SARAANSH

Monthly Current Affairs

February 2026

- ☆ **Polity and Governance**
- ☆ **Nation & States**
- ☆ **Economic Scenario**
- ☆ **International Relations**
- ☆ **Environment & Ecology**
- ☆ **Science & Technology**
- ☆ **History, Art & Culture**
- ☆ **Social Issues**
- ☆ **Facts for Prelims**

CURRENT AFFAIRS

INDEX

India's M.A.N.A.V. Vision for AI

At the **India-AI Impact Summit 2026**, PM unveiled the **M.A.N.A.V. vision**, a human-centric AI framework focused on ethics, inclusivity, and national sovereignty.

India's M.A.N.A.V. Vision for AI

- Shifts AI from autonomous force to becoming **extension of human aspirations**.
- **5 foundational pillars:**
  - **M – Moral & Ethical Systems:** AI built on strict ethical guidelines.
  - **A – Accountable Governance:** Transparent rules & strong oversight mechanisms.
  - **N – National Sovereignty:** Data ownership rests with its creators.
  - **A – Accessible & Inclusive:** Broad societal benefit; prevent concentration.
  - **V – Valid & Legitimate Systems:** Lawful, verifiable, trustworthy AI.
- Views AI as a **strategic asset & global common good**, backed by India's talent pool, digital infrastructure, and policy clarity.

India's Efforts in Advancing the M.A.N.A.V. Vision for AI	
Ensuring Moral and Ethical AI Systems - **NEP 2020:** Integrates digital literacy, computational thinking, and AI education early. - **Public engagement:** India-AI Impact Summit 2026 recorded **2,50,946+ pledges** for AI responsibility (Guinness World Record). **Mechanisms to Drive Accountable Governance in AI** - **IndiaAI Mission:** ₹**10,300+ crore** outlay; builds governance into AI ecosystem (compute, data, skilling, innovation). Institutionalises standards for AI development, deployment, monitoring. - **AI Governance Guidelines 2025:** Transparent regulatory framework based on trust, equity, accountability, constitutional values.	**National Sovereignty in the Digital Era** - **Digital sovereignty:** Extends to data, algorithms, digital infrastructure. - **Self-reliance:** India Semiconductor Mission; secure **digital public infrastructure**; strengthened domestic compute capacity. - **Strategic autonomy:** Focus on chips/cloud; joined **US-led Pax Silica Initiative** (India-AI Impact Summit 2026). **Ensuring Accessible and Inclusive AI** - **Digital Public Infrastructure** (**DPI**): Scalable AI solutions in healthcare, agriculture, education, governance. - **Democratising computing: MeghRaj GI Cloud, IndiaAI Compute Portal** provide shared access to GPUs/TPUs. - **Grassroots capacity: IndiaAI Kosh, AI Data Labs Network, National Supercomputing Mission** expand broad-based AI innovation.
Regulating AI for Trust, Safety, and Legality	
- **Tackling Deepfakes:** Ensure AI systems are **legally verifiable & transparent** to protect democratic discourse and social trust. - **IT Amendment Rules, 2026:** Define & strictly regulate **synthetic content**; enforce platform accountability. - **Safe & Trusted AI Pillar** (**IndiaAI Mission**): Focus on **bias mitigation, algorithmic audits, privacy-preserving design** to operationalise ethical standards.	
- **AI Impact Summit 2027:** To be hosted by **Switzerland** (**Geneva**); focus on **international AI law and inclusive governance**. - **AI Impact Summit 2028:** To be hosted by **UAE**; continues global cooperation on responsible AI.	

Hate Speech and Hate Crime

SC raised concerns over hate crimes & speech, urging restraint while hearing a plea for a legal framework to recognise hate-based offences.

Hate speech

- **About:** Refers to words/actions intended to incite hatred against groups based on **race, ethnicity, gender, religion, sexual orientation**, etc., including speech or visuals that provoke fear or violence (**267th Law Commission Report (2017)**).
- **Protection Against Hate Speech:**
  - **Art. 19(1)(a):** Guarantees free speech; **Art. 19(2):** Permits reasonable restrictions (public order, dignity, sovereignty, incitement of offences).
  - **BNS, 2023:** Penalises promoting enmity b/w groups.
  - **RPA 1951:** Disqualifies candidates convicted of promoting communal disharmony.
  - **SC/ST (Prevention of Atrocities) Act, 1989:** Punishes insults/humiliation of SC/ST members.
  - **Protection of Civil Rights Act, 1955:** Penalises acts promoting untouchability.

- **Key SC Judgements:**
  - **Shaheen Abdulla v. UoI (2022):** Directed police to take **suo motu action** against hate speech.
  - **Tehseen S. Poonawalla v. UoI (2018):** Issued guidelines to curb **mob lynching**, including appointment of **district nodal officers**.
  - **Shreya Singhal v. UoI (2015):** Struck down **Sec 66A, IT Act, 2000** as vague; upheld **Art. 19(1)(a)**.
  - **Pravasi Bhalai Sangathan v. UoI (2014):** Urged **Law Commission** to define hate speech and explore empowering the **Election Commission** to regulate it.

Hate Crime

- **About:**
  - Crime motivated by bias against **race, colour, religion, national origin, sexual orientation, gender, gender identity, or disability**.
- **Protection:**
  - No specific legal definition in India. Provisions under **BNS, 2023** & **SC/ST (Prevention of Atrocities) Act, 1989** address mob lynching, caste-based violence, attacks on Dalits/minorities, and gender/sexuality-based assaults.

Challenges in Curbing Hate Speech and Hate Crime	Suggestions
■ **Legal Challenge:** • **Vague definitions:** No standalone "hate crime" law under **BNS, 2023**; terms like *annoyance, insult, disharmony* are subjective. • **Proving intent:** Conviction requires proof of **malicious intent/bias motive**, creating major evidentiary hurdles. ■ **Enforcement Gap:** • **Weak suo motu action:** Despite SC directions, police action is inconsistent, especially against influential persons. • **Low conviction rates:** Poor evidence collection & political pressure lead to frequent acquittals. ■ **Digital Dilemma:** • **Algorithmic amplification:** Social media platforms prioritise engaging content, often boosting sensationalist & hateful rhetoric. • **Anonymity:** Use of **VPNs** & fake accounts enables offenders to act with impunity. • **Transnational nature:** Content hosted outside India hinders takedown and prosecution by local authorities. ■ **Societal Challenge:** • **Electoral gains:** Fear-mongering & exclusionary narratives used for political mobilisation make hate politically profitable. • **Historical prejudices:** Deep-rooted caste & religious hierarchies enable hate speech to escalate into violence. • **Statistical blind spot:** **NCRB** lacks specific data on lynchings/religious killings, obscuring the scale of the problem.	■ **Codify definition:** Enact a standalone law defining **Hate Speech** and **Hate Crime** based on incitement to violence, discrimination, or severe exclusion. ■ **Constitutional tort liability:** Treat hate speech by public officials as a civil wrong; enable damages for violation of **Art. 14** and **Art. 21**. ■ **Service rule enforcement:** Amend **All India Service Rules** to classify failure to prevent/report hate speech as major misconduct. ■ **Vishakha-style code of conduct:** Frame judicial guidelines imposing a duty of restraint on Constitutional functionaries to uphold fraternity. ■ **Suo motu FIR mandate:** Strictly enforce **SC (2022)** directive; treat delay in registering cases as **contempt of court**. ■ **24-hour digital takedown:** Under **IT Rules, 2026**, create a priority channel for **District Nodal Officers** to remove inflammatory content within 24 hours. ■ **Fast-track "Hate Courts":** Set up special courts to complete trials within **6 months**. ■ **Media literacy:** Integrate critical thinking in **NCERT** curriculum to counter misinformation and "othering." ■ **Community peace committees:** Establish ward-level, diverse local bodies to de-escalate communal tensions early.

Examine the legal and institutional challenges in prosecuting hate crimes in India. Why is a standalone law being demanded?

Drishti Mains Question

Death Penalty in India

Annual statistics report on death penalties in India by the Square Circle Clinic **(NALSAR University of Law, Hyderabad)** notes that SC has not confirmed any death sentences in the past **three years**, raising concerns over wrongful convictions & fairness in capital sentencing.

Key Highlights of the Report on Death Penalties in India

- **Zero Confirmations:** SC confirmed **no death penalties** in last **3 years**; **10 acquittals in 2025** (highest in a decade).

- **Trial vs. Appellate Disconnect:**
  - **Sessions Courts:** 128 death sentences (2025); 1,310 since 2016. **HCs:** Confirmed only **8.31%** of cases.
- **Death Row Surge: 574 (Dec 2025)** – highest since 2016.
  - Average **5+ years** on death row before acquittal; some waited nearly a decade.
- **Procedural Violations & Non-Compliance:** Frequent acquittals indicate **trial court errors** leading to wrongful convictions & death sentences.

- **SC rulings:** *Manoj v. State of MP (2022)*; *Vasanta Sampat Dupare v. Union of India (2025)* mandate **psychological evaluation, prison conduct reports, mitigation hearings**.
- **~95% death sentences (2025)** imposed without these safeguards.

- Sentencing often within days of conviction → limited defence preparation; fair trial concerns.
- **Emerging Alternative Sentences:** Rising use of **life imprisonment without remission** or long fixed terms (up to **60 years**).
  - Concerns over scope for **rehabilitation**.

Legal Position of Death Penalty in India	Legal Recourse for Death Row Convicts

■ **BNS, 2023:** Retains death penalty; expanded to **mob lynching (resulting in death)** & **rape of a minor**. ~**14 categories of offences** attract death penalty (e.g., murder, terrorism, abetting mutiny).
■ **Exemptions:** Juveniles, pregnant women, mentally ill persons cannot be executed.
■ **Appellate Process:** Sessions Court death sentence requires **HC confirmation**. Accused can appeal to SC.
	■ **Mercy Petition:** Request to **President/Governor** for mercy against death/imprisonment sentence. Pardoning power subject to **judicial review**.
	■ **Pardoning Power:**
	  ● **President (Art. 72):** Pardons, reprieves, commutations.
	  ● **Governor (Art. 161):** Similar powers; major capital cases generally deferred to President.
	■ **Curative Petition:** Evolved in *Rupa Ashok Hurra v. Ashok Hurra (2002)*. SC may reconsider final judgment to cure **gross miscarriage of justice**.

Key SC Judgements
■ **Jagmohan Singh v. State of UP (1973):** SC upheld the constitutional validity of the death penalty. ■ **Shatrughan Chauhan v. Union of India (2014):** Inordinate delay in execution = **torture**; ground for **commutation**. Execution of **mentally ill unconstitutional**. ■ **Manoj Vs State Of MP (2022):** SC made it mandatory **mitigation reports** (probation, jail authorities, mental health experts) before awarding death penalty. ■ **Vasanta Sampat Dupare v. Union of India (2025):** SC can revisit death penalty under **Art. 32** for grave procedural lapses. Mandated strict compliance with *Manoj v. State of Madhya Pradesh* guidelines.

Arguments in Favour of Death Penalty	Arguments Against Death Penalty

■ **Retributive Justice:** Based on lex talionis (proportional punishment).
  ● For extreme crimes (e.g., Nirbhaya case), seen as moral closure & satisfying collective conscience.
■ **Deterrence Theory:** Fear of death as ultimate deterrent. Rational offenders deterred by high cost (death).
■ **The "Taxpayer Burden" Argument:** Long-term incarceration of violent offenders strains public resources.
■ **Public Will:** Majority support retention; ~**70%** favored it after **Dec 2012 Delhi rape case**.
	■ **No Empirical Evidence of Deterrence: Justice Verma Committee (2013):** No evidence of deterrence in rape cases. UN studies: Abolition ≠ higher crime rates.
	■ **Judicial Arbitrariness:** "Rarest of rare" doctrine subjective.
	  ● **2012:** 14 former judges sought pardon for 13 wrongly sentenced convicts.
	  ● Risk of irreversible miscarriage of justice.
	■ **Socio-Economic Bias:** Poor lack quality legal aid → higher conviction risk.
	■ **Reformative Justice:** Focus on reformation over retribution. **Death Row Phenomenon** seen as torture (*Shatrughan Chauhan v. UOI, 2014*).

Measures to Reform the Capital Punishment Framework

- **Strict Adherence to "Manoj" Guidelines:** Enforce **Manoj v. State of MP (2022)** guidelines. Mandatory **comprehensive mitigation analysis** before awarding death penalty.
- **Standardizing Sentencing:** Establish a **Sentencing Council (UK model)**. Ensure uniform application of **"Rarest of Rare"** doctrine; reduce arbitrariness.
- **Evidence-Based Policing:**
  - Shift to **scientific & forensic-based investigation** over confession-centric methods.
  - Reduce appellate acquittals.
  - Article 39A– ensure competent legal representation for indigent accused at trial stage.
- **Life Without Remission:** Codify **25–30 years/natural life** as statutory alternative to death penalty.

- **Long-Term Vision:** Consider **Law Commission 262ⁿᵈ Report:** Abolish death penalty for ordinary crimes; retain for terrorism & waging war.

> Critically examine the effectiveness of the "rarest of rare" doctrine in ensuring fairness and consistency in death penalty sentencing in India.
>
> **Drishti Mains Question**

India's Expanding Drone Ecosystem

Recent government data highlights the **rapid expansion of India's regulated drone ecosystem** across governance, agriculture, infrastructure monitoring & national security.

India's Drone Regulatory & Promotion Framework

- **Regulatory Framework:** Drone Rules, 2021 (amended **2022 & 2023**) liberalised the ecosystem.

- Reduced approvals/forms, rationalised fees, expanded green airspace access, widened civilian use.
- Replaced traditional pilot licences with **DGCA-issued Remote Pilot Certificates**.

- **Digital Sky platform** & **e-Governance for Civil Aviation**: Single-window system for registration, pilot certification, type certification, airspace permissions.
  - By **Feb 2026**: **38,500+ drones registered**; ~**39,900 Remote Pilot Certificates issued**.

- **Manufacturing Support: PLI Scheme** with ₹**120 crore outlay** for domestic drone & component manufacturing; supports **start-ups & MSMEs**.

- **Tax Incentive: GST reduced to 5%** to lower costs and boost commercial adoption & training infrastructure.

- **Capacity Building: SwaYaan Programme**: HR development in unmanned aircraft systems via training & partnerships.
  - **National Innovation Challenge for Drone Application and Research (NIDAR)**: Promotes autonomous drone innovation & start-up incubation.

Key Applications of Drones	
- **Agriculture & Farmer Services: Namo Drone Didi Scheme** (**Nov 2023**) – drones to **Women SHGs** for modern farming, higher productivity, lower input costs, sustainable livelihoods. - **Land Mapping** (**SVAMITVA Scheme**): Drone survey of rural **abadi areas** for legal property cards. ~**3.28 lakh villages mapped**; **2.76 crore property cards prepared**. - **Highway Monitoring** (**NHAI Projects**): Monthly drone recordings to track progress. Used for stage comparison, dispute resolution & quality verification.	- **Disaster Management: NECTAR** drone system– long-duration stability, heavy-load capacity. Monitors flood/landslide areas; provides live visuals for faster, coordinated search & rescue. - **Railway Monitoring:** Track, bridge, yard inspection. **Railway Protection Force** uses them for surveillance, crowd monitoring, anti-trespassing. - **Defence Applications:** Border surveillance, intelligence gathering, precision strikes. Used in **Operation SINDOOR**; integrated with air defence & radar networks.

Rajya Sabha Elections

ECI announced the schedule for **biennial elections** to fill **37 Rajya Sabha seats** across **10 States**.

Key Facts About the Rajya Sabha

- **Rajya Sabha: Upper House** of Parliament; represents **States & UTs** + **persons nominated by President**.

- **Constitutional Provisions: Article 80**: Maximum strength **250** (including **12 nominated** for literature, science, art, social service).

- **Present strength: 245** (233 elected from States/UTs – Delhi, Puducherry, J&K + 12 nominated).

- **Allocation of Seats:** Based on population as per **Fourth Schedule**.

- **Eligibility (Article 84):** Must be a **citizen of India**.
  - Take **oath/affirmation** before a person authorized by the Election Commission (Third Schedule)
  - Minimum **30 years of age**
  - Other qualifications as prescribed by **Parliament by law**.

- **Tenure: Permanent House**; not subject to dissolution.
  - **1/3rd members retire every 2 years**; term = **6 years**.

- **Bye-Elections:** Held for resignation, death, disqualification. Elected member serves only the remainder of the original term
  - Member elected to fill a casual vacancy serves only for the **remainder of their predecessor's term** (RPA, 1951).

- **Chair: VP** is **ex-officio Chairperson of the House**.

Special Powers of Rajya Sabha
- **Art. 249:** Can authorise Parliament to legislate on **State List** in national interest (2/3rd majority of members present & voting).
- **Art. 312:** Exclusive power to initiate creation of **All-India Services** (2/3rd majority).
- **Emergency Powers** (**Arts. 352, 356, 360**): If **Lok Sabha dissolved**, RS can approve & continue Proclamation of Emergency until LS is reconstituted.

Process for Election

- **Election Mechanism: Indirect election** by elected **MLAs of States/UTs**.
  - System: **Proportional Representation by Single Transferable Vote (STV)**.
  - **MLAs rank candidates (1, 2, 3…) on a ballot.**
    - ❖ Candidate must secure a prescribed **quota** to win.
    - ❖ **Surplus votes** transferred to next preference at reduced value.
  - If seats remain, **candidate with the lowest votes eliminated**; votes redistributed as per subsequent preferences.

- **Electoral College:** Only **elected MLAs** of States & UTs.

- **Domicile Requirement:**
  - **Pre-2003:** A candidate had to be a resident of the state from which they were contesting from.
  - **Post-2003:** A candidate can be an elector from **any parliamentary constituency in India**. (Removed by the Representation of the People (Amendment) Act, 2003).

- **Pre-2003:** Mandatory state residency.

- **Post-2003:** Candidate can be an elector from **any parliamentary constituency in India** (Removed by RPA (Amendment) Act, 2003).

- **"Open Ballot" System:** Voting is **not secret** for MLAs belonging to political parties.
  - Party MLAs must **show marked ballot** to authorised party agent. Aims to prevent **cross-voting & money power**.
  - **Independent MLAs** need not show ballot.

- **Anti-Defection:** SC ruled that voting against party whip in RS election **does not attract disqualification** under **10th Schedule**.
  - Party can take disciplinary action, but MLA **retains Assembly seat**.

- **NOTA: SC (2018)** in *Shailesh Manubhai Parmar v. Union of India* scrapped **NOTA** for RS elections. Held that NOTA defeats **proportional representation & STV** principles.

Tribal Protests Over Forest Rights Act

Tribal farmers in Maharashtra marched demanding proper **Forest Rights Act** implementation, land titles, irrigation, jobs, and education reforms.

Issues Faced by the Forest Dweller Communities

- **Pre-Colonial Era:** Before colonialism, local communities had **traditional rights over forests in their area** or even a wider region. Even if kings or chieftains claimed hunting rights in specific forests, local communities still had access to all other benefits from the forests.

- Enjoyed **customary rights** over local forests. Despite rulers' **hunting rights**, communities retained access to other forest resources

- **Colonial Era: Indian Forest Act, 1878** based on **'eminent domain'** (ruler always owns all property)
  - Creation of **Imperial Forest Department** to maximise **timber & revenue.** Local communities treated as **trespassers** on state forests
  - **The injustices imposed by this colonial forest policy took multiple forms:**
    - ❖ **Shifting cultivation banned**
    - ❖ Biased & incomplete **land survey & settlement**
    - ❖ Creation of **'Forest Villages'**: land leased in return for **compulsory/bonded labour**
    - ❖ Access to forest produce made **limited, temporary, chargeable**, controlled by forest bureaucracy with police powers. Livelihood concessions treated as **revocable 'privileges'**
    - ❖ No community right to manage forests; state logging led to **de facto open-access forests**

- **Post Independence Era: Wildlife (Protection) Act, 1972** & **Forest (Conservation) Act, 1980** based on **eminent domain.** Forceful relocation for **sanctuaries & national parks**
  - Local communities excluded from decisions on forest diversion
  - Inadequate compensation despite high levies
  - Non-recognition of cultivated forest land led to **mass mobilisations & long marches by tribal communities.**

Issues in Implementation of FRA	Suggestions
- **Individual Rights vs. Community Rights:** Focus on **Individual Forest Rights (IFRs)** as encroachment regularisation. Neglect of **Community Rights**, weakening sustainable forest management - **Poor Recognition of IFRs:** Resistance from **Forest Department**, apathy of other departments. Misuse of technology. - **45%+ claims rejected** in some regions. Approved claims often for **less land than cultivated** - **Digital Processes in Areas with Poor Connectivity:** Use of platforms like **VanMitra** (**MP**) in low-connectivity, low-literacy areas. Hinders proper filing & processing of claims - **Incomplete Recognition of Community Forest Rights (CFRs):** Slow, partial recognition of **CFRs**. Resistance from forest bureaucracy. Limits community empowerment in forest management - **Forest Villages Not Addressed:** Issue of **'forest villages'** inadequately addressed in most states. Despite authority under **FRA & PESA**, Gram Sabhas often sidelined in claim verification and approval	- **Empower Gram Sabhas:** Ensure active role in **forest management decisions** - **Inclusive Decision-Making:** Involve **rights holders** in planning & governance - **Accountability:** Enforce compliance with **FRA**; fix responsibility for violations - **Integrated Planning:** Balance **development & conservation** with forest dwellers' rights - **Strengthen PESA:** Enhance **tribal self-governance** in Scheduled Areas. Expand employment for educated tribal youth - **Livelihood Linkages:** Integrate **irrigation, MSP access, rural infrastructure** with land rights - **Convergence Planning:** Align forest rights with **agriculture, water management, education** in tribal regions

How do implementation gaps in the Forest Rights Act undermine tribal livelihoods and participatory forest governance? Examine with reference to recent protests in Maharashtra.

Drishti Mains Question

International Conference on Dam Safety 2026

ICDS 2026 concluded in **Bengaluru**, strengthening India's **dam safety ecosystem**.

Key Highlights of ICDS 2026

- **Dam Safety Framework:** Focus on implementing **Dam Safety Act, 2021** & **Dam Rehabilitation and Improvement Project**.
- **Sediment Management:** Reservoir sedimentation flagged as threat to **water security**.
  - **Measures:** catchment treatment, remote sensing, simplified risk screening & dam-break assessment tools.
- **Flood Management:** Emphasis on **forecast-informed, basin-level reservoir operations**. Use of **dynamic rule curves** & **real-time data sharing**.
- **Emergency Preparedness:** Strengthen **Emergency Action Plans (EAPs)**, **floodplain zoning**, and **early warning systems**.

> **ICDS 2026: Second edition** under **DRIP Phase II & III**; first held in **Jaipur** (**2023**). Jointly organized by: Government of Karnataka; Ministry of Jal Shakti; Central Water Commission (CWC); IISc Bangalore; World Bank

Dam Rehabilitation and Improvement Project (DRIP)

- **About: Flagship initiative** of **Ministry of Jal Shakti** to enhance **structural safety & operational efficiency** of dams.
  - Financial assistance from **World Bank** & **AIIB**. **USD 500 million** external assistance per phase.
- **Need**: India ranks **3ʳᵈ globally** (after China & USA) in large dams. **6628 dams** (National Register of Specified Dams, 2025). Aging infrastructure makes safety and efficiency critical for **water security**.
- **Objectives:**
  - **Safety Improvement**: Improve safety and operational performance of selected dams and appurtenances sustainably.
  - **Institutional Strengthening**: Strengthen dam safety institutions at **State & Central levels**.
  - **Revenue Generation**: Explore incidental revenue for sustainable **operation & maintenance of dams**.
- **Funding Pattern**: 80:20 – Special Category States; **70:30** – General Category States; **50:50** – Central Agencies
  - **90% Central Grant (loan component)** for **Manipur, Meghalaya, Uttarakhand**.
- **Phases:**
  - **Phase I (2012–2021)**: Rehabilitated **223 dams** across **7 states**. Established basic **safety protocols & guidelines**.
  - **Phase II & III (2021–2031)**: Target **736 dams** across **19 states**. Focus on **climate resilience, advanced monitoring, sustainable revenue generation**.

> ### Dam Safety Act, 2021
> - Establishes framework for **surveillance, inspection, operation & maintenance** of large dams to prevent failures.
> - Four-tier institutional mechanism: **National Committee on Dam Safety** (**NCDS**) & **National Dam Safety Authority** (**NDSA**) – Centre.
>   - **State Committee on Dam Safety** & **State Dam Safety Organization** – State level.

India-AI Impact Summit 2026

India-AI Impact Summit 2026 began at **Bharat Mandapam, New Delhi**, organized by **MeitY**, marking the first major global AI summit in the **Global South** and highlighting India's leadership in inclusive, development-focused AI.

- Hosted under the **India AI Mission**, it shifts the focus from **"AI Safety"** to **"AI for Development and Impact."**

Key Highlights of the Summit

- **Theme**: Based on **"Sarvajana Hitaya, Sarvajana Sukhaya"** (Welfare for all, happiness for all).
- **Three Sutras (Pillars):**
  - **People**: AI for healthcare, education, financial inclusion.
  - **Planet**: AI for sustainability, climate resilience, resource efficiency.
  - **Progress**: AI for economic growth, governance, public service delivery.
- **Seven Chakras (Working Groups):** Health, Agriculture, Safe & Trusted AI, Science, Inclusion, Democratizing AI Resources, Economic Development.
- **Anchored by:** MeitY; IndiaAI Mission; Software Technology Parks of India (STPI); Digital India initiative
  - Provide **policy direction, ecosystem support, innovation infrastructure, digital foundations** aligned with national priorities and inclusive governance.
- **Expected Outcomes: 15+ tangible deliverables** on AI governance, innovation, inclusive growth.
  - India's entry into **US-led Pax Silica initiative** for resilient electronics & semiconductor supply chains.
  - Global cooperation on **AI governance & ethics** via multistakeholder frameworks.
  - Strengthening **AI for jobs & public service delivery**.
  - Expansion of **AI Safety Institute model** for collaborative research on safety and standards.

Significance

- **Voice of the Global South:** Focus on developmental outcomes over risk-centric regulation. AI for healthcare access, agricultural productivity, language barriers.
- **Democratization of Technology:** Showcases **Digital Public Infrastructure (DPI)** model (e.g., **UPI, Aadhaar**) as blueprint

for AI. Advocates **"AI Commons"**: accessible compute, datasets, models for developing nations.

- **Shift from Regulation to Innovation:** Emphasis on **Applied AI** and practical use cases. Focus on improving **HDI indicators** through ground-level deployment.

- **Strategic Diplomacy:** Positions India as a **bridge b/w developed West & developing South**. Enhances diplomatic leverage in technology governance.

- **6+ million** employed in tech & AI ecosystem.
- **AI talent pool** projected to reach **12.5+ lakh by 2027** (data science, AI engineering, analytics).
- As of 2025, **1,800+ Global Capability Centres**; 500+ focused on AI.
- **1.8 lakh startups**; ~**89% of new startups** last year used **AI** in products/ services.

For People: Bridging Social Inequities	For the Planet: Precision and Sustainability
Healthcare: AI diagnostics addressing **doctor–patient ratio** (**currently ~1:834 in India**). - Tools like **Qure.ai** (radiology) and automated blood/urine analysis delivering **lab-grade results** in rural clinics. **Education:** DIKSHA & adaptive learning systems personalize curriculum. - AI translation removes **English barrier**. **YUVAi** (**Youth for Unnati and Vikas with AI**)-- AI & social skills for **Classes 8–12**. **Linguistic Inclusion: Bhashini** enables real-time translation across **22 Scheduled languages**. **Sarvam Vision**– indigenous model for Indian languages & high-accuracy OCR, reducing reliance on foreign models.	**Agriculture:** AI uses **satellite imagery & soil data** for localized weather advisories and pest prediction. **Kisan E-Mitra** (**AI chatbot**)-- optimizes fertilizer use, reducing costs and runoff. **MausamGPT** (under development) – personalized climate/weather advisories in regional languages. **Energy Management:** Supports **Climate-Smart development** & **2070 Net Zero** target. - AI-enabled **smart grids** predict peak loads and manage renewable intermittency (solar/wind). **Flood Forecasting: BrahmaSATARK**– AI-integrated physics modeling for impact-based forecasts in **Brahmaputra & Ganga basins**.

For Progress: Economic and Governance Transformation

- **Governance:** AI is projected to add **USD 500–600 billion** to India's GDP by 2030 through productivity gains.
  - India is integrating AI into its **Digital Public Infrastructure** (Aadhaar, UPI, DigiLocker).
  - For example, **MuleHunter.AI** identifies "mule accounts" in banking to prevent fraud and automates the translation of complex court judgments to improve legal accessibility.
- **Governance:** AI projected to add **USD 500–600 billion to GDP by 2030**. Integration with **DPI** (Aadhaar, UPI, DigiLocker).
  - **MuleHunter.AI** detects mule accounts to prevent fraud.
  - AI-enabled translation of complex court judgments for legal accessibility.
- **Digital Sovereignty: IndiaAI Mission** building **38,000+ GPUs** compute capacity.
  - **BharatGen**– World's larges government-funded multimodal LLM for AI-driven public services.
  - Ensures data localization and culturally representative AI models.

> "India AI Impact Summit 2026 marks a shift from AI safety to AI for development." Discuss its implications for the Global South.
>
> **Drishti Mains Question**

Urban Challenge Fund

The Union Cabinet has approved the **Urban Challenge Fund (UCF),** marking a shift from grant-based funding to market-driven urban development.

- It gives effect to India's vision announced in the **Union Budget 2025–26** to implement proposals relating to *Cities as Growth Hubs, Creative Redevelopment of Cities, and Water and Sanitation.*

Key Facts About UCF

- **About:** The **Urban Challenge Fund (UCF)** is a Centrally Sponsored Scheme of the **Ministry of Housing and Urban Affairs (MoHUA)** with a central assistance of Rs 1,00,000 crore for FY 2025–26 to 2030–31, with an extendable implementation period up to FY 2033–34.

  - It aims to support **bankable urban infrastructure projects** through a challenge-based approach, catalysing nearly **Rs 4 lakh crore in investment** over five years.

  - The scheme represents a paradigm shift from **grant-based financing to market-linked,** reform-driven, and outcome-oriented urban development, recognising that public finance alone cannot meet urban infrastructure needs.

- **Funding Pattern and Financing Model:**
  - **Central Assistance:** The Union Government will cover **25% of the project cost**.
  - **Market Leverage:** A prerequisite for funding is that cities must raise a **minimum of 50% of the project cost** from market sources, including **municipal bonds, bank loans, and Public-Private Partnerships (PPPs)**.
  - **Remaining Share:** The final 25% can be contributed by States, Union Territories, **Urban Local Bodies (ULBs)**, or additional market finance.
    - ❖ This structure encourages **private sector participation by enabling both financial and managerial partnerships** in building and managing urban infrastructure.
- **Three Strategic Verticals:** Projects under the UCF must align with one of three core pillars:
  - **Cities as Growth Hubs:** Focuses on **transit-oriented development (TOD),** greenfield townships, and economic corridors to enhance competitiveness.
  - **Creative Redevelopment:** Revitalizing congested city cores (Central Business Districts), heritage sites, and brownfield regeneration (reusing abandoned industrial land).
  - **Water and Sanitation:** Achieving service saturation in water supply and modernizing solid waste management, including **legacy waste remediation**.
- **Credit Repayment Guarantee for Small Cities:** A **Rs 5,000 crore corpus** has been created to provide a Credit Repayment Guarantee Scheme to facilitate market access for smaller cities.
  - **Eligibility:** ULBs in **Northeastern/Hilly states** and towns with a **population below 1 lakh**.
  - **The Guarantee:** It provides a central guarantee of up to Rs 7 crore or 70% of the loan amount (whichever is lower) for first-time loans, and up to Rs 7 crore or 50% for subsequent loans.
    - ❖ This enables small ULBs to undertake projects worth Rs 20 crore initially and Rs 28 crore in subsequent phases, improving lender confidence and expanding access to market finance.
- **Coverage:** The Fund will cover all cities with a population of **10 lakh or more** (as per 2025 estimates), all **State and Union Territory capitals** not included in this category, and **major industrial cities with a population of 1 lakh or more**.
  - Projects must be **bankable, transformative, and aligned** with the three verticals, with clear outcomes and credible market financing plans.
  - Projects already funded under **AMRUT (Atal Mission for Rejuvenation and Urban Transformation) 2.0,** Swachh Bharat Mission-Urban (SBM-U 2.0), or other Centrally Sponsored Schemes are not eligible, ensuring that UCF supports new and innovative initiatives.
- **Reform-Linked Selection (Challenge Mode):** Unlike previous schemes, where funds were allocated based on population, the UCF uses a **Competitive Challenge Mode**.
  - Funding is released only if cities implement specific reforms in **Urban Governance, Digital Systems, and Financial Transparency**.
  - Projects are evaluated on performance indicators (KPIs) like job creation, revenue mobilization, and climate resilience.

Reasons Why Cities are Central to India's Economic Future

- **Productivity Powerhouses: Cities act as massive engines that compress economic activity into small, efficient** geographical areas.
  - While only 3% of the land is urban, cities contribute nearly **60% to 70% of India's GDP**.
  - Just 15 cities (including Mumbai, Delhi, Bengaluru, Chennai, and Hyderabad) account for **30% of the national GDP**. These hubs are expected to contribute an additional **1.5% to annual GDP growth** leading up to 2047.
- **Consumption and the Rising Middle Class:** Cities are the epicenter of India's status as the **world's third-largest consumer market**.
  - By 2030, India's total consumer spending is expected to double to USD 3.1 trillion, with the urban middle class accounting for **nearly 60% of this increase.**
  - Urban incomes are up to four times higher than rural incomes, driving demand for **everything from electronics to premium services.**
- **Global Competitiveness & FDI:** Nearly 90% of **Foreign Direct Investment (FDI)** in India is concentrated in major urban centers.
  - Efficient urban infrastructure such as metro networks, high-speed internet, and stable power is essential for **India's ambition to reach a USD 5 trillion economy by 2026 and USD 40 trillion by 2047.**
- **Social and Economic Opportunity:** Urbanization is a primary vehicle for **poverty reduction and social mobility.**
  - Cities offer superior access to healthcare, specialized education, and digital infrastructure, linking economic growth with improved quality of life.

> **India's Initiatives for Promoting Urban Growth and Sustainability:** Swachh Bharat Mission; Smart Cities Mission; National Urban Livelihood Mission; PM SVANidhi Scheme; PM Awas Yojana (Urban); AMRUT; Scheme for Special Assistance to States for Capital Investment.

Challenges in Sustainable Development of Indian Cities

- **Infrastructure & Housing Deficit:** Indian cities are growing faster than their ability to build. The urban population is projected to hit **600 million by 2031**, creating an immense "scale" problem.

  - India needs an annual investment of **Rs 4.6 lakh crore** for urban infrastructure, yet current funding hovers around **Rs 1.3 lakh crore**, leaving a massive 70% deficit.

  - There is a shortage of **10 million affordable homes**, a number expected to triple by 2030. This has led to **65 million people** living in slums.

- **Completion Lag:** Under schemes like PMAY, while approvals are high (1.08 crore), **completion rates often lag behind targets due to rising land costs and regulatory hurdles.**

- **Environmental & Resource Stress:** Rapid urbanization has severely degraded the urban "commons"—air, water, and soil.

  - In 2024, India was the 5th most polluted country globally. By 2026, the **"Pollution Economy"** has boomed, with households **spending billions on private air and water purifiers** as public systems fail to provide clean air.

  - By 2030, water demand will be **twice the available supply**. Cities like Bengaluru and Delhi already face acute seasonal crises, losing **40-50% of piped water** to outdated infrastructure and leakages.

  - Cities generate over **150,000 tonnes** of waste daily. Major landfills like **Ghazipur (Delhi)** are overflowing, yet only a small portion of waste is processed scientifically.

- **Mobility & Climate Vulnerability:** The physical "flow" of cities is choking, while the physical "form" is becoming unsafe.

  - Congestion levels in cities like Mumbai and Bengaluru often exceed 50%, costing the economy **USD 22 billion annually** in lost productivity.

  - City centers are now **3-4°C hotter** than surrounding rural areas (Urban Heat Island Effect), increasing mortality risks and straining the power grid for cooling.

- **Urban Flooding:** Encroachment of stormwater drains and "concrete-heavy" planning has made cities like Chennai and Mumbai highly vulnerable to extreme rainfall. **85% of Indian districts** are now vulnerable to extreme climate events.

- **Governance & Fiscal Weakness:** While cities drive 2/3rds of the GDP, municipalities control **less than 1% of national tax revenue**.

  - Less than **0.2% of India's GDP** is raised through property taxes, compared to **1.1% in OECD nations, due to poor GIS mapping and political hesitation to revise rates.**

- Projects like the Mumbai Metro expansion face delays because of "multi-layered governance," where multiple agencies (State, Central, and Local) often work at cross-purposes.

Measures that can be Adopted for Sustainable Growth of Indian Cities

- **Transit-Oriented Development (TOD):** Under UCF, promote high-density, mixed-use development along transit corridors to minimize commute times and reduce dependence on private vehicles.

- **Non-Motorized Transport (NMT):** Create dedicated "Last-Mile" connectivity through pedestrian-friendly walkways and cycling tracks to reduce the **loss** incurred due to traffic inefficiencies.

- **Digital Infrastructure (Gati Shakti):** Using the **PM Gati Shakti** geospatial platform for integrated planning of water, power, and transport networks to avoid frequent road digging and resource wastage.

- **The "Sponge City" Concept:** Implementing the "Sponge City" model (used in China and Singapore) to manage **Urban Flooding** by creating permeable surfaces, urban wetlands, and "rain gardens" to absorb stormwater.

- **Urban Heat Island (UHI) Mitigation:** Increasing "Green-Blue" infrastructure (parks and water bodies) and enforcing **Cool Roof** policies to lower city temperatures by **2-3°C**.

- **Circular Economy in Waste:** Moving toward **Zero-Waste Cities** by mandating 100% waste segregation and using **Waste-to-Energy** plants for non-recyclable legacy waste (e.g., at the Ghazipur or Okhla sites).

- **Water Neutrality:** Mandating **Decentralized Sewage Treatment Plants (STPs)** in large residential complexes to treat and reuse 100% of "grey water" for horticulture and flushing.

> Discuss the significance of the Urban Challenge Fund in transforming urban infrastructure financing in India.
>
> **Drishti Mains Question**

Substantive Motion in Lok Sabha

An **MP** moved a **Substantive Motion in the Lok Sabha** against LoP seeking **disqualification from Parliament** and a **lifetime ban from contesting elections** over alleged anti-national conduct.

Key Facts About Motion

- **About:** A **formal proposal** by a member seeking a decision of the House.

  - Every question before the House must be proposed as a **motion** and decided in the **affirmative or negative**.

  - Forms the **basis of all discussions & decisions** in Parliament.

- **Admissibility of Motions:**
  - Decided by the **Speaker**. Under **Rule 186 of the Rules of Procedure and Conduct of Business in Lok Sabha**, a motion must:
  - Raise **one definite issue**.

- Avoid **arguments, ironical expressions or defamatory statements**.
- Relate to a **recent occurrence**.
- Not concern a **sub-judice matter**.
- Be primarily related to the **Government of India**.

Types of Motions	
Substantive Motions	**Subsidiary Motions**

■ **About: Self-contained proposal** expressing a clear decision of the House; independent of other motions. Used to discuss **conduct of persons in high authority** or major decisions.
■ **E.g., All resolutions** are substantive motions as they are complete in themselves.
■ **It is used for:** Impeachment of the President
  ● Removal of a Judge SC/HC
  ● Election of the Speaker/Deputy Speaker
  ● **Motion of Thanks** on the President's Address
  ● Adjournment motion on a matter of public importance
  ● **Confidence or No-Confidence motion** in the Council of Ministers
  ● Resolution for removal of the Speaker or Deputy Speaker
  ● Motion declaring a member's seat vacant
  ● Motions for discussion on matters of general public interest
	■ **About:** Motion that **depends on or relates to another motion** or House proceedings.
	  ● Has **no independent meaning**; cannot express the House's decision without reference to the original motion.
	■ **Types of Subsidiary Motions:**
	  ● **Ancillary Motions:** Regular procedural motions facilitating **legislative business**. Used to move that a **Bill be taken into consideration** or **passed**.
	  ● **Superseding Motions:** Moved during debate to **replace or delay** the main question; often **dilatory** (e.g., recommitting to Select/Joint Committee, recirculation, adjournment).
	  ● **Amendments:** Introduce changes before final decision; may modify a **Bill, resolution, motion, or another amendment** to improve or present an alternative proposal.

Substitute Motions	
■ **About:** Moved **in place of an original motion** (e.g., policy discussion). Can express an opinion but **depend on the original motion**. ■ **Process:** Moved during debate; at the end, **only the substitute motion is put to vote**. ■ **Example (1991):** During discussion on international situation, substitute motions termed government's foreign policy **"unsatisfactory"** (e.g., Gulf War response).	

Removal of the Lok Sabha Speaker

MPs submitted a notice seeking the removal of **Lok Sabha Speaker Om Birla**. The notice, reportedly signed by over 100 MPs, cites "partisan conduct" and the denial of permission to the **Leader of Opposition (LoP)** to speak as primary reasons.

- This move has brought the constitutional procedure for the **removal of the Lok Sabha Speaker** into the spotlight.

Procedure for the Removal of the Lok Sabha Speaker

- **Constitutional Provision: Article 94 of the Constitution** specifies the circumstances in which the Speaker or Deputy Speaker of the Lok Sabha vacates office.
  - Under Article 94(a), they automatically **cease to hold office if they stop being a member of the Lok Sabha.**
  - Article 94(b) allows **them to resign at any time by submitting a written resignation.**
  - Under Article 94(c), they may be **removed by a resolution passed by a Majority of all the then members of the House.**
  - This provision applies exclusively to the Lok Sabha and not the Rajya Sabha.

- **Procedural Requirements:** The specific steps are governed by Rules 200–203 of the *Rules of Procedure and Conduct of Business in Lok Sabha*.
  - **14-Day Notice:** A resolution for removal can only be moved after giving at least **14 days' notice**.
    - ❖ The notice must be given in writing to the **Secretary-General** of the Lok Sabha, signed by at least one member.
  - **Admission of Motion:** The motion is entered in the List of Business if it is in order.
    - ❖ The Presiding Officer reads the notice to the House, for the motion to be admitted for discussion, at least **50 members** must rise in support of it in the House.
    - ❖ If fewer than 50 members rise, the motion fails to get the "leave of the House" and is dropped.
  - **Strict Guidelines for the Motion:** The charges in the resolution must be **specific, clearly expressed, and precise**.
    - ❖ It must **not** contain arguments, inferences, ironic expressions, imputations, or defamatory statements.

❖ The discussion is strictly confined to the charges mentioned in the resolution.

- **Passing the Resolution:** For the removal to be successful, the resolution must be passed by a majority of all the then members of the House. This is technically known as an **Effective Majority.**

- **Outcome:** If the resolution is passed by the Effective Majority, the Speaker is removed from office immediately.

  - Notably, the **Speaker does not vacate his office upon the dissolution of the Lok Sabha. The Speaker** continues until immediately before the first meeting of the newly elected Lok Sabha.

  - However, in the case of removal by resolution, the vacation is immediate.

- **Speaker's Role During Proceedings:** The Speaker **cannot preside** over the House while a resolution for their removal is under consideration (**Article 96**).

  - The Speaker has the right to speak and take part in the proceedings. They can vote in the **first instance** (as an ordinary member) but **cannot exercise a casting vote** in the case of an equality of votes (tie).

- **Historical Precedents:** No-confidence motions against the Speaker have been moved only **three times** in history:

  - **1954:** Against **G.V. Mavalankar** (First Speaker).

  - **1966:** Against **Hukam Singh**.

  - **1987:** Against **Balram Jakhar**.

  - **Outcome:** All three motions failed, and no Speaker has ever been removed from office via this process.

Sarvam AI and the Sovereign AI in India

Bengaluru-based **Sarvam AI**'s models **Sarvam Vision** & **Bulbul V3** outperformed **Google Gemini** and **ChatGPT** on **India-specific AI benchmarks**, boosting India's **sovereign AI ecosystem**.

- **Sarvam Vision: 3 billion-parameter vision-language model** for image captioning, scene text recognition, chart/table interpretation.

- **Focus:** Digitizing Indian records (manuscripts, financial tables, historical texts).

- **Key Features:**

  - Performs **Knowledge Extraction** beyond traditional OCR—understands **document structure**, **reading order**, and **mixed scripts**.

  - Trained on datasets in **22 official Indian languages**.

  - **Performance:** Scored **84.3%** on **olmOCR-Bench**, beating **Google Gemini 3 Pro** & **DeepSeek OCR v2**

    ❖ Achieved **93.28% accuracy** on **OmniDocBench v1.5**, excelling in **complex document parsing**.

- **Bulbul V3:** Sarvam's upgraded **Text-to-Speech (TTS)** model with **35+ voices** across **11 Indian languages**; expanding to all **22 Scheduled Languages**.

  - Captures **prosody**, handles **Indian accents**, **code-switching**, **regional variations**, and **emotional tone**.

  - Part of **₹10,300 crore India AI Mission** for **sovereign AI models**.

- **Sarvam** selected to build India's **first indigenous LLM** under **IndiaAI Mission**. Developing **70-billion-parameter model** with variants:

  - **Sarvam-Large** (advanced reasoning)

  - **Sarvam-Small** (real-time apps)

  - **Sarvam-Edge** (on-device use)

- **AI tools launched:**

  - **Sarvam Samvaad:** Conversational AI for enterprise insights/actions.

  - **Sarvam Audio:** 3B language model extension in **English** + **22 Indian languages**.

  - **Sarvam Dub:** AI dubbing, zero-shot voice cloning, cross-lingual speech.

Challenges in Scaling Up the Sovereign AI Ecosystem in India	Suggestions
■ **Linguistic Exclusion:** Lack of quality datasets in **22 languages/dialects** causes **token inequality** and poor vernacular AI performance. ■ **Bias Reinforcement:** Uncurated data may amplify **caste, gender, religious biases**, affecting **welfare delivery**. ■ **Riskless Capitalism:** VC funding favours **consumer tech** over **deep tech**; **patient capital** for AI is scarce. ■ **Data Quality:** Vast data exists but is **unstructured/siloed**, limiting **machine-readability**. ■ **Moat Sustainability:** Global giants could **close the performance gap** by fine-tuning models on **Indic datasets**, weakening Sarvam's edge.	■ **Link with ISM:** Prioritize **AI chip fabrication** (ASICs/TPUs) under **India Semiconductor Mission**. ■ **Design-Led Manufacturing:** Incentivize **indigenous AI accelerators** (e.g., **Shakti, Vega**) for a full Atmanirbhar compute stack. ■ **Frugal AI:** Focus on **Small Language Models** (**SLMs**) for efficiency and Edge AI use. ■ **Global Partnership on AI Leadership:** Promote **Global South AI framework** prioritizing **developmental goals**. ■ **Data Residency:** Enforce **DPDP Act, 2023** to ensure local data processing and boost domestic infra. ■ **Move Beyond Pilots:** Mandate use of **indigenous AI** in **public procurement** (railways, defence, postal). ■ **AI Safety Institute:** Set up statutory body to **test and certify high-impact models** for safety and bias.

> "Sovereign AI is the digital equivalent of national defense in the 21st century." Discuss this statement in light of recent developments in indigenous AI models
>
> **Drishti Mains Question**

Union Budget 2026–27 Push for Chemical Parks

India's first dedicated budgetary support for chemical park infrastructure announced in Union Budget 2026–27; **₹600 crore challenge-based scheme** (proposed) to help States **establish 3 Chemical Parks**.

Chemical Parks

- **About:** Planned industrial clusters for **chemical & petrochemical manufacturing**.
- **Key Features:** Follow **cluster-based, plug-and-play model**. Offer ready land, shared utilities, logistics & standard environmental compliance (e.g., waste treatment, safety systems).
  - Model builds on **Plastic Parks**, **Bulk Drug Parks** & **Petroleum, Chemicals and Petrochemical Investment Regions (PCPIRs)**.
- **Objective**: Boost domestic chemical manufacturing, cut import dependence, improve supply-chain integration, enhance global competitiveness in **bulk & specialty chemicals**.
- **India's Status**:
  - Contributes **~7% to GDP; 6th largest** globally, **3rd in Asia.** Supplies key inputs to agriculture, pharma, textiles, autos, construction
- **Significance**: Supported by policy, tech adoption, innovation, sustainability. Aims to deepen **manufacturing capacity** & **global chemical value chain integration**

Related Cluster-based Initiatives

- **Plastic Parks Scheme**: Industrial zones for **plastic processing**; focus on recycling, value addition, exports, employment with shared infrastructure.
- **Scheme for Promotion of Bulk Drug Parks**: Support domestic pharma manufacturing; provide common facilities (ETPs, labs, utilities); located in **Gujarat, Himachal Pradesh, Andhra Pradesh**.
- **PCPIRs**: Large zones for petroleum, chemical, petrochemical sectors; integrate production units with logistics and environmental infrastructure; key sites at **Dahej, Visakhapatnam, Paradeep**.

PMO's Directive on PM CARES and Relief Funds

PMO informed the **Lok Sabha Secretariat** that questions on **PM CARES Fund**, **PMNRF** & **NDF** are **inadmissible** as they are funded by **voluntary contributions**, not the **Consolidated Fund of India**. Cited **Rules 41(2)(viii)** and **41(2)(xvii)** of Rules of Procedure and Conduct of Business in Lok Sabha.

> **NOTE:** Rule 41 of the Rules of Procedure and Conduct of Business in Lok Sabha allows MPs to ask Ministers questions on matters of public importance under their special cognizance.
>
> - **Rule 41(2)(viii)**: Questions must not relate to matters **not primarily under the Government of India**.
> - **Rule 41(2)(xvii)**: Questions must not deal with **bodies not primarily responsible** to the Government of India.

Question in the Parliamentary Context

- **About:** A **Question** is a parliamentary tool to **hold the Government accountable** by seeking information on **administration**, **activities**, and **policies**.
- Generally, the first hour of **Lok Sabha** sitting is the **Question Hour**, dedicated to this.

Type of Questions	Description	Key Feature
Starred Question	A question for which the member desires an **oral answer** in the House.	Distinguished by an asterisk (*). Allows **supplementary questions** to follow.
Unstarred Question	A question for which a **written answer** is desired.	Deemed laid on the Table. **No supplementary questions** can be asked.
Short Notice Question	Relates to a matter of urgent public importance.	Can be asked with **less than 10 days' notice** (shorter than the usual minimum) for oral answer by a Member.
Question to Private Member	Addressed to a Member who is *not* a Minister.	Subject matter must relate to a Bill/Resolution for which that specific Member is responsible.

- **Admissibility of Questions:** Decided by the **Speaker of Lok Sabha** as per **Rules 41–44**, **Direction 10A**, **past precedents**, **rulings**, and **parliamentary conventions**.
  - **Conditions for Admissibility: Public Importance**: Must relate to a matter of public importance under the concerned **Minister's jurisdiction**.
    - ❖ **No Irony or Defamation**: Should not include **arguments**, **irony**, or **defamatory statements**.
    - ❖ **No Repetition**: Must not **repeat** questions already answered.
    - ❖ **No Secret Matters**: Cannot seek info on **Cabinet secrets** or **Presidential advice**.
    - ❖ **Not Sub-Judice**: Cannot relate to matters **under court adjudication**.
  - **Grounds for Disallowance (Direction 10A):** A question may be rejected if it:

❖ **Encourages divisive tendencies** affecting **national unity**.

❖ Relates only to **day-to-day administration** or **individual interests**.

❖ Falls under the jurisdiction of bodies like the **Chief Election Commissioner** or **Courts**.

Can a Government Body Preemptively Block Questions?

The PMO's blanket ban on questions is procedurally unusual, say parliamentary experts.

■ **Case-by-Case Norm**: **Admissibility** is typically decided **per question**, not by banning entire subjects.

■ **Standard Practice**: Ministries usually request **disallowance of specific questions** (e.g., citing national security), not issue **general bans**.

■ **Criticism**: The move is seen as **undermining parliamentary oversight**, promoting **executive interference**, and weakening **accountability** over **public donation-based fund**s.

India Semiconductor Mission 2.0

Announced in **Union Budget 2026–27**, ISM 2.0 marks a shift from **policy & capacity building** to **consolidation**, **technological depth**, and **global integration**, building on the foundation of **ISM 1.0**.

■ **Objective**: Position India in the **global semiconductor value chain**; supports **Aatmanirbhar Bharat** & **Make in India–Make for the World**.

■ **Budget 2026–27**: ₹1,000 crore

■ **Manufacturing: ISM 1.0** (Dec 2021): ₹**76,000 crore** outlay, up to **50% fiscal support**.

- **By Dec 2025**: **10 projects**, ₹**1.60 lakh crore** investment, across **6 states**

- Includes **silicon fabs**, **compound semiconductors**, **advanced packaging**, **testing facilities**

■ **Market Size**: $38 billion (**2023**) → $45–50 billion (**2024–25**); Projected: **$100–110 billion by 2030**

- **Targets: 70–75% self-sufficiency** in domestic demand by **2029**. 3 nm & 2 nm chip manufacturing by **2035**

■ **Key Focus Areas:**

- **Indigenous Manufacturing**: Local production of equipment, chemicals, gases, materials to cut import dependence.

- **Full-Stack IP Development**: Promote end-to-end Indian semiconductor IP for secure, competitive chip solutions.

- **Research & Skills**: Set up industry-led R&D and training centres for advanced manufacturing skills.

- **Supply Chain Resilience**: Strengthen domestic and global supply chains amid geopolitical risks.

■ **Ecosystem**: Backed by **Modified Programme** for Development of Semiconductor and Display Manufacturing Ecosystem.

- **Outlay**: ₹**8,000 crore** (2026–27)

- Focus: Boost **investment**, expand **fabrication & packaging capacity**, create **high-quality jobs**.

Mission for Aatmanirbharta in Pulses

Self-Reliance in Pulses Mission roadmap finalised at **FLRP, Amlaha, Sehore, MP**.

Mission for Aatmanirbharta in Pulses

■ **Launched**: Oct 2025 | **Budget**: ₹11,440 crore | **Period**: 2025–26 to 2030–31

■ **Focus Crops**: **Tur (Arhar), Urad, Masoor**

■ **Need:** Pulses vital (20–25% of protein); per capita intake < 85g/day.

- Despite 31% rise in production, **47.38 lakh tonnes imported (2023–24).**

■ **Targets:** Expand area by **35 lakh ha** → Total **310 lakh ha**; Increase production to **350 lakh tonnes.**

- Goals: Reduce imports, boost yield/income, promote climate-resilience

■ **Operational Strategy: SATHI Portal**: Tracks seed lifecycle; ensures quality seeds

■ **Assured Procurement**: 100% Tur, Urad, Masoor procurement for 4 years via **NAFED & NCCF** under **PM-AASHA**

■ **Cluster Approach**: Geographic diversification & efficient resource use.

Highlights of the Roadmap

■ **1,000 pulse mills** (incl. **55 in MP**) under **cluster model**; ₹25 lakh **subsidy/unit**

■ **"Seed to market"**: Seeds distributed **state-wise**, not from Delhi

■ Cluster farmers get **seed kits** + ₹**10,000/ha** for **model farming.**

NITI Aayog Recommendations

■ **One Block–One Seed Village** via **seed hubs & FPOs**

■ Use **rice fallows** for pulses cultivation

■ **Integrate pulses** into **PDS & Mid-Day Meals**

■ Promote **climate-resilient, short-duration varieties** & use **SATHI Portal** for **data-driven monitoring.**

Facts About the Pulses

■ **About:** **Edible dry seeds** of **legumes** (Fabaceae); rich in **protein, fiber**, and **nutrients**

- Nitrogen-fixing, improve **soil fertility**, **long shelf life**, low-fat
- **Climatic needs**: 20–27°C, 25–60 cm rainfall, **sandy-loamy soil**
  - **Kharif**: Arhar, Urd, Moong, Lobia, Kulthi, Moth
  - **Rabi**: Gram, Lentil, Pea, Lathyrus, Rajmash
  - **Summer**: Moong, Urd, Lobia
- **Production Status:** India - **largest producer & consumer** (~25% global output)
  - Share in food grain output declined: **16% (1950) → ~8% (2022–23)**
  - **Pulse demand by 2050**: ~39 million tonnes → **2.2% annual growth needed**
- **Major Growing States:** MP, Maharashtra, Rajasthan, UP, Gujarat, Karnataka, Jharkhand, AP, Chhattisgarh, WB
- **Environmental Benefits: Nitrogen fixation**, **soil biodiversity**, **low carbon**, good for **climate-resilient** and **plant-based** agriculture.

Revised Startup Recognition Framework

India has **revised the startup recognition framework under the Startup India Action Plan**, marking a significant policy update as the **Startup India** initiative enters its second decade.

- In **2024**, only **about 10% of Department for Promotion of Industry and Internal Trade (DPIIT)-recognised startups were deep tech**, a level flagged as **too low**, prompting reforms to build a **future-ready ecosystem** aligned with India's **innovation, manufacturing, and emerging technology goals**.

Key Revisions in India's Startup Recognition Framework

- **Introduction of a Deep Tech Startup Category:** A dedicated sub-category of startup has been introduced for **"Deep Tech Startups"** with specific criteria to identify genuine innovation:
  - **Definition:** The entity must develop solutions based on **new scientific or engineering knowledge**, involving **long development cycles, extended gestation periods, high capital and infrastructure needs, and significant technical or scientific uncertainty**.
  - **R&D Focus:** It must have a high percentage of expenditure on Research & Development relative to its revenue or funding.
  - **IP Requirement:** The entity must **own or be in the process of creating significant, novel intellectual property (IP)** and be **taking steps to commercialise it**.
  - **Asset Restriction:** During the recognition period, Deep Tech startups are explicitly disallowed from investing in assets or activities not integral to their core business.

- **Authority:** The **DPIIT** is the final authority that determines whether a company qualifies as a startup or a deep tech startup.
  - ❖ It will decide this based on "guidance" from an Inter-Ministerial Board of Certification.
- **Turnover Limit and Age Eligibility:** Under the new **DPIIT** norms, the turnover limit for startup recognition has been **doubled from Rs 100 crore to Rs 200 crore** for entities up to **10 years** from incorporation.
  - For **deep tech startups**, the **recognition period has been extended from 10 to 20 years** from incorporation, with the **turnover limit raised to Rs 300 crore**.
- **Cooperative Societies:** Both **Multi-State Cooperative Societies (under Multi-State Cooperative Societies Act, 2002)** and **Cooperative Societies (under State and Union Territory Cooperative Acts)** are now eligible for startup recognition.
  - This move specifically aims to boost innovation in agriculture, rural development, and allied sectors.
- **Restrictions to Prevent Misuse:** To ensure that benefits accrue only to genuine startups, the revised framework introduces **stricter safeguards**, including a bar on entities engaged in **speculative or non-productive assets or activities**, as notified by the government.
  - It also clearly excludes businesses formed through the **splitting up or reconstruction of existing enterprises** from being recognised as startups.

> **NOTE:** The **Anusandhan National Research Foundation** (**ANRF**) is the custodian of the Rs 1 lakh crore **Research and Development Innovation (RDI) Fund** that is expected to invest in emerging technology and fund research over seven years.
> A part of these investments, which will be through secondary fund managers such as financial institutions, will go to **deep tech startups**.

Startup India Initiative

- **About:** The Startup India Initiative launched on 16th January 2016, led by DPIIT under the **Ministry of Commerce and Industry**, has evolved into a full-stack platform supporting startups from ideation to scale.
- **Startup India Action Plan:** An Action Plan for **Startup India** was unveiled in 2016.
  - The Action Plan comprises 19 action items spanning across areas such as "Simplification and handholding", "Funding support and incentives" and "Industry-academia partnership and incubation".
  - The Action Plan laid the foundation of Government support, schemes and incentives envisaged to create a vibrant startup ecosystem in the country.
- **Major Schemes & Support Pillars:** The **Fund of Funds for Startups** channels a Rs 10,000 crore corpus through **SEBI-**

registered **Alternative Investment Funds** to expand domestic risk capital.

- The **Credit Guarantee Scheme for Startups** enables collateral-free lending via eligible financial institutions.
- The **Startup India Seed Fund Scheme** provides early-stage funding for proof of concept, prototyping, and market entry.
- The **Startup India Hub** acts as a single-window digital platform linking startups with investors, mentors, incubators, corporates, and government bodies.
- At the federal level, the **States' Startup Ranking Framework** promotes competitive federalism by assessing startup policy performance across States and UTs.
- **Mentorship and networking platforms such as Mentorship, Advisory, Assistance, Resilience, and Growth (MAARG)** and Startup India Investor Connect

Portal bridge founders with mentors and investors, strengthening the overall startup ecosystem.

- **Impact & Achievements:**
  - **Scale:** India is now one of the world's largest startup ecosystems with over **2 lakh recognized startups**.
  - **Unicorns:** The number of unicorns (startups valued at USD 1 Billion+) has grown from just 4 in 2014 to over **120**.
  - **Inclusivity:** Over **45%** of startups have at least one woman director, and nearly **50%** of recognized startups come from **Tier II and Tier III cities**.

Defence in Union Budget 2026–27

Union Budget 2026–27 allocates **₹7.85 lakh crore** to **defence** — highest ever — focusing on **military modernisation, indigenous manufacturing, veterans' welfare**, post **Operation Sindoor**, with national security central to self-reliance vision.

Advancing Defence Modernisation and Self-Reliance through the Union Budget	Key Challenges in India's Defence Modernisation Despite Higher Allocations

■ **Modernisation Push: Capital allocation**– ₹2.19 lakh crore+ for Defence Forces; focus on **capital acquisition**.
  ● Induction of **next-gen aircraft, weapons, naval platforms, subs, unmanned systems**.
  ● Boost to **BRO** for **tunnels, bridges, airfields**.
  ● Investment in **optical fibre networks** for **network-centric, joint ops**.
■ **Boosting Indigenous Defence Manufacturing:** ₹1.39 lakh crore for **domestic procurement**; ~**75% of capital budget** for Indian manufacturers.
  ● **Customs duty exemption** on imported raw materials for **aircraft** maintenance, repair and overhaul.
  ● Aims to boost **Aatmanirbhar Bharat**, attract **investment**, create **skilled jobs**.
■ **Research, Development & Innovation: DRDO** allocation up ~**8.5%**, focused on **capital expenditure** for capability creation.
  ● Expanded **R&D funding** to **industry, start-ups, academia**; boosts **CoEs & tech transfer**.
■ **Enhanced Healthcare and Pension Support for Veterans: Ex-Servicemen Contributory Health Scheme** gets ₹**12,100 crore** (↑45.49%) for veterans' healthcare.
  ● **Defence pensions** up 6.56%; covers **34+ lakh pensioners** via **SPARSH** & other channels.
	■ **High Revenue Expenditure:** 50% spent on salaries & pensions; <30% for capital outlay, limiting modernisation.
	■ **Low GDP Share**: Defence budget at ~**2% of GDP**, below **3% recommended** by **Standing Committee on Defence** (2018).
	■ **Currency Depreciation**: Reduces **buying power** as defence deals are mostly in **USD**.
	■ **Committed Liabilities**: Large share of capital budget tied to **past contracts**; shortages risk **contractual defaults**.
	■ **Import Dependence**: 2nd-largest arms importer (SIPRI); high foreign spend creates **emergency vulnerability**.
	  ● **Negative Lists Issue: Import bans** before domestic readiness cause **capability gaps** despite Atmanirbharta push.
	■ **Domestic Quality Issues: CAG** (2022) flagged **Ordnance Factory faults** (accidents), **119 of 178 DRDO projects** delayed.
	■ **Critical Equipment Shortages:** Army– only **15% new-gen equipment** (target 30%); lacks **snow gear** for high-altitude troops.
	  ● **Air Force**– 31 squadrons active vs **42 authorized**; **MiG phase-out** without replacements risks air superiority.
	■ **Disparity in Spending Power: China outspends India**, ensuring superior **tech & military depth**.
	  ● **Two-Front Pressure**– Despite outspending **Pakistan**, India's resources are stretched across land & sea.
	■ **DAP 2020 Struggles: Project 75(I)** deal took **6 years post-DAP, 20 years total** — deemed functionally **obsolete** in AI warfare era.

Measures to Strengthen India's Defence Preparedness

- **Financial Restructuring**: Activate **Modernisation Fund** (recommended by 15th FC); **non-lapsable**, supports **committed liabilities** beyond annual budgets.
- **Incentivising Private Sector R&D**: Shift to **co-development model**; fund **Make-I category R&D prototypes** to reduce DRDO dependence, boost **defence exports** (₹210 bn in 2023–24; target ₹500 bn by 2028–29).

- **Accelerate Procurement**: Revamp **DAP**; simplify **AoN process**, allow **fast-track buys** for urgent needs.
- **Theaterisation**: Speed up **Integrated Theatre Commands** for joint ops & efficient resource use vs **China & Pakistan**.
- **Realistic Indigenisation**: Align **import bans** with **domestic production timelines**; use **emergency procurement** if local systems fail quality tests.

> Discuss the structural constraints limiting India's defence modernisation despite increased capital expenditure.
>
> **Drishti Mains Question**

Electronics Components Manufacturing Scheme

The **Union Budget 2026–27** has significantly bolstered India's ambition to become a global technology leader by increasing the outlay for the **Electronics Components Manufacturing Scheme (ECMS) to Rs 40,000 crore**, aligned with the goal of building a **USD 500-billion domestic electronics manufacturing ecosystem by 2030–31**.

- **ECMS**: Launched in April 2025 by the **Ministry of Electronics and Information Technology (MeitY)**, it aims to build a **self-sustaining electronics component ecosystem** by attracting domestic and global investment across the value chain by integrating its domestic electronic industry with the **Global Value Chains (GVCs).**
- **Incentive Structure:**
  - The ECMS provides **turnover-linked, capex-linked, or hybrid fiscal incentives,** with a portion of both turnover and capex incentives linked to employment generation.
  - Incentives will be given on a **first-come, first-served basis** to firms ready for early production.
- **Tenure:** ECMS has a **six-year tenure** with a one-year gestation period for the Turnover Linked Incentive, while the Capex Incentive is available for a five-year period.
- **Target Segments:** It focuses on **sub-assemblies** such as camera modules and display units, **bare components** including multi-layer PCBs, capacitors, and resistors, and **capital equipment** used in electronics factories, together accounting for **nearly 90% of the Bill of Materials (BoM)** for mobile phones.
- **Surplus Investment Interest:**
  - As of December 2025, the ECMS attracted **Rs 1.15 lakh crore in investment commitments**, which is **double the initial target of Rs 59,350 crore**.
- **Projected Economic Outcomes: ECMS** is expected to generate **Rs 10.34 lakh crore over six years and** create **1.41 lakh direct jobs** and several lakh indirect opportunities.
  - Positions electronics as India's potential **second-largest export item**, following a **six-fold production increase** in the last decade.

- **Synergy with ISM 2.0:**
  - The ECMS acts as a horizontal enabler, working alongside the **India Semiconductor Mission (ISM) 2.0** to build a comprehensive ecosystem covering materials, equipment, and advanced packaging.

Electronics as an Export Powerhouse of India

- **Electronics Growth**: According to the **Economic Survey 2025–26**, electronics is now **India's third-largest and fastest-growing export category**, up from seventh place in 2021–22.
  - In the **first half of FY26**, electronics exports touched **USD 22.2 billion,** putting the sector on track to become **India's second-largest export category**.
  - Electronics production has witnessed a **six-fold increase**, rising from **Rs 1.9 lakh crore in 2014–15 to Rs 11.3 lakh crore in 2024–25**.
  - India is currently the **world's second-largest mobile phone manufacturer**, with production skyrocketing **28-fold** over the last decade.
- **Employment Generation:** The electronics sector has created **25 lakh jobs** in the past 11 years.

Supporting Policy Framework

- **Production-Linked Incentive** (**PLI**) **Scheme:** It covers 14 sectors and nearly **70% of the USD 4 billion FDI in electronics** since 2020 is attributed to **PLI beneficiaries.**
  - The sector has also benefited from allowing **100% foreign direct investment in electronics manufacturing**, subject to applicable laws and regulations.
- **Modified Electronics Manufacturing Clusters (EMC 2.0) Scheme:** Focuses on creating world-class infrastructure through **Modified Electronics Manufacturing Clusters**.
- **Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors (SPECS):** Provides a **25% financial incentive on capital expenditure** for high-value electronic components.
- **National Policy on Electronics (NPE) 2019:** The overarching **National Policy on Electronics** aiming to position India as a global hub for Electronics System Design and Manufacturing (ESDM).
- **Fiscal Incentives:** The Union Budget 2026-27, announced **Basic Customs Duty** (**BCD**) **exemptions** for microwave oven inputs and **Social Welfare Surcharge exemptio**ns for electronic toy parts.

NDMA Guidelines for Disaster Victim Identification

NDMA has released India's first-ever national guidelines & SOPs for Disaster Victim Identification (DVI). Titled *"National Disaster Management Guidelines on Comprehensive Disaster Victim Identification and Management"*, the document was released, marking 25 years since the 2001 Gujarat earthquake.

Need for the Guidelines	Key Provisions of NDMA DVI Guidelines
■ **Triggered by Disasters**: Air India crash (Ahmedabad), Sangareddy chemical factory explosion (Telangana), Uttarakhand flash floods, Delhi's car bomb blast near Red Fort. • **Gaps**: No SOPs, lack of trained manpower/infrastructure, traditional ID methods inadequate. • Addresses **dignity of the dead**, **legal closure**, and **emotional closure** for families. **Significance** ■ Based on **INTERPOL DVI standards**, adapted to **Indian context**. ■ Strengthens **disaster governance**, **institutional preparedness & victim dignity**. ■ Integrates **science, technology & ethics** in disaster response. ■ Addresses **India-specific challeng**es: climate disasters, urban accidents, industrial hazards.	■ **Four-stage Identification Process**: **Systematic recovery** of remains; **Post-mortem data** (DNA, fingerprints, dental, physical markers); **Ante-mortem data** from families; **Reconciliation** of post- and ante-mortem records ■ **National Dental Data Registry**: A major recommendation is the creation of a dental registry, allowing authorities to **use teeth and jaws** (which are highly durable) to identify victims when other methods fail. ■ **National Dental Data Registry**: Use of **teeth & jaws** for identification when other methods fail. ■ **Forensic Archaeology & Odontology**: Enables identification even **months/ years later** using **dental records**. ■ **No Mass Autopsies**: Advised in mass fatality events. ■ **Cultural Sensitivity**: Respect customs; provide **emotional support & counselling**. ■ **Implementation**: Creation of **state-level specialised forensic teams**. **Targeted training** for complex scenarios (e.g., landslides without records).

Challenges in DVI

- **Decomposition**: Rapid in **hot, humid climate**; visual ID impossible within hours.
- **State of Remains**: Often **charred, fragmented, mingled**, making ID complex.
- **Displacement**: Bodies **moved miles away** or **buried deep** in floods/landslides.
- **Infrastructure Gaps**: Shortage of **mortuaries, cold chain transport, storage**.
- **Coordination Issues**: **Multiple agencies**, no **unified command**.
- **Lack of Data**: No **centralised database** (e.g., dental records) for ID.

Measures to Strengthen DVI

- **"Pre-Disaster" Public Data Repository**: Link **ABHA** with **biometric markers** (e.g., dental scans, implant serial numbers) for real-time **Dental Registry** use.
- **Integration of "Digital Forensics"**:
  - Use **smartwatches, mobiles, cloud health data** for quick ID.
  - **Biometric locks**– serve as **rapid primary identifiers**.
  - **AI facial reconstruction**– faster, objective alternative to **clay modelling**.
- **Portable DNA labs**: Deploy **Rapid DNA machines** at disaster sites to generate a DNA profile in **90 minutes** directly at the disaster site.
- **Tamper-proof records**: Use **Blockchain ledger** for secure **Chain of Custody**.
- **International DVI diplomacy**: Pre-signed **DVI treaties** for **instant biometric/DNA data sharing**.

16th Finance Commission Report

The **16th Finance Commission (16th FC)**, chaired by **Arvind Panagariya**, has submitted its report for the award period **2026-31**. The recommendations, tabled in Parliament alongside the **Union Budget 2026-27,** signal a significant shift from "entitlement-based" transfers to "compliance-driven" fiscal federalism.

Key Recommendations of the 16th Finance Commission (2026–31)

- **Tax Devolution:**
  - **Vertical Devolution:** This is the percentage of the Central Government's Divisible Pool of taxes that is given to the States.
    - ❖ Under 16th FC, states' share in the **divisible pool of central taxes** was retained at **41%**, unchanged from the **15th Finance Commission.**
    - ❖ The divisible pool excludes **cesses, surcharges, and cost of collection** from gross central tax revenue.
  - **Horizontal Devolution:** This is the formula used to decide exactly **how many rupees each state gets from that 41% pot.**
    - ❖ The 16th FC has introduced a major **shift toward rewarding economic performance.**
    - ❖ Distribution among states is based on a **revised devolution formula** with weights for **income distance (42.5%)**, **population as per the 2011 Census (17.5%)**, **demographic performance (10%)**, **area (10%)**, **forest & ecology (10%)**, and a new **10% weight for contribution to GDP**, while **excluding the tax and fiscal effort parameter** used by the 15th FC.

16th FC Criteria for Devolution

- **Per Capita GSDP Distance** (**Income Distance**): Defined as the gap between a state's per capita GSDP and the **average per capita GSDP of the top three large states** with the highest income levels.
  - States with **lower per capita GSDP receive a higher share**, ensuring inter-state equity.
- **Population** (**2011 Census**): Devolution is based on each state's **share in India's population as per the 2011 Census**, reflecting expenditure needs arising from population size.
- **Demographic Performance:** Measures population growth between **1971 and 2011**, instead of changes in **Total Fertility Rate** (**TFR**).
  - States with **lower population growth** during this period receive a **higher share**, rewarding effective population control.
- **Forest:** Weightage is assigned based on a state's **share in total forest area** and its **contribution to the increase in forest cover between 2015 and 2023**. Unlike the 15th FC, **open forests are also included**, not just dense and moderately dense forests.
- **Contribution to GDP:** A new criterion recognising a state's **economic contribution to national GDP**, replacing the earlier **tax and fiscal effort** parameter.
  - **It rewards states contributing more to national economic output**.

Grants-in-Aid

- The 16th FC has recommended grants worth **Rs 9.47 lakh crore over the five-year period.** These comprise grants for **urban and rural local bodies, and disaster management.**
  - Revenue deficit grants, sector-specific grants, and state-specific grants recommended by the 15th Finance Commission have been discontinued.
- **Grants for Local Bodies:** Grants to local bodies amount to Rs 8 lakh crore, with Rs 4.4 lakh crore allocated to rural local bodies and Rs 3.6 lakh crore to urban local bodies.
  - All local body grants are subject to **three entry conditions:** constitution of **local bodies as per the Constitution, public disclosure of provisional and audited accounts, and timely constitution of State Finance Commissions.**
  - Local body grants are split into **basic grants (80%)** and **performance-based grants (20%).** This structure aims to ensure predictable transfers while incentivising fiscal and administrative performance.
    - ❖ 50% of the basic grant will be untied and the rest 50% will be tied to sanitation and solid waste management, and/or water management.
    - ❖ Performance grants will be further divided between **local body-level outcomes and state-level reforms.**
  - **Urbanisation premium grants of Rs 10,000** crore are proposed as one-time transfers to states. These are

meant to support the **merger of peri-urban villages into ULBs** and the formulation of a Rural-to-Urban Transition Policy.

- **Special infrastructure grants** of Rs 56,100 crore have been recommended for developing **comprehensive wastewater management systems** in cities with populations between ten and forty lakh, **as per the 2011 Census.**
- **Disaster Management Grants:** Rs 2,04,401 crore for State Disaster Relief and **Management Funds (SDRF and SDMF).**
  - Cost sharing is **90:10 for north-eastern and Himalayan states and 75:25 for other states.** Centre's share is Rs 1,55,916 crore.

Other Recommendations

- **Fiscal roadmap:** Recommended the centre to **reduce fiscal deficit to 3.5% of GDP by 2030–31**. It recommended the annual fiscal deficit limit for states to be 3% of GSDP.
  - It recommended ending **Off-budget borrowings and including all such liabilities in fiscal deficit and debt.** Combined Centre–state debt is **projected** to decline from **77.3% of GDP in 2026–27** to **73.1% in 2030–31**.
- **Power Sector Reforms:** States encouraged to privatise **DISCOMs**. Legacy debt to be parked in a special purpose vehicle, with repayment allowed through the **Special Assistance Scheme for Capital Investment**, usable only after privatisation.
- **Subsidy Expenditure: It recommended** states to rationalise subsidies, especially **unconditional cash transfers,** introduce **clear exclusion criteria, stop off-budget financing, and adopt uniform accounting** and disclosure of subsidies and transfers.
  - Across **21 states**, these schemes now account for **20.2% of total subsidy spending in 2025–26**, up from just **3% in 2018–19**.
  - By **2025–26, large-group cash transfer schemes alone account for 47.4%,** overtaking traditional social security spending. The Commission links this shift partly to the success of the **JAM trinity**, which has made mass cash transfers administratively easy and politically attractive.
- **Public Sector Enterprise Reforms:** Recommended closure of **308 inactive SPSEs** recommended.
  - Loss-making PSEs for **3 out of 4 consecutive years** to be placed before the Cabinet for a decision on closure, privatisation, or continuation based on strategic importance.
- **Data on Net Tax Proceeds :** The Commission recommended that the Union government **annually disclose Comptroller and Auditor General (CAG)-certified data on net tax**

proceeds under Article 279, to enhance transparency in the size of the divisible pool and ensure greater clarity on actual tax devolution to states.

Concerns Regarding the 16th Finance Commission

- **Stagnation in Vertical Devolution:** 16th FC has retained states' share in central taxes at **41%**, despite states demanding an increase to **50%**.
  - This is seen as **inadequate given expanding state responsibilities in health, education, and welfare,** especially after the **Goods and Services Tax (GST)** reduced their revenue autonomy.
  - The continued heavy use of cesses and surcharges, which **lie outside the divisible pool,** further shrinks states' untied fiscal space and worsens vertical fiscal imbalance.
- **Changes in Horizontal Devolution Formula:** Reduced weight **for income distance weakens equity**, while **higher weight for population (2011)** and a new **10% weight for contribution to GDP** favours populous and industrialised states.
  - Southern states contend that fiscal devolution now disadvantages them despite **successful population control,** while poorer state**s fear tighter transfers will hinder development.**
  - Tamil Nadu saw only a minimal rise in share from 4.079% to 4.097%, reflecting reduced **weightage for area, demographic performance, and per-capita GSDP.**
- **Phasing Out of Demographic Performance Incentives:** 16th FC flags the risk of **"aging before becoming rich"** and gradually reduces rewards for population control.
  - This has raised concerns among southern states that **early investments in fertility reduction are no longer adequately recognised,** undermining the principle of **cooperative federalism.**
- **Discontinuation of Revenue Deficit Grants:** The complete scrapping of **Revenue Deficit** grants is controversial.
  - Hill and special category states argue that their structural and geographical **constraints make revenue deficits unavoidable**, and removal of such support ignores asymmetric federal realities.
- **Off-budget Borrowing Restrictions:** The insistence on a **3% GSDP** fiscal deficit **cap for states and a complete end to off-budget borrowings** is seen as fiscally prudent but potentially contractionary.
  - States fear an investment squeeze in infrastructure and welfare, especially when combined with pressure to rationalise subsidies.
- **Over-centralisation:** An increasing share of tied grants limits states' flexibility to address local priorities.

- This fuels concerns that states are being reduced to implementing agencies for centrally defined priorities, undermining fiscal autonomy.

Measures to Strengthen Fiscal Federalism

- **Elasticity-Linked Transfers:** A portion of the devolution could be linked to the **"Revenue Buoyancy"** of a state. This would reward states that are improving their tax systems even if their absolute GDP is currently low.
- **Phased Implementation:** The 16th FC has already signaled a "gradual" shift, but states recommend a **"Floor Guarantee"** - ensuring no state's absolute share in nominal terms drops below their 15th FC levels during the transition.
- **SFC Empowerment:** The Union could provide a **"Matching Grant"** to states that successfully implement their own State Finance Commission (SFC) recommendations, turning a penalty-based system into a reward-based one.
- **Capping Surcharges:** Legislation could be introduced to cap cesses/surcharges at a specific percentage (e.g., 10%) of the Gross Tax Revenue (GTR), ensuring they remain "temporary" as originally intended by the Constitution.
- **Inter-State Council Reactivation:** Frequent meetings of the Inter-State Council (Article 263) specifically on fiscal matters would allow for "Real -time Federalism," where concerns about grant delays (the 10-day rule) can be resolved without litigation.

> The 16th Finance Commission marks a shift from entitlement-based to compliance-driven fiscal federalism. Critically examine the implications of this shift for Centre–state relations.
>
> **Drishti Mains Question**

34th Foundation Day of National Commission for Women

The **National Commission for Women (NCW)** observed its **34th Foundation Day on 31st January**, reaffirming its role as India's apex statutory body for protecting women's rights.

- The event highlighted women's health as a core pillar of empowerment and nation-building under the theme *Swasthya hi Sashaktikaran*.

Key Facts About NCW

- **About:** The NCW is a statutory body established on **31st January 1992** under the **National Commission for Women Act, 1990**.
  - Its primary mandate is to review **constitutional safeguards for women,** recommend legislative measures, and facilitate the redressal of grievances.
- **Background:** The establishment of the NCW was the result of recommendations by the **Committee on the Status of Women in India (CSWI)** and the **National Perspective Plan for Women (1988-2000).**

- **Constitution of the Commission:** The Central Government nominates the body. The structure ensures representation from various fields relevant to women's welfare.
  - **A Chairperson:** Committed to the cause of women.
  - **Five Members:** Persons of ability and integrity with experience in law, trade unionism, management, women's voluntary organizations, administration, or social welfare.
    - ❖ At least one member must belong to the **Scheduled Castes and one to the Scheduled Tribes.**
  - **A Member-Secretary:** An expert in management/ sociology or a civil servant with appropriate experience.
  - All hold office fo**r three years or until the age of 65, whichever is earlier.**
- **Functions and Mandate**
  - **Investigation:** Examining matters relating to safeguards provided for women under the Constitution.
  - **Reporting:** Presenting annual reports to the Central Government on the working of safeguards and recommending effective implementation.
  - **Legislative Review:** Reviewing existing laws affecting women and suggesting amendments to fix lacunae or shortcomings.
  - **Suo Moto Notice:** Taking initiative to look into matters of deprivation of rights, non-implementation of laws, and non-compliance with policy guidelines.
  - **Research and Studies:** Undertaking research to identify factors impeding women's advancement (e.g., housing, health hazards) and funding litigation for issues affecting a large body of women.
  - **Inspections:** Inspecting jails, remand homes, & women's institutions to ensure proper custody conditions.
- **Powers of the Commission:** The NCW enjoys powers of a **civil court**, including summoning individuals, examining witnesses on oath, calling for documents, requisitioning public records, and receiving evidence on affidavits.
  - These powers strengthen its role as a **quasi-judicial body.** Despite its mandate, it is frequently characterized as a "toothless tiger" because it is a recommendatory body with limited enforcement powers.
- **Initiatives:**
  - **Helplines:** Launched a WhatsApp helpline and a **24x7 Women Helpline** to provide online support, psychological counseling, and links to police/hospitals.
  - **Mahila Jan Sunwai:** A pilot project to facilitate speedy disposal of complaints via in-person and online hearings.
  - **Capacity Building:** Collaborated with **LBSNAA** to train Protection Officers under the **Domestic Violence Act, 2005** for gender sensitization of police personnel.

- **"She is a Changemaker" – Women in Politics:** NCW's programme supports women's leadership and political participation.
  - ❖ It offers training on public policy, gender-responsive governance, communication, and leadership.
- **Cyber Safety:** Conducted research on cyber threats against women and launched awareness campaigns regarding **"Misogyny Online" and social media responsibility.**

Split Verdict on Section 17A

SC delivered a split verdict on the **constitutional validity of Section 17A of the Prevention of Corruption Act (PCA), 1988**.

PCA, 1988

- India's **principal anti-corruption law**, based on **Santhanam Committee (1962–64)**.
- Covers **public servants**: govt employees, judges, persons performing public duty.
- Criminalises **bribery**, **undue advantage**, **criminal misconduct**.
- Provides **punishment** for offences committed during official functions.
- **Section 17A (2018 Amendment)**
  - **Objective:** Protect **bona fide decision-making**; prevent **"play-it-safe" syndrome**.
  - Mandates **prior government approval** before inquiry/ investigation into official acts of a public servant.
  - **Distinct from Section 19**: **Section 17A** → approval at **investigation stage**. **Section 19** → sanction at **prosecution stage**.
- **SC Split Verdict**
  - **Justice K.V. Viswanathan**: Upheld Section 17A **conditionally**. Prior approval valid **only if** based on binding opinion of **independent authority**: **Lokpal** (Centre), **Lokayuktas** (States), not govt itself.
  - **Justice B.V. Nagarathna**: Struck down Section 17A as **unconstitutional**. Violates **Article 14**; termed it **"old wine in a new bottle"**. Held **Section 19** already provides adequate protection.
- **Key Legal Precedents**
  - **Vineet Narain (1998)**: Single Directive struck down; prior sanction before investigation violates **Article 14**.
  - **Subramanian Swamy (2014)**: Section 6A, DSPE Act invalid; irrational classification, hampers independent probe.
- **Systemic Reforms Highlighted:** Need for **speedy disposal** of corruption cases.
  - **Penalties for false/malicious complaints** to prevent misuse of safeguards.

Code of Wages, 2019

SC urged States to decide on including domestic workers under the **Minimum Wages Act, 1948** & **Code of Wages, 2019**.

Code of Wages, 2019	

■ **Aim**: Ensures **fair wages**, **social justice**, **ease of compliance** & **employment generation** by unifying wage-related laws.
  ● Promotes **Single Registration**, **Single License**, **Single Return**. Reduces **rules: 163→58**, **forms: 20→6**, **registers: 24→2**
■ **Origin**: Based on **2nd National Commission on Labour (2002)** recommendations to consolidate 29 laws into **four functional codes**.
■ **Subsumes**: Payment of Wages Act, 1936; Minimum Wages Act, 1948; Payment of Bonus Act, 1965; Equal Remuneration Act, 1976
■ **Objective**: Balances **worker protection** with **ease of compliance**, promoting **decent employment**.
■ **Gender Inclusivity and Social Justice**:
  ● **Section 3**: **No Gender Discrimination** – Prohibits bias in recruitment, wages, or conditions for same/similar work (includes transgender).
  ● **Section 42**: **Women's Representation** – 1/3rd **members** in Central/State Advisory Boards must be **women**.
	■ **Key Pro-Worker Reforms & Provisions**:
	  ● **Section 5**: **Universal Minimum Wages** – Extends to **all employees**, increasing coverage from ~**30% to 100%**.
	  ● **Section 9**: **Introduction of National Floor Wage** – Empowers Centre to set **baseline wage**; States can't go below it.
	  ● **Fixing of Minimum Wages**: Based on **skill**, **region**, **arduousness of work**; revised every **5 years**.
	  ● **Section 17**: **Timely Wage Payments** – No wage ceiling; e.g., monthly wages within **7 days**, termination dues within **2 days**.
	  ● **Section 13**: **Stipulating Working Hours** – Max **48 hrs/week**, **12 hrs/day** (incl. rest). **Section 14**: **Overtime** – Paid at **2× normal wage rate**.
	  ● **Section 50**: **Proof of Payment** – **Wage slips** mandatory for all, incl. **unorganised sector**.
	■ **Pro-Employment & Compliance Reforms**:
	  ● **Section 56**: **Decriminalization & Compounding of Offences**– Replaces imprisonment with fines for first-time offences; allows compounding at **50%** of max fine.
	  ● **Section 51**: **Inspector-cum-Facilitator** – Introduces **web-based random inspections** and **facilitative role**.
	  ● **Section 64**: **Employer Asset Protection** – Safeguards deposits/dues from court attachment, except for **employee liabilities**.

District One Product (ODOP)

The **ODOP** initiative has recently been in the news for its nationwide expansion.

ODOP

- **Launched by**: **Ministry of Commerce & Industry**, implemented via **DPIIT** with **Invest India** support. Inspired by Japan's "One Village One Product".
  - Launched in UP (2018) with Moradabad's brassware. Revived traditional crafts: chikankari embroidery, pottery, carpets, leather goods, brassware.
- **Coverage (as of 2025)**: **1,102+ products** from **761 districts** across sectors — agriculture, textiles, handicrafts, food, minerals.
- **Objective**:
  - Support **artisans, farmers, MSMEs**; transform **local specialities into global brands**; preserve **cultural heritage**.
- **Vision**:
  - Aligned with **Atmanirbhar Bharat** and **Vocal for Local**; promotes **eco-friendly**, traditional, and **sustainable production**.
- **Market Access**: Integrated with **GeM**, **ODOP Bazaar**, and **state e-commerce platforms**.

- **Exports**: Supports **Districts as Export Hub**, **Make in India**, and promotes products at **global trade platforms**.
- **Product Selection**: Done by **States/UTs** based on local ecosystem; shared with DPIIT.

ODOP Wall

- **Curated display** of **district-specific indigenous products**. Set up at platforms like **SARAS Aajeevika Stores**.
- **Objective:** Improve **market access & visibility** for **rural artisans** and **women SHGs**.

PM Ekta (Unity) Malls

- Developed under **PPP model** as **national cultural & retail hubs**.
- **Financial support**: ₹**5,000 crore interest-free**, with ≥ ₹**100 crore per State**.
- **Coverage**: 29 Unity Malls approved across 27 States.
- **Purpose**:
  - Dedicated retail hubs for **ODOP**, **GI-tagged**, and **handicraft products**.
  - Earmarked space for every State & UT to showcase **district-level specialities**.
- **Outcome**:
  - Enhances **artisan incomes**, **market access**, and **cultural integration**.

Year-End Review 2025: Ministry of Skill Development and Entrepreneurship

MSDE highlighted progress in India's **skilling ecosystem** since **2014**, addressing the gap of **millions entering workforce without industry-ready skills**.

Role of MSDE in Transforming India's Skilling Ecosystem

- **PMKVY 4.0:** Shifted to **demand-driven skilling**; by **Dec 2025**, 27.08 lakh trained across **38 sectors, 732 districts.** Introduced **102 future-skill job roles & 77 customised courses**; focus on **Industry 4.0, green jobs**.
  - **Converged with** PM Surya Ghar, Vibrant Villages, Green Hydrogen Mission, PM-JANMAN, PM SVANidhi, Jal Jeevan Mission.
- **Rebuilding Vocational Education via ITI:** Enrolment rose from **9.5 lakh** to **14+ lakh. PM–SETU (May 2025)** – linked ITIs to **industry-led clusters** (hub-and-spoke) & **state economic strengths**.
  - **STRIVE Project** (World Bank-supported)-- upgraded **ITIs and industry clusters**.
- **Apprenticeships as a Scalable Employment Bridge:** NAPS apprenticeships scaled as a core skilling pathway rather than a peripheral option. **49.18+ lakh** apprentices engaged since **2016**; ˜**18 lakh** in **FY 2024–26**.
  - **Women's participation**– 11.3% (2018–19) → 22.84% (2024–25).
- **Mainstreaming Traditional Skills: PM Vishwakarma** (launched **Sept 2023**) integrated **traditional artisans** into formal skilling & credit. By **2025**– **23.66 lakh artisans**, **18 trades**, trained & certified.
  - Focus on **skill upgradation, toolkits, bank credit** for **income-oriented modernisation**.
- **Digital Public Infrastructure:** Skill India Digital Hub (launched **2023**)-- 1.6 crore registrations, 30,000+ training centres, ₹1,100+ crore DBT (Sept 2025). **Bharatskills Portal** (since **2019**) – 75.37 lakh users, 4.44 crore hits; supports ITI trainees/trainers.
  - Enabled **rapid expansion with transparency & fiscal control**.

- **Entrepreneurship:** 12.75 lakh trained, **26,000+ enterprises** created (Dec 2025).
  - **Swavalambini Programme** (2025) – promotes **women-led enterprises**.
  - **Credit Guarantee Fund Scheme** (revamped **2024**) – expanded lenders, loan limits to ₹**7.5 lakh**, improved coverage.
- **Jan Shikshan Sansthans:** Targeted **women, tribal, marginalised groups** for **last-mile inclusion**. **33.55 lakh** trained; **7.08 lakh** NCVET-compliant certificates post digital integration (**2018–Dec 2025**).
  - Extended skilling to **informal and vulnerable labour segments**.
- **Globalising Indian Skills:** Through **G2G agreements** & **Skill India International Centres** (**SIICs**). **8,313 candidates** trained at SIICs (**Nov 2025**).
  - Shift towards **regulated, skill-based global mobility**.
- **Strengthening Governance & Quality:**
  - **NCVET (2018):** Apex regulator for **standardising qualifications**, **quality assurance**, under **NSQF**.
  - **ISDS (2017):** Strengthened **administration of skilling schemes**.
  - **SANKALP Programme (2018–25):** World Bank-supported; boosted **institutional capacity**, **district/state-level skilling plans**.
  - **Skill Gap Studies:** Conducted to align training with **domestic & global demand**.

How has the Ministry of Skill Development and Entrepreneurship shifted India's skilling strategy from scale-centric to demand-driven outcomes.

Drishti Mains Question

International Data Privacy Day (IDPD)

India observed **IDPD (28th January),** reaffirming its commitment to responsible **data practices** amid the rapid expansion of digital platforms.

- **IDPD: Designated in 2006** by the **Council of Europe**. Marks the signing of **Convention 108** – the **first legally binding global treaty** on **data protection**.
- **Convention 108: Adopted in 1981** to protect **privacy** amid rising **cross-border data flows**.
- **Modernised (2018):** Introduced **Mandatory data breach reporting, Safeguards** against **algorithmic decision-making** & **AI risks**.
- **India has not signed or ratified** the Convention.

Digital Footprint & India's Data Privacy Framework

- **Digital Footprint:** Reflects **extensive use of digital platforms** for governance, services, and citizen engagement.

- **India**: **3rd-largest digital economy; 101.7 crore broadband users**, **lowest data cost** (~USD 0.10/GB).
- **Digital Public Infrastructure**: Aadhaar, UPI, MyGov, eSanjeevani (44+ cr consultations).
- **Need for Data Privacy:**
  - High **volume & sensitivity** of personal data raises risk of: **Cyber threats, fraud, privacy breaches; 1.91 million cybercrime complaints** in **2024**
  - **Requires:** Privacy by design, Robust legal & institutional safeguards, Trust-based digital governance.
- **Evolution of India's Data Privacy Framework**
  - **IT Act, 2000:** Foundation of India's cyberspace law; recognizes e-records, e-signatures; established CERT-In for cyber response
  - **CERT-In:** National nodal agency for cybersecurity; proactive threat management & incident response

- **IT Rules, 2021 (Amended 2025):** Enforce due diligence by intermediaries; ensure safe, accountable online space; define intermediaries (e.g., ISPs, social media)
- **DPDP Act, 2023:** Based on K.S. Puttaswamy judgment; recognizes privacy as a fundamental right (Art. 21); introduces SARAL compliance model
- **Data Protection Board of India:** Established under DPDP Act; handles breaches, enforces compliance, ensures grievance redressal
- **DPDP Rules, 2025:** Operationalise DPDP Act; define rights, responsibilities, enforcement; ensure transparent, citizen-centric governance.

Challenges to Data Protection

- **State Exemptions**: DPDP Act allows govt. to exempt itself without judicial oversight, creating **constitutional imbalance** and weakening **Article 21 privacy rights**.
- **Executive-Controlled Regulator**: **Data Protection Board** lacks independence; risks **biased enforcement** as the govt. is the **largest data fiduciary**.
- **No Victim Compensation**: **Fines go to State**, not victims; citizens must go to **civil courts**, making **privacy justice inaccessible**.
- **Public Data Grey Zones**: Exemptions for **publicly available data** allow **AI training/data scraping** without meaningful consent, risking misuse via **deepfakes**.
- **Weak Grievance Mechanism**: **Multi-step redressal** (company → board → tribunal) is **complex and discouraging** for users.
- **Cybersecurity Capacity Deficit**: Shortage of **skills and enforcement capacity** against **AI-driven frauds**; data protection is weak without **cyber readiness**.

Measures to Strengthen Data Protection

- **Autonomous Regulator**: Ensure **DPBI is independent**; adopt **collegium-based appointments** for credible oversight.
- **Judicial Oversight for State Exemptions**: Require **independent/judicial approval** for surveillance to balance **privacy & security**.
- **Victim Compensation Fund**: Create a **dedicated fund** from penalties; allow **DPBI to grant ex-gratia relief** for citizen-centric enforcement.
- **Bilateral Data Agreements**: Promote **safe international data flow** via **bilateral/multilateral accords**.
- **Consent Managers Reform**: Mandate **open, non-profit, interoperable models** (like Account Aggregators) to ensure **informed, meaningful consent**.

> "Data protection is a democratic imperative in a digitally governed society." Examine this statement in the context of India's Digital Public Infrastructure.
>
> **Drishti Mains Question**

Governor's Address to State Legislature

Recently, the **Tamil Nadu Governor** walked out of the State Assembly during his customary address. Simultaneously, the **Kerala Governor** omitted specific paragraphs. These incidents have reignited the debate on the **discretionary powers of the Governor** and the sanctity of **Article 176**.

Role of the Governor

Constitutional Provisions

- **Article 176:** Mandates that the Governor shall address the Legislative Assembly, or both Houses in bicameral States, at the **commencement of the first session each year** to inform the **Legislature of the causes of its summons**.
  - This address is a **constitutional duty** and functions as a policy statement of the elected State government, not as a personal expression of the Governor.
- **Article 175:** Empowers the Governor to address either House or both Houses of the State Legislature and to send messages, particularly in relation to Bills.
  - However, this power is exercised as **part of executive functioning and does not confer independent discretion,** remaining subject to the aid and advice of the Council of Ministers.
- **Article 163:** Establishes that the **Governor shall act on the aid and advice of the Council of Ministers** except in matters where the Constitution explicitly provides discretion.

Constituent Assembly About the Governor's Role

- The **Constituent Assembly** envisaged the **Governor as a constitutional head rather than an autocratic authority,** entrusted with duties but no independent powers.
- The governor is expected to act as a **neutral representative of the people of the State as a whole, not as a political actor.**

Supreme Court Judgments on Governor's Role

- **State of Tamil Nadu v. Governor of Tamil Nadu (2024):** The Supreme Court held that the Governor's discretionary powers **cannot be exercised to stall, obstruct, or negate the functioning of an elected government**.
- **Nabam Rebia v. Deputy Speaker (2016):** A five-judge Constitution Bench ruled that the Governor's discretionary powers are strictly limited and explicitly defined in the Constitution.
- **Shamsher Singh v. State of Punjab (1974):** A seven-judge Constitution Bench held that the Governor is a

constitutional head and must act on the **aid and advice of the Council of Ministers** in all matters except those where the Constitution expressly grants discretion.

- It held that the Governor cannot exercise personal discretion in executive matters.

Committee Recommendations

- **Sarkaria Commission (1988) Recommendations:** It emphasized that the Governor must not be an agent of the Centre and should act as a **"lynchpin" of federalism, avoiding active politics.**
- **Punchhi Commission (2007):** Recommended that the Governor should not be burdened with positions (like **Chancellor of Universities**) that open them to political controversies, focusing strictly on constitutional duties.

Arguments for Governor's Discretion

- **Constitutional Oath (Article 159):** The Governor takes an **oath to preserve, protect, and defend the Constitution** and cannot be compelled to read material perceived as **unconstitutional, factually incorrect, seditious**, or undermining constitutional values.
- **Right to Dissent and Free Speech:** As a high constitutional authority, the Governor is not a mechanical functionary and **may refuse to endorse content that directly attacks the office of the Governor**.
  - Articles 175 and 176 mandate the Governor's address but do not explicitly prescribe that the Governor must read it verbatim, leaving some interpretive space.
    - ❖ This constitutional silence is cited to argue that discretion is not entirely excluded.
- **Representative of the Union:** Being the **constitutional link between the Union and the State**, the Governor is argued to have a responsibility to prevent speeches that may threaten **national unity or federal integrity.**
- **Preventing Institutional Self-Contradiction:** If the address contains content directly **contradicting constitutional positions earlier taken by the Governor** (e.g., assent, reservation of Bills, reports to the President), reading it may amount to institutional inconsistency.

Arguments Against Governor's Discretion

- **Aid and Advice Principle (Article 163):** Under the Westminster model adopted by India, the Governor is a ceremonial head. The real power lies with the **elected Council of Ministers**, thus, the Governor must act on their "aid and advice".
- **Nature of the Governor's Address:** The address is a **statement of the State Government's policy, not the Governor's personal opinion**. Altering or refusing it blurs accountability and confuses legislative responsibility.

- **Erosion of Federalism:** Unilateral edits or walkouts by a centrally appointed Governor are seen as encroachments on State autonomy and disrupt the federal balance.
  - Allowing discretion in addresses opens the door to selective obstruction, especially in opposition-ruled States. This **undermines the Governor's expected neutrality** and erodes public trust in constitutional offices.
- **Threat to Parliamentary Democracy:** Allowing discretion in routine executive functions risks creating a parallel authority, weakening the core principle of responsible government.
- **Legislative Privilege and Autonomy:** The Governor's address is part of legislative proceedings.
  - Interference may infringe upon the legislature's privilege to debate and reject government policy on the floor, rather than through pre-emptive executive.
- **Judicially Preferred Remedy Exists:** If content is unconstitutional, the appropriate remedy lies in judicial review, not unilateral refusal by the Governor.
  - **Constitutional adjudication is the domain of courts,** not individual constitutional authorities.

Way Forward

- **Codification of Conventions:** The "conventions" of the British parliamentary system (where the Monarch never deviates from the speech) should be codified or strictly adhered to.
  - The Supreme Court can issue **declaratory constitutional guidelines clarifying that the Governor's address is a mandatory constitutional function** without discretionary scope. This would reduce recurring litigation and prevent inconsistent practices across States.
- **Orientation and Capacity-Building for Governors:** Newly appointed Governors should undergo mandatory constitutional training on federalism, conventions, and judicial precedents. This would improve role clarity and reduce institutional friction.
- **Constructive Dialogue:** Chief Ministers and Governors **must bridge the "trust deficit" through private consultation** on the draft speech before the session, rather than public confrontation.
- **Time-bound Constitutional Communication Mechanism:** A formal, time-bound framework should require Governors to communicate any objections to the address in writing within a fixed deadline.
  - If no response is given within this period, concurrence should be presumed. This would **eliminate avoidable delays,** discourage tactical silence, and ensure smooth constitutional processes.

The Governor's address under Article 176 is a constitutional duty, not a discretionary power." Examine in the light of recent controversies and Supreme Court judgments.

Drishti Mains Question

Arbitration Council of India (ACI)

SC sought the government's response on a plea to **constitute the ACI** and frame **uniform guidelines for accreditation** and regulation of arbitral institutions/arbitrators; though mandated under the Arbitration and Conciliation (Amendment) Act, 2019, the ACI remains unconstituted.

- **Legal Basis**: **Statutory body** under **Part IA (Sec 43A–43M)** of **Arbitration Act, 1996**, added via **2019 Amendment**, based on **Justice B.N. Srikrishna Committee (2017)**.
- **Composition**:
  - **Chairperson**: Appointed by Govt in **consultation with CJI**; eligible – former SC/HC judge or eminent arbitrator.
  - **Members**: Arbitration experts, academicians, govt reps.
- **Functions**: Grade arbitral institutions, accredit arbitrators, maintain award depository. Promote **ADR mechanisms** (e.g., mediation, conciliation). Frame **uniform professional standards**.
- **Key Concerns**: **Lack of independence** due to govt dominance. **Over-regulation risk** by accrediting many institutions (vs. single bodies in **Singapore/HK**).
  - **Excludes foreign professionals**, reducing global appeal.
- **Draft Arbitration and Conciliation (Amendment) Bill, 2024: Redefines "arbitral institution"** – now based on **procedural authority**, not court designation.
  - **Institutions can: Extend award deadlines, Reduce fees** for delays, **Appoint substitute arbitrators.**
- **Court's interim relief powers curtailed**; shifted to **emergency arbitrators**.
- **Arbitration start timeline**: From **interim relief application date** (not court order).
- **New Sec 9-A**: Interim measures via **emergency arbitrators** after arbitration starts but before tribunal forms.

NOTE: ACI is distinct from the **Indian Council of Arbitration (ICA)**, which is a **non-governmental arbitral institution** established in **1965**.

Arbitration

- **Nature**: **Private, voluntary, binding** ADR method; **neutral third party** (arbitrator) resolves disputes.
- **Law**: Governed by **Arbitration & Conciliation Act, 1996**, based on **UNCITRAL Model Law** (**1985**) & **Rules** (**1980**).
- **Use**: Suitable for **commercial, civil, international disputes**.
- **Recent Reform Push**: **Dr. TK Viswanathan Committee** (**2024**) recommends strengthening **institutional arbitration**, **minimising court intervention**, and ensuring **cost-effective, time-bound** processes.

National Voters' Day (NVD) 2026

The **President of India presided over the National Voters' Day (NVD) celebrations**, observed on **25ᵗʰ January**, to celebrate democracy and encourage citizen participation in the electoral process.

- NVD marks the foundation of the **Election Commission of India (ECI)**, which was established on **25ᵗʰ January 1950 under Article 324 of the Indian Constitution.**

Key Highlights of NVD 2026

- **Theme:** The theme for NVD 2026 is *"My India, My Vote"* with the tagline **"Citizen at the Heart of Indian Democracy"**.
  - This symbolizes the ECI's efforts to design citizen-centric electoral processes where the convenience of the voter is paramount.
- **Significance:** It underscores the importance of voter participation in a democracy. It promotes voter enrolment and awareness, with special focus on new and young voters, through nationwide celebrations and outreach activities led by the ECI.
- **Initiatives Launched:**
  - **Best Election District Awards in 2026:** The President presented the **Best Electoral Practices Awards,** recognising states like Bihar, Kerala, Tamil Nadu, Odisha, Gujarat, Meghalaya, Mizoram, UP, Jharkhand, and Delhi for excellence in technology use, election management, voter awareness, Model Code of Conduct enforcement, and training.
  - **Publications:** On NVD 2026, the publications "2025: A Year of Initiatives and Innovations" and "Chunav Ka Parv, Bihar Ka Garv" were released, showcasing the ECI's leadership in electoral management.

Major Electoral Reforms Introduced by the ECI

- **Photo Identity Cards for Voters (1993):** The ECI introduced the **Electors Photo Identity Card (EPIC)** scheme to prevent impersonation and fraudulent voting. While initially a physical card, the initiative evolved to include **Photo Electoral Rolls (PERs)** in 2004.
  - In 2021, the **e-EPIC** was launched, allowing voters to download a secure, non-editable digital version of their ID, making it easier to carry and access on mobile devices.
- **Electronic Voting Machines (EVMs) (1998):** First used experimentally in 1982 (Kerala), EVMs were formally introduced on a larger scale in 1998 for State Assembly elections in Madhya Pradesh, Rajasthan, and Delhi.
  - They eliminated **"invalid votes" (a common issue with paper ballots),** reduced the time required for counting from days to hours, and are eco-friendly by saving paper.

- **Systematic Voters' Education and Electoral Participation (SVEEP) (2009):** This is the ECI's flagship program for voter education. It aims to bridge the "participation gap" by addressing urban apathy and youth disengagement.
  - The program uses targeted interventions (like street plays, social media, and campus ambassadors) to ensure **"No Voter to be Left Behind".**
- **Voter Verifiable Paper Audit Trail (VVPAT) (2013):** Following a Supreme Court directive in 2013 (Subramanian Swamy vs. ECI), the **VVPAT** was introduced to add a layer of verification to EVMs.
  - VVPATs allow voters to verify their vote through a printed slip visible through a glass window for seven seconds.
- **National Electoral Roll Purification and Authentication Programme (NERPAP) (2015):** This programme allowed electoral officers to conduct door-to-door verification drives.
  - It focused on linking **EPIC data with Aadhaar** to identify and remove duplicate or multiple entries across different constituencies to create an error-free and authenticated electoral roll.
- **ERO-NET (2018):** A digital form-processing system for election officials available in 14 languages and 11 scripts. It helps voters track the status of their applications and allows for real-time processing of forms to prevent dual registration.
- **Accessible Elections for Persons with Disabilities (2018):** The ECI declared 2018 as the **"Year of Accessible Elections".**
  - ECI provided **Braille-enabled EPICs** for visually impaired voters, establishing auxiliary polling stations to reduce travel distance, and offering free transport to polling stations for **Persons with Disabilities (PwDs).**
- **cVIGIL App (2018):** This mobile app empowers citizens to act as "election observers".
  - Citizens can take a photo or video of Model Code of Conduct (MCC) violations (like hate speech or bribe distribution). The app uses geo-tagging to pinpoint the location.
  - The ECI mandates that authorities must investigate and respond to cVIGIL complaints within 100 minutes.
- **Special Intensive Revision (SIR) (2025):** A comprehensive electoral roll revision ordered by the ECI to ensure no eligible citizen is excluded and no ineligible person is included.
  - **SIR** covered over **51 crore electors** across 12 States/UTs, targeting the removal of deceased voters and duplicate entries.
- **ECINET (2026):** A user-friendly digital interface launched by the ECI for electors, election officials, political parties,

and civil society. More than 40 existing mobile and web applications of the ECI will be integrated by this platform into a single "one-stop" interface.

- **International Cooperation:** India strengthened international electoral cooperation through bilateral engagements and by hosting the **India International Conference on Democracy and Election Management (IICDEM) 2026** in New Delhi, which led to the adoption of the **Delhi Declaration 2026.**
  - The **Declaration outlines five pillars** - clean electoral rolls, free and fair elections, research and publications, use of technology (including sharing India's ECINET platform), and training and capacity building through IIIDEM - to advance global electoral integrity and democratic innovation.

MSDE–WEF India Skills Accelerator

The **Ministry of Skill Development and Entrepreneurship (MSDE)** has signed a Memorandum of Understanding with the **World Economic Forum (WEF)** to strengthen **India's skills and Technical and Vocational Education and Training (TVET) ecosystem.**

- Under the MoU, the partners will launch a **Skills Accelerator in India** to scale innovative solutions and address emerging skill gaps.

MSDE- WEF India Skills Accelerator

- **About:** It is a multistakeholder platform that brings together government, industry, academia, and global institutions to address **current and emerging skill gaps in India's workforce.**
- **Objectives:** The Accelerator aims to align skilling initiatives with evolving industry and global labour-market needs while scaling innovative skilling models and strengthening public–private partnerships.
  - It will support **flexible, industry-linked curricula, integrate vocational and higher education pathways**, enable mutual recognition of qualifications, and promote innovative, outcome-based financing for skilling.
- **Importance:** By strengthening the TVET ecosystem, the initiative enhances global employability of Indian youth and helps convert India's demographic advantage into a skilled, future-ready workforce.
  - It complements the **National Education Policy (NEP) 2020** by integrating vocational education with general education and fostering lifelong learning.
  - The initiative is positioned as a **central pillar for Viksit Bharat @2047,** aiming to convert India's demographic advantage (over 500 million people under 25) into economic leadership.

Initiatives Driving India's TVET Landscape		
Scheme	**Target Group**	**Key Features**
Skill India Mission	Youth across India	Skilling, reskilling, upskilling via MSDE through training centres & digital platforms; aims at future & industry-readiness.
Pradhan Mantri Kaushal Vikas Yojana	Youth, including rural	**PMKVY 4.0** (**2022–26**) focuses on short-term training, **RPL**, and employability-oriented skills.
Jan Shikshan Sansthan	Non-literates, neo-literates, school dropouts (15–45 years)	Vocational training for disadvantaged groups; priority to women, SC/ST/OBC, minorities, Divyangjan.
National Apprenticeship Promotion Scheme	Apprentices and industrial establishments	Financial support for apprenticeship under Apprentices Act, 1961; combines basic & on-the-job training.
Craftsmen Training Scheme	Youth seeking long-term vocational training	Implemented via ITIs; promotes industry-ready workforce and youth self-employment.

National Girl Child Day 2026

National Girl Child Day, observed on **24ᵗʰ January** to reaffirm commitment to **eradicate gender discrimination** and promote **holistic empowerment of girls**.

- **About: NGCD,** initiated in **2008 by MWCD** to raise awareness on **gender discrimination**, promote **equal opportunities**, and highlight issues like **female foeticide, child marriage, girls' rights, education, health**, and **nutrition**.

Initiative	Key Features	Outcomes
Beti Bachao Beti Padhao (BBBP)	Launched **2015**; Prevent **sex selection**, promote **survival, protection, education**; under **Sambal** (**Mission Shakti**)	**SRB** improved: **918** (**2014–15**) → **930** (**2023–24**); **Increased secondary enrolment**
Mission Shakti	Umbrella scheme (**2022**); Sub-schemes: **Sambal** (safety), **Samarthya** (empowerment); ensures convergence of schemes	Integrated implementation of **BBBP, One Stop Centres, PMMVY**
Samagra Shiksha	School education (pre-school to XII); focuses on **gender parity**, **separate toilets**, **stipends**	**GER for girls** (**Secondary**): **80.2**% (2024–25); **97.5% schools** with girls' toilets
Vigyan Jyoti (DST)	STEM push for girls (Class IX–XII), esp. rural; via **counselling, labs, workshops**	**80,000+ girls** supported in **300 districts**, **35 States/UTs**
Prohibition of Child Marriage Act, 2006 & Bal Vivah Mukt Bharat Campaign	Legal ban on child marriage; **2024 campaign** aims **child marriage-free India by 2030**	Targets **10% reduction** in prevalence by **2026**
Scheme for Adolescent Girls	For **14–18 yrs** in Aspirational & NE districts; **Nutrition + non-nutrition** support	**24.08 lakh+ girls** on **Poshan Tracker** (**Dec 2024**)
Sukanya Samriddhi Yojana (SSY)	**2015 savings scheme** for girl's education/marriage; part of **BBBP**	**4.2 crore+ accounts** opened (Nov 2024); boosts **financial inclusion**

Freedom of Speech in Parliament

Budget Session 2026 saw concerns over **MPs' freedom of speech** after expunction of remarks raised questions on safeguards under **Article 105**.

Protection and Regulation of the Freedom of Speech of MPs

- **Constitutional Protection:**
  - **Article 105(1):** Grants MPs **freedom of speech in Parliament & committees**; separate from **Article 19**; enables debate & executive scrutiny.
  - **Article 105(2):** Provides **absolute immunity** from civil/criminal liability for anything said or vote given in Parliament; courts cannot question such proceedings.
  - **Extension of Protection to Non-Members: Article 105(2)** protection extends to authorised non-members (e.g., **Attorney General of India**) participating in proceedings.
  - **Article 121:** Prohibits discussion on conduct of **SC/HC judges**, except during impeachment; safeguards judicial independence.

- **Regulation Through Rules of Procedure:**
  - **Expunction (Rule 380 of the Rules of Procedure and Conduct of Business in Lok Sabha):** Speaker may expunge defamatory, indecent, unparliamentary or undignified words.
  - **Sub Judice Matters:** No discussion on matters pending before courts.

- **Personal Allegations:** Defamatory/incriminatory charges require prior notice to Speaker.
- **High Constitutional Authorities:** Negative references to their conduct are restricted.
- **Fellow Members:** Questioning bona fides generally prohibited.
- **Internal Checks Against Misuse: Committee of Privileges** examines breach/misuse of parliamentary privilege.

SC Judgments Regarding the Freedom of Speech of MPs

- **Tej Kiran Jain v. N. Sanjiva Reddy (1970):** Upheld **absolute immunity** under **Art. 105(2)**; "anything" has widest scope; no judicial scrutiny.
- **P.V. Narasimha Rao v. State (1998):** Immunity for bribery if directly linked to vote in House.
- **Raja Ram Pal v. Hon'ble Speaker, Lok Sabha (2007:** Parliamentary privileges subject to **judicial review** if constitutional limits violated.
- **Sita Soren v. Union of India (2024):** Overruled **1998 verdict**; no immunity for MPs/MLAs for accepting bribes; bribery not protected under **Art. 105(2)/194(2)**.

International Mother Language Day

On **21st Feb (International Mother Language Day)**, **UNESCO's 7th State of the Education Report for India 2025** — *"Bhasha Matters: Mother Tongue and Multilingual Education"* — highlights linguistic diversity as key to quality learning.

International Mother Language Day

- **Declared by UNESCO (1999);** observed globally since **2000** on **21st Feb** to promote linguistic & cultural diversity and multilingualism.
- **Theme 2026:** *"Youth Voices on Multilingual Education."*
- **Origin:** Commemorates **Bangla Language Movement (Dhaka, 21st Feb 1952)**; students killed demanding recognition of **Bangla**.
- **Objective:** Protect linguistic heritage, cultural diversity & intellectual traditions.
- **Crisis of Language Loss:** One language disappears every two weeks (**UN estimate**) due to globalization & economic preference for foreign languages.

UNESCO SoER 2025 Report for India

- **About:** Annual flagship report by **UNESCO Regional Office for South Asia**; evidence-based analysis of India's education system; aligned with **SDG 4 (quality education)**; calls for strengthening **Mother-Tongue-Based Multilingual Education (MTB-MLE)** with roadmap for inclusive education.
- **Core Focus:**
  - **Access, Inclusion & Equity:** Mother-tongue instruction for tribal children, girls, CWSN.
  - **Contextual & Lifelong Learning:** Integrate local languages & cultural knowledge from school to teacher training.
  - **Linguistic Diversity:** Treat children's linguistic repertoire as assets.
  - **Skills for Sustainable Futures:** Multilingual learning for cognitive flexibility & additional languages (incl. English).
  - **Institutionalisation:** Strengthen policies, teacher education & digital ecosystems for sustainable **MTB-MLE**.
- **Key Findings:**
  - **Policy Alignment:** MTB-MLE moving to centre of reforms; aligned with **NEP 2020** and **International Decade of Indigenous Languages (2022–2032)**; endorses mother-tongue instruction & multilingual pedagogy.
  - **State-Level Planning is Underway:** Language mapping expanding for medium of instruction, teacher deployment & materials; not yet universal.
  - **Vibrant Community-Led Practices:** Localised co-creation of learning materials in **Saora, Kui, Gondi, Santali, Khasi, Mizo**; showcases value of Indigenous knowledge systems.
  - **Odisha Tribal MLE Programme:** Covers **21 tribal languages** in **17 districts**; benefits ~**90,000 children**.
  - **Digital Innovation:** DIKSHA (Telangana), PM eVIDYA, **AI4Bharat** enabling multilingual content & documentation of endangered languages.
  - **Institutional Collaboration is Growing:** Coordination among **ministries, SCERTs, TRIs, NGOs, tech partners** for context-based pedagogy.
- ~**44% children (NCERT 2022)** enter school with a language different from medium of instruction.
- **NEP 2020** mandates **home language instruction till Grade 5 (preferably Grade 8)**; shift from colonial-era approach.

Linguistic Landscape

- **Diversity:**
  - **1,369 mother tongues; 121 languages** spoken by >10,000 people; **Linguistic Diversity Index–** 0.914 (among highest globally).
- **Language Families:** Indo-Aryan (78%), Dravidian (20%), Austro-Asiatic (1.2%), Tibeto-Burman (0.8%).
- **Endangerment:** ~**200 languages** vulnerable/endangered; mainly **Tibeto-Burman & Austro-Asiatic**.
- **Double Divide:**
  - Hierarchy—**English** > **dominant regional languages** > **Indigenous/tribal language**s, excluded from education, governance & digital spaces.

Key Challenges in Implementing MTB-MLE in India	Recommendations of the UNESCO SoER 2025 Report
■ **Language Mismatch:** Many tribal children start school in non-home language, affecting comprehension. ■ **Lack of Materials:** Limited textbooks in local languages; scripts still evolving. ■ **Teacher Preparedness:** Multilingual pedagogy not consistently integrated in training. ■ **Premature Transition:** Early shift to regional/global languages disrupts foundation. ■ **Digital Exclusion:** Tribal/minoritized languages under-represented online; poor accessibility & connectivity gaps. ■ **Fragmented Governance:** Dispersed institutional roles; lack of language-disaggregated data.	■ **National Mission for MTB-MLE:** High-level body for coordination, leadership & sustainable implementation. ■ **Inclusive Language Technologies:** Invest in tools for lesser-known languages; improve accessibility (**Indian Sign Language, Braille**); ensure remote connectivity. ■ **Sustainable & Equitable Financing:** Long-term, targeted funding for teacher prep, materials & digital inclusion. ■ **Strengthen Teacher Systems:** Reform recruitment, deployment & standards to prioritise multilingual competence; use **DIKSHA** for multilingual resources. ■ **Community Participation:** Institutionalise integration of Indigenous knowledge & oral traditions into curricula.

> Discuss the challenges in implementing Mother-Tongue-Based Multilingual Education (MTB-MLE) in India. Suggest measures to overcome them.
>
> **Drishti Mains Question**

SANKALP Scheme

Based on a **CAG report**, the **PAC** has raised concerns regarding the implementation of the **SANKALP** (utilised only **44% of its** World Bank assistance **funds)**.

SANKALP Scheme

- **About:** Launched in **January 2018** by the **MSDE** to operationalise the **National Skill Development Mission (NSDM)**.
- Nature of Scheme: Centrally Sponsored Scheme (CSS)
  - Focus: **Institutional strengthening** for short-term skill training and improving access for **marginalised groups**.
- **Funding Pattern**
  - **Total Outlay:** ₹4,455 crore
  - **World Bank Loan:** ₹3,300 crore
  - **Other Sources:** State leverage + Industry contribution
- **Timeline:** Original completion: **March 2023 (**extended till **March 2024).**
- **Core Objectives**
  - **Institutional Strengthening:** Capacity building at **National, State, District levels**
    - ❖ Support to **District Skill Committees (DSCs);** Implementation of **Mahatma Gandhi National Fellowship (MGNF)**
  - **Quality Assurance:** Standardisation of certification
    - ❖ Universalisation of **National Skills Qualification Framework (NSQF)**
    - ❖ Creation of pool of quality trainers
  - **Inclusion:** Enhanced participation of **Women**, **SC/STs**, and **PwDs**

- **Key Achievements:** Strengthened **DSCs** for demand-driven implementation of **PMKVY**
  - Promoted **Recognition of Prior Learning (RPL)** and certification at **Gram Panchayat level**
  - Developed **Skill India Portal** for nationwide skilling data capture.

7 New Interventions under Export Promotion Mission

The Ministry of Commerce & Industry launched **7 new interventions** under the **Export Promotion Mission (EPM)** to empower **Micro, Small and Medium Enterprises (MSMEs)** and enhance India's global export competitiveness.

- Following this launch, **10** of the **11 proposed EPM interventions** are now **operational**, including the three—**Market Access Support**, **Interest Subvention for Pre- and Post-Shipment Export Credit**, and **Collateral Support for Export Credit**—that were already under implementation.

7 New Interventions

- **Interventions Under Niryat Protsahan (Financial Enablers)**
  - **Support for Alternative Trade Instruments (Export Factoring):** Promotes **export factoring** as an affordable **working capital solution** for **MSMEs** by providing an **interest subvention of 2.75%** on the **factoring cost** for eligible transactions. Assistance is capped at **Rs 50 lakh** per **MSME annually.**
    - ❖ **Export factoring** is a **trade finance mechanism** in which an exporter sells its **foreign receivables (invoices)** to a specialized financial institution called a **factor** at a discount, in order to receive **immediate cash flow** instead of waiting for the overseas buyer to make payment.

- **Credit Assistance for E-Commerce Exporters:** The **Direct E-Commerce Credit Facility** will provide support up to **Rs 50 lakh** with 90% guarantee coverage. The **Overseas Inventory Credit Facility** will extend support up to **Rs 5 crore** with 75% guarantee coverage.
  - ❖ **Interest subvention** of **2.75%** will be available, subject to an annual ceiling of **Rs 15 lakh per applicant**.
- **Support for Emerging Export Opportunities:** It enables exporters to access **new or high-risk markets** through various shared-risk and credit instruments. These structured mechanisms aim to strengthen **exporter confidence** and liquidity flows.

Interventions Under Niryat Disha (Non-Financial Enablers)

- **Trade Regulations, Accreditation & Compliance Enablement (TRACE):** Supports exporters in meeting international **Testing, Inspections, and Certification (TIC)** requirements. Provides partial reimbursement of **60% under the Positive List** and **75% under the Priority Positive List** for eligible expenses subject to an annual ceiling of **Rs 25 lakh** per Importer-Exporter Code (IEC).
- **Facilitating Logistics, Overseas Warehousing & Fulfilment (FLOW):** Supports exporters in accessing **overseas warehousing** and **fulfilment infrastructure**, including **E-Commerce Export Hubs**. Provides up to **30% of the approved project cost** for a maximum of **3 years**.
- **Logistics Interventions for Freight & Transport (LIFT):** Mitigates **geographical disadvantages** faced by exporters in **low export intensity districts**. Provides partial reimbursement of up to **30% of eligible freight expenditure** subject to a ceiling of **Rs 20 lakh** per IEC per financial year.
- **Integrated Support for Trade Intelligence & Facilitation (INSIGHT):** Strengthens **exporter capacity-building** and **district-level facilitation** under the **Districts as Export Hubs** initiative.
  - Financial assistance is upto **50%** of project cost, with upto **100% support** for proposals from Central and State Government institutions and Indian Missions abroad.

Private Member's Bill on Judicial Diversity

A **Private Member's Bill** seeks to amend the **Constitution** to ensure **social diversity in higher judicial appointments** and create **regional benches of SC** for better access.

New Private Member Bill's Proposal for Judicial Diversity

- **Proportional Representation**: Mandates due representation for SC, ST, OBC, religious minorities & women in the SC and HCs, in proportion to their population.
  - **Current Data (2018–2024)**: SC/ST/OBC: ~20% of higher judiciary appointees. Women: <15%; Religious minorities: <5%

- **Time-Bound Appointments**: Requires the **Central government** to notify **collegium recommendations within 90 days** to prevent delays.
- **Regional Benches of SC:** Permanent regional appellate benches in **New Delhi, Kolkata, Mumbai, Chennai** for regular appeals.
  - **Constitution Bench in Delhi** to handle matters of **national constitutional importance**.
  - Presently, the **SC sits only in New Delhi**, restricting access for litigants from **southern, eastern, and north-eastern states**.

Constitutional Provisions Regarding SC's Seat & Judicial Appointments

- **Article 130:** Declares that the seat of SC shall be in Delhi, or at such other places as the **CJI** may decide with the prior approval of the **President.**
- **Article 124:** SC judges appointed by the President in consultation with the CJI and other judges.
- **Article 217:** HC judges appointed by the President in consultation with CJI, Governor, and HC Chief Justice.
- **Ad hoc Judges** (**Article 127**): If quorum of SC judges is not available, CJI (with President's consent) can request a HC judge to sit in SC.
- **Acting CJI** (**Article 126**): In case of vacancy/absence, senior most available SC judge appointed by the President.
- **Retired Judges** (**Article 128**): With President's consent, CJI may request a retired SC judge to sit and act as SC judge for a specified period.
- **Article 224A**: A retired HC judge may be requested to sit and act as an ad hoc judge of HC, with the prior consent of the President, on a reference made by the Chief Justice of the HC.
- **Appointment Procedures:**
  - **CJI:** Outgoing CJI recommends a successor, usually by seniority.
  - **SC Judges:** CJI initiates the recommendation, consulting **Collegium members** and the senior-most judge from the candidate's HC. Their opinions are recorded in writing.
    - ❖ The Collegium's recommendation is sent to the Law Minister, then PM, who advises the President for the appointment.
  - **HC Chief Justices/Judges**: The Chief Justice of HC is appointed by the President in consultation with the CJI and the Governor of the State.
    - ❖ The procedure for appointing puisne Judges is the same except that the Chief Justice of the HC concerned is also consulted.

Challenges Hindering Diversity in Judicial Appointments

- **Lack of transparency**: Collegium functions without **public criteria, binding diversity metrics, or published minutes**, leading to possible **unconscious bias**.

- **"Uncle Judge" syndrome**: **Nepotism & familial influence**; many judges linked to former judges/elite legal families, limiting entry of **first-generation and marginalized lawyers**.

- **No constitutional mandate**: Under **Articles 124 & 217**, no reservation for **SC, ST, OBC, or women** in higher judiciary; diversity depends solely on **Collegium discretion**, resulting in underrepresentation.

- **"Leaky Pipeline"**:
  - Despite high entry at law school/lower judiciary level, women's presence declines sharply at higher levels.
  - **Late 2024**: Women ~**14%** of **HC judges**. Only **2 of 25 HCs** have women **Chief Justices**.

- **Workplace realities**: Demanding litigation, **caregiving burden**, and lack of **institutional support/infrastructure** disrupt continuous career paths needed for elevation.

- **"Old Boys' Club" mentality**: Elevation depends on **visibility, senior designations, elite networks**; male-dominated circles limit recognition of outsiders.

- **Geographical & economic centralization**: **SC practice concentrated in New Delhi**; high relocation/logistical costs restrict lawyers from distant regions (e.g., Northeast, deep South) from gaining visibility for elevation.

- **No diversity metrics/audits**: Current **Memorandum of Procedure (MoP)** does not mandate disclosure of **demographic data**; absence of regular audits hinders monitoring & accountability.

Measures to Strengthen Diversity in Judicial Appointments

- **Regional Benches (Article 130)**: As per **229th Law Commission Report (2009)** & **Parliamentary Standing Committees (2021–22)**, **CJI** can establish regional benches under **Article 130** without constitutional amendment, in a phased manner.

- **Workplace infrastructure**: Provide **crèches, safe washrooms, anti-harassment committees** in lower & HCs to prevent women's attrition before eligibility for elevation.

- **Formal mentorship**: Institutional mentoring for **first-generation, Dalit, Adivasi & minority lawyers** to build visibility and prepare for judicial roles.

- **Revive modified NJAC**: Include representatives from **judiciary, executive, Bar Councils, civil society/academia** to democratize selection, reduce nepotism, and widen talent pool.

- **Formal diversity metrics in MoP**: Amend **MoP** to make **caste, gender, religion & region** binding criteria alongside merit and seniority.

23rd Foundation Day of National Commission for Scheduled Tribes

Ministry of Tribal Affairs marked the **23rd Foundation Day** of **NCST**, reaffirming its mandate to protect **ST rights**.

- **About:** NCST is a constitutional body established under Article 338-A of the Constitution through the **89th Constitutional Amendment Act, 2003**, which bifurcated the earlier combined National Commission for SCs and STs to provide focused attention on the distinct problems and developmental needs of tribal communities.

- **Composition:** Consists of Chairperson, Vice-Chairperson, and 3 other members **(including at least one woman Member)** appointed by the President by warrant under his hand and seal; their conditions of service and tenure are determined by the President.

- **Tenure and Service Conditions:** The Chairperson, Vice-Chairperson, and other Members serve a **3-year term**, with the Chairperson holding the rank of Union Cabinet Minister, the Vice-Chairperson the rank of a Minister of State, and other Members the rank of Secretary to the Government of India.
  - **Members are not eligible for appointment for more than two terms.**

- **Reporting**: Submits **annual/periodic reports** to **President**; laid before Parliament with action taken memorandum; state reports sent to Governor for state legislature.

- **Powers**: Civil court powers—**summon persons, seek documents, receive affidavits, requisition public records**; can regulate own procedure.

- **Core Functions:**
  - Monitor & investigate **constitutional/legal safeguards for STs**. Inquire into complaints of rights deprivation. Participate in socio-economic planning & evaluate development progress. Submit reports to President; recommend measures to Union/States.
  - **Additional Functions (Specified by President in 2005):** Ensure minor forest produce ownership rights. Safeguard rights over mineral & water resources; prevent land alienation. Oversee implementation of **PESA Act, 1996**. Improve **relief & rehabilitation** of displaced tribals. Eliminate **shifting cultivation**.

- **Mandatory consultation**: Centre & States must consult NCST on major policy matters affecting STs.

Nation & States

Anti-Defection Law

SC gave **3-week final deadline** to **Telangana Assembly Speaker** to decide **MLA disqualification petitions** under the **Anti-Defection Law**.

Anti-Defection Law

- **About: Introduced by 52nd Amendment, 1985** – Tenth Schedule
  - **Strengthened by 91st Amendment Act, 2003** – removed **1/3rd "split"**, retained **2/3rd "merger."**
- **Objectives:** Prevent **political defections & horse-trading**, enforce **party discipline &** allow **party mergers** without disqualification.
- **Grounds for Disqualification: Voluntarily give up** party membership (incl. conduct); **Vote/abstain** against party whip; **Independent MLAs** joining a party; **Nominated members** joining a party after 6 months.
- **Exceptions: 2/3rd merger rule** (no disqualification); **Speaker/Deputy Speaker** resigning to remain neutral.
- **Role of the Presiding Officer: Speaker/Chairman** decides disqualification. Decision is **judicially reviewable only after it is made.**
- **Criticisms of the Law: No time limit** for Speaker's decision
  - **Delays & bias** due to Speaker's party loyalty (**"pocket veto"**)
  - **Suppresses dissent** & intra-party democracy

SC on Anti-Defection

- **Padi Kaushik Reddy** (**2025**): Urged **Parliamentary reforms**; called for **re-examining Speaker's role** in defection cases.
- **Keisham Meghachandra** (**2020**): Speaker must decide cases **within 3 months**; suggested **independent tribunal** for neutrality.
- **Ravi S. Naik** (**1994**): **Conduct alone** can imply defection; **formal resignation not necessary.**
- **Kihoto Hollohan** (**1992**): Speaker's decision is **subject to judicial review** for **mala fide, procedural lapses**, or **constitutional violation**.

Measures to Strengthen Anti-Defection Law

- **Time-bound & Transparent Proceedings:** As per **Goswami, Halim Committees**, and **Law Commission (1999, 2015)** – ensure **public scrutiny** and accountability (time-bound defection proceedings).
- **Independent Adjudication:** Shift disqualification power from **Speaker to tribunal/Election Commission**; supported by **2nd ARC**.

- **Intra-Party Democracy:** Enable internal debate; recommended by **170th Law Commission Report**.
- **Speaker Neutrality:** Follow **British practice** – Speaker resigns from party upon election.
- **Limit Whip Scope:** Make **whip binding only on critical motions** (e.g., No-confidence, Money Bills); allow free voting on other issues.

> "Delays in deciding disqualification petitions defeat the very purpose of the Anti-Defection Law." Discuss in the light of recent Supreme Court interventions.
>
> **Drishti Mains Question**

Curbing Freebies Culture

SC expressed concern over **political parties and state governments announcing freebies** and cash transfers to woo voters, questioning if they amount to appeasement and hinder national development.

Freebies

- **About:** Welfare benefits provided free by governments or promised by political parties to attract voter support.
- **Characteristics:** Populist & distortionary; divert funds from long-term investment; fiscally unsustainable; promote dependency.
- **Legal and Institutional Landscape:**
  - **S. Subramaniam Balaji Case (2013):** SC held freebies are a matter of **legislative policy** and beyond judicial review; some align with **DPSP**.
  - **2022:** SC proposed an **expert group** (NITI Aayog, Finance Commission, EC, RBI, political parties) to study impact; not formed.
    - ❖ **2025 (PIL hearing):** SC criticised pre-election freebies, stating free ration/money discourage work & create dependency.
  - **ECI:** Under **Model Code of Conduct**, manifestos are not corrupt practices under **RPA, 1951**, but parties should avoid promises that vitiate electoral purity or exert undue influence.
  - **RBI:** Distinguishes freebies from merit goods (e.g., education); warns that loan waivers, free power & cash transfers crowd out infrastructure spending and strain state finances.

Concerns Associated with Freebies

- **Rising debt burden:** *Economic Survey 2025–26* estimates ~₹1.7 lakh crore cost in **FY26**; states' **gross fiscal deficit**

rose from **2.6% (FY22)** to **3.2% (FY25)**; outstanding liabilities at **~28.1% of GDP**.

- **Crowding out of productive capital:** Diverts funds from infrastructure and long-term growth, undermining medium-term development.

- **Electoral & Democratic concerns:**
  - Pre-election freebies from public funds influence voters, distort level playing field, akin to unethical inducements.

- **Creation of Dependency Culture:** Cash transfers constitute **11–24%** (female casual labourers) and up to **87%** (some self-employed women) of income; risk of reduced self-reliance.
  - **Venezuela** – extensive freebies linked to economic collapse (~2000).

- **Limited impact:** Short-term consumption gains; no consistent improvement in nutrition, education, or sustained poverty exit without jobs/services.

Aspect	Freebies	Welfare
Definition	Free public welfare measures; often **short-term and populist**.	**Rights-based, developmental interventions** aligned with **DPSP**.
Primary Objective	Aim at **immediate voter appeal/electoral gains**.	Aim at **long-term socio-economic upliftment, human capital formation, poverty reduction**.
Time Horizon	Usually **announced near elections**; limited sustainability planning.	**Sustainable and institutionalised**; designed for enduring impact.
Targeting	Often **universal**, irrespective of income.	**Targeted** at vulnerable groups to avoid universal waste.
Fiscal Sustainability	**Strain state finances**; crowd out capital expenditure; raise deficits/liabilities.	Emphasise **fiscal prudence** and merit goods with high growth multiplier.
Economic Impact	Risk of **dependency, market distortion, weakened credit discipline**.	Promote **human development, equity, productivity, inclusive growth**.
Examples	Free laptops/smartphones/TVs, universal free electricity, unconditional cash transfers, farm loan waivers.	PDS, Mid-Day Meal Scheme, targeted health/education, nutrition schemes.

Steps to Curb Freebies

- **Differentiate freebies vs welfare:** Frame objective criteria—**social utility, long-term human development impact, fiscal sustainability, targeting effectiveness, outcome orientation**; classify **merit goods** separately from non-merit subsidies.

- **Budgetary discipline:** Strengthen **FRBM Act, 2003**; mandate **sunset clauses** and periodic review for subsidy schemes.
  - Improve tracking of **off-budget borrowings** and hidden subsidies (e.g., electricity underpricing) through stronger financial oversight.

- **Enhance voter awareness:** Highlight opportunity cost of freebies; encourage civil society/media scrutiny of fiscal impact of electoral promises.

- **International best practices:** Design **conditional, review-based, time-bound** cash transfers (e.g., Mexico – Progresa; Brazil – Bolsa Familia linking aid to school attendance/health check-ups).

- **Strengthen legal framework:** Consider amendments to **RPA, 1951** to address undue influence; mandate disclosure of funding sources and fiscal viability of manifesto promises.

> "Freebies are often criticized as populist electoral tools, yet some have evolved into transformative welfare schemes." Examine.
> **Drishti Mains Question**

Judicial Oversight of Religious Practices in India

Rulings of the Madras High Court in the **Thiruparankundram Deepathoon dispute** and the case concerning the **Thenkalai sect's right to recite hymns at the Kanchipuram Varadaraja Perumal Temple** have brought renewed attention to the **judiciary's role in religious matters.**

- These cases show the growing role of constitutional courts in religious disputes, using the **Essential Religious Practices (ERP) test** to assess contested customs.

Evolution of Religious Disputes in India

- **Civil Rights Era:** Over 100 years ago, temple entry disputes were treated as civil rights issues. In *Sankaralinga Nadan v. Raja Rajeswara Dorai (1908)*, the Privy Council in London decided whether the Nadar community had the right to enter the Kamudhi temple, reflecting broader struggles for access and co-worship within civil law.

- **Legislative Oversight:** In 1927, the Madras Presidency introduced the **Hindu Religious Endowments Act**, which began the process of **auditing temple funds and setting up local committees**, establishing the Presidency government's supervisory role.

- **Constitutional Transition:** With the adoption of the Constitution in 1950, **Articles 25 and 26** introduced the right to practice religion.
  - However, these rights were made subject to **public order, health, and morality**, allowing the state to intervene when practices offended the public conscience.

*Evolution of Judicial Interpretation
of Essential Religious Practices in India*

- **Essential Religious Practice (ERP) Test:** It is a legal doctrine used by the Indian judiciary to determine which religious practices are "essential" to a faith and, therefore, entitled to constitutional protection under **Articles 25 and 26**.
  - If a practice is found to be "essentially integral" to the religion (like the reading of the **Guru Granth Sahib in Sikhism**), it is protected. The State cannot easily regulate or ban it.
  - If a practice is **social, economic, or commercial in nature,** even if associated with religion, it is deemed "secular." The State has the power to regulate these for social reform.

- **Evolution:**
  - **Shirur Mutt Case (1954):** The Supreme Court of India established that what is "essential" must be decided based on the tenets of the religion itself.
  - **Durgah Committee Case (1961):** The SC ruled that superstitious beliefs or "unessential accretions" are not protected by the Constitution.
    - ❖ The SC ruled that protection under Article 26 is confined only to such religious practices as are an essential and integral part of the religion.
  - **Ananda Marga Case (2004)**: The SC ruled that a practice is essential only if its **absence fundamentally alters the religion.**
  - **Shayara Bano Case (2017):** The SC held that **Triple Talaq is not an essential practice of Islam.**
    - ❖ It stated that a practice that is merely "permitted" but not "mandatory" cannot be an essential religious practice.
  - **Sabarimala Case (2018):** The court ruled that even "essential" practices cannot be protected if they violate Constitutional Morality (equality, dignity, and liberty).
  - **Thiruparankundram Deepathoon Ruling (2026):** The Madras High Court ruled that the State administration cannot ban a long-standing religious ritual simply to avoid potential communal tension.
    - ❖ It ruled that "the administration must facilitate rituals rather than use security as an excuse to block them.
  - **Kanchipuram Varadaraja Perumal Temple (2026):** The Court upheld the exclusive right of the Thenkalai sect to **lead hymn recitations (Adhyapaka Mirasi).**
    - ❖ It ruled that an i**ndividual's right to worship (Article 25) cannot interfere with the denominational rights** and established ritual offices of a sect protected under **Article 26.**

*Criticisms of Judicial Jurisprudence
on Essential Religious Practices in India*

- **Judicial Expertise Gap:** Courts risk intruding into theological domains where they may lack specialized expertise, leading to religiously contested outcomes.
- **ERP Inconsistency:** The test often suffers from **doctrinal uncertainty**, with different benches arriving at divergent conclusions on what is "essential."
- **Conflict of Autonomy:** Balancing **Article 26 (Denominational Autonomy)** with **Constitutional Morality** often leads to accusations of "secular paternalism (the idea that the State knows what is better for a religious group than the group itself)."
- **Implementation Hurdles:** Landmark judgments (e.g., Sabarimala) often face massive local resistance, social boycotts, and institutional non-cooperation.
  - The Executive often finds it difficult to enforce religious reforms without causing significant law-and-order issues.
- **The Risk of Politicization:** High-profile religious rulings are frequently politicized, where judicial outcomes are used by various actors to mobilize support or deepen social divisions.
  - Constant involvement in religious disputes can occasionally put the judiciary's **image of "secular neutrality"** at risk.

*Reforms Required in the
Judicial Approach to Religious Disputes*

- **Principled Distance:** The judiciary must adopt a "Principled Distance" approach (intervening only when religious practices violate the core of **human dignity** and **equality)**.
  - The **21st Law Commission (2018)** emphasised "reform from within" rather than reform imposed from above, advocating changes to personal laws.
  - Adopt clear, consistent ERP standards and focus on core principles rather than micromanaging rituals.
- **Administrative Training:** Members of temple management bodies and government departments should be trained in **Constitutional Literacy** to ensure that administrative decisions do not infringe upon sectarian autonomy protected under **Article 26**.
- **Inter-sect Dialogue:** Promoting regular communication between rival sects.
- **Promoting Constitutional Mindedness:** Educational curricula should foster a citizenry that values both their **Freedom of Conscience** and the **Rule of Law**, understanding that faith and the Constitution are not in conflict but in a state of mutual respect.

> Critically analyse the Essential Religious Practices test. Has it strengthened or weakened constitutional secularism in India?
>
> **Drishti Mains Question**

Bank-Centric to Corporate Bond-Based Finance

The **Union Budget 2026-27** has introduced several **financial sector reforms** aimed at deepening **India's corporate bond market** and reducing the **structural burden on banks**.

- These measures implicitly acknowledge that **Indian banks** are shouldering **risks** which, in **mature economies**, are absorbed and distributed by **well-developed financial markets**.

Reforms Introduced to Deepen Corporate Bond Market in the Budget

- **Market-Making Framework:** Establishes **designated intermediaries** to provide continuous **two-way quotes (buy and sell)** for **corporate bonds**, supported by improved access to **funding** and **derivatives** on bond indices.
- **Total-Return Swaps (TRS):** Introduces **synthetic trading tools** allowing investors to gain exposure to a bond's **total return** (interest plus price changes) without owning the **underlying asset**, facilitating **risk hedging**.
- **Bond-Index Derivatives:** Broadens participation and supports **risk management** through **derivatives on corporate bond indices**, contributing to greater **fixed-income market depth**.
- **Infrastructure Risk Guarantee Fund:** Provides prudently calibrated **partial credit guarantees** to lenders during **infrastructure project** development and construction phases.
- **CPSE Asset Monetisation:** Accelerates **capital recycling** by unlocking significant **underutilised real estate holdings** of **Central Public Sector Enterprises (CPSEs)** through dedicated **Real Estate Investment Trusts (REITs)**.
- **De-risking Infrastructure:** Strengthens private developer confidence, improves **project bankability**, and reduces **financing hurdles** to encourage private participation in high-risk segments.

Key Challenges Faced by Banks due to Shallow Corporate Bond Market Penetration

- **Structural Overburden of Risk: Banks** are forced to act as the **default warehouse** for credit risk due to the absence of a **deep corporate bond market**, carrying roughly **60-65% of all non-financial corporate debt** compared to **30% in the US.**
- **Extreme Asset-Liability Mismatch:** Banks are expected to finance **long-gestation infrastructure projects** (highways, power plants) using **short-term deposits**, increasing **systemic vulnerability** to shocks.

- **Recurring Fiscal Dependency:** The accumulation of **private-sector credit losses** has necessitated massive **public recapitalisations** (over Rs 3.2 lakh crore since 2017), effectively transferring **private losses** onto the **public balance sheet**.
- **Constrained Lending Capacity (Opportunity Cost): Capital** tied up in **long-term corporate loans** reduces the availability of funds for productive sectors like **small and medium enterprises (SMEs)**, **exporters**, and **first-time borrowers**, even after capital clean-ups.
- **Impaired Monetary Policy Transmission:** Burdened by **long-term credit exposures**, banks are reluctant to adjust rates smoothly—hesitating to pass on **higher costs** or constrained from **fresh lending** when rates fall—distorting the **transmission of policy signals**.

Status of Corporate Bond Market in India

- **Impressive Growth Trajectory:** Expanded from ₹**17.5 trillion** (**FY2015**) to ₹**53.6 trillion** (**FY2025**); ~**12% CAGR**.
- **Shallow by International Standards:** Market stands at only **15–16% of GDP**. Compared to: **US** (**80%+**), **South Korea** (**79%**), **Germany** (**55–60%**), **Malaysia** (**54%**), **China** (**45–50%**).
- **Future Potential:** Could exceed ₹**100–120 trillion by 2030**; key to financial stability & growth.

Steps to Deepen Corporate Bond Market in India

- **Create a Corporate Bond Repo Market:** Establish a dedicated, centrally cleared **repo market** for **corporate bonds**, allowing holders to borrow against their **bond portfolios**. This would transform corporate bonds from "**buy-and-hold**" instruments into active **collateral**, dramatically improving **liquidity** and enabling **leveraged trading strategies**.
- **Introduce "Greenium" Incentives for ESG Bonds:** Offer regulatory incentives such as **lower listing fees**, **faster approval pathways**, or **lower reserve requirements** for banks investing in certified **green corporate bonds**. This would tap into global **ESG demand** and create a differentiated, liquid **green corporate bond** segment.
- **Mandate "Bond-Only" Project Finance for Infrastructure:** Gradually mandate that a fixed percentage (e.g., **20-30%**) of new **infrastructure project financing** must be raised through **public bond issuances** rather than **bank loans**. This would force issuers to create **market-disciplined, rated, and tradable instruments** from the project's inception.

- **Launch a "Corporate Bond Credit Default Swap (CDS)" Index:** This would allow investors to hedge **broad market risk** or take views on the **corporate credit cycle** without picking individual bonds, attracting a new class of **macro-oriented investors**.

- **Create Retail-Focused "Corporate Bond Savings Certificates":** Design a simple, low-denomination corporate bond product with tax benefits (similar to tax-saving fixed deposits) but linked to a diversified pool of highly-rated corporates. This would directly channel household savings into corporate debt while creating retail demand pull.

"India's financial system remains structurally bank-centric." Examine the challenges faced by banks arising from shallow corporate bond markets.

Drishti Mains Question

Reforming India's Power Distribution Sector

Recent Union government data for **Financial Year 2024–25** show a financial turnaround in **Distribution Companies (DISCOMs),** with improved **Profit After Tax** and reduced **Aggregate Technical and Commercial (AT&C) losses** following sectoral reforms.

Key Developments in DISCOM Performance

- **Recent Financial Turnaround:** Distribution Companies (DISCOMs) recorded a positive **Profit After Tax (PAT) of ₹2,701 crore** in Financial Year (FY) **2024-25**, marking a significant improvement from losses of **₹67,962 crore** in FY **2013-14**, indicating a notable financial recovery.

- **Reduction in Aggregate Technical and Commercial (AT&C) Losses:** AT&C Losses declined from **22.62% to around 15.04%**, reflecting improved operational efficiency, although losses remain elevated in several States.

- **Dependence on State Government Support:** A considerable portion of the financial improvement is attributable to **tariff subsidies** and direct takeover of losses by State governments, raising concerns regarding long-term sustainability.

- **Improved Payment Discipline:** Implementation of the **Late Payment Surcharge (LPS)** Rules has significantly reduced legacy dues and improved payment cycles, strengthening liquidity across the electricity value chain.

- **Demand and Cost Pressures:** Rising electricity **demand and fluctuations** in fuel costs continue to exert pressure on power procurement expenses.

- **Reform Implementation through Revamped Distribution Sector Scheme (RDSS):** Performance-linked financial assistance under **RDSS** has contributed to operational improvements and enhanced accountability.

Challenges Faced by DISCOMs	Suggestions
■ **Dependence on State Subsidies**: Financial gains largely driven by **tariff subsidies & State loss absorption**; sustainability concerns.	■ **Strengthen Financial Discipline**: Strict enforcement of **LPS Rules** and timely dues clearance.
■ **Chronic Financial Stress & Legacy Debt**: High **AT&C losses** and wide **ACS–ARR gap** led to accumulated losses; risk of revenue deficits persists.	■ **Cost-Reflective Tariffs**: Automatic, timely tariff revisions aligned with **fuel costs and inflation** to prevent **ACS–ARR gap**.
■ **Tariff Rationalisation Issues**: **Non-cost-reflective tariffs**, delayed subsidy payments, and political resistance to tariff hikes/free power withdrawal.	■ **Targeted Subsidies**: Shift to **DBT for electricity subsidies** for transparency & reduced fiscal stress.
■ **Resistance to Privatisation**: Employee concerns over **job losses, retrenchment, service conditions**. Past experience– **Delhi's voluntary retirement scheme** reflect concerns about job security & financial stability	■ **Expanding Feeder Segregation**: Accurate measurement of **agricultural consumption** to reduce inefficiencies.
■ **Unmetered Agricultural Supply**: Distorts consumption data and subsidy estimation; weak financial planning.	■ **Solarisation of Agriculture**: Scale up **solar pumps & decentralised renewables** to lower procurement costs and subsidy burden.
	■ **Regulatory Strengthening**: Empower **State Electricity Regulatory Commissions** for transparent tariff setting and efficiency enforcement.

Improving the financial health of DISCOMs is essential for fiscal prudence and energy security. Examine the recent reforms, persistent challenges, and the way forward.

Drishti Mains Question

India's Aviation Sector

In **2025**, India's **civil aviation sector** faces repeated **operational disruptions, safety concerns & declining airline profitability**, amid entry of **new regional players**, raising concerns over systemic vulnerabilities.

Status of India's Aviation Sector

- **Global Ranking: 3ʳᵈ-largest domestic aviation market** (after US & China). Accounts for ~**4.2%** of global air traffic; fleet share ~**2.4%**. Rapid fleet expansion due to new orders.

- **Passenger Traffic Growth**: **715 million** domestic passengers projected by **2030**. ~**1.1 billion** passengers by **2040** (six-fold growth).

- **Airport Infrastructure Expansion:** Operational airports: **74 (2014) → 163 (2025)**. Target: **350–400 airports by 2047** (greenfield & PPP focus).

- **Economic Contribution (2025):** Supports **7.7 million+ jobs**. Contributes **1.5% of GDP**.
- **Indian Civil Aviation Regulation:**
  - **Air Corporations Act, 1953:** Nationalised **9 airlines**; govt-owned carriers dominated till mid-1990s.
  - **Open Sky Policy (1990–94):** Allowed **private air taxi operators**. Ended monopoly of **Indian Airlines (IA)** & **Air India (AI)**.
  - **Bharatiya Vayuyan Adhiniyam, 2024:** Replaces **Aircraft Act, 1934**; aligns with **ICAO & Chicago Convention**. Promotes **Make in India & Atmanirbhar Bharat** in aviation manufacturing. Simplified licensing, structured appeals mechanism, modernised governance.

Key Challenges in India's Aviation Sector	Suggestions
■ **Training & Skill Bottlenecks: Simulator shortages**, limited trainers, high costs, type-rating constraints. **236 temporary foreign pilot approvals (2025)** → reliance on stopgap measures.	■ **Shift from Crisis Management to Structural Reform:** Shift from **ad hoc crisis management** to long-term institutional strengthening. Build resilience for **715 million passengers by 2030**.
■ **High Market Concentration & Systemic Risk:** IndiGo (63–65%) + Air India group (27–28%) ≈ **90% domestic traffic**. IndiGo sole carrier on ~**60% routes** → disruptions cause connectivity loss.	■ **Strengthen Regulatory Oversight Capacity:** Fill **DGCA technical vacancies**. Adopt rule-based, risk-based supervision for safety compliance.
■ **Low Shock Absorption Capacity:** Global spare crew capacity: **20–25%**; Indian carriers operate at **near-total utilisation**. Minor disruptions cascade into network-wide failures.	■ **Expand Pilot Training Ecosystem:** Increase simulator capacity & training institutions. Streamline licensing; address **type-rating bottlenecks**. Reduce reliance on **temporary foreign approvals**.
■ **Weak Regulatory Capacity:** ~50% DGCA technical posts vacant. Reliance on schedule exemptions over strict enforcement.	■ **Institutionalise Reserve Capacity Norms:** Fix **minimum spare crew norms (20–25%)** to prevent cascading disruptions.
■ **High Operating Costs & Fuel Volatility:** Volatile **Aviation Turbine Fuel (ATF) prices** linked to global crude & **US dollar** → cost instability.	■ **Support Viable Regional Carriers:** Ensure effective **UDAN subsidy** implementation. Provide **preferential slots** at congested airports. Develop **Tier-2 & Tier-3 airports** to reduce overdependence on dominant carriers.
■ **Recurring Airline Failures:** Collapses– **Kingfisher Airlines (2012)**, **Jet Airways (2019)**, **Go First (2023)** → structural vulnerabilities.	
■ **Aviation Safety Risks:** Rising traffic & disruptions. **19 safety violation notices (DGCA, 2025)** → concerns over compliance & resilience.	■ **Rationalise Fuel Policy:** Consider **ATF tax rationalisation**. Explore **fuel hedging mechanisms** to reduce global price & dollar volatility exposure.

RBI's Credit and Consumer Protection Reforms

RBI unveils measures **to boost MSMEs & other sectors** and strengthen **consumer protection** in the digital age

Measures Introduced by the RBI

- **Collateral-Free Loan Limit for MSMEs Doubled:** Raised from **₹10 lakh to ₹20 lakh**. Aims to **reduce reliance on informal credit**, ease **access to formal finance**, & support **scalable growth** of small businesses.
- **Permitting Bank Lending to REITs:** Aligns with **SEBI's classification of REITs as equity instruments**. Previously, only **InvITs** were eligible for bank finance. Expected to **attract more institutional investment**, including from **mutual funds**.
- **Proposed Customer Protection Frameworks:**
  - **Compensation for Small-Value Fraud:** Customers to be compensated up to **₹25,000** for **fraudulent digital transactions**, reducing liability in unauthorised cases.
  - **Guidelines to Curb Mis-selling:** Draft norms to ensure **third-party financial products** sold via banks match customer **needs & risk profile**.
  - **Harmonised Rules for Loan Recovery Agents:** RBI to **review & unify** rules for **recovery agents** across all regulated entities to ensure **fair practices**.

- **'Mission SAKSHAM':** Capacity-building & certification framework for **Primary (Urban) Co-operative Banks**. To train ~**1.40 lakh participants** through programs in **regional languages**.

> - REITs manage income-generating commercial real estate (e.g., offices, malls), offering rental income & capital appreciation to investors.
> - InvITs are investment trusts that enable pool investments in operational infrastructure (e.g., roads, power lines, telecom towers), offering stable long-term income.
>   - Both are governed by SEBI Regulations, 2014

RBI MPC Keeps Repo Rate Unchanged

The **Reserve Bank of India**'s (RBI) **Monetary Policy Committee** (MPC), in its **February 2026 meeting**, kept the **repo rate** unchanged at **5.25%**, following a **25 basis point cut** in December 2025.

- The decision implies **no immediate change in lending and deposit rates**. **EMIs on repo-linked loans** (home, personal loans) are expected to **remain stable**.

Key Announcements made by the RBI's MPC

- **Monetary Policy Stance:** The committee chose to retain the **"neutral" monetary policy stance**. This indicates the

RBI is not committed to a future **rate hike or cut** and will act based on **incoming data**.

- **GDP Growth Forecast**: The **RBI** raised its **GDP growth** projection for **FY26** to **7.4%** from the earlier estimate of **7.3%**.

- **Retail Inflation for FY26**: The **RBI** marginally increased its **retail inflation projection** for **FY26** to **2.1%** from the earlier **2.0%**.

Positive Domestic Conditions (Supporting the Pause)

- **Strong and Upwardly Growth**: The revised **7.4%** growth **forecast** indicates **strong momentum** driven by **robust consumption**, projected to expand by about **7% in FY26**. It is supported by **budget stimuli** (**income tax cuts** in FY26, **GST rationalisation**), past **125 bps rate cuts**, and subdued inflation.
  - The **Economic Survey 2025–26** has forecast GDP to grow between **6.8-7.2%** in the fiscal year 2026-27 on the back of strong domestic demand.

- **Benign and Controlled Inflation**: Headline inflation, at **1.33% in December 2025**, remains comfortably below the **RBI's 2–6% band**. The **underlying inflation** is low and **benign**, with the near-term outlook near the target.

- **Recent Pro-Growth Stimuli**: The **Union Budget 2026–27**'s **pro-growth fiscal measures** are expected to boost consumption. The **RBI** is **pausing** to assess their **impact**, as past **monetary easing** is still **transmitting through the economy**, reducing the need for immediate further action.

RBI's Monetary Policy Stances

- **Accommodative Stance:** This signals a deliberate bias towards **lowering interest rates** to **stimulate growth** by making **credit cheaper**, typically adopted when **inflation** is controlled but the economy requires support.

- **Neutral Stance:** A balanced, data-dependent position with **no pre-set bias**, giving the **RBI** flexibility to adjust **policy rates** in either direction based on **incoming macroeconomic data**.

- **Calibrated Tightening:** This indicates a **cautious shift** towards **gradually tightening policy** to **curb inflation**, signaling **rate cuts are unlikely** while **potential hikes** remain on the table.

- **Hawkish Stance:** A **policy orientation** that prioritizes **controlling inflation**, even at the potential cost of **slower growth**, often through **higher interest rates**.

- **Dovish Stance:** A **policy approach** that favors **promoting growth and employment**, typically through **lower interest rates**, even if **inflation risks** are elevated.

External Risks and Uncertainties (Justifying Caution)

- **Intensifying Global Headwinds**: Evolving **geopolitical risks** and **global trade tensions** threaten **stability**, requiring **vigilant monitoring**. E.g., **Middle East instability (Israel-Hamas and related US-Iran-Israel dynamics)**.

- **Need to Assess New Trade Pacts**: New **trade agreements** with the **US, EU, Oman, and New Zealand** are a medium-term growth cushion, but their **full impact** is unrealized. The **pause** allows for **impact assessment**.

Charting India's Developmental Path: Economic Survey 2025–26

Economic Survey 2025–26 outlines India's **long-term strategy** amid global disruptions, focusing on **strategic sobriety**, **institutional quality**, and **capability building** towards Viksit Bharat @2047.

- **Economic Survey 2025–26:** India's Developmental Path Amid Global Uncertainty

Macroeconomic Strategy

- **Strategic Sobriety** > Defensive Pessimism for managing global volatility.

- **Strategic Indispensability** > Resilience: India as a reliable global value source.

- **Marathon + Sprint**: Balance **long-term growth** with **short-term shock** management.

- **Buffers & Redundancy**: Treat as **strategic assets** in fragmented supply chains.

- **Institutional Quality** = Key to national power.

- **Fiscal Credibility**: Driven by **capital formation** & **human capital**, not just deficit cuts.

State Capacity and Governance

- **'Ruler's Raj'** → **'Citizen's Raj'**: State as **enabler**, not controller.

- **Entrepreneurial State**: From **compliance** to **capability** and problem-solving.

- **Regulatory Reform** = **Institutional reorientation**, not State withdrawal.

- **Contextual Compliance**: Civic behaviour shaped by **design, norms, incentives**.

- **Trust-based Systems**: Replace inspection-based controls to ease business.

- **Delayed Gratification**: Prioritise **Śreya (long-term strength)** over **Preya**.

Industry, Manufacturing, and Trade

- **Strategic/Intelligent Indigenisation**: Tiered import substitution for strategic/economic feasibility.

- **Servicification**: Greater **services integration** in manufacturing.

- **Friendshoring/Nearshoring**: Supply chains realigned geopolitically (beyond China Plus One).

- **PCI & IDP**: Shift to **high-complexity goods** & move from **FDI recipient → FDI source**.

- **Orange Economy**: Promote **creative industries** as growth drivers.
- **Institutional Stress Test**: Export-led manufacturing exposes systemic gaps.
- **National Input Cost Reduction Strategy**: Tackle high **energy, logistics, raw material** costs.
- **Dead Capital**: Urban land under restrictive laws = unused economic potential.

Technology and AI

- **Bottom-up AI**: Focus on **application-specific**, distributed innovation (vs. frontier models).
- **AI-OS Initiative**: Treat **AI as a public good** (like UPI, Aadhaar).
- **Frugal AI**: Resource-efficient, **locally adapted** solutions.
- **Data Stewardship**: Balance **open data** with **domestic value retention**.
- **DPI (e-Shram, Udyam)**: Formalise workforce, boost productivity.
- **Sovereign AI / Compute Capacity**: Build **domestic AI infra** to reduce dependency.
- **Physical-Digital Fusion**: Integrate infra + digital layers (ULIP, GatiShakti) for **logistics efficiency**.

Agriculture and Rural Development

- **Nutrient Imbalance**: Skewed **N:P:K ratio (10.9:4.1:1)** → focus on **soil health**.
- **Climate-Resilient Farming**: Use **Per Drop More Crop**, **crop diversification**.
- **Lab-to-Land**: Bridge research-to-field application gap.
- **Social Capital**: Use **SHGs** for sustainable rural livelihoods.
- **Rights-based Entitlements**: **Viksit Bharat–GRAM G Act, 2025** ensures legal work rights.

Urbanisation and Infrastructure

- **Agglomeration Economies**: Productivity via **urban clustering**.
- **Polycentric Growth**: New urban hubs to **ease core city pressure**.
- **Transit-Oriented Development (TOD)**: Mixed-use, high-density zones around transit.
- **Endowment Effect**: Civic ownership improves **public asset care**.
- **Financialisation of Infra**: Use **InvITs/REITs** for funding infra.
- **8–80 Philosophy**: Urban design for **universal street safety and access**.

Environment and Climate Change

- **Greenium**: Lower borrowing cost for **green bonds**.
- **Mission LiFE**: Citizen-led **behavioural change** for sustainability.

- **Adaptation-led Development**: Focus on **resilience** (heatwaves, floods) over just mitigation.
- **Dispatchable Power**: Ensure **reliable thermal/nuclear backup** for renewables.
- **Circular Economy**: Promote **recycling**, **resource recovery**, **waste-to-energy**.

Social Sector

- **Double Burden**: Coexistence of **communicable & NCDs** (e.g., obesity).
- **Demographic Dividend**: Depends on **health & skilling**.
- **Pink Tax**: Extra cost on women → hinders **workforce participation**.
- **Ultra-Processed Foods (UPFs)**: Obesity driver → **needs regulation & awareness**.
- **FLN**: Core to **education reforms** for employability.
- **Power Gap**: Convert **economic size into global influence**.
- **Delayed Gratification**: Prioritise **long-term capacity over quick fixes**.
- **Psychological Safety**: Enable **honest bureaucratic decisions under uncertainty**.

Finance and Banking

- **Financialisation**: India's **balanced approach** averted market dominance risks.
- **Crowding Out**: Govt borrowing may **limit private investment**.
- **Evergreening**: Tackle **masking of bad loans**.
- **Credible Consolidation**: Balance **fiscal prudence + Capex**.
- **QE Infinity Trap**: Warns of **monetary easing dependency** in global economies.
- **Refined Regulatory Touch**: Balance **financial stability with innovation**.
- **NUDGE**: Use **data-informed nudges** for tax compliance & effective policy.

> The Economic Survey 2025–26 advocates a shift from strategic resilience to strategic indispensability. Examine the implications of this shift for India's global economic positioning.
>
> **Drishti Mains Question**

Capital Goods Sector

Union Budget 2026–27 boosts **capital goods sector** via increased public capex, targeted manufacturing schemes, and tax/customs duty incentives.

- **Public Capital Expenditure: Public Capex** raised to **₹12.2 lakh crore**; 4.2× increase since FY18; aimed at **infrastructure-led growth** and crowding in **private investment**.
- **Manufacturing Capacity Enhancement: Hi-Tech Tool Rooms** to be set up by CPSEs for high-precision, low-cost digital manufacturing support.

- New **Scheme for Enhancement of Construction and Infrastructure Equipment** to boost domestic manufacturing of advanced machinery.

- **Container Manufacturing Scheme:** ₹10,000 crore Container Manufacturing Scheme over **5 years** to build a **globally competitive ecosystem**, boost **logistics** and **exports**.

- **Support to Toll Manufacturing & Electronics Manufacturing:** 5-year income tax exemption for non-resident suppliers to toll manufacturers in bonded zones.

- **Tax exemptions** extended to **foreign electronics suppliers** in bonded zones till **2030–31** to reduce **capital costs** and promote **electronics manufacturing**.

- **Energy Transition & Critical Minerals: Customs duty exemption** on capital goods for **lithium-ion cell manufacturing** (battery energy storage).
  - **Exemption** also for capital goods used in **critical mineral processing**.
  - Aims to boost **domestic value chains**, **energy security**, and **energy transition goals**.

- Capital goods include **plant, machinery, and equipment** used for **production or service delivery**, including **modernisation, technological upgradation,** and **capacity expansion**.
- Used across **manufacturing, infrastructure, agriculture, mining, allied activities,** and the **services sector**.

Measures Required to Strengthen the Capital Goods Sector	Suggestions
- **Inverted Duty Structure**: Higher import duty on **raw materials** than **finished goods** raises costs, discourages local value addition.	- **Expand Hi-Tech Tool Rooms** and **Common Engineering Facilities** to give MSMEs access to **high-precision machinery**, improving quality & competitiveness.
- **Technology Gap**: Low **R&D** and tech depth hinder **high-precision manufacturing**; dependence on **imports**.	- Promote **indigenous manufacturing** of advanced equipment (e.g., **tunnel-boring machines**, **industrial systems**) to cut import dependence.
- **High Logistics Costs**: Inefficient transport/ports raise **delivery time** and **expenses**, aaffecting **global competitiveness**.	- Provide **fiscal incentives**, **tax exemptions**, and **easy credit** to lower capital burden and enable **tech acquisition**.
- **Fragmented Industry**: MSME dominance limits **scale, finance access**, and **tech upgrades**.	- Invest in **Centres of Excellence** and **innovation hubs** to develop import substitutes, enhance skills, and promote self-reliance.
- **Capex Dependence**: Growth tied to **public expenditure cycles**; vulnerable to **fiscal tightening**.	- Strengthen **infrastructure** and promote domestic container manufacturing to cut transport costs and improve competitiveness.

Circular Economy in Mobility

NITI Aayog launched **3 reports** on Enhancing circular economy in **End-of-Life Vehicles (ELVs, waste tyres, e-waste & lithium-ion batteries** at **IMRC, Jaipur**, organised by **MRAI**. Reports outline **challenges and policy pathways** to strengthen India's circular economy.

- Unlike the **linear economy** (take–make–dispose), the circular economy includes **6 R's - Reduce, Reuse, Recycle, Refurbishment, Recover & Repairing of materials.**

Key Highlights of the Reports	
ELVs	**Circular Economy of Waste Tyres in India**
- **EV sales**: 50,000 (2016) ₹ **2.08 million** (**2024**); govt. targets **30% EV sales by 2030**. - **ELVs projected**: 23 million (2025) ₹ 50 million (2030). - **Challenges:** Limited **Automated Testing Stations (ATS) & Registered Vehicle Scrapping Facilities (RVSFs)** • Weak financial viability, procedural delays, low consumer awareness. Rise in informal dismantling practices.	- **Vehicle & EV growth** → rise in **End-of-Life Tyres (ELTs)**. - **Recycling ecosystem**: Fragmented; poor **traceability**, weak **standards**, dominated by **informal sector**. - **High-value options** like **Carbon Black (rCB)** & **retreading** underutilised. **Downcycling** causes loss of **import substitution** & **green job** opportunities.
E-waste & Lithium-Ion Batteries in India	
- **E-waste**: 6.19 MMT (2024) → **14 MMT** (**2030**). **Li-ion battery demand**: 29 GWh (2025) → **248 GWh** (**2035**). - Sector dominated by **unsafe informal recycling** → pollution, health risks, economic losses. - **EPR** for E-waste covers limited metals; **weak monitoring** enables fake recyclers, fraud. **Inefficient recycling** → increased **import dependence**; risks to **energy security**.	

Importance of Circular Economy for India

- **Resource Constraint:** 18% of global population, only **~7% minerals** & **~4% freshwater** → linear growth unsustainable.
  - Circular economy reduces **import dependence** by using **domestic secondary materials**.

- **Exploding Waste Generation**: ~**1.68 lakh tonnes/day** → **436 MTPA by 2050**. Only **55–60% waste processed**; rest becomes **residual landfill waste**.
- **GHG emissions from waste**: ~**41 million tonnes CO_2-eq by 2030**, mainly from **landfill methane**; circularity cuts emissions at **source & disposal**.
- **Construction and Demolition (C&D) waste**: ~**95% recyclable**; poor circularity leads to sand mining, cement emissions, ecological harm.
- **Urban sewage**: Projected **1.2 lakh MLD by 2050**; reuse reduces **freshwater withdrawals**.
- **Employment**: Circular activities can generate **1+ crore man-days**, unlike extractive sectors.

Measures to Strengthen the Circular Economy in Mobility

- **ELVs: Expand ATS & RVSFs** with **PSU-private models** for full coverage. Link vehicle deregistration to **Certificate of Deposit (CoD)**; use **Aadhaar-based transfer** & **automated penalties**.
  - **Formalise informal dismantlers** via phased integration, technical aid, and one-time waiver of legacy environmental liabilities.
- **Circular Economy of Waste Tyres**: Restrict **Tyre Pyrolysis Oil (TPO) use** to refineries/approved industries; mandate **carbon char → rCB**. Notify **national standards** for TPO/rCB; issue **usage guidelines**.
  - Formalise informal sector via Udyam Assist, financial aid, liability waivers, and **GST/Harmonized System of Nomenclature (HSN) codes rationalisation**.
- **E-waste & Lithium-Ion Batteries: Expand EPR** to include more high-value/critical minerals.
  - Notify **chemistry-wise metal composition**; update **BIS standards (IS 16046)** for testing & purity standards.
  - Issue **guidelines** for collection, storage, transport, refurbishment, recycling. Set up **shared recycling facilities**; train & recognise informal recyclers.
  - Boost waste collection via **ULB-led PPP systems**.

Consumer Confidence in India

    Consumption remains resilient post **tax reforms (lower income tax & rationalised GST)**, though **underlying stress persists** despite improved consumer confidence.

Factors Supporting Consumer Confidence

- **Surge in Durable Goods Demand: GST rate cuts** led to **headline retail inflation dropping to 0.25%** (Oct 2025).
  - Resulted in **1.5x increase in consumer durable loans** during Dussehra-Diwali 2025 vs previous year.
- **Rising Rural Wages: Real rural wage growth** rose to **4.1%** (Q1 2025–26) after 3 years of stagnation. Driven by **rural CPI inflation fall** to **2.4%** (from 5.5% YoY).
  - **Nominal wage growth** hit **6.5%**, highest since mid-2023.

- **Urban Wage Growth: Real urban wage proxy** (staff cost growth of listed firms) rose **5.7%** (Jul–Sep 2025), highest in 2+ years. Supported by **low urban inflation** at **2.1%**.
- **Policy Support: RBI rate cuts of 125 bps** in 2025 are **still transmitting**, expected to further boost demand.

> ### RBI's Consumer Confidence Survey (CCS)
>
> - **About: Bi-monthly** survey to gauge **consumer sentiment** on current & future economic conditions.
> - **Coverage: Urban-focused CCS**: Conducted in **13–19 major cities** (e.g., Mumbai, Delhi, Kolkata).
>   - **Rural CCS (RCCS)**: Covers **rural/semi-urban households** across **31 States/UTs** for inclusivity.
> - **Main Parameters:** General economic situation, Employment scenario, Price level/Inflation, Household income, Current & expected spending.

Concerns Affecting Consumer Confidence in India

- **Weak Household Balance Sheets: Financial liabilities** rose to **6.2% of GDP (2023–24)**; slight dip to **4.7% (2024–25)**.
  - **Net financial assets** hit a **multi-decade low** of **4.9% of GDP (2022–23)**.
  - **Real personal bank debt** rose **2.9x** (FY09–FY23), while **industrial wages** rose only **1.9x** → reduced consumption capacity.
- **Unsustainable Income Growth: Rural wage growth** due to **low inflation**, not income surge.
  - **Urban nominal wages stagnant** since mid-2023 → limited disposable income.
- **Inequality & Narrow Demand Base: K-shaped recovery**: affluent spend more; lower/middle income groups face stagnation → restricts mass demand.
- **Structural Challenges: Falling household savings**, **reduced spending on education**, **debt-driven consumption**, rising **health & ultra-processed food cost.**

Steps to Sustain Consumer Confidence

- **Boost Incomes:** Focus on labor-intensive exports, real wage growth, farm reforms beyond MSP.
- **Rebuild Financial Buffers:** Promote financial savings, RBI norms on loans, financial literacy, expand social security.
- **Price Stability:** Ensure low, predictable inflation, stable tax regime.
- **Inclusive Growth:** Invest in rural infra, support MSMEs, integrate into global value chains.
- **Strategic Fiscal Policy:** Balance capex with human capital, maintain fiscal prudence, ensure policy certainty.

> The resilience of India's consumption story is often questioned due to deteriorating household balance sheets. Suggest measures to ensure sustainable consumer confidence in the Indian economy.
>
> **Drishti Mains Question**

India Energy Week (IEW) 2026

IEW 2026 concluded in Goa, highlighting India's strong preparedness to tackle global energy volatility and accelerate clean energy transitions.

Highlights of India Energy Week 2026

- **Energy Addition Focus:** Transition = **"energy addition"**, not just replacement; investment needed in **oil, gas, biofuels, green hydrogen, LNG**.
  - **Reform Push:** India promoted **OALP** & **DSF rounds** to open sedimentary basins for global investment.
  - **Price Stability:** Despite global turmoil, **OMC interventions** kept **fuel & LPG prices low** for consumers.
- **India-UAE Energy Ties:**
  - UAE reaffirmed as **reliable crude & LPG supplier**.
  - Warned of **underinvestment risks**.
  - UAE = **4th largest oil source** (behind Russia, Iraq, and Saudi Arabia), 3rd trading partner, 2nd export destination (Exports: $36.63 bn in FY25).
  - **Trade goal:** Double to **$200 bn by 2032**.
- **Demand Drivers:** Future demand led by **emerging markets, digitalisation, integrated energy systems**, with **India central to trends**.
- **Goa's Vision:** Targeting **100% renewable energy by 2050**; focus on **Green + Blue Economy** balance.

India Energy Week (IEW)
- **Launched: 2023**; India's **flagship global energy platform** by **MoP&NG** to promote **secure, sustainable, affordable energy**.
- **Role:** Neutral forum for **policy dialogue, investment**, and **tech collaboration**.
Energy Security in India
- **Global Ranking (IRENA 2025): 3rd** in solar power; **4th** in wind power & total renewable capacity.
- **Achievements: 50%** electricity capacity from non-fossil fuels (achieved 5 years ahead of 2030 target); Still **3rd largest net energy importer**.
- **Dropped to 71st** in WEF **Energy Transition Index 2025** (from 63rd in 2024)

India's Low Public Health Spending

India's public health spending remains **critically low**, with the **Union govt failing to meet National Health Policy (NHP) 2017 targets**.

Status of Public Health Spending

- **NHP 2017 Target: 2.5% of GDP by 2025** unmet. **Union govt's target (1%)** remains at **0.29% of GDP (2025–26)**, down from **0.37% in 2020–21.**

- **Centre–State Trend: States increased** from **0.67% (2017–18)** to **1.1% (2025–26). Centre reduced**, causing **financial hyper-centralisation.**
  - **Centre's share in health scheme transfers** fell from **75.9% (2014–15)** to **43% (2024–25).**
- **HEC Misuse: Health and Education Cess** funds substitute, not supplement, health budget. **Only 25%** of HEC used for health in **2023–24**.
- **Global Gap:** India's **per capita health spending** far below - **Bhutan (2.5x)**, **Sri Lanka (3x); BRICS (14–15x), Thailand/Malaysia (10x).**

National Health Policy (NHP) 2017
- **Goal:** Achieve **Universal Health Coverage (UHC)** with **equitable, affordable, quality care**
- **Focus Areas:**
• **Free, comprehensive primary care** with **health card**
• Affordable **secondary & tertiary care** via public & private
• Reduce **out-of-pocket & catastrophic expenditures**
- **Core Principles (10):** Equity, Affordability, Universality, Patient-Centered Quality Care, Accountability, etc.
- **Specific Quantitative Targets: Govt. Health Expenditure:** 2.5% of GDP
• **State Health Spending:** >8% of state budgets
• **MMR:** Reduce to 100 (by 2020)
• **Under-5 Mortality:** Reduce to 23
• **NCD Premature Mortality:** Reduce by 25%
• TB Elimination By 2025 & Maintain Kala-Azar & Leprosy Elimination
- **Policy Thrust and Major Shifts:**
• **Preventive & Promotive Health:** "Health in All" approach; 7 priorities (e.g., Swachh Bharat, tobacco control, road safety)
• **Healthcare Delivery Shift: Health & Wellness Centres (HWCs)** for comprehensive primary care
❖ Free drugs, diagnostics, emergency care in public facilities
• **System Strengthening:** Fill **infra & HR gaps**; build strong **HMIS**
• **Private Sector Engagement: Strategic purchasing** & **regulation** to align with public goals.

Reasons for Low Public Health Spending

- **Political Preference:** Focus on **visible infra/cash transfers** over long-term, diffuse health gains.
- **Fragmented Financing:** No **unified, ring-fenced** health fund; health budgets face **annual political competition**.
- **Siloed Governance:** Weak "Health in All Policies" implementation; determinants like **sanitation, nutrition, air** handled separately.
- **Private Sector Dominance:** Healthcare seen as **private good**, reducing **public demand** for govt investment.

- **No Binding Plan:** NHP 2017 lacks a **costed, time-bound, legally enforceable roadmap**; target remains aspirational.

Steps to Increase Public Health Spending

- **Enhance Fiscal Capacity:** Improve **tax-GDP ratio** via reforms, digital compliance, GST rationalisation. Introduce **health cess / higher GST (35%)** on harmful goods.
  - **15th FC Grants:** Fast-track disbursal for **PHC/CHC infra** development

- **Blended Finance:** Combine **public, private, philanthropic capital. Subsidise PM-JAY premiums** for the "missing middle"; cover indirect costs

- **Efficiency & Accountability:** Strengthen **procurement**, adopt **outcome-based budgeting.** Use **DBT**, ensure **audited, published health accounts.**
  - **Budget Rebalancing:** Treat **health as economic investment.** Allocate **two-thirds** of the health budget to **primary care** (as per NHP 2017).

- **Legal & Policy Reforms:** Enact **Right to Health Act.** Consider moving **public health to Concurrent List** for stronger national standards.

> Critically analyse India's public health financing trends and suggest institutional, fiscal, and legal reforms required to sustainably increase public health spending in India.
>
> **Drishti Mains Question**

State Finances: A Study of Budgets of 2025–26

The **RBI's** *State Finances: A Study of Budgets of 2025–26* report notes that India is at a **critical demographic inflection point**, with the need to harness the **youth bulge** while preparing for an **ageing population**.

- It stresses that **tailored state-level fiscal strategies**, aligned with different stages of **demographic transition**, are essential for sustainable economic growth.

Key Findings of the RBI's State Finances Report 2025-26

- **Demographic Diversity Across States:** The **median age** varies from **23 years in Bihar** to **37 years in Kerala**, while the **old-age dependency ratio** ranges from **14.0 to 30.1**, leading to the classification of states into **Youthful, Intermediate**, and **Ageing** categories, each requiring distinct fiscal approaches. It calls for differentiated fiscal strategies.

- **Youthful States** need higher spending on education, skilling, and job creation; **Intermediate States** should focus on **infrastructure**, **urban reforms**, and **female workforce participation**; **Ageing States** must prepare for higher healthcare, pension, and social welfare costs.

- **Widened Fiscal Deficit:** The states' **Gross Fiscal Deficit (GFD)** widened to **3.3% in 2024-25** (from lower levels post-pandemic), primarily due to **lower grants** from the Centre (decline in **GST compensation** & **revenue deficit grants**).
  - **16 States** have budgeted a **GFD exceeding 3% of GSDP** for 2025-26, with **13 States** surpassing **3.5%**.

- **State-Level Reforms for Revenue Growth:** States' **own tax base** is highly concentrated, with **State GST**, **sales tax**, **excise duties**, and **stamp duties** constituting **~90% of collections**. States are exploring **non-tax revenue sources** like mineral taxation and **asset monetisation**.

- **Capital Push and Social Sector Focus:** Capital expenditure has firmed up steadily, supported by the **Centre's Scheme for Special Assistance to States for Capital Investment (SASCI)**. It is expected to increase up to **3.2% of GDP in 2025-26**. **Social sector expenditure** is the major driver of **revenue expenditure** in 2025-26 (8.2% of GDP).

- **Debt and Borrowings: Consolidated debt of States** declined to **28.1% of GDP** by **March 2024** from a peak of **31%** (March 2021), but is budgeted to rise to **29.2% by March 2026**.
  - **Market borrowings** now finance about **76% of the GFD** (2025-26), indicating increased reliance.
  - **Interest payment burden** remains manageable (**Interest Payments-to-GDP stable at 1.5–1.9%**), aided by concessional loans from the Centre.
  - The **maturity profile** of **State Government Securities (SGS)** is **elongating**, with an increase in issuances beyond **10–15 years**.

- **Other Key Observations:** Research & Development (R&D) expenditure by States is low (**around 0.2–0.3% of GSDP**) and dominated by **medical** and **agricultural research**.
  - States are building **fiscal buffers** via the **Consolidated Sinking Fund (CSF, Rs 2.4 lakh crore)** and **Guarantee Redemption Fund (GRF, Rs 16,019 crore)**.
  - **SASCI** has been highly effective, with nearly **full disbursement (Rs 1.49 lakh crore in 2024-25)** and driving **reforms**.

Demographic Transition

- **About:** Describes the historical shift from **high to low birth and death rates** as a country **develops**. It typically involves several stages.
  - **Stage 1: High birth** and **high death rates** lead to a stable, low population.
  - **Stage 2: Death rates** fall due to better **healthcare** and **food security**, while **birth rates** remain high, causing **rapid population growth**.
  - **Stage 3: Birth rates** begin to decline due to **urbanization**, **education**, and **family planning**, slowing **population growth**.
  - **Stage 4:** Both **birth** and **death rates** are low, leading to a **stable** or **aging population**.

Contd...

Demographic Transition
■ **India's Current Demographic Status:** As per the 2011 **Census**, **India** is in **Stage 3** of the demographic transition model.   ● The **Total Fertility Rate** (**TFR**) has fallen to **2.0** (as per **NFHS-5**), which is below the **replacement rate of 2.1**. This means, on average, **women** are having **fewer children** than needed to maintain the current population size without migration. ■ **Future Projection:** According to the **UN's World Population Prospects 2024**, India's population is expected to **peak** at around **1.7 billion** in the **early 2060s** and then gradually **decline**, though it will remain the world's most populous country.

Fiscal Implications of India's Demographic Transition for State Governments			
Area	**Youthful States**	**Intermediate States**	**Ageing States**
Revenue Potential	High potential **tax buoyancy** due to expanding **working-age population, rising incomes, consumption**, and labour participation. Requires productivity-enhancing investments to realise **demographic dividend** (e.g., Bihar, Uttar Pradesh).	Stable but **slowing revenue growth** as workforce share peaks. Scope to tap skilled labour, services, and **silver economy** (senior citizens centered) (e.g., Telangana).	Shrinking or **stagnant tax bases** as the working-age population declines. Lower income and consumption growth **caps own-source revenues** (e.g., Kerala, Punjab).
Expenditure Composition	High developmental spending needs on **education, skilling, healthcare**, and job creation to absorb youth bulge; lower old-age welfare burden initially.	Dual expenditure pressure—**continued investment in human capital alongside rising healthcare** and social security demands.	**Rising committed expenditure on pensions, geriatric healthcare**, and **social security**, crowding out infrastructure and education spending.
Debt Sustainability & Fiscal Space	**Manageable debt outlook** if growth-enhancing spending raises future revenues; risk of stress if youth dividend is missed.	**Tightening fiscal space** as welfare obligations rise while revenue growth moderates; careful debt management required.	**High stress on debt sustainability** due to rising welfare spending, and high interest payments; fiscal deficits risk exceeding 3% of GSDP.
Fiscal Buffers, Transfers & Productivity	Need to build **early fiscal buffers** and invest in **productive capex**; benefit relatively from current Finance Commission devolution norms based on population size.	Strategic focus on **expenditure quality, R&D, and technology** to offset future ageing effects; gradual buffer creation.	Strong need for fiscal buffers, prudent **contingent liability management** (**pensions**), higher R&D spending, and reform of devolution criteria to reflect higher old-age dependency ratios.

Harnessing the Demographic Dividend

■ **Hyper-Local Skill Matching:** Use AI-driven platforms to map **local industry demand** in real-time with the **skill profiles of youth**, creating dynamic, district-level apprenticeship and job-matching ecosystems.

■ **Create 'Opportunity Corridors' in Emerging Sectors:** Identify and develop specialized industrial/technology corridors focused on **future sectors** (e.g., **green hydrogen**, **semiconductors**, **space technology**) with **pre-approved land**, **plug-and-play infrastructure**, and fast-tracked clearances to attract investment and high-quality jobs.

■ **Implement a 'Learn-Earn-Pension' Continuum:** Bundle student loans with **guaranteed internship stipends** and an option to auto-enroll a **micro-contribution** into the **National Pension System (NPS)** upon first employment, fostering **long-term financial security** from the start of a **career**.

■ **Foster District as an Export Hub (DEH) Model:** Empower districts with high youth populations to specialize in **niche products** (**handicrafts**, **textiles**, **food processing**). Provide integrated support for **branding**, **e-commerce onboarding**, **logistics**, and meeting global quality standards to turn local talent into global entrepreneur**s**.

Mitigating Risks of Population Ageing

■ **Develop Silver Economy Clusters:** Incentivize the **private sector** to develop integrated townships or clusters with **age-friendly housing**, accessible healthcare facilities, recreation centers, and **geriatric care services**, creating new economic ecosystems and reducing public infrastructure burden.

■ **Elderpreneurship Schemes:** Partner with **industry** to design **flexible**, **part-time**, and consultancy-based roles for **experienced retirees**. Provide seed grants and incubation support for seniors to start **social enterprises** or **knowledge-based consultancies**.

■ **Sub-National Longevity Funds:** Create dedicated **state-level funds**, potentially through **public-private partnerships**, to invest in and subsidize preventive healthcare, **telemedicine**, **assistive technologies**, and drug research for age-related diseases.

> Examine the fiscal implications of India's demographic transition for State governments and suggest measures for sustainable finances.
>
> **Drishti Mains Question**

India-France Special Global Strategic Partnership

President of France visited India for the **AI Impact Summit 2026**, where both countries elevated ties to a **"Special Global Strategic Partnership."**

- Building on **25 years of strategic cooperation** and the **Horizon 2047 Roadmap**, they agreed to deepen collaboration in **various sectors.**

Key Outcomes of the Visit

- **Defence & Strategic Cooperation:** Contract finalised for **26 Rafale-Marine fighter jets.** Inauguration of **H125 Final Assembly Line (TATA-Airbus)** – first private helicopter facility in India. Creation of **Joint Advanced Technology Development Group**
- **Nuclear Energy Cooperation:** Cooperation on **SMRs & AMRs** under **2025 Declaration of Intent.** Collaboration across value chain incl. **Jaitapur Nuclear Power Plant Project.**
- **Space Cooperation:** 3rd India-France Strategic Space Dialogue (2026). India to attend International Space Summit (July 2026, France)
- **AI & Innovation:** Launch of **India-France Innovation Network; INRIA–DST binational centre** for digital sciences. Establishment of **Joint Center for Advanced Materials**

- **Indo-Pacific Cooperation:** Enhanced cooperation under **IPOI** & **IORA** (India's Chairship). Trilateral engagement with **Australia** & **UAE**
- **Health Cooperation:** AI in Healthcare Research Centre: Sorbonne University, **AIIMS Delhi**, Paris Brain Institute
  - **Collaboration: PariSanté Campus–C-CAMP; Health Data Hub–ICMR**
- **Education & Culture:** Target: **30,000 Indian students in France by 2030** (from 10,000). Cooperation: **Yuge Yugeen Bharat Museum–France Muséums Développement**
  - **Namaste France 2028** to mark 30 years of strategic partnership
- **Multilateral Issues:** France reaffirmed support for **India's permanent UNSC membership.** Coordination on **veto regulation in cases of mass atrocities.**
  - PM invited to **G7 Summit 2026 (France).** Invitation to **Africa Forward Summit (Nairobi, May 2026)** to enhance Africa partnerships

NOTE: France is **India's 2nd-largest arms supplier** (after Russia); **Key deals–** Rafale jets, 26 Rafale-Marine fighters, Scorpene submarines. France is **India's 3rd-largest EU trading partner** (after Netherlands & Germany); Bilateral trade– **€12.67 billion (2024–25)**

Key Areas of Concern in India-France Relations	Suggestions

- **Defence Procurement & Technology Transfer Delays:** Delays in projects like **Rafale jets**, **Scorpene submarines**, **jet engine collaborations.**
  - Issues: contract negotiations, policy shifts, localisation demands
- **Market Access Issues:** France seeks access for **pharma, luxury goods, defence sectors.** India seeks easier entry for **IT, agriculture, generic drugs.**
  - Indian exports face **Sanitary and Phytosanitary (SPS) measures** in French market
- **Disagreements on Global AI & Data Regulation:** France backs **EU's GDPR model**; India prefers flexible approach under **DPDP Act, 2023.** Differences on **open-source AI, cybersecurity norms, digital sovereignty**
- **Divergences on Strategic Autonomy:** India's ties with **Russia** (energy, defence) vs France's opposition to Russia over **Ukraine war**
  - India did not join **NATO-led sanctions**; France a key military supporter of Ukraine
- **Immigration & Mobility Restrictions:** Challenges– visa limits, work permits, recognition of qualifications. India seeks easier residency/work access; France bound by **EU-wide immigration policies**
	- **Deepen Defense & Security Collaboration:** Accelerate **joint production & R&D** (precision-guided missiles, helicopters, jet engines). Align with **Atmanirbhar Bharat**
	- **Advance Energy Cooperation:** Expand ties in **renewables, green hydrogen, clean tech.** Joint investments in **critical minerals & advanced materials**
	- **Enhance Economic & Trade Ties:** Utilise **India–EU FTA** to reduce trade imbalances & tariffs. Create **joint working groups** on market access. Promote sectors– **aeronautics, space, high-speed rail**
	- **Technological Partnerships:** Launch **India–France Year of Innovation 2026.** Set up centres of excellence in **AI, digital sciences, biotechnology.**
	  - Promote collaboration among **startups, research institutions, industry**
	- **Strengthen Cultural Exchanges:** Expand **education, culture, mobility programs.** Establish **Swami Vivekananda Cultural Centre (Paris)**
	  - Cooperation on heritage projects like **National Maritime Heritage Complex (Lothal)**

India–France relations have evolved beyond defence procurement into a comprehensive strategic partnership. Examine.

Drishti Mains Question

India-Bangladesh Relations

Bangladesh Nationalist Party (BNP), led by **Tarique Rahman**, won a landslide in the **February 2026 general elections**, ending the interim period that followed the ouster of **Sheikh Hasina (Awami League)** in Aug 2024.

- India's PM congratulated Rahman, signalling readiness to work with the new government despite past tensions.

Historical Context of India-Bangladesh Relations under BNP Rule

- **BNP: Founded by General Ziaur Rahman**; shifted Bangladesh from secular foundations towards a **stronger Islamic identity** and improved ties with **Pakistan**.
  - **2001–2006 BNP–Jamaat coalition**: Considered the **lowest point** in bilateral relations.
    - India accused the regime of harboring Northeast insurgent groups like **ULFA** and **NDFB**.
    - Rise in radicalization and cross-border terror threats.
    - Clear pivot towards **China** in defence & infrastructure.
- **2009–2024 ("Golden Chapter") – Sheikh Hasina: Land Boundary Agreement (2015)** resolved.
  - Expansion of **connectivity projects**.
  - Crackdown on **anti-India insurgents**.
  - Bilateral trade reached **USD 13 billion (FY 2023–24)**; Bangladesh became **India's largest trade partner in the subcontinent**.
  - **Duty-free access** on most tariff lines under **SAFTA**.
- **Interim Period (2024–2026):** Followed **student-led revolution** & **Hasina's flight to India**. Rise in **anti-India sentiment**, alleging India backed an "authoritarian" regime.

Emerging Challenges in India-Bangladesh Relations	Suggestions
■ **"Hasina" Factor & Extradition: BNP government** may seek Sheikh Hasina's **extradition** for alleged "crimes against humanity" during the **2024 uprising**. ■ **Security & Insurgency Concerns:** Risk to **Siliguri Corridor ("Chicken's Neck")** if vigilance on Northeast insurgents weakens. Fear of revival of **safe havens** for groups like **ULFA**. Possibility of expanded **Pakistan footprint**. ■ **Border Control:** Jamaat-e-Islami won significant seats in border districts near **West Bengal, Assam & the Siliguri corridor**. ■ **The Rise of Islamist Politics:** Regime changes (**2001, 2024**) linked to violence against **religious minorities** (seen as Awami League vote banks). 　● Concerns over safety of **Hindus** and rise of **radicalism** affecting **West Bengal & Assam**. Potential **refugee influx** (**like 1971**) could destabilize demography of **Assam and West Bengal**. ■ **BNP's "Look East" policy:** Closer ties with **China** and the **Islamic world** (**including Pakistan**) to balance India. Likely push to fast-track **BRI projects**. ■ **The "India Out" Sentiment:** Strong anti-India rhetoric in **universities & student movements**. Limits BNP government's ability to appear openly "friendly" to India.	■ **De-hyphenation from Awami League:** Move beyond image of being an "Awami League-only" ally. Engage BNP & broader civil society. Shift to people-to-people connect; ease visa regimes for medical tourism and education. ■ **Pragmatic Engagement:** High-level visits (including PM-level) to confer legitimacy, linked to **concrete security guarantees**. ■ **Economic Interdependence as a Stabilising Tool:** Use **trade surplus** to promote cooperative behaviour and fair market access. 　● Continue supply of **cotton yarn, power, and essential commodities** to stabilise Bangladesh & reinforce interdependence. ■ **CEPA & LDC Graduation:** Loss of **duty-free access to Western markets**. India can fast-track **CEPA** to provide **duty-free access to Indian market**, conditional on political stability. ■ **Establish Clear "Red Lines": Zero tolerance** for Indian insurgents on Bangladeshi soil. **Protection of minorities** as a prerequisite for normal ties. 　● No conversion of Chinese projects at **Mongla & Payra ports** into **dual-use facilities** (e.g., submarine docking) threatening the **Eastern Naval Command**. ■ **Domestic Coordination:** Centre must coordinate with CMs of **West Bengal, Assam, Meghalaya, Tripura, Mizoram** for a unified stance.

US–Bangladesh Cotton Deal: Implications for India

Bangladesh and the US signed a reciprocal trade agreement, colloquially termed the **"Cotton for Zero-Tariff" deal**.

- The pact has raised significant concerns among Indian exporters, as it threatens to erode the competitive edge India had gained under the **India–US Interim Trade Agreement in the US market** and could also disrupt **India's raw cotton exports.**

Key Highlights of the US-Bangladesh Trade Deal

- **Tariff Reduction:** The deal secures a **19% reciprocal tariff** for Bangladesh, a reduction from the earlier 20%.
- **Zero-Tariff Mechanism:** The most significant aspect is the commitment to establish a mechanism allowing a specified volume of Bangladeshi textile and apparel goods to enter the US at a **zero reciprocal tariff rate**.
- **Conditionality (Rules of Origin):**
  - The zero-tariff benefit is conditional. The volume of duty-free exports will be determined based on Bangladesh's use of **"US-produced cotton and man-made fibre textile inputs."**
- **Reciprocal Commitments by Bangladesh:** Bangladesh has agreed to significantly open its economy to US industrial and agricultural goods.

- It has committed to purchasing **USD 3.5 billion** of US agricultural products (wheat, soy, cotton, corn) and **USD 15 billion** worth of energy products over 15 years.

Impact of Us-Bangladesh Trade Deal on India

- According to the **Confederation of Indian Textile Industry (CITI)**, the deal presents a "two-fold challenge" for India:

- **Erosion of Tariff Advantage:** Prior to this deal, India had a perceived advantage with an **18% US tariff** compared to Bangladesh's **20%**.

  - With the new deal, Bangladesh's general tariff drops to **19%**, narrowing India's margin to just 1%.

  - More critically, for the specific quota of goods entering at **0% duty**, India now faces a massive **18% disadvantage** compared to Bangladesh.

  - **Bangladesh is already the second-largest apparel exporter globally (after China).** This deal further strengthens its position against India (the 6th-largest exporter) in the lucrative US market.

  - Industrial hubs like Tiruppur (Tamil Nadu) and Surat (Gujarat) operate on thin profit margins. Global retail giants (like Walmart, GAP) may shift large-volume orders to Bangladesh to capitalize on the duty-free benefits.

- **Loss of a Key Market for Indian Cotton:** Bangladesh has traditionally been the largest buyer of Indian raw cotton (accounting for nearly 70% of India's cotton exports).

  - India exported USD 1.6 billion worth of cotton yarn and about USD 85 million of **manmade fibre (MMF)** yarn to Bangladesh in 2024.

  - To access the 0% US tariff, Bangladeshi manufacturers must use **US-produced cotton**. This incentivizes them to switch their sourcing from India to the US.

  - This will likely lead to a **sharp decline in Indian cotton exports to Bangladesh, causing a glut in the Indian domestic market** and depressing prices for Indian cotton farmers.

Measures India can Take to Safeguard its Cotton and Textile Sector

- **Lobby for "Cotton Parity" With the US:** India's **cotton imports rose to 4.13 million bales in 2024–25, with the US as the top supplier**.

  - India should seek a **"Cotton Clause" from the US,** granting zero-duty access for garments made from US cotton to counter **Bangladesh's new advantage.**

  - Fast-track the **India–US Bilateral Trade Agreement (BTA)** to reduce non-tariff barriers and compliance burdens, enabling faster movement of goods to the US market.

- **Countering with ESG:** Western buyers are sensitive to "Ethical Sourcing." Bangladesh faces scrutiny over labor rights and safety.

- India should aggressively market its **"Sustainable & Socially Compliant"** manufacturing (zero child labor, better fire safety records than Bangladesh) to premium buyers who fear reputational risk.

- **Pivot to Man-Made Fibres (MMF):** Global textile trade is **70% MMF (polyester/viscose) and 30% cotton,** but India's exports are largely cotton-based.

  - Higher taxes on MMF raw materials than on finished goods have historically discouraged domestic MMF production.

  - The **GST Council** must rationalize the entire MMF value chain to make Indian synthetics price-competitive against Bangladesh, China and Vietnam.

- **The "Kasturi" Strategy:** Scale up the **"Kasturi Cotton Bharat"** initiative. By using blockchain to prove that Indian cotton is **ethically grown and contamination-free**, India can command a premium price that offsets the tariff disadvantage.

- **Technical Textiles:** India should target high-tech textiles where quality outweighs tariff gaps, shifting toward value-added textile segments like Meditech (surgical implants, sanitary products), Mobiltech (airbags, seatbelts), and Geotech (road construction fabrics).

  - Creating a guaranteed domestic market would help firms scale up and compete globally.

- **Market Diversification:** Reduce over-reliance on the US market by exploring new export destinations in **Australia** and the **UAE** (where India already has FTAs) and tapping into emerging markets in **Latin America**.

> "Trade agreements often create both opportunities and vulnerabilities." Examine this statement in the context of the US–Bangladesh textile deal and its implications for India.
>
> **Drishti Mains Question**

India-Greece Relations

The **Defence Minister of India** held bilateral talks with the **Minister of National Defence of Greece** in New Delhi.

- The meeting resulted in the signing of a **Joint Declaration of Intent (JDI)** to strengthen defence industrial cooperation.

- This step highlights the growing strategic convergence between the two ancient maritime nations and marks a significant boost to their **strategic partnership.**

Key Highlights of the India-Greece Bilateral Talks

- **Joint Declaration of Intent:** India and Greece signed a JDI to strengthen bilateral defence industrial cooperation, which will lay the foundation for a **structured five-year roadmap** to guide long-term collaboration.

  - Alongside this, both sides exchanged the **Bilateral Military Cooperation Plan for 2026,** outlining planned military engagements between their armed forces.

- The cooperation aims to link India's **'Aatmanirbhar Bharat'** (Self-Reliant India) initiative with Greece's defence reforms under **Agenda 2030**, aiming to expand the capacity of indigenous defence industries in both countries.
  - ❖ By formalizing sustained industrial collaboration instead of ad-hoc arrangements, the move **reflects India's broader strategy** of diversifying defence partnerships beyond traditional suppliers.
  - Together, these steps signal a clear **shift from dialogue-driven engagement to structured, time-bound cooperation.**
- **Maritime Security Collaboration:** Greece announced the positioning of a **Greek International Liaison Officer** at the **Information Fusion Centre-Indian Ocean Region (IFC-IOR)** in Gurugram.
  - This move aims to **enhance Maritime Domain Awareness (MDA) and information sharing,** reflecting the shared maritime interests of both nations in the Indo-Pacific and the Mediterranean.

India-Greece Relations

- **Historical Linkages:** India–Greece ties go back nearly 2,500 years, with trade links between the **Mauryan Empire and Greece** reflected in ancient coinage and texts.
  - In 326 BC, **Alexander** reached northwestern India up to the **Hyphasis (Beas River) and fought** Raja Puru, King of Pauravaa (between the Jhelum and Chenab) and King Ambhi who ruled at Taxila.
  - The Mauryan dynasty was contemporary to Alexander. **Chanakya's** *Arthashastra* mentions the Greek (Yavana) ambassador Megasthenes at Chandragupta Maurya's court.
  - The **Gandhara school of art** later emerged as a blend of Indian and Greek cultural influences.

- **Strategic Partnership:** The bilateral relationship was elevated to a **"Strategic Partnership"** in **August 2023**.
- **Diplomatic Support:** Greece has consistently supported India's stance on **Kashmir** and India's bid for a permanent seat in the **UN Security Council (UNSC)**. Conversely, India supports Greece's position on the **Cyprus issue**.
  - India supports a bi-zonal, bi-communal federation for the Cyprus issue, in line with UNSC resolutions, and international law

Significance of the Cooperation

- **Gateway to Europe:** Greece's strategic location in the **Eastern Mediterranean** serves as a vital gateway for India to Europe.
  - Greece, having a massive merchant shipping fleet (controlling ~20% of global shipping tonnage), offers India a logistical partner to penetrate the EU market.
  - It is a crucial node in the proposed **India-Middle East-Europe Economic Corridor (IMEC)**, with Greek ports (like Piraeus) potentially acting as entry points for Indian goods.
- **Countering Geopolitical Adversaries:** Closer ties with Greece provide a strategic counterbalance to the **Turkey-Pakistan** axis.
  - Turkey's close military cooperation with Pakistan makes India's partnership with Greece (Turkey's traditional rival) geopolitically significant.
- **Indo-Pacific & Mediterranean Convergence:** Both nations are maritime powers **advocating for a rules-based international order** and freedom of navigation, aligning their interests in the Indo-Pacific and the Mediterranean Sea.
  - Greece's interest in the **Indo-Pacific Oceans Initiative (IPOI)** and India's naval presence in the Mediterranean (e.g., INS *Tabar* exercises) create a security continuum stretching from the Arabian Sea to the Aegean.

Challenges in India-Greece Relations

- **Economic Underperformance:** Despite the potential, bilateral trade stands at approximately **USD 2 billion** (2022-23).
  - This is significantly lower than India's trade with other European nations like Germany, France, or Italy.
  - The trade is heavily **skewed towards primary products** (aluminum, mineral fuels, cotton) rather than high-value technology or services, limiting economic depth.
- **Connectivity Deficit:** The absence of direct shipping lines **necessitates trans-shipment,** increasing the time and cost for Indian exports to reach Greek ports.
- **The "China Factor":** Greece is positioned as India's "Gateway to Europe" via the **IMEC**.

- However, the largest Greek port, **Piraeus**, is majority-owned by **COSCO Shipping**, a Chinese state-owned enterprise.
- India's strategic reliance on a port controlled by a geopolitical rival (China) poses a **long-term security dilemma** for its European supply chains.
  - **Institutional Lag:** Despite elevation to a Strategic Partnership, India–Greece ties lack regularised high-level mechanisms such as a **2+2 Dialogue and foreign policy review frameworks.**
    - This limits continuity, policy follow-up, and long-term strategic coordination.

Steps to Enhance India-Greece Relations

- **Operationalize IMEC:** With the **Red Sea crisis** destabilizing traditional routes, accelerating the **India-Middle East-Europe Economic Corridor** will automatically resolve connectivity issues, making Greece the primary entry point for Indian goods into the EU.
  - Develop a **Green Maritime Corridor between Indian and Greek ports,** focusing on **green hydrogen,** ammonia bunkering, and **decarbonised shipping**.
- **Labor Arbitrage:** Greece faces a severe demographic crisis and labor shortage (agriculture, construction, tourism), while India has a surplus of skilled workforce.
  - Swift implementation of the **Migration and Mobility Partnership Agreement (MMPA)** will legalize Indian labor flows, curbing illegal migration while boosting remittances.
- **Strategic Grouping:** India should formalize a minilateral grouping involving **India, Greece, Cyprus, and Israel (or France)**. This "Mediterranean Quad" would focus on energy security and joint naval patrols, effectively extending India's security perimeter.
- **Digital Connectivity:** Collaborate on the **Blue-Raman cable system** (submarine cables) to link India's digital infrastructure with Europe via Greece, bypassing the vulnerable **Suez choke-point.**

> India–Greece defence cooperation reflects a shift from symbolic diplomacy to structured strategic engagement. Discuss
>
> **Drishti Mains Question**

Agricultural Safeguards in India–US Interim Trade Agreement

India & US issued a **joint statement** announcing a **framework for an Interim Trade Agreement**, after the US cut **reciprocal tariffs on Indian goods to 18%.**

- Acts as a **precursor to a full Bilateral Trade Agreement**, offering India **preferential access** to the **USD 30-trillion US market**. Aims to **expand bilateral trade** while protecting **Indian farmers** & **sensitive sectors.**

Protections of Indian Farmers
Under India - US Interim Trade Agreement

- **Agricultural Trade Balance (2024)**: India's exports to US: **USD 3.4 billion;** Imports from US: **USD 2.1 billion. Trade surplus**: **USD 1.3 billion**
  - US will apply **zero additional duty** on Indian agricultural exports worth **USD 1.36 billion.**
- **Negative List Maintained** – No tariff relief for US on: **Meat, poultry, dairy; Staple grains**: wheat, rice, maize, millets; **Fruits & vegetables**: bananas, strawberries, cherries, citrus, green peas; **Other commodities**: soybean, sugar, oilseeds, ethanol, tobacco
- **GM Ban Continues:** India blocks **American GM corn & soybean**; no opening to **GM items**
- **Duty-Free Access**– US duties on many Indian products **reduced from 50% to 0%**
  - **Agriculture Exports** (Zero-duty access): Spices, tea, coffee; Cashew nuts, Brazil nuts, coconuts (including oil and copra)
  - **Fruits & Vegetables**: Mangoes, guavas, papayas, avocados, bananas, mushrooms
  - **Processed Goods**: Select **processed foods** and **cereals** (e.g. **barley**) to enter **duty-free.** Encourages **value addition** within India before export
- **Animal Feed Market: Rationale**– rising demand from **poultry & livestock sectors** outpaces domestic **maize and soybean** supply.
  - **Non-GM Import Allowed**: US can now export **Sorghum (Red Sorghum)** to India — a **non-GM alternative** to corn.
  - **Distillers Dried Grains with Solubles (DDGS)** allowed as processed feed input.
  - Though derived from **GM corn**, permitted **only in processed form**, without lifting the **GM grain ban**.

Calibrated Market Opening with Strong Safeguards

- **Tariff Rate Quotas (TRQs)**: Applied to items like apples & almonds. Allows **limited imports at lower tariffs**
- **Phased Rollouts**: Gradual tariff reduction over **up to 10 years.** Enables **domestic industry adjustment**
- **Minimum Import Price (MIP)**: Imposed on wines & spirits. Ensures entry of **only high-value premium products**, protecting mass-market segment

India as Chair of the Kimberley Process 2026

India has assumed the **chair of KP for 2026**, strengthening its role in **global diamond governance** as a key **Global South voice** & **diamond value chain hub** to push for **reforms.**

Kimberley Process	Kimberley Process Certification Scheme (KPCS)

■ **Initiated**: 2000 by **Southern African countries**
 	
 ■ **Purpose**: Prevent trade in **conflict diamonds** (used by **rebel groups** to fund armed conflicts) and support **legitimate rough diamond trade**
 	
 ■ **Nature**: Not a **formal organisation** or **legally binding treaty**
   ● No **permanent office/staff**; runs on burden-sharing contributions by countries
   ● Rules enforced via national laws
 	
 ■ **Participants**: **60 participants**, representing **86 countries.** Cover ~**99.8%** of global **rough diamond production**
	■ **Launched**: **2003** to govern **rough diamond trade**
	
	 ■ **Minimum Requirements**: Must be met by all **participants**
	
	 ■ **KP Certificate**: Mandatory, **tamper-resistant**, accompanies **every rough diamond consignment**
	
	 ■ **Trade Rules**: Only allowed b/w **certified KP members**
	   ● Countries must share timely, accurate trade & production data
	
	 ■ **Enforcement**: Done **individually by participant countries**
	   ● Ensures only **conflict-free diamonds** enter the supply chain
	
	 ■ **India**: A **founding member** of KPCS

Diamonds in India

■ **Resources: Majhgawan mine**, Panna (Madhya Pradesh) – **only commercial diamond mine.** Panna diamonds have GI tag
 	
 ■ **Market Dominance:** Major **importer** of rough diamonds from **UAE**, **Belgium**, **Russia**
   ● ~**90% of world's diamonds** processed in India (2024); ~75% global turnover by value (iNDEXTb)
   ● Industry hubs: **Surat**, **Mumbai**
 	
 ■ **Lab-grown Diamonds: 3 million+** produced in **2023; 15%+ of global output**
 	
 ■ **Strategic Leverage:** India exports polished & LGDs to **US**, **China**, **UAE**, **Hong Kong.** Central to value chain; holds **governance influence**

Core Challenges & Criticisms Facing the KP

- **Narrow Definition:** Covers only diamonds used by **rebel groups. Excludes** those funding **state-led wars** or **human rights abuses**

- **"Mixed origin" laundering loophole:** Blending of sources in trading hubs. Re-certified as **"Origin: Mixed"**, erasing **traceability**

- **Veto Power:** Consensus-based system lets a **single country block reforms** or conflict identification. Leads to **paralysis & stagnation**

- **No Permanent Institutional Structure:** Lacks secretariat & staff. Weakens monitoring, continuity, and crisis response

- **Ineffective Embargoes: Central African Republic** case (banned **2013**, rejoined **2024**) shows **weak enforcement** led to **smuggling** & **violence**
  - Disagreement on **state-led violence** vs **community protection** shows need for **mandate reform**

- **Rough-only Jurisdiction Gap:** KP covers only **rough diamonds. Minimal polishing** removes them from KP scope, enabling **evasion**

- **LGDs:** Ethical concerns over **conflict diamonds** & **mining abuses** shift consumers to **LGDs.** Risks **reduced demand** for natural diamonds, affecting **mining-dependent economies**

Measures that India can take as Chair to Reform the KP

- **Broadening the Agenda:** Form **technical working groups** to assess **violence & human rights risks** beyond rebel insurgencies. Build **consensus** to **redefine "conflict diamonds"**

- **Technological Modernization:** Promote **blockchain-based certification** for fraud reduction & traceability

- **Institutional Reform:** Advocate **independent third-party audits.** Push for **public release of detailed trade statistics**

- **Capacity Building:** Establish regional technical hubs in African producer nations. Provide **IT support**, **forensic tools**, and **certification help**

- **Sustainable Development:** Ensure **diamond revenues** fund **health**, **education**, and **infrastructure** in mining communities. Align KP with **SDGs** – especially **poverty reduction** & **decent work**

India–US Trade Deal 2026

The US has slashed the **effective tariff on Indian goods to 18%**, down from a staggering peak of 50% (which included punitive duties). The deal marks a **strategic de-escalation of trade tensions and reaffirms India's role as a primary US ally** and a critical counterweight to **China in the Indo-Pacific.**

Key Highlights of the India- US Trade Deal

- **Tariff Reduction:** The US has reduced the **reciprocal tariff** on Indian imports from **25% to 18%**.
  - Crucially, the additional **25% punitive tariff** (which was imposed in August 2025 due to **India's purchase of Russian oil**) has been effectively removed, bringing the total effective tariff down from roughly **50% to 18%**.

- **India's Commitments:**
  - **Energy Shift:** In a major diplomatic concession, India has agreed to halt/significantly reduce the purchase of Russian crude oil.

- ❖ India will pivot its energy procurement to the **US** and potentially **Venezuela**.
- **Market Access:** India is expected to reduce its tariffs and non-tariff barriers on US goods to **"zero"**.
  - ❖ The US expects a surge in agricultural exports (tree nuts, cotton, and soybean oil) to India's massive consumer market.
- **"Buy American" Policy:** India has committed to a stronger **"Buy American" stance** for government and large-scale industrial procurements.
  - ❖ India could buy as much as **USD 500 billion worth of US energy, coal, technology, agricultural and other products.**

Background of India - US Tariff Evolution

The road to the 18% tariff was marked by aggressive "transactional diplomacy":

- **The "Tariff King" Narrative:** US historically criticized India's high import duties. In mid-2025, the US imposed a **25% reciprocal tariff**, matching India's average rates.
- **The Russian Oil Friction:** Following India's continued purchase of Russian crude during the Ukraine conflict, the US added a **25% punitive "extra duty"** in August 2025, pushing the total tariff to **50%**.
- **Operation Sindoor & Regional Leverage:** The US reportedly used tariff pressure as a strategic tool for regional stability following **India's Operation Sindoor** (**May 2025**) against terrorist targets in Pakistan, later claiming that trade leverage helped push a ceasefire.
- **India's Pre-Deal Moves:** To thaw relations, India had already slashed duties in its **Union Budget** on items like heavy motorcycles and bourbon whisky, and passed the **SHANTI Act, 2025** to open up the nuclear power sector.

Significance of India-US Tariff Rationalization

- **For India**
  - **Boost to Indian Exports:** The reduction to 18% restores competitiveness for Indian exporters. Sectors like **textiles and apparel** (which operate on thin margins) and **pharmaceuticals** are expected to see an immediate revival in orders.
  - **Competitive Edge:** At 18%, India now faces a more favorable rate than regional competitors like **Vietnam (20%)**, **Bangladesh (20%)**, and **China (30-35%)**.
  - **Economic Stability:** The deal removes the uncertainty of a trade war, likely stabilizing the Rupee and encouraging FDI back into Indian manufacturing.
- **For US**
  - **Nuclear & Tech Exports:** The deal paves the way for US companies to enter India's nuclear power sector (enabled by the SHANTI Act, 2025) and defense manufacturing.

- ❖ This deepens the **"US-India Initiative on Critical and Emerging Technology (iCET)."**
- **Data Center Dominance:** As presented in **Union Budget 2026-27**, **Tax holidays for foreign companies** setting up data centers in India directly benefit US tech giants like Google, Microsoft, and Amazon, cementing their dominance in India's digital infrastructure.
- **Energy Exports:** In FY25, India's crude oil import dependence rose to 88.2% compared with 87.4% and 85.5% during FY24 and FY23.
  - ❖ With India pivoting away from Russia, the **US energy sector (oil, LNG, coal)** gains a massive, long-term customer. This directly **benefits US shale oil producers and LNG exporters.**

Challenges Related to India-US Trade Deal 2026

- **The "Strategic Autonomy" Dilemma:** The deal's success is contingent on India halting or significantly reducing Russian oil imports. This risks straining the **"Special and Privileged Strategic Partnership"** with Moscow, which remains India's largest defense supplier.
  - This also underscores the challenge to **India's de-hyphenated foreign policy**, which seeks to maintain **independent, multi-aligned relationships** rather than aligning exclusively with any single power bloc.
- **Transactional Diplomacy:** The "Reciprocal" nature of the deal (matching tariffs to 18%) suggests that the US now views India through a purely transactional lens.
  - This could set a precedent where every strategic concession requires a massive economic or political "payback."
- **China Retaliation:** As India cements its role as a "China Counter," Beijing has already warned of consequences.
  - Given India's **import dependency** on China (especially for **Rare Earths and API pharmaceuticals**), any retaliatory trade barriers from China could cripple Indian manufacturing.
- **Regional Parity**: India remains disadvantaged as competitors such as Bangladesh and Vietnam enjoy **a special GSP (Generalised System of Preferences) concession of about 5%**, withdrawn from India in 2019, raising doubts over true regional parity.
- **Economic Risks**: US has claimed India committed to reducing tariffs to **"zero"**. Opening India's dairy and poultry sectors to highly subsidized US agri-products could **trigger widespread rural distress and farmer protests**, which have historically been protected.
  - Russian oil was purchased at a discount, providing a cushion against global inflation. Shifting to US or Venezuelan oil might increase India's **import bill**, potentially impacting the **Current Account Deficit (CAD).**

- **Regulatory and Technical Barriers:**
  - Even with lower tariffs, US **"Sanitary and Phytosanitary" (SPS) standards** often act as invisible walls for Indian food and pharma exports. The deal does not yet fully address these technical hurdles.
  - This deal might eventually require India to align its Intellectual Property laws with US interests, potentially raising healthcare costs.
- **Digital Trade:** Issues regarding **Data Localisation** and the **India's DPDP Act (2023)** remain sticking points. The US tech giants seek "free flow of data," which may conflict with India's national security and privacy frameworks.

Leveraging the Indo-US Trade Pivot for Viksit Bharat

- **Balancing Strategic Autonomy with Energy Transition:** Recognise the cost of alignment in shifting crude sourcing from Russia to the US.
  - Accelerate the **National Green Hydrogen Mission and expand nuclear energy, especially Small Modular Reactors (SMRs).** Leverage trade deals for technology transfer to **ensure energy security** without fiscal slippage.
- **Diversify Export Markets:** India should fast-track free trade agreements with Gulf nations and East Asian blocs to help Indian businesses **diversify export markets** and reduce dependence on US buyers.
- **Protecting Domestic Interests:** India needs to calibrate the "zero tariff" commitment carefully to ensure that small-scale farmers and MSMEs are not overwhelmed by cheap US imports.

- Finalize the BTA to ease trade tensions, improve supply chain integration in semiconductors and pharmaceuticals, and harmonize regulatory standards with US norms to attract investments.
- **Leveraging "Friendshoring":** Use the 18% tariff window to move from Assembly in India to **Deep Manufacturing.** India should use this renewed proximity to the US to **attract supply chains moving out of China**, pitching the 18% tariff as a stable environment for "**Make in India" for the world.**
- **Protecting Agri-Livelihoods while Liberalising Trade:** Avoid blanket zero-tariff commitments; adopt product-specific safeguards. Promote value-added agri-exports (processed, organic products) over raw commodities.
  - Prevent rural displacement and ensure favourable terms of trade for farmers.
- **Promoting Innovation-Led Exports:** Leverage the **iCET framework** for collaboration in **AI and space technologies**.
  - Align **IPR standards** for high-tech sectors while retaining **public-interest waivers** in pharma. Position India as a global **R&D and innovation hub** supporting knowledge-driven exports.

> Assess the opportunities and risks for India arising from the recent India–US trade deal.
>
> **Drishti Mains Question**

India's Balancing Act Between the US and Russia

US claims India has "agreed to stop buying Russian oil" **under 2026 trade deal, raising concerns over India's balancing of ties with Russia amid US pressure.**

Evolution of India–Russia Relations

- **Cold War Solidarity** (1950-1991): USSR backed **India's positions on Kashmir & Goa**, stayed **neutral during 1962 Sino-Indian war**, and mediated **Tashkent Declaration** (1965).
  - **Treaty of Peace, Friendship, and Cooperation** (1971) gave India a **security guarantee** during Bangladesh Liberation War.
  - USSR was **India's top defence supplier** (~**70**%) & economic partner via **Rupee-Rouble trade arrangement**.
- **Post-Soviet Drift** (1991–1999): USSR collapse coincided with **India's economic crisis**. Russia shifted focus **Westward**, ended "friendship prices" on arms.
  - India began **economic liberalisation** (**LPG Reforms**) and improved ties with **US & Israel**.
- **Defence Cooperation:** Anchored by **2021–2031 military-technical agreement**; joint exercises include **INDRA** & **Zapad-2025**.

- **Strategic Partnership** (2000–2021): 2000– signed **Declaration on Strategic Partnership**. 2010– Upgraded to **Special and Privileged Strategic Partnership**.
  - Expanded to **joint defence** (e.g., **BrahMos**) and **energy** (**Sakhalin oil fields**) cooperation.
  - **Kudankulam Nuclear Plant** marked civil nuclear cooperation; Russia was sole builder of nuclear reactors in India.
- **Economic Cooperation:** Trade in FY 2024–25: **USD 68.7 billion**, skewed towards Russia (mainly energy imports).
  - Targets– **USD 100 bn trade by 2030**, **USD 50 bn investments by 2025**.
- **Ukraine War Impact: India ramped up Russian oil imports** due to Western sanctions, boosting trade.
  - **US concerns**: Claims India indirectly funds the war; imposed then **rolled back tariffs** with **monitoring and snap-back clause**. **US aims to replace Russia** as energy partner via **US crude, LNG, Venezuelan oil.**

Significance of India-US Trade vs. India-Russia Trade

- **Trade Volume Disparity:**
  - **India-US Trade: USD 128 bn** total trade; **India enjoys trade surplus**. Driven by **high-value goods, services exports**, and **FDI inflow**.

❖ Supports **startups, infrastructure** & **strategic tech ties via iCET**. Aligned with **Viksit Bharat 2047** vision.

- **India-Russia Trade: USD 68.72 bn** in 2024–25; **imports: USD 63.84 bn**, **exports: USD 4.88 bn**. Trade is **heavily skewed & commodity-driven** (oil, fertilizer, defence spares).
  ❖ Lacks deep integration with **India's civilian economy**.
- **Geopolitical Derivatives:**

- **US Advantage**: Trade supports **Indo-Pacific strategy** and acts as **economic security guarantee** against China. Key to **"China + 1" strategy** and **global supply chain integration**.
- **Russia Dilemma**: **Growing dependence on China** weakens Russia's strategic value. Over-reliance risks **exposing India to Chinese coercion** via supply chains.
- **Energy Security Shift**: **US tariff threats** prompted India to **diversify oil imports** (US, Venezuela) despite higher costs.

Challenges for India in the Current India–US –Russia Dynamic	Suggestions
■ **Russia–China Nexus**: Russia's **tilt towards China** may weaken **support in UNSC** & neutrality in **Sino-Indian border crises**. ■ **Defense & Security Vulnerabilities**: ~60% of India's military hardware is Russian; risk of **delays in spares/maintenance**. Russia has shared **sensitive tech** (e.g., nuclear subs, hypersonics); alienation may end this access. ● Shifting from Russian to Western systems is **costly**, needs **new training**, and risks **short-term readiness gaps**. ■ **Economic & Energy Challenges**: US/Venezuelan oil is costlier; freight cost from Americas is higher. ● Indian refineries need **adjustments** for non-Russian crude, causing **downtime, efficiency loss**. Higher landed costs may **raise fuel prices, inflate Current Account Deficit**. ■ **India's Global South Leadership**: Strategic ambiguity in great-power rivalries may **weaken India's moral authority & diplomatic credibility**.	■ **Accelerated Defense Indigenization**: Localize **spares/ammunition for Russian platforms** (Su-30s, T-90s) under **Atmanirbhar Bharat**. Buy high-tech gear from **US, France, Israel** to dilute Russian leverage. ● Target– **Reduce Russian dependency to <30%** in 10 years. ■ **Energy Security: The "Portfolio Approach"**: Diversify imports via **West Africa** (Nigeria, Angola), **Iraq**. Expand **Strategic Petroleum Reserves (SPR)** to hedge against distant supply risks. ■ **Economic Insulation**: Expand **FTAs** (e.g., India–EU) to **diversify export markets**. Strengthen **Rupee-based trade** to avoid US financial exposure. ● Build **domestic capacity** in APIs, green energy to counter supply chain risks. ■ **Leveraging Multilateralism**: Use **Global South leadership** for diplomatic space. ● Balance– **Quad** to counter China at sea; **BRICS** to manage continental ties with Russia-China.

Compare India–US and India–Russia trade relations and analyse their implications for India's long-term strategic autonomy.

Drishti Mains Question

India-Malaysia Relations

PM visited **Malaysia** and **operationalised the India–Malaysia Comprehensive Strategic Partnership**.

Outcomes of the PM's Visit to Malaysia

- **Digital & Fintech: Malaysia–India Digital Council (MIDC)** set up for **fintech, AI, cybersecurity, e-governance, DPI**.

- **NPCI International Ltd (NIPL)–PayNet** partnership for **low-cost cross-border digital payments**.
- **Trade & Finance:** Push for **local-currency trade settlement (INR–MYR)**.
- **Energy and Semiconductor Cooperation:** Expanded cooperation in **renewable energy, green hydrogen** & **R&D, skills, supply-chain resilience in Semiconductor**.
- **Public Administration:** MoU on **Combating and Preventing Corruption** between **CBI** and the Malaysian Anti-Corruption Commission.
- **Disaster Management:** MoU between **National Disaster Management Authorities** of both countries.
- **UN Peacekeeping:** Cooperation on **UN Peacekeeping.**
- **Education:** Expanded exchanges under **MTCP, ITEC**; Malaysians invited to **Study in India**.
  ● **TVET:** Cooperation to meet **future workforce needs**.
- **Healthcare:** Traditional Indian Medicine experts under **ITEC**; **Homeopathy MoU** (India–University of Cyberjaya).
- **Social Security:** MoU between **ESIC (India)** and **Malaysia Social Security Organisation** for Indian workers.

- **Culture: Thiruvalluvar Chair & Scholarships** at **Universiti Malaya**; Tamil cinema legacy (**MGR**) noted.
- **Diplomatic Expansion:** New **Indian Consulate General** in Malaysia.
- **Global Alliances:** Malaysia joined **IBCA**; welcomed **India's BRICS 2026 Chair**; ASEAN centrality (Malaysia Chair **2025**); Indo-Pacific cooperation via **AOIP–IPOI** alignment.
- **Terrorism:** Reaffirmed **zero tolerance**, including **cross-border terrorism**.
  - ADMM-Plus: India–Malaysia co-chair EWG (2024–27).

India-Malaysia Bilateral Relations

- **Historical Ties:** Links date back **1,000+ years** to the **Chola period (9th–13th C)**.
  - Chola rulers **Rajaraja Chola I** and **Rajendra Chola I** extended naval influence into the Malay Peninsula**.**
- **Economic Partnership: Malaysia** is **India's 3rd largest trading partner in ASEAN**; **Bilateral trade: USD 19.86 billion (2024–25)**.
  - Push for **local currency trade settlement** (INR–Ringgit).
  - Key frameworks: **Malaysia–India Comprehensive Economic Cooperation Agreement (MICECA); ASEAN–India Trade in Goods Agreement (AITIGA).**
- **Defence & Security:**
  - Joint military exercises: **Harimau Shakti** (Army); **Samudra Lakshmana** (Navy); **Udara Shakti** (Air).
  - **Malaysia–India Security Dialogue** & potential sale of **Tejas LCA, BrahMos missiles.**
- **Strategic Convergence:** Partner in **India's Act East Policy**; role in shaping **ASEAN–India relations**.
  - Supporting **Rules-Based Order in SCS** and the **Indo-Pacific**.
- **Diaspora:** Hosts the 2nd largest PIO community globally, Majority trace origins to Tamil Nadu.

Challenges in Relations

- **Persistent Trade Deficit:** Trade ~**USD 20 bn (FY 2024–25)**, tilted towards Malaysia. India imports **palm oil, electronics, crude oil**; exports are low value.
- **The "Palm Oil" Diplomacy & Volatility:** Malaysia is a major supplier. **2019–20 import restrictions** due to political friction. Sustainability norms (deforestation) may raise costs.
- **Political & Diplomatic Irritants:** Past criticism on **Article 370** and **CAA**. **2019 UNGA** remarks on Kashmir still affect trust.
- **The "China Factor" & Geopolitics:** China = Malaysia's top trade partner & BRI investor.
  - Malaysia prefers **quiet diplomacy** in SCS; India & **Quad** take a firmer stance.

Steps to Enhance Relations

- **Defence Cooperation:** Expand defence exports & joint exercises to counter China.
- **Cultural Soft Power:** Leverage **Tamil diaspora** and Thiruvalluvar Centre.
- **Maritime Security:** Integrate Malaysia with **IFC-IOR**; secure Strait of Malacca.
- **Trade Reforms:** Conclude **ASEAN-India Trade in Goods Agreement (AITIGA)** review by **2026–27**.
- **Palm Oil Stability:** Long-term **G2G contracts** for price & supply certainty.

> Despite strong civilisational and strategic ties, India–Malaysia relations face structural challenges. Analyse.
>
> **Drishti Mains Question**

End of New START Treaty

New START Treaty expired on **5th Feb 2026**, ending the **last legally binding US–Russia nuclear arms control pact**, leaving **no legal limits since 1972** and raising risks of **arms buildup, miscalculation, escalation**.

- **START-I**: signed in **1991**, came into force in 1994 and replaced by **Strategic Offensive Reductions Treaty (SORT)**, then **New START** (signed 2010, in force 2011).
  - Extended in **2021 till 2026**; **Russia suspended participation in 2023** post-Ukraine war; **inspections, data sharing halted**.
- **Key Provisions:** Limits **long-range strategic weapons** targeting power centers, with **verifiable reductions in strategic arms**. **US & Russia** hold **87% of global nuclear warheads**.
- **Arms Limitations:** 700 deployed ICBMs/SLBMs/bombers, 1,550 warheads, 800 launchers (deployed + non-deployed launchers & bombers).
- **Persistent Frictions: US–Russia tensions** over **missile defence, advanced weapons** (e.g., Kinzhal missiles and Avangard hypersonic glide vehicles), strained the treaty.
  - **Talks stalled (2024–25)** due to **mutual distrust** on scope/terms.
- **Global Implications: Lapse weakens** global arms control, hampers inclusion of **China & others** in non-proliferation efforts.

> - **Treaty on the Non-Proliferation of Nuclear Weapons** (**NPT**), **1968:** Prevents nuclear weapons spread, promotes disarmament & peaceful use; recognises **5 NWS** – US, Russia, UK, France, China.
> - **CTBT, 1996:** Prohibits **all nuclear explosions** for **testing purposes** (not yet entered into force).
> - **Treaty on the Prohibition of Nuclear Weapons** (**TPNW**), **2017:** Bans the use, possession, testing, and transfer of **nuclear weapons** under international law.

Deepening India-Brazil Cooperation

The **President of Brazil** paid a State Visit to India resulting in significant agreements across **digital partnership**, **defense**, **energy transition**, and **global governance reform**.

- The Indian Prime Minister invited the Brazilian President to the **18th BRICS Summit** to be held in **India in 2026**, guided by the theme "**Building for Resilience, Innovation, Cooperation and Sustainability**".

Key Outcomes of the Brazilian President's State Visit to India

- **Reaffirmation of the India–Brazil Strategic Partnership:** Both countries reaffirmed the **Brazil-India Strategic Partnership (2006)** and reiterated commitment to the **five priority pillars** from the **Brasilia Joint Statement 2025**:
  - Defense and security,
  - Food and nutritional security,
  - Energy transition and climate change,
  - Digital transformation and emerging technologies and
  - Industrial partnerships in strategic areas.
- **Digital & AI Partnership:**
  - **Digital Partnership for the Future:** In the context of the **India-Brazil Digital Partnership for the Future**, both leaders welcomed the launch of the **Open Planetary Intelligence Network (OPIN)**.
    - ❖ They agreed to leverage **Digital Public Infrastructures (DPIs)** to boost sustainable development and climate action in developing nations.
  - **AI Cooperation:** Both underlined the importance of **multilateral AI initiatives** including **UNGA Resolutions, Digital Global Compact**, **UNESCO Recommendation on AI Ethics**, and **BRICS Leaders' Declaration on Global Governance of Artificial Intelligence.**
- **Trade, Investment & Economic Cooperation:** Bilateral trade surged by **25.5% in 2025**, with a new target set at **USD 30 billion by 2030**, alongside a commitment to address **non-tariff barriers** and resolve **anti-dumping concerns**.
  - To strengthen the **India–MERCOSUR Preferential Trade Agreement (PTA)**, both sides agreed to expand its scope and signed an **MoU on the Mutual Recognition of Electronic Certificates of Origin**.
- **Critical Minerals Cooperation:** Leaders welcomed the signing of the **MoU on** cooperation in **rare earth elements** and **critical minerals** and the MoU in the **Field of Mining for the Steel Supply Chain**.
- **Cyber Cooperation:** They welcomed the **first India-Brazil Cyber Dialogue** in Brasilia **(November 2025)** to discuss **cyber governance**, **data protection**, and fight against **cybercrime**.

- **Climate Change and Energy Transition:** India's PM commended **Brazil** for hosting **COP30 in Belem** (November 2025) and for launching the **Tropical Forests Forever Facility (TFFF)**.
  - Leaders reiterated commitment to the "**Belém 4x Pledge on Sustainable Fuels**" to expand **sustainable fuels use fourfold by 2035**.
- **Science, Technology & Intellectual Property:** Both agreed to hold the **3rd Joint Commission on Scientific & Technological Cooperation** in India (August 2026) and enhanced **Intellectual Property (IP)** cooperation through Brazil's access to India's **Traditional Knowledge Digital Library** and closer ties between DPIIT and Brazil's Ministry of Development.

Key Pillars of India-Brazil Cooperation

Diplomatic relations between **India and Brazil** were established in **1948**. **India** opened the **Embassy in Rio de Janeiro**, the erstwhile capital, later moving to **Brasilia in 1971**. India has a **Consulate General in São Paulo** while **Brazil** has one in **Mumbai**.

- **Trade and Investment:** Brazil is India's **largest trading partner in the Latin America** and Caribbean region.
  - Bilateral trade in **2025** grew by over **25%** reaching **USD 15.21 billion (Indian exports - USD 8.35 billion, imports from Brazil - USD 6.85 billion).**
  - Major Indian exports include **processed petroleum products**, **agro-chemicals**, **pharmaceuticals**, **engineering products**. Brazilian exports include **crude oil**, **soybean oil**, **gold**, **raw sugar**, **cotton**, **iron ore**.
  - Total **Indian investment in Brazil** is estimated at more than **USD 15 billion**.

- **Defence Cooperation:** A **defence cooperation agreement (2003)** was ratified in 2006, creating the **Joint Defence Committee (JDC)**.
  - The **2+2 Political-Military dialogue** was inaugurated in New Delhi (March 2024).
  - A trilateral MoU was recently signed involving **Mazagon Dock Ltd** and the **navies** of India and Brazil for the maintenance of **Scorpene-class submarines** and other military vessels.

- **Energy Transition and Biofuels:** As "**renewable energy super-powers**," both nations are leading the **global decarbonization agenda** by harmonizing biofuel standards and creating a **Sustainable Aviation Fuel (SAF) corridor**.
  - This cooperation is no longer just **bilateral** but **global**, utilizing the **Global Biofuel Alliance (GBA)** to set **international sustainability benchmarks**.
  - The **National Biofuel Policy (India)** and **Renova Bio Program (Brazil)** share common objectives of enhancing **biofuel blending**.

- **Multilateral Governance & G4 Reform: India** and **Brazil** are increasingly acting as a unified "**diplomatic bloc**" to demand the democratization of global institutions like the **UN Security Council** and the **WTO**. Their cooperation is rooted in the belief that the **current global architecture** does not reflect the realities of the **21st century**.
  - Through the **G4 group**, both nations are coordinating a "**text-based negotiation**" strategy to secure **permanent seats** on an expanded **UN Security Council**.

Obstacles that Limit Effective India–Brazil Cooperation

- **Geographic and Logistical Distance:** The vast **14,000+ km** distance and **lack of direct connectivity** result in high transportation costs and long lead times, making trade **less competitive** compared to trade with neighbours or regions like Africa and Southeast Asia.

- **Trade Composition and Asymmetry:** Bilateral trade is characterized by a **primary commodity** composition, with India exporting **pharmaceuticals** and **petroleum products** while importing **sugar, soybean oil**, and **gold** from Brazil, making the relationship susceptible to global price fluctuations and lacking intra-industry depth.

- **The "China Factor":** Brazil's deep economic cooperation with China creates a strategic imbalance for India.
  - **China is Brazil's largest trading partner.** This dominance makes it harder for Indian companies to compete in the Brazilian market.
  - While **India has been cautious about Chinese influence in the Global South,** Brazil has at times been **more receptive to Chinese-led initiatives**, leading to occasional differences in the "rhythm" of cooperation within the BRICS framework.

- **Nascent Defence Cooperation:** Defence cooperation remains nascent, with limited **joint exercises, defence technology transfers**, or major **procurement deals** compared to India's relationships with traditional partners like **Russia**, **France**, or even the **US**.

Measures to Further Strengthen India-Brazil Relations

- **Diversify and Deepen the Trade Basket:** Efforts should focus on facilitating market access for **high-value manufactured goods**, IT services, and engineering products.
  - Encouraging **joint ventures** in sectors like **biofuels**, **pharmaceuticals**, and **aerospace (e.g., Embraer**) can create **intra-industry trade** that is more resilient to **price shocks**.

- **Establish Direct Maritime and Air Connectivity:** India and Brazil should establish a **maritime corridor** to reduce shipping costs and launch **direct flights** between Delhi/Mumbai and Sao Paulo, enhancing trade, tourism, and business connectivity.

- **Cooperation in Emerging Technologies:** Joint initiatives in **AI**, **semiconductors**, **digital public infrastructure**, and **critical minerals** can foster **innovation** and **supply chain resilience**.

- **Multilateral Coordination:** Align positions in **BRICS, G20, G-4, ISA, Global Biofuel Alliance, Coalition for Disaster Resilience Infrastructure**, and UN reforms to strengthen Global South leadership.

- **Defence Industrial Cooperation:** Move towards co-development (e.g., drones, aircraft parts) and expand joint exercises.

> "The India-Brazil Strategic Partnership holds the key to amplifying the voice of the Global South." Critically examine the opportunities and challenges in this relationship.
>
> **Drishti Mains Question**

US Exit from ISA

US withdrew from International Solar Alliance (ISA) in **Jan 2026**, 5 years after joining in 2021.

ISA

- **HQ:** Gurugram, Haryana; first intergovernmental org headquartered in India.
- **Launched:** 2015 by **India & France** at **COP21**, Paris (Paris Agreement).
- **Assembly:** Apex decision-making body (1 country = 1 vote).
- **Membership:** Initially tropic-zone countries; **opened to all UN members in 2020**; **100+ signatories**, **90+ ratified**.
- **Objective & Strategy**
  - **Goal:** Make **solar power affordable & accessible** in developing countries.
  - **Not a solar plant builder**, but facilitates **finance, risk reduction, adoption**.

- **'Towards 1000' Strategy (by 2030):** USD **1,000 bn** investments; **1,000 million people** energy access; **1,000 GW** solar capacity; **1,000 million tonnes CO$_2$** mitigation.
- **Key Initiatives:**
  - **OSOWOG:** Global solar grid interconnecting Asia, ME, Europe, Africa.
  - **SUNRISE Network:** Solar waste management, circular economy, innovation.
  - **SIDS Solar Platform:** Joint solar procurement with SIDS & World Bank.

- **Global Capability Centre & ISA Academy:** Global hub + AI-based solar skills training.

India's Solar Industry

- **Manufacturing Base:**
  - **144 GW** solar module capacity; **25 GW** solar cell capacity (rapidly growing)**.**
- **Chinese Import Dependence:**
  - China holds **70% global cell capacity;** India imported **$1.7 bn** worth PV modules from China in **FY25.**

Potential Impact	Way Forward
■ Signals declining US commitment to Global South & weakens global unity on solar	■ Position ISA as neutral, indispensable platform for Global South's solar transition
■ May dampen investor confidence & raise project risk in developing nations	■ Partner with EU, Japan, ADB, AIIB; create de-risking tools for investment
■ Loss of US technical expertise in grid integration, storage, project mgmt.	■ Collaborate with tech leaders (France, Germany, Japan); leverage Indian R&D institutions
■ Opens market for Indian firms in ISA nations wanting non-Chinese partners	■ Use ISA to promote Indian solar tech; fast-track export market access negotiations
■ Risk of bifurcated global climate governance, hindering coordination	■ Ensure ISA remains inclusive & project-focused, keeping channels open with US and other players

The US withdrawal from the International Solar Alliance (ISA) presents both a challenge and an opportunity for India's climate diplomacy. Critically examine.

Drishti Mains Question

India's Foreign Policy and Erosion of Multilateralism

In the **Rajya Sabha**, PM acknowledged the emerging **new world order**, highlighting India's need to recalibrate its **national identity and foreign policy** amid shifting global power dynamics and weakening multilateralism.

Key Facets of the Emerging World Order

- **Rise of Unilateralism and "Great Power" Rivalry:**
  - **US "Isolationism"**: Withdrawals from **WHO, Paris Climate Agreement, UNHRC**; exit from **31 UN institutions**, weakening multilateralism.
  - **Strategic coercion**: Use of **tariff volatility & coercive supply chains**; e.g., US tariff threats over India's energy trade with Russia; impacts **Global South autonomy**.
    - ❖ Shift toward **"America First" / "China First"** policies; unilateral tariffs & trade barriers bypassing multilateral trade norms.
- **Institutional Paralysis:**
  - **UNSC deadlock**: Inaction on conflicts (e.g., **Ukraine, Gaza**) due to **P5 veto**; rising demand for reform to include **India** & **Africa**.
  - **WTO crisis**: **Appellate Body blocked**, weakening dispute settlement; increasing use of **"national security" tariffs** undermines free trade norms.

- **Rise of China**: Since **2010**, built alternative architectures (**BRI, NDB, RCEP**); leads **4 of 15 UN specialized agencies**; aid volumes exceed West.
- **Minilateralism over Multilateralism**: Shift to smaller groups (**QUAD, AUKUS, I2U2**) for strategic coordination.
  - **Trade shift**: Toward **RCEP** and **bilateral FTAs**; declining reliance on **WTO-led multilateral trade governance**.
- **Failure of 1945 UN vision**: Ideals of **equality, non-aggression, self-determination** strained; e.g., **Russia–Ukraine war** highlights limits of collective security.
  - Widening gap b/w **"Rule of Law"** (treaties) and **"Rule of Power"** (military/economic might).
- **Weaponisation of interdependence**: Use of control over **supply chains, SWIFT, semiconductors, energy flows, sanctions** for coercion without kinetic war.

Evolution of India's Foreign Policy Evolved in Changing Global Order

- **Idealism & Non-Alignment (1947–1964):** Adopted **Non-Alignment**; guided by **Panchsheel** & Afro-Asian solidarity. Focus on **decolonization & disarmament** ("Universalism of the Weak").
  - **1962 Sino-Indian War** exposed limits of idealism; need for stronger defence.

- **Security and Power Balancing (1964–1991):** Shift to realism; priority to national security & regional stability.
  - **1971 Indo-Soviet Treaty** & support to **Bangladesh's liberation** reflected strategic alignment.
  - **Pokhran-I (1974)** marked move to **deterrence & power-based diplomacy**.
- **Economic Diplomacy (1991–2000):** Post-**1991 crisis & Soviet collapse**– Shift to **economic diplomacy**.
  - **LPG reforms (1991)** integrated India globally; **Look East Policy** strengthened SE Asia ties.
  - Ties with **Israel**; **1998 nuclear tests** signalled strategic & economic autonomy.
- **Multi-Alignment (2000–2014):** India–US Civil Nuclear Deal (2008); engagement with **ASEAN, BRICS, G20**.
- **Assertive Multi-Vector Diplomacy (2014–Present):**
  - **Dual balancing**: Participation in **Quad (2017)** while procuring **S-400 from Russia (2018)**.
  - **De-hyphenated diplomacy**: Engages countries independently (not US–Russia or Israel–Palestine binaries).
  - **Global South leadership**: Voice of Global South Summit; **African Union inducted into G20** (2023 Presidency).
  - **Strategic minilateralism**: Focus on agile groups— **QUAD, I2U2, ISA**.
  - **Technological sovereignty**: Promoting **Digital Public Infrastructure (DPI)**; push for **ethical AI governance** (e.g., 2026 AI Impact Summit, New Delhi).
  - **Vishwa Bandhu (Friend of the World):** Positioning itself as a stabilizer or "bridge" b/w polarized West & Global South; shift from **balancing power** to an independent **"Third Pole."**

Challenges to India's Foreign Policy in Changing Global Order

- **"Transactional" trade challenge**: Shift to asymmetric, coercive trade practices; e.g., **India–US Interim Trade Agreement** seeks "concessions first," unlike phased reciprocity in **EU trade deals**.
- **Expectation–Responsibility gap**: As India aspires to major power status, global expectations for clear positions rise; requires balancing **strategic autonomy** with greater **normative & strategic clarity**.
- **Persistent China Challenge:**
  - **Border tensions**: Despite talks, **60,000+ troops** remain along **LAC**; disengagements haven't resolved trust deficit.
  - **Economic asymmetry**: Heavy reliance on Chinese imports in **pharma & electronics**; e.g., **2025 halt on rare earth magnet exports**.

  - **Maritime encirclement**: Expanding Chinese naval presence in **IOR**; **BRI investments** challenge India's role as **net security provider**.
- **Neighbourhood volatility**: "Neighbourhood First" under strain.
  - **Pakistan factor**: Post **Operation Sindoor**, strengthened Pakistan stance; potential defence ties with **Bangladesh** may raise India–Pakistan friction.
  - **Regional encirclement**: China's **investment-led diplomacy** (Maldives to Myanmar) outpaces India's project delivery.
- **Technology & energy sovereignty gap**:
  - **Critical minerals**: Chinese dominance in **rare earths** (vital for missile & aerospace).
  - **Digital vulnerability**: Despite leadership in **DPI**, India is a **malware detection hotspot**; reliant on Western platforms for core **AI development**.

Measures for India to Reframe its Foreign Policy in Changing Global Order

- **Viksit Bharat 2047 focus**: Shift from generic **"strategic autonomy"** to a purpose-driven policy aligned with **economic transformation goals**.
- **De-risk supply chains**: Reduce dependence on China for **electronics & APIs**. Promote **friend-shoring** via **Supply Chain Resilience Initiative (SCRI)**
- **Build endogenous capabilities**: Focus on domestic **technological & industrial strength**; aim to become **cyber & AI power**.
  - Secure **critical minerals**; deepen partnerships in **AI, semiconductors, quantum tech**.
- **Aggressive trade diversification**: Reduce US-centric vulnerabilities; expand exports & pursue **FTAs with Asia & Africa**. Instead of matching **BRI** spending, export **DPI** to **Africa & Southeast Asia** to build trust-based growth ecosystems.
- **Maintain Russia link**: Sustain defence & energy ties despite Western pressure to avoid Russia's complete tilt toward **China**.
- **Reframe neighbourhood policy**: Treat **Pakistan** pragmatically; explore **water-sharing, trade agreement, revival of Iran–Pakistan–India pipeline**.
- **Reposition BRICS**: As Chair, steer **BRICS** toward economic cooperation; e.g., **linking official digital currencies** for smoother cross-border trade.

> "In a fragmented global order, India's 'Strategic Autonomy' is less about non-alignment and more about calibrated multi-alignment." Discuss
>
> **Drishti Mains Question**

Environment & Ecology

Scenarios Towards Viksit Bharat and Net Zero

NITI Aayog's report, "Scenarios Towards Viksit Bharat and Net Zero," outlines pathways to achieve Viksit Bharat by 2047 while meeting its Net Zero GHG emissions target by 2070.

Highlights of NITI Aayog Reports

Macroeconomic and Social Impacts

- **GDP Structure:** Shift from **consumption-led → investment-driven** growth.
  - **GDP: USD 4.18 tn (2025) → USD 30 tn (2047)**.
- **Trade:** Rise in **critical mineral imports**; fossil fuel import savings of **₹9 tn by 2070**.
- **Employment: 7 million green jobs** in energy by **2050**.
  - **150+ fossil-fuel districts** need **just transition** (skilling + social protection).
- **Land Conflict:** Land demand for renewables may conflict with **agriculture & ecology**.
- **Role of Behavior: Mission LiFE** (critical to moderate demand through lifestyle changes).
- **Urban Population: 37% (2023) → 51% (2047) → 65% (2070)**.
- **Infrastructure Boom: 86% building floor space (2070)** yet to be built.
  - **AC penetration: 10% → 80% by 2070**.
  - **Car ownership: 32 → 200–250 per 1,000 people**.

Energy Transition (Net Zero Scenario)

- **Electrification:** Electricity share **21% (2025) → 60% (2070)**.
  - Drivers: **EVs, induction cooking, heat pumps**.
- Power Mix Shift
  - **Renewables: ~164 GW (2025) → 6,000+ GW (2070)**.
  - **Nuclear: 8 GW → 300+ GW** (baseload).
  - **Fossil fuels: 87% → 14%** of primary energy mix. Remaining use via **CCUS**.
  - **Grid emission factor: → Zero by 2070**.

Financial Implications

- **Total investment: USD 22.7 tn by 2070**.
  - **Annual need: ~USD 500 bn** (vs current **USD 135 bn**).
- **Financing gap: USD 6.5 tn**.
- Foreign capital share: **17% → 42% by 2070**.

Critical Minerals

- Shift in energy security: **Fuel supply → Mineral supply**.
- **Critical Energy Transition Minerals (CETMs) demand: +51%** under Net Zero

- **Key Minerals: Copper & Graphite: ~2/3rd demand**.
  - **Lithium, Cobalt, Nickel:** Near-total import dependence.
  - Demand drivers: **EV batteries (55%)**, **Solar (30%)**.
- **Strategy:** Boost **exploration**, secure **overseas assets**, promote **recycling/circularity**.

Challenges in Achieving Viksit Bharat & Net Zero

- **Unprecedented Scale:** No major economy has attempted **8× GDP growth (USD 4.18 tn → 30 tn)** while transitioning to **Net Zero** simultaneously.
- **Nascent Technologies:** CCUS, Long-duration Energy Storage, Small Modular Reactors (SMRs) are **unproven at scale in India**.
- **Financing & Macroeconomic Shift:**
  - **Private consumption share: 58% (2025) → 52% (2070)**.
  - Higher **investment share** may tighten domestic liquidity.
  - Risk of crowding out consumption without **foreign capital inflows**.
- **Critical Mineral Dependence:** Near-total import reliance for **Lithium, Nickel, Cobalt, Rare Earths**; gaps in **refining capacity (e.g., polysilicon)**.
- **Water Stress: ~75% renewable capacity** located in **water-stressed states**, causing energy–water conflict.
- **Infrastructure Lock-in Risk:** 86% of 2070 building space yet to be built. AC penetration: 10% → 80%+.
  - Risk of locking in high energy demand without **efficient building design & appliances**.
- **Social & Regional Disparities:** 150+ coal-dependent districts. **~17 million workers** in fossil-fuel-linked sectors.
  - Need for **just transition (reskilling + social protection)**.
- **Agriculture's Dual Challenge:** Both **emitter and climate-vulnerable sector**; must cut emissions while ensuring **food security & farmer livelihoods**.

Measures to Strengthen Path to Viksit Bharat & Net Zero

- **Behavioral Change:** Mainstream **Mission LiFE**; enforce **EPR** & recycled-content norms to reduce virgin resource use.
- **Urban Mobility Reform:** Prioritize **rail, metro, NMT** over private EV-centric shift.
  - Promote **Transit-Oriented Development (TOD)**. Shift freight to **Rail & Waterways**.
- **Future-Ready Buildings: ~80% of 2070 building stock yet to be built** → mandate strict energy codes.

- Use **benchmarking, disclosure, green procurement** for "Net Zero Ready" buildings.

- **Green Industrial Competitiveness:** Use **blended finance & public procurement** to scale **Green Hydrogen, CCUS, low-carbon cement**.
  - Strengthen **carbon measurement & certification** (prepare for carbon border taxes).

- **Resilient Supply Chains:** Reduce mineral dependence; boost **domestic exploration & refining**.
  - Strengthen **KABIL** for overseas asset acquisition.

- **Integrated Land & Water Planning:** Promote **agrivoltaics, floating solar, use of degraded/mined land**.
  - Basin-based planning for **water-intensive tech (e.g., Green Hydrogen)**.

- **Just Transition:** Use **DMF & Skill India Mission** for reskilling. Upgrade **e-Shram** to link informal fossil workers to green jobs.

- **Adaptation & Resilience:** Treat adaptation equal to mitigation. Conduct **vulnerability mapping & climate-proof infrastructure**.

- **Climate Finance:** Need ~**USD 500 bn/year** (vs **USD 135 bn current**). Create **National Green Finance Institution**.
  - Develop **Climate Finance Taxonomy**. Leverage **GIFT City** to attract foreign capital.

- **Data & Digital Infrastructure:** Establish robust **MRV systems**.
  - Develop **Unified Energy Interface (UEI)** (like UPI for energy services).

- **Institutional Architecture:** Set up **Low Carbon Development Cell** under **PM's Council on Climate Change**. Align **5-year sectoral & state budgets** with India's **NDC cycle**.

> "India's Net Zero transition is a developmental opportunity rather than a constraint." Discuss
>
> **Drishti Mains Question**

Bio-based Chemicals

Bio-based chemicals are a strategic sector for India to leverage its **agricultural base**, reduce **petrochemical import dependence**, and align with **global sustainability goals**.

- **About:** Chemicals derived from **renewable biological resources** (plants, agri-residues, forestry, marine sources, algae). Alternative to **petroleum, natural gas, coal-based** chemicals

- **Production Methods:** Produced in **biorefineries**
  - Processes: **fermentation, enzymatic conversion, thermochemical treatment, catalytic upgrading**
  - Examples: Microbial fermentation of sugars/starch → **organic acids, alcohols.** Extraction/modification of **plant oils, lignocellulosic materials**

Bio-based Chemical	Production Method	Applications
Lactic acid	Fermentation of carbohydrates	**Biodegradable plastics** (polylactic acid), food preservatives, cosmetics
Succinic acid	Derived from glucose/sugars	Intermediate for **polymers, solvents**, pharmaceuticals
Bio-based glycerol	By-product of biodiesel production	**Pharmaceuticals**, personal care, chemical feedstock
Bio-ethanol and bio-butanol	Fermentation	**Solvents**, fuels, chemical building blocks
1,3-Propanediol	Fermented from glycerol/sugars	Polyesters for **textiles, cosmetics, industrial uses**
Bio-based surfactants and lubricants	Derived from **plant oils**	**Detergents**, paints, adhesives

- **India's Current Status & Potential:** Strengths: **Large agricultural base**, expertise in **fermentation (pharma & vaccines)**, growing manufacturing sector
  - **Import dependence:** Imported **USD 479.8 million of acetic acid (2023)**
  - **Benefits:** Reduce petrochemical imports, create **new agri-markets**, emerge as supplier of **sustainable industrial inputs**
  - **Policy Push:** Prioritised under **DBT's BioE3 Policy**

- **Global Best Practices:**
  - **EU: Bioeconomy Strategy & Action Plan** supports circular bioeconomy
  - **USA: USDA BioPreferred Program** mandates federal preference for certified bio-based products
  - **China:** National bioeconomy development plans prioritise **bio-based chemicals & enzyme technologies**

- **Advantages:**
  - Lower **GHG emissions;** Reduced dependence on **non-renewable resources;** Greater **biodegradability;** Supports **circular economy** via waste valorisation

- **Risks & Challenges:**
  - Low **cost competitiveness** vs petrochemicals; Feedstock availability & infrastructure uncertainty; Market reluctance to shift from existing inputs

NGT Approved Great Nicobar Project

NGT cleared the **₹81,000-crore Great Nicobar project**, finding no grounds to intervene, while imposing stringent environmental safeguards.

- It acknowledged the project's **strategic importance** and noted that adequate safeguards were built into the environmental clearance to mitigate ecological impacts.

Environmental Safeguards Imposed by the NGT

- **Prevention of Erosion:** Construction (including foreshore works) must not cause **erosion or shoreline changes**.

- **Protection of Sandy Beaches: No loss of sandy beaches** (critical nesting sites; natural coastal protection).

- **Coral Reef Protection: MoEFCC** to ensure protection and **coral regeneration** using scientific methods. **Translocation of scattered corals** as per **ZSI** suggestions.

- **Protection of Endangered Species:** Safeguards for **Leatherback sea turtle, Nicobar megapode, Saltwater crocodile, Robber crab, Nicobar macaque** and endemic birds.

- **Binding Nature of Conditions:** Government bound to strictly comply with **environmental clearance conditions** at all stages.

Great Nicobar Project

- **About: Conceived by NITI Aayog**; launched in **2021**.
  - Mega infrastructure project to develop **Great Nicobar Island** as a **strategic & economic hub**.
  - Aligned with **Maritime Vision 2030** & **Amrit Kaal Vision 2047**.

- **Project Sites** – Galathea Bay, Pemmaya Bay, Nanjappa Bay.
  - Strategically located—nearly equidistant from **Colombo, Port Klang, Singapore**, positioning India at the centre of regional sea trade.

- **Key Infrastructure Components**
  - **International Container Transhipment Terminal (ICTT):** To position Great Nicobar as a regional & global cargo transhipment hub.
  - **Greenfield International Airport:** Civilian connectivity, tourism, and **dual-use defence capability**.
  - **Greenfield Township:** To support projected population and economic activity.
  - **Gas & Solar-Based Power Plant:** To meet energy requirements of the project.

- **Tribal Safeguards:** Mandatory consultation with **AAJVS** & **Ministry of Tribal Affairs** as per **Jarawa (2004)** and **Shompen (2015) Policies**. Consultation with **NCST** under **Article 338A(9)** to protect tribal interests.

- **Environmental Safeguards:** Provision of **8 wildlife corridors**. **Compensatory afforestation in Haryana**; islands already have **75%+ forest cover**.

Strategic Significance of the Great Nicobar Project	Concerns Associated with the Great Nicobar Project
Chokepoint Proximity: Near **Malacca, Sunda, Lombok Straits**—vital Indo-Pacific sea lanes. Close to **Sabang (Indonesia)** & proposed **Kra Canal (Thailand)**.	**Impact on Indigenous Tribes:** Risk of dispossession of **Nicobarese** from ancestral lands. Area previously devastated by **2004 Indian Ocean tsunami**.
Maritime Domain Awareness: Enhances monitoring of **IOR naval movements**, including China's presence. Near **Coco Islands (Myanmar)** facility (~55 km from A&N).	**Environmental & Ecological Concerns:** • **Deforestation:** Clearing of **130 sq km** primary rainforest (~15% of GNI); tree felling may exceed **10 million**.
First Line of Defence: Andaman & Nicobar Islands share sea boundaries with **Myanmar, Thailand, Indonesia, Bangladesh**. Expands EEZ & continental shelf under **UNCLOS, 1982**.	• **Wildlife Threat:** Risk to **Leatherback sea turtles**; **Galathea Bay Wildlife Sanctuary** (1997) denotified in **2021** for port.
Military Deterrence: Enables deployment of **warships, aircraft, missile batteries, troops** for surveillance and deterrence.	• **ICRZ Violations Alleged:** ~700 hectares under restricted **ICRZ areas** as per **ICRZ Notification, 2019**.
Economic Significance: ICTT reduces dependence on **Singapore & Colombo** transshipment ports. Integrates India into global supply chains.	**Compensatory Afforestation Issues:** Forest diversion compensated in **Haryana & Madhya Pradesh**. Critics argue it cannot replicate **unique island biodiversity**.
	Geological Concerns: Geology– **tertiary sandstone, limestone, shale over volcanic rocks**. High **seismic vulnerability**; prone to **liquefaction** during earthquakes.
	Legal Concerns: Shekhar Singh Commission (2002) recommended **ban on tree felling** in tribal reserves & national parks and prior afforestation. Allegations of non-compliance.

Steps to Ensure the Sustainability of the Great Nicobar Project

- **Ecological Conservation:** Explore **legal personhood status** for Great Nicobar ecosystem. Long-term **ecological monitoring** (soil health, coastal erosion, carbon emissions). Adaptive measures to protect **turtle nesting sites** & prevent habitat fragmentation.

- **Safeguarding Tribal Rights:** Resettlement packages reflecting **pre-tsunami habitation patterns**. **Restricted access protocols** during construction.

- Include **Tribal Councils of Great & Little Nicobar** in deliberations as per **Forest Rights Act, 2006**.

- **Institutional Oversight & Transparency:**
  - Establish **multi-stakeholder independent oversight authority**. Ensure compliance with **environmental & social safeguards**.

- **Sustainable Economic Opportunities:**
  - Promote **green employment**: renewable energy, eco-tourism, low-impact offshore activities. Align with India's **biodiversity & climate commitments**.

Carbon Capture, Usage and Storage (CCUS)

The PM emphasized the role of CCUS in decarbonizing India's heavy industries. The Union Budget 2026–27 has earmarked funds for a new CCUS scheme.

CCUS

- **About:** A suite of technologies that **capture CO_2** from large point sources or atmosphere, then **transport and use or permanently store** it.
- **The Three-Step Process:**
  - **Capture:** Separation of CO_2 using **chemical solvents, membranes, or solid sorbents**.
  - **Transport:** Compressed CO_2 moved via **pipelines, ships, or road tankers**.
  - **Utilization & Storage:**
    - ❖ **CCU:** Conversion into **urea, synthetic fuels, building materials, methanol, etc.**
    - ❖ **CCS:** Injection into **depleted oil/gas fields or saline aquifers** for permanent storage.

India's Initiatives on CCUS

- **Union Budget 2026–27:** ₹**20,000 crore** (**5 years**) for CCUS in **Power, Steel, Cement, Refineries, Chemicals**.
- **NITI Aayog CCUS Policy Framework:** Proposed **Viability Gap Funding** (**VGF**) to reduce capture cost.
  - Development of **CCUS hubs/clusters** (e.g., **Gujarat, Odisha**) for shared transport & storage.
- **Green Steel Taxonomy:** "Green Steel" benchmark: **<2.2 tCO_2e per tonne of crude steel**.
  - **3–5 star ratings** to incentivize low-carbon tech (e.g., CCUS) and avoid **CBAM** risks.
- **DST Roadmap:** Phased plan - **Pilot** (**2025–30**) → **Commercial scale-up** (**2035–45**).
  - **NCoE-CCU** set up at **IIT Bombay** and **JNCASR, Bengaluru**.
- **Mission Innovation Challenge** (**2018**): Joint initiative of **DST & DBT** with **24 member countries** for R&D in CO_2 capture, storage, and utilization technologies.

CCUS's Importance

- **Hard-to-Abate Sectors:** Essential for **steel, cement, chemicals**, where emissions are **process-intrinsic** (e.g., limestone calcination in cement). Currently the only viable decarbonisation option without halting production.
- **Steel Sector Imperative: India** is world's **2nd-largest crude steel producer** (~**152 MT** in FY 2024–25).
  - Target: **300 MT by FY 2030–31** (National Steel Policy 2017); **500 MT by 2047**.
  - Sector emits **10–12% of India's GHGs**.
  - CCUS enables **low-carbon steel** using existing plants (bridge till hydrogen scale-up).

- **Energy Security:** Coal accounts for **~55–60%** of primary energy. CCUS allows continued fossil fuel use with reduced emissions during transition.
- **Circular Economy:** Captured CO_2 can produce **methanol** or be used in **Enhanced Oil Recovery (EOR)**, creating economic value.
- **Countering Carbon Taxes:** Reduces export risks under mechanisms like **EU's CBAM**; attracts climate-aligned investments.
- **Preventing Stranded Assets:** Extends viability of India's relatively **young steel plants**.
- **Global Commitments:** Supports **Paris Agreement targets** and advances SDGs (Climate Action, Clean Energy).

Challenges in Scaling Up CCUS

- **High Capital Cost:** Raises electricity costs by **60–80%**; increases steel & cement prices → export competitiveness affected.
- **Energy Penalty:** Capture systems consume **15–25%** of plant power → lower efficiency, higher coal use.
- **Infrastructure Gaps:** No dedicated **CO_2 pipeline network**; land acquisition challenges for pipeline corridors.
- **Geological & Data Constraints:** Estimated storage: **500–1000 GT**, but lack of detailed **Carbon Storage Atlas**.
  - Major potential in **Deccan Traps (basalt)**—technically complex vs sedimentary formations.
  - Risk of minor seismic activity or groundwater contamination.
- **Limited Utilization Market:** CO_2 use (beverages, dry ice, etc.) too small relative to emissions.
  - Methanol production costly; depends on **Green Hydrogen** (nascent stage).
- **Regulatory Vacuum:** No clear liability framework for long-term CO_2 leaks.
- **Weak Carbon Pricing:** Absence of strong **carbon market/carbon tax** reduces industry incentive to adopt CCUS.

Measures to Strengthen CCUS Scaling

- **Cluster-Based Approach:** Develop **industrial CCUS hubs** (e.g., Gujarat, Odisha) with shared CO_2 transport & storage to lower costs.
- **Strengthen Carbon Markets:** Integrate CCUS under **Carbon Credit Trading Scheme (CCTS)** to enable sale of carbon credits.
- **Introduce PLI for CCUS:** Provide **Performance-Linked Incentives** to offset high upfront capital costs.
- **Adopt '45Q'-Type Tax Credits:** Offer fixed tax incentives per tonne of CO_2 stored or utilized.

- **Promote CCU over Storage:** Focus on value-added products (e.g., **Green Urea, Green Methanol**) for better economic viability.

- **Storage Standards & Regulation: BIS** to frame guidelines for safe injection, monitoring & verification of CO_2 storage.

> "Carbon Capture, Utilization, and Storage (CCUS) is not just a climate mitigation tool but a prerequisite for sustaining India's industrial growth in a carbon-constrained world." Discuss
> **Drishti Mains Question**

Arctic Warming Amplifies Invasive Species Threat

Scientists warn of the risk of invasive alien plant species transforming fragile Arctic ecosystems due to rapid Arctic warming.

Arctic Warming & Threat of Invasive Plants

- **Changing Climate Conditions:** Rising temperatures and human activity weaken natural barriers (short growing season, harsh climate), making Arctic regions suitable for non-native species.

- **Scientific Evidence:** Approx **2,554 vascular plant species** globally could find suitable climatic niches in a warming Arctic.

- **Existing Spread:** Arctic inventory recorded **341 alien taxa**, of which **188 are naturalised**; non-native species (e.g., common meadow rue in Svalbard) already observed.

- **Vulnerable Hotspots:** Six key invasion zones: **western Alaska, SW & SE Greenland, northern Iceland, Fennoscandia, Kanin–Pechora region**.

- **Introduction Pathways:** Escape from confinement, stowaways, seed contamination, transport via vehicles, increased connectivity.

- **Ecological Impact:** Displacement of native tundra flora (mosses, lichens, shrubs) and threat to dependent fauna; invasive species are major drivers of **global biodiversity loss**.

Invasive Alien Plant Species

- **About:** Non-native plants introduced deliberately or accidentally that **outcompete native species** and cause **ecological, economic, or health impacts**.

- **Drivers of Spread:** Climate change, land-use change, altered fire regimes, soil moisture changes, grazing patterns, biodiversity loss.

- **India Scenario:**
  - **Major Invaders:** *Lantana camara, Chromolaena odorata, Prosopis juliflora*.
  - **Spread:** ~266,954 sq km of natural habitats affected.
  - **High-Risk Regions:** Shivalik–Terai belt, Duars (NE), Aravallis, Dandakaranya, Nilgiris (Western Ghats).

- **Most Vulnerable Ecosystems:** Dry grasslands, savannas, shola grasslands, Ganga–Brahmaputra wet plains.

Rat-Hole Mining in Meghalaya

A major disaster has unfolded in **Meghalaya's East Jaintia Hills**, where at least **18 workers died** following an explosion in an **illegally operating rat-hole coal mine.**

- The incident once again exposed the continued prevalence of rat-hole mining despite long-standing bans by the **National Green Tribunal(NGT)** and the **Supreme Court (SC) of India**.

Rat-hole Mining

- **About:** Narrow, unscientific coal extraction method with **3–4 ft tunnels**, done in **crawling/squatting positions**, without **ventilation or structural support**.

- **Types:**
  - **Side-cutting:** Horizontal tunnels into hill slopes
  - **Box-cutting:** Vertical pit with branching horizontal tunnels
  - **Location:** Predominantly in **Meghalaya**, also seen in other NE states.

- **Legality: Banned by NGT in 2014** as illegal and hazardous.
  - **Upheld by SC**; violates **MMDR Act, 1957**
  - All current operations are **illegal.**

- **Reasons for Persistence:**
  - **Geological necessity:** Thin coal seams (<2m) make open-cast mining uneconomical
  - **Economic dependence:** Key livelihood for local communities
  - **Lack of alternatives:** Few industries or jobs in the region
  - **High demand:** Regional industries rely on cheap black-market coal
  - **Local collusion:** Alleged nexus of mine owners, officials, politicians.

Associated Concerns

- **Safety Hazards:** No **pillars, ventilation, emergency exits**
  - Deaths from **roof collapse, flooding (Ksan 2018), gas asphyxiation**
  - **Child labour** violations

- **Water Pollution: Acid Mine Drainage (AMD)** releases **sulfuric acid & heavy metals** (Iron, Cadmium, Chromium)
  - Rivers like **Kopili, Myntdu, Lukha** now too acidic for life

- **Deforestation & Soil Erosion:** Extensive forest loss. Biodiversity decline, infertile land.

- **Air Pollution:** High **particulate matter & toxic gases;** Affects health in **ST regions** (Jaintias, Khasis, Garos).

- **Black Lung Disease** (silicosis, pneumoconiosis) due to coal dust exposure.

- **Regulatory Challenges:**
  - **Sixth Schedule areas**: Local ownership limits central control. **Conflict** between ADC rules & **MMDR Act, 1957**
  - **Weak enforcement** due to low manpower, **corruption**, political pressure.

Measures to End Rat-hole Mining

- **Tech Surveillance:** Use **drones, satellite, GIS** with a **central database** for real-time detection and offender tracking.
- **Alternative Livelihoods:** Promote **pineapple farming, eco-tourism, agri-horticulture** to reduce mining dependence.
- **Empowered Mining EACs:** Create dedicated **Extra Assistant Commissioners** for mining oversight; report directly to **NGT**, bypassing local pressure.
- **MEPRF Utilization:** Use **Meghalaya Environment Protection and Restoration Fund** to pay former miners in **"Green Corps"** for ecological work.
- **Open-cast Mining:** Allow only in zones with **thick coal seams** via **cooperatives**, enabling **safe, mechanized extraction**.

> Discuss the environmental and human health impacts of rat-hole mining.
>
> **Drishti Mains Question**

Sacred Groves

Communal tension in Kapena village, Odisha, **b/w tribals & Christians** has disrupted the practice and sanctity of tribal sacred groves.

- **About Sacred Groves:** Community-protected virgin/near-natural forests with **religious, cultural, spiritual** significance; linked to **deities, spirits, burial sites, water sources**; ensure **biodiversity conservation** without formal legal safeguards.
- **Extent**: 1 million+ sacred forests, 1–1.5 lakh sacred groves in India.
- **Distribution**: Found in **Western Ghats, Himalayas, Northeast, Central India**; high in **Maharashtra, Karnataka, Kerala, Tamil Nadu**.
- **Local Names**: *Sarna* (Bihar), *Dev Van* (HP), *Devarakadu* (Karnataka), *Kavu* (Kerala), *Devrai* (Maharashtra), *Law Kyntang* (Meghalaya), *Oran* (Rajasthan). In Himalayas, groves may appear as **alpine meadows**.
- **Cultural Base**: Rooted in **Hinduism, tribal beliefs, animism, ancestor/nature worship**; protected by **moral duty**, not law.
- **Strict Prohibitions**: **Logging, hunting banned**; managed by **local religious communities, joint families, temple trusts**.
- **Global Recognition**: Align with **IUCN Green List Standard**; potentially qualify as **Other Effective Area-based Conservation Measures (OECMs)**.
- **Ecological Significance:**
  - **Biodiversity Refuge**: Mini-forests conserving diverse species; called **"secret wizards of conservation"**.
  - **Water Conservation**: Maintain **WHO-standard water quality**, support aquatic & terrestrial biodiversity.
  - **Soil Conservation**: **Dense cover prevents erosion**, enhances fertility, ensures ecosystem stability.
- **Protection:**
  - **Primary Responsibility**: State Governments manage wildlife and habitat.
  - **WPA, 1972**: Allows states to notify sacred groves as **Community Reserves**.
  - **FRA, 2006**: Recognises groves as **Community Forest Resources**; **Gram Sabha** empowered to manage via **Community Forest Resource Management Committees**.
  - **Funding**: Kerala funded under **Centrally Sponsored Scheme** (2020–23) for **Kadalundi–Vallikkunnu Community Reserve**.
  - **Legal Conflict**: WPA-led reserves **undermine Gram Sabha's autonomy** under FRA.

India Expands Ramsar Network to 98 Sites

Ahead of **World Wetlands Day** 2026, the Prime Minister welcomed the addition of Patna Bird Sanctuary (Uttar Pradesh) and Chhari-Dhand (Gujarat) as **Ramsar sites**, raising the national total to 98.

- **World Wetlands Day** is observed every year on 2nd February to highlight the ecological importance of wetlands and to commemorate the signing of the **Ramsar Convention on Wetlands in 1971** at Ramsar, Iran.

Chhari-Dhand (Gujarat)

- It is a **seasonal saline wetland** between the **Banni grasslands** and **Kutch** salt flats, expanding to nearly 80 sq km during the monsoon in the arid Kutch region.
- It is **Gujarat's only Conservation Reserve** and a key stopover on the western migratory flyway, serving as an important wintering ground for **waterfowl.**
- It supports about **30,000 Common Cranes** annually, large populations of **Greater and Lesser Flamingos,** and threatened species such as the critically endangered **Sociable Lapwing** and the vulnerable **Common Pochard**.
- Seasonal waters provide essential feeding and roosting habitats, surrounding drylands support **chinkara, caracal, and desert fox**, and the area is known for the **"Chir Batti"** phenomenon seen after sunset.

Patna Bird Sanctuary (Uttar Pradesh)

- Located in the **Jalesar subdivision of Etah district**, it spans just over 1 sq km, making it among Uttar Pradesh's smallest wildlife sanctuaries.
- The sanctuary includes **freshwater marshes,** woodlands, and **grasslands** within an agricultural landscape, supporting diverse habitats.

- During winter, it hosts tens of thousands of migratory birds such as the **Rosy Pelican, Eurasian Spoonbill, and Northern Pintail**, underscoring its role on the **Central Asian Flyway.**
- It records **178 bird species** and **252 plant species**, sustains key waterbird populations, and is designated an **Important Bird and Biodiversity Area** by **BirdLife International**.

State of Finance for Nature 2026

The **United Nations Environment Programme (UNEP)** released its flagship report titled *"State of Finance for Nature 2026,"* which highlights a stark imbalance in global financial flows, revealing that for every **USD 1 invested in protecting nature, nearly USD 30 is spent on activities that destroy it**.

Key Highlights of the Report

- **Nature-Negative Finance:** Global financial flows to activities harming nature (e.g., fossil fuel extraction, unsustainable agriculture, deforestation) reached **USD 7.3 trillion** in 2023. This is approximately **7% of global GDP**.
  - The private sector accounts for **USD 4.9 trillion** of nature-negative flows, concentrated in sectors like energy, utilities, and basic materials.
  - Governments provide about USD 2.4 trillion annually in **Environmentally Harmful Subsidies (EHS)**, dominated by **fossil fuel support,** followed by unsustainable agriculture and water subsidies.
    - ❖ These subsidies distort market prices, making environmental destruction cheaper than conservation.
- **Nature-Positive Finance:** Investments in **Nature-based Solutions (NbS)** stood at only **USD 220 billion**.
  - This creates a massive disparity, with harmful investments outpacing protective spending by a 30:1 ratio, resulting in a stark and unsustainable imbalance.
  - However, **spending on biodiversity and landscape protection is rising,** increasing by 11% between 2022 and 2023, while international public finance for nature-based solutions in 2023 was 22% higher than in 2022 and 55% above 2015 levels.
- **The Finance Gap for NbS:** The NbS finance is overwhelmingly driven by public funds (90% of total NbS finance comes from governments).
  - Private investment in NbS is negligible, accounting for just **10%** of the total.
  - To meet the **Rio Convention targets**, NbS investment must increase **2.5 times** to reach **USD 571 billion annually by 2030**.
    - ❖ The **Rio Conventions** from the 1992 Earth Summit target climate stability, biodiversity conservation, and land restoration.

- ❖ **UNFCCC** aims to limit warming to **below 2°C, preferably 1.5°C**.
- ❖ **CBD** seeks to conserve **30% of land, waters, and seas** and restore **30% of degraded ecosystems by 2030**.
- ❖ **UNCCD** targets restoring **1.5 billion hectares of degraded land by 2030**.

Challenges in Scaling NbS Finance

- **High Due Diligence Costs: Site-specific complexity**, lack of **standard data** → **high transaction costs** vs grey infrastructure.
  - **Nascent Asset Class**: Limited **track record**, uncertain **risk-return** → higher **investor premiums**.
- **Liquidity Issues**: **Long-term, illiquid** investments (10–20 yrs) → unattractive to **private equity** (3–5 yrs).
- **Currency & Sovereign Risk**: **Global South NbS sites** vs **Global North capital** → high **FX volatility** & **sovereign risk**; hedging reduces returns.
- **Lack of Metrics**: No standard **ROI measures** for **biodiversity**, unlike carbon.

Implications of Low NbS Finance

- **Subsidy Paradox**: **Nature-negative subsidies** (e.g., **fertilizers, free electricity**) outweigh **nature-positive budgets** (e.g., **MoEFCC, organic farming**), worsening ecological degradation.
- **Public Finance Overload**: **NbS in India** mainly **state-funded** (e.g., **CAMPA**); **private investment (CSR/impact)** remains minimal.
- **High GDP Risk**: Over **50% workforce** in **agri/allied sectors** → ecosystem collapse (e.g., pollination, water) could cause **economic instability**.
- **Green Taxonomy Gap**: **No formal taxonomy** → risk of **greenwashing**, blocks genuine global capital inflow to NbS.
- **Fiscal Federalism Paradox**: **Centre commits globally**, but **States implement NbS**; States often **prioritize extractive industries** due to revenue needs.

Measures to Increase NbS Finance

- **Nature Transition X-Curve**: UNEP's dual strategy – **phase out harmful subsidies**, **scale nature-positive markets** by redirecting capital.
- **Pricing Externalities**: Use **Carbon Taxes/Nature-Liability Levies** to **make destruction costly, conservation profitable**.
- **Mandatory Disclosures**: Enforce **TNFD-aligned reporting** on **nature dependency & impact** by companies.
- **Innovative Instruments**: Expand **Green Bonds, Biodiversity Credits, Sustainability-Linked Loans**; offer **First-Loss Guarantees** to de-risk private investment.

- **Standardized Metrics**: Include **biodiversity indicators** (e.g., **Mean Species Abundance**) alongside CO_2 to avoid **greenwashing**.
- **Integrated Policy**: Align **Finance, Agriculture, Energy ministries** with **Kunming-Montreal GBF targets** to avoid internal contradictions.

River Delta Subsidence

Nature **study** warns that several **major Indian river deltas** are **sinking rapidly**, increasing risk of **flooding and displacement** for **millions**.

Key Findings of the Study	
■ **Study Scope**: 40 deltas across **29 countries**; covers **236+ million people** at near-term flood risk. ■ **Subsidence > Sea-Level Rise**: >50% deltas sinking faster than **3 mm/year** (2014–2023); global sea-level rise ~**4 mm/year**. **Global Impact**: **35%** of delta area sinking; **38 of 40 deltas** show >50% area subsiding. ■ **India-Specific**: Brahmani (**77%**) & Mahanadi (**69%**) – fastest sinking (>**5 mm/year**). Ganga-Brahmaputra, Brahmani, Mahanadi – subsiding across >**90%** area.	■ **Hotspots of Delta Land Loss: 7 major deltas** (Ganga-Brahmaputra, Nile, Mekong, Yangtze, Amazon, Irrawaddy, Mississippi) = **57%** of global subsiding delta area (~**265,000 sq km**). ● **Sinking cities– Kolkata, Alexandria, Bangkok, Dhaka, Shanghai** – high urban flooding risk. ■ **Reasons of Subsidence**: Unsustainable groundwater extraction (e.g., Ganga-Brahmaputra, Cauvery) → **irreversible sediment compaction**. In Mahanadi, Kabani – **groundwater depletion, river regulation, land-use changes**.
Major River Deltas in India	**Significance of Deltas**
■ **Ganges-Brahmaputra** (**Sundarbans Delta**): World's largest delta; spans **West Bengal & Bangladesh**; home to **largest mangrove forest**. ■ **Godavari Delta**: In **Andhra Pradesh**; major eastern coastal delta. ■ **Brahmani Delta**: In **Odisha**; formed by **Brahmani River**. ■ **Mahanadi Delta**: In **Odisha**; formed by **Mahanadi River**. ■ **Cauvery Delta**: In **Tamil Nadu**; called "**granary of South India**".	■ Cover **1% of world's land**, support **350–500 million people** (~**6% global population**). ■ Host **10 of 34 megacities**. ■ Vital for **agriculture, fisheries, ports, trade, energy; ecologically fragile**.

Green Ammonia

Solar Energy Corporation of India (SECI) successfully concluded its **green ammonia auction** under the **SIGHT programme**, setting new global price benchmarks & positioning India as a leader in the clean ammonia market.

- **About: Green ammonia (NH_3)** produced using **100% renewable energy**; near-zero carbon footprint.
- **Process (Modified Haber-Bosch):**
  - **Green Hydrogen:** Electrolysis powered by solar/wind/hydro splits $H_2O \rightarrow H_2 + O_2$.
  - **Nitrogen:** Extracted from air (N_2).
  - **Synthesis:** $H_2 + N_2$ combined under high pressure & temperature using catalyst, powered by renewable electricity.

- **Environmental Significance:** Conventional ammonia emits ~**2–3 tons CO_2 per ton**; ~**2% of global CO_2 emissions**; green ammonia curbs this.
- **Applications:**
  - **Green Fertilizer:** Decarbonises agriculture feedstock.
  - **Carbon-Free Fuel:** For shipping & power (co-firing/dedicated turbines); **NOx** manageable via Selective Catalytic Reduction (SCR).
  - **Hydrogen Carrier:** Easier liquefaction (**-33°C vs -253°C for H_2**); can be cracked back to hydrogen.
- **SIGHT Scheme:**
  - Financial incentive under **National Green Hydrogen Mission**; implemented by **MNRE** through **SECI** via competitive bidding.

Type of Ammonia	Source/Production Method	Carbon Emissions Profile	Key Characteristics
Grey/Brown Ammonia	Produced from **fossil fuels** – Natural Gas via Steam Methane Reforming (SMR)/**coal gasification**	Highest CO_2 emissions (no carbon capture)	Conventional method; **carbon-intensive**; widely used in fertilizer industry
Blue Ammonia	Produced from fossil fuels (SMR/gasification) with **Carbon Capture and Storage** (**CCS**)	Moderate emissions (partially reduced through CCS)	**Transitional** low-carbon option; depends on CCS efficiency
Green Ammonia	Produced using **renewable energy–based electrolysis** to generate **green hydrogen**, combined with **nitrogen**	Near-zero emissions	Fully **decarbonized pathway**; aligned with climate goals & energy transition

Science & Technology

Advanced Chemistry Cell Production Linked Incentive Scheme (ACC-PLI)

A report highlights serious implementation challenges in **India's ACC-PLI scheme.**

ACC-PLI Scheme

- **Launched: Oct 2021**, by **Ministry of Heavy Industries**; to promote domestic manufacturing of **ACC** (mainly **Li-ion batteries**) for **EVs & energy storage**.
- **Objective:** Build **domestic battery supply chain**; reduce **import dependence (China)**; attract investment & global tech partnerships & lower battery costs and accelerate EV adoption.
- **Targets & Outlay:**
  - **50 GWh** manufacturing capacity by **2026**.
  - Financial outlay: **₹18,100 crore**.
- **Incentives:**
  - Up to **₹2,000 per kWh** sold.
  - Minimum investment: **₹1,100 crore**.
  - Domestic value addition: **25% (2 yrs)** → **60% (5 yrs)**.

- **Current Status (Oct 2025):** Only **30 GWh** allotted (out of 50 GWh).
- **1.4 GWh commissioned**; **8.6 GWh under development (delayed)**.
- **No incentives disbursed** (against ₹2,900 crore target).
- Jobs: **1,118 created** vs **1.03 million projected**.
- EV demand growth below projections → implementation slowdown.

> **PLI Scheme** (**March 2020**): Aims to boost **domestic manufacturing, reduce imports, and create jobs** by providing **incentives on incremental sales** (**up to 5 years**) across **14 key sectors** including mobiles, autos, pharma, electronics, textiles, solar PV, ACC batteries, and drones, with focus on **performance, value addition, and R&D**.

New Telescopes in Ladakh to Boost Space Research

Union Budget 2026–27 approved two new telescopes in **Ladakh** —**National Large Solar Telescope (NLST)** & **National Large Optical–Near Infrared Telescope (NLOT)**— and the upgradation of the **Himalayan Chandra Telescope**.

- Ladakh, home to the **Hanle Dark Sky Reserve**, offers ideal high-altitude and clear-atmospheric conditions.

NLST	NLOT

■ **About: State-of-the-art solar physics facility**; operational in **5–6 years**.
■ Location: **Merak region near Pangong Tso lake**.
■ Features: **2-metre aperture**; India's **3rd ground-based solar observatory** (after Kodaikanal Solar Observatory (1899) & Udaipur Solar Observatory (1975)).
■ **Operational Spectrum: Visible and near-infrared wavelengths** of the electromagnetic spectrum.
■ **Scientific Objectives:** Study **solar dynamics & magnetism**.
  ● Observe **energetic solar events** and map **space-weather processes**.
  ● Data vital for protecting **satellites & launch vehicles**.
■ **Synergy with Space Missions:** Complements **ISRO's Aditya-L1 mission**.
	■ **Location: Hanle**.
	■ **Features: 13.7-metre aperture** segmented-mirror telescope; among the **world's largest** in optical–near infrared spectrum.
	■ **Timeline:** Ready in the **next decade**.
	■ **Technology:** Primary mirror– **90 smaller hexagonal segmented mirrors** acting as one large unit. Leverages experience from the **Thirty Meter Telescope** (**TMT**) project.
	■ **Scientific Objectives:** Research on **exoplanets, stellar evolution, supernovae**. Study origins of the **universe**.
	■ **Geographical Advantage:** High altitude, cold/dry atmosphere, clear skies. Minimal **diffraction issues**.

Himalayan Chandra Telescope (HCT)

- **About: 2.01-metre optical–infrared telescope** at **Indian Astronomical Observatory, Hanle** (**Ladakh**).
  - **First light–** 2000; regular observations from **2003**.
  - Operated remotely from **CREST, Hosakote** (**Karnataka**) via **dedicated satellite link**.
  - Equipped with advanced instruments– Himalaya Faint Object Spectrograph (**HFOSC**), Near-Infrared Imaging Spectrograph (**TIRSPEC**) **&** Hanle Echelle Spectrograph (**HESP**).
  - High **pointing & tracking accuracy**, strong image quality, autoguider for **faint stars**.
  - Key role in studying **transient cosmic events**, especially **supernovae**.
- **Upgrade Details:** Upgraded to a **3.7-metre segmented primary mirror system**.
- **Future Role:** Will continue operating in the **optical–infrared wavelength**. Will complement **LIGO-India** (**Maharashtra**) & **Square Kilometre Array** (**Australia & South Africa**).

Significance of These Developments in Astronomy

- **Unique Longitudinal Advantage**: NLST & NLOT fill a gap in global sky surveillance, enabling **continuous monitoring** of celestial events.

- **Data Sovereignty**: Generate **high-quality data** domestically, reducing dependence on international facilities.

- **Global South Leadership**:
  - Enhances scientific capacity; **preferential observation time** for Indian researchers and promotes collaborations.

- **Space Weather Monitoring**: NLST to monitor **solar flares & CMEs**; crucial for safeguarding **satellites, communication grids, and power infrastructure**.

Integration of Artificial Intelligence in Education

Experts stress that educational institutions must move beyond basic technical literacy and integrate the **"Three A's" of AI — Adoption, Absorption & Application** — into curricula.

- Aligns with **NEP 2020**, which envisions a **technology-driven education ecosystem** to prepare students for an AI-ubiquitous future.

Adoption (The Foundation)	Absorption (The Conceptualisation)	Application (The Execution)
■ **Definition:** Introduction of **AI tools** in education; familiarisation with **AI interfaces (LLMs)** & digital tools. ■ **Objective:** Replace **fear of unknown** with **digital literacy & accessibility**. ■ **Skills Obtained:** • **AI literacy & tool fluency** (LLMs—ChatGPT, image generators). • **Basic prompt engineering** (structuring effective queries). • **Digital adaptability** (overcoming technophobia). • **Resource optimisation** (automating tasks like summarising, drafting emails).	■ **Definition:** Understanding **how AI works**—its logic, limitations & ethical implications; not treating it as a black box. ■ **Objective:** Develop **critical thinking** to identify AI-generated **hallucinations vs. facts** and remain in control of technology. ■ **Skills Obtained:** • **Critical thinking & fact-checking** (auditing AI outputs). • **Algorithmic awareness** (probability-based outputs, limitations). • **Ethical reasoning** (bias detection, data privacy concerns). • **Cognitive offloading** (judicious AI use without dependency).	■ **Definition:** Practical use of **AI** for solving real-world problems & innovation. ■ **Objective:** Create **value creators & innovators**, not passive consumers. ■ **Skills Obtained:** • **Complex problem solving** (domain-specific AI use, e.g., weather prediction). • **Design thinking & innovation** (AI as co-pilot for ideation & prototyping). • **Data analytics & interpretation** (processing large datasets, deriving insights).

Significance of Integrating AI in Curriculum

- Moves from **rote memorisation** to **critical thinking**, problem-solving & emotional intelligence.

- Enables **adaptive learning**; democratises personalised tuition as per student pace.

- As per **WEF Future of Jobs Report 2025**, **39% of worker's core skills** expected to change by **2030**; AI application becomes key employability metric.

- AI translation tools (e.g., **Bhashini**) help learning in **mother tongue**, reducing English-only barrier.

Key Challenges of Integrating AI in Curriculum

- **Infrastructure Deficit:** Unlike Japan's **GIGA School** (One Student–One Device), Indian govt schools rely on **shared, low-power devices**. Rural devices lack **NPU power** to run **SLMs locally**.

- **Cognitive Atrophy**: Risk of **cognitive offloading**. Excessive AI use for process (code/essay structuring) may hinder **critical thinking & logic development**.

- **Evaluation Crisis:** Current exams test **memory & output**, where AI performs well.

- Delay in adopting **process-based assessment** (vivas, in-class problem solving) to curb AI dependency.

- **Data Sovereignty & Privacy:** Absence of a sovereign **Indian Education Cloud**; reliance on free tiers of **global LLMs**.
  - Student data & intellectual property processed on **foreign servers**, raising **national data sovereignty** concerns.

- **Bias in Training Data:** LLMs trained on **Western datasets** (**W**estern, **E**ducated, **I**ndustrialized, **R**ich, **D**emocratic). Leads to **cultural hallucinations** & contextually biased responses for Indian issues.

- **The "Black Box" Teacher Dilemma:** Students often have higher **Adoption skills** than teachers. Teachers unable to explain AI logic/limitations. Difficulty in auditing or grading **AI-assisted assignments**.

Measures to Strengthen AI Integration in Education

- **National Educational Technology Forum (NETF):** Create a **Sovereign AI Cloud** for education (as per **NEP 2020**). Enable rural schools to access powerful AI via **low-end devices**; bridge **compute divide**.

- **Mandatory "AI Citizenship" Course:** From **Class 8 onwards**. Focus on data privacy, algorithmic bias, IPR. Develop responsible AI users, not just coders.
- **Continuous Comprehensive Evaluation (CCE):**
  - Shift to **formative, process-based assessment**. Track learning journey, query history, critical thinking, not just final answer.

- **Teacher Training 2.0:** Nationwide **"Train the Trainer" mission** (like **NISHTHA**) on **AI pedagogy**. Enable teachers to effectively co-teach with AI assistants.

> Examine how National Education Policy (NEP) 2020 envisions a technology-driven educational ecosystem. What structural reforms are necessary for effective AI integration?
>
> **Drishti Mains Question**

Breakthrough in CAR T-Cell Therapy

A study by **IIT Bombay** has demonstrated a **gentler method for recovering lab-grown T-cells**. This development in **cancer immunotherapy**, particularly **CAR T-cell therapy**.

Key Findings	Significance

■ **Cell Recovery: 3D scaffolds** (**which mimic the human body**) promote T-cell growth but make **retrieval difficult**.
   • T-cells **adhere tightly**, and harsh enzymes like **Trypsin/TrypLE** damage them by stripping essential proteins.
■ **Efficient Recovery: Accutase** used instead of Trypsin for **gentle detachment** of T-cells.
  • Preserves **cell membrane**, ensuring **higher survival** and **immune function**.
  • Accutase-treated cells formed **healthy clusters**, suitable for **cancer therapy**.
	■ Global **CAR T-cell therapy cost**: ₹3–4 crore.
	■ **Reduced cell loss** & improved recovery can help Indian initiatives (e.g. **ImmunoACT**) lower costs to a **fraction of global prices**.
	■ Ensures **consistent supply of healthy T-cells**, improving **treatment success**.
	■ Marks a shift in India's biomedical sector from **generic drug manufacturing** to **innovation in complex therapies**.

Did You Know	

- **T-Cells:** Type of WBC; detect infections or abnormal cells (e.g. cancer). **Destroy threats** directly or **signal** other immune cells.
- **CAR T-cell Therapy: T-cells collected** from patient & **genetically modified** in lab. Modified with **Chimeric Antigen Receptors** (**CARs**) to target cancer cells. Approved for **blood cancers** like **leukemia** & **lymphoma**.
- **NexCAR19:** India's **first approved indigenous CAR-T cell therapy** (2023). Developed by IIT Bombay, Tata Memorial Centre, and ImmunoACT. **World's most affordable** CAR-T therapy.

Patent Law in Space

Earth-based intellectual property law clashes with the **sovereignty-free, open innovation** necessary for developing **essential survival technologies** (like water extraction) on the **Moon or Mars**. This creates a **major legal challenge**, despite the clear need for **multinational collaboration**.

Why Current Patent Law Is Ill-Suited for Outer Space

- **Current Patent Law in Outer Space:**
  - Currently, **spacefaring nations** have universally adopted the **jurisdiction-by-registration approach** (**Article VIII** of the **Outer Space Treaty, 1967** (OST)) to apply their national patent laws to activities and inventions in outer space. An invention on a **US-registered module** is treated as occurring in **US legal territory**.
- **Core Legal Conflict:**
  - Earth's patent law is built on **territoriality**—rights are tied to **specific national jurisdictions**. This clashes with **international space law**, which prohibits **national sovereignty** over **celestial bodies** (**Article II** of **OST, 1967**).

- **ISS Model & Its Limits:** The **International Space Station (ISS)** operates under an intergovernmental agreement that allocates **jurisdiction module-by-module**, treating each as the **territory of its partner state**.
  - This works for a static, **segmented facility** but is **ill-suited** for **integrated, shared lunar bases** where **multinational teams** co-develop technologies across **common platforms**, blurring the lines of where invention occurs.
- **Conflict with Space Law Principles:** Patent exclusivity over essential survival technologies (e.g., life-support systems) could lead to **de facto exclusion**, potentially conflicting with the **OST, 1967** mandate that space be used **"for the benefit of all humankind"** (**Article I** of the **OST, 1967**).
- **Unresolved Doctrines and Legal Loopholes:** It is unclear if the **"temporary presence"** doctrine from the **Paris Convention for the Protection of Industrial Property, 1883** (which limits **patent enforcement** on **goods in transit**) applies to **space equipment**, creating uncertainty. The registration system also invites **"flags of convenience"** strategies, where **entities** use **jurisdictions with weak enforcement** to evade **patent claims**.

- **Limits of Coordination:** While **operational coordination** mechanisms like the **NASA Artemis Accords** can reduce **interference**, they do **not constitute jurisdiction** and thus **cannot** resolve questions of **ownership** and **enforcement** in permanently inhabited space.
  - Despite growing discussions on **space-specific IP mechanisms**, coordination remains uneven, and most states **remain rule-takers**, leaving **ownership and enforcement unresolved**.

Outer Space Treaty, 1967

- **About:** The Outer Space Treaty, 1967, is the **fundamental legal framework** governing **all celestial activity**, establishing principles of **peaceful use**, **non-appropriation**, and **international cooperation** to prevent conflict and ensure space benefits all humanity.
- **Origin & Status:** Adopted by the **United Nations** (**UN**) in **1966**, entered into force in **1967**, and has more than **115 states parties**, making it a near-universal arms-control and space-governance instrument. **India** signed the treaty in **1967** and ratified it in **1982**.
- **Foundational Principles:**
  - **Article I:** Mandates space exploration for the **benefit of all mankind**, with space free for all states.
  - **Article II:** Establishes the **non-appropriation principle**, prohibiting sovereignty claims in space.
  - **Article IV:** Enforces **peaceful use**, banning weapons of mass destruction and military bases on celestial bodies.
  - **Article VII:** Establishes **state liability** for **damage** caused by its space objects.
  - **Article VI:** Confirms **state responsibility** for all national space activities, including private ones.

Tetanus and Adult Diphtheria (Td) Vaccine

Ministry of Health launched the indigenously manufactured **Tetanus and Adult Diphtheria (Td) vaccine** at the **CRI, Kasauli**.

Features Tetanus and Adult Diphtheria (Td) Vaccine

- **Dual Protection:** Protects against **Tetanus (T)** and **Diphtheria (d)** (unlike TT which covers only tetanus).
- **Reduced Diphtheria Dose:** "d" = lower diphtheria toxoid dose for adults/adolescents → fewer side effects, effective booster.
- **Need:** Diphtheria immunity from childhood DPT declines in adulthood; Td ensures long-term protection.
- **Policy Shift:** WHO recommended replacing TT with Td.
  - NTAGI advised Td for all age groups, including pregnant women.
- **Implementation in India:** Inducted into Universal Immunization Programme (UIP).
  - CRI Kasauli to supply 55 lakh doses by April 2026.

Tetanus

- **Cause:** *Clostridium tetani* (anaerobic spores in soil/animal feces).
- **Transmission:** Non-communicable; enters via contaminated wounds/umbilical stump
- **Maternal & Neonatal Tetanus (MNT):** Linked to non-sterile cord cutting; major risk in low-income areas.
- **Symptoms:** "Lockjaw," muscle spasms, difficulty swallowing, seizures.
- **Prevention:** Tetanus-Toxoid-Containing Vaccines (TTCV); no natural immunity after infection.
- **Global Progress:** 97% reduction in neonatal tetanus deaths (1988–2018).
- **India:** Eliminated MNT in 2015 (<1 case/1000 live births per district); U-WIN tracks vaccinations.

Diphtheria

- **Cause:** *Corynebacterium diphtheriae* (toxin-producing strains).
- **Transmission:** Respiratory droplets/direct contact; asymptomatic carriers possible.
- **Key Symptom:** Thick grey pseudomembrane in throat → breathing obstruction.
- **Complications:** Myocarditis, neuropathy; fatality up to 30% without treatment.
- **Risk Factors:** Overcrowding, conflict, low vaccination, pandemic-related immunization gaps.
- **Treatment:** Diphtheria Antitoxin (DAT) + antibiotics; AMR emerging concern.

Sodium-Ion Batteries

As batteries increasingly underpin modern infrastructure, **India's heavy reliance on lithium-ion technology exposes** it to supply risks and import dependence. In this context, **sodium-ion batteries (SiBs)** are emerging as a safer and more resilient alternative, prompting calls for a strategic shift to **strengthen India's long-term energy security.**

Sodium-ion Batteries

- **SiBs: Cost-effective, safe**, use **abundant sodium** (e.g., sea salt). Enable **fast charging, long life**, good **low-temp performance**. Suited for **EVs, grid storage, solar apps**.
- **Sodium-Ion Batteries Compare to Lithium-Ion:**
  - **Energy Density**: Improving; nearing **LFP levels** despite sodium's heavier weight.
  - **Safety Profile**: **Lower thermal runaway temps**; inherently **safer** than Li-ion.
  - **Transportation Benefits**: Shipped at **zero volts (**lithium-ion batteries shipped at ~30% charge**)**, no degradation; **safer & cheaper logistics**.

- **SiBs Significance for India:**
  - **Reduces Import Dependence:**
    - ❖ Cuts import dependence on scarce minerals (Li, Co, Ni, graphite). **Sodium from abundant domestic soda ash** enables strategic autonomy. Shields India from geopolitical risks and mineral price volatility.
- **Cost Advantage for Mass Market:** SiBs Use **aluminium** (cheaper, lighter) over copper; suits **price-sensitive EV & grid markets**.
- **Ease of Adoption:** Compatible with **existing PLI infrastructure**; allows **rapid scale-up**. Projected to be **cheaper than Li-ion by mid-2030s**; early adoption key for **energy security & competitiveness**.

India's Initiatives to Strengthen Battery Manufacturing

- **Production Linked Incentive Scheme for Advanced Chemistry Cell (ACC) Battery Storage:** Incentivises domestic manufacturing of advanced battery cells and promotes technology adoption, R&D and scale.
  - Under **PLI for ACC** 50 GWh of domestic capacity is targeted, with 40 GWh awarded to four beneficiary firms, but only about 1 GWh has been commissioned so far, with no incentives claimed yet, underscoring slow on-ground progress.
- **National Critical Minerals Mission:** Secures supply chains for critical minerals through exploration, mining, processing, recycling and overseas assets.
- **Overseas mineral partnerships via Khanij Bidesh India Limited:** Acquisition and development of lithium and other critical mineral assets abroad.
- **Battery Waste Management Rules 2022:** Mandates **Extended Producer Responsibility (EPR)** for battery collection, recycling and refurbishment.

Key Challenges in Scaling up SiBs in India	Measures to Scale SiBs in India
Weight Penalty: Heavier than **Li-ion**, unsuitable for **compact/high-range EVs**.	**Farm-to-Battery Hard Carbon Strategy**: Use **agri-waste** (e.g., parali, coconut shells) for **hard carbon anodes**; set up pyrolysis units in Punjab, Haryana, Kerala, TN.
Manufacturing Issues: Moisture sensitivity, need for deep vacuum drying; high energy use raises costs.	**Desert-Centric Manufacturing Clusters**: Establish **SiB factories** in **Rajasthan, Kutch** to cut dry-room energy use & ease moisture challenges.
Weak Supply Chain: Lack of **sodium-specific materials**; limited **battery-grade processing infra**.	**Strategic Market Entry via Standardisation**: Start with standard sodium-ion packs for 3-wheelers & buses to build scale **before moving to 2-wheelers**.
Policy Gaps: Incentives **Li-ion–centric**; no SiB targets, safety standards, certification pathways.	**Hybrid Sodium–Lithium Battery Packs**: Sodium-ion for daily use, lithium for peak performance.
Low Market Confidence: Limited **deployment, pilots, demonstrations**; Original Equipment Manufacturers (OEMs) hesitation.	**Incentivise Chemical Upgrades**: Support **domestic chemical firms to** upgrade industrial **soda ash to battery-grade sodium carbonate** to cut imports.

Discuss the technological and ecosystem challenges in scaling sodium-ion batteries in India.

Drishti Mains Question

New Delhi Declaration on AI Impact

India-AI Impact Summit 2026 concluded with **89 countries & international organisations**, including **US & China**, signing the **New Delhi Declaration** based on **"Sarvajan Hitaya, Sarvajan Sukhaya"** for equitable AI benefits.

- The **non-binding declaration** is structured around **7 'Chakras'** and marks the **broadest multilateral AI consensus** so far.

Key Highlights of the New Delhi Declaration on AI Impact (7 Chakras)

- **Democratising AI Resources:**
  - Affordable digital infrastructure & connectivity to unlock AI potential; guided by **Vasudhaiva Kutumbakam** for equitable access.
  - Notes **Charter for the Democratic Diffusion of AI**: voluntary framework to expand access to foundational AI tools, support local innovation, build resilient ecosystems while respecting national laws.
- **Economic Growth & Social Good:**
  - Promotes open, accessible AI solutions for scalability & adaptability.
  - Mentions **Global AI Impact Commons**– voluntary platform to adopt, replicate & scale successful AI use cases across regions.
- **Secure & Trusted AI:** Recognises **Trusted AI Commons** – voluntary platform for shared tools, benchmarks & best practices for responsible AI.
- **Science:** Expand AI research infrastructure; notes **International Network of AI for Science Institutions** to connect researchers & pool AI capabilities.
- **Access for Social Empowerment:** Supports voluntary collaborative platform for exchange of knowledge & scalable AI practices for social empowerment.

- **Human Capital:** Focus on **skilling, reskilling & AI literacy**; workforce development backed by guiding principles & playbooks for AI-driven economy.

- **Resilience, Innovation & Efficiency:** Promote **energy-efficient, resilient AI systems**; guided by Voluntary Guiding Principles on Resilient, Innovative & Efficient AI; recognises **Playbook on Advancing Resilient AI Infrastructure** as key resource.

India's Strategic Outcomes of AI Impact Summit 2026

- **Pax Silica Alliance:** India formally joined the US-led Pax Silica coalition, aiming to secure semiconductor supply chains and access to critical minerals.
  - This move supports diversification and reduces reliance on any single global power.
  - India also signed a Joint Statement on the 'India-US AI Opportunity Partnership' as a bilateral addendum to the declaration.

- **Major Investment Commitments:** Over USD 250 billion pledged for infrastructure, including data centers and semiconductor fabrication plants.
  - Around USD 20 billion committed to deep-tech venture capital, strengthening India's innovation ecosystem.

- **GPU Expansion and Compute Capacity:** The government announced a massive ramp-up of its compute muscle, adding 20,000 Graphics Processing Units (GPUs) to its existing 38,000, with a target to cross 100,000 GPUs by the end of 2026.

- **IndiaAI Mission 2.0:** Scale compute infrastructure, datasets & AI adoption.

- **MANAV Vision:** Framework—Moral, Accountable, National Sovereignty, Accessible, Valid—for human centric AI development.

- **UPI-Style AI Playbook for MSMEs:** India plans to package AI solutions into a standardized "playbook" for small businesses and MSMEs, inspired by the success of the UPI, to accelerate widespread adoption.

- **Push for Sovereign AI:** India is prioritizing indigenous foundation models that are trained and hosted domestically, ensuring data sovereignty and strategic autonomy. Companies like Sarvam AI are central to this effort.
  - At the summit, Sarvam AI unveiled two large language models Sarvam-30B (30 billion parameters) and Sarvam-105B (105 billion parameters). This milestone signals India's entry into the group of nations capable of developing frontier AI models from scratch.
    - ❖ Sarvam AI unveiled Sarvam Kaze, a made-in-India smart glasses initiative positioned as an alternative to Meta's Ray-Ban smart glasses, integrating AI-powered vision and audio capabilities.
  - BharatGen launched Param2, a 17-billion-parameter model supporting 22 Indian languages, and unveiled Sutra, an AI news anchor that converts policy discussions into multilingual reports.

- **Global Fund for Equitable AI Access:** The UN Secretary-General urged technology companies to support a USD 3-billion global fund to ensure equitable access to AI, and announced the appointment of a 40-member UN scientific panel on AI and a global dialogue on AI governance set to begin in Geneva in July 2026.

Concerns Regarding the New Delhi Declaration on AI Impact	Suggestions

■ **Non-Binding & Voluntary Nature:** Commitments are **voluntary, non-binding**; no enforcement or verification mechanism for **Democratic Diffusion** or **Trusted AI**.
 	
■ **No Redlines:** Unlike **EU AI Act**, no explicit ban on **high-risk AI** (predictive policing, biometric surveillance); left to national laws.
 	
■ **Silent Labour Crisis:** Limited discussion on impact on **5.8 mn IT workforce**, especially entry-level roles; minimal labour union engagement.
 	
■ **Infrastructure Gaps:** Lack of advanced compute infra, semiconductor fabs, hyperscale data centres; risk of becoming a "**data colony.**"
 	
■ **Sustainability Issues:** Data centres use ~**11 lakh litres/day**; expansion (e.g., **Bengaluru**) worsens water stress & environmental concerns.
	■ **Operationalise "Three Sutras":**
	  • **People:** Implement **MANAV Vision** with ethical guardrails in public-sector AI.
	  • **Planet:** Promote **Green AI**; incentivise energy-efficient algorithms & renewable-powered data centres.
	  • **Progress:** Launch **MSME AI Stack** (**UPI-like**) for affordable AI tools.
	
	■ **Semiconductor Synergy:** Align with **ISM 2.0** to develop indigenous AI chips; reduce foreign dependence.
	
	■ **Institutionalising Global Governance:** Develop common technical benchmarks under **Trusted AI Commons**. Create cross-border regulatory sandboxes for AI in health & agriculture.
	
	■ **Labour & Ethics:** Scale **Reskilling Playbook** (e.g., **Bodhan AI**) for AI-ready workforce. Mandate "**Glass Box**" transparency in AI-based governance decisions.

The New Delhi Declaration on AI Impact 2026 marks a paradigm shift from 'AI Safety' to 'Democratic Diffusion' of technology. Discuss.

Drishti Mains Question

80 Years of the RIN Revolt

18th Feb 2026 marks the **80th anniversary** of the **Royal Indian Navy (RIN) Revolt (1946)** — a short-lived armed uprising symbolising **militant anti-colonial resistance** & **Hindu-Muslim unity** in the final phase of British rule.

RIN Revolt 1946

- **About**: Large-scale insurrection involving **20,000+ naval ratings.** Covered **78 ships** & **20 shore establishments.** Began at **HMIS Talwar (Bombay).**
  - Spread to **Karachi, Madras, Cochin, Vishakhapatnam, Calcutta, Andaman Islands.** Sympathetic strikes in **Royal Indian Air Force** at **Bombay, Poona, Calcutta, Jessore, Ambala**
- **Immediate Triggers & Grievances**: Poor food, low wages. Racial discrimination, abuse by officers. Arrest of a rating for writing **'Quit India'**
- **Broader Political Links**: Formation of **Naval Central Strike Committee.** Protest against **INA trials.** Opposition to deployment of Indian troops in **Vietnam & Indonesia** to restore French and Dutch colonial rule.
- **Broader Context of INA Trials**:
  - **Trials**: First trial held at **Red Fort (Nov 1945).**
  - **Congress Support**: Sept 1945 Bombay Session: Resolution backing **INA cause.**
- **Diverse Support**: Backed by **Muslim League, CPI, Unionists, Akalis, Justice Party, Ahrars, RSS, Hindu Mahasabha, Sikh League.** Even loyalists & govt employees contributed funds.
- **Symbols of Unity**: Procession with portrait of **Subhas Chandra Bose.** Rebel fleet hoisted flags of **Congress, Muslim League,** and **Communist Party** together
- **Escalation to Armed Conflict**: Hunger strike turned into armed uprising after **British forces opened fire.** Ratings fought with firearms inside barracks. Rebel ships manned guns in harbour, threatening full-scale conflict to defend comrades.
- **Communal Unity on the Streets**: Joint **Hindu-Muslim hartal.** Raids on post offices, tram tracks uprooted, barricades set up. Buses & military vehicles torched. **Mill district** became epicentre; textile mills, railway workshops, factories shut
- **Brutal Suppression & Casualties**: British deployed **army battalions & armoured vehicles.** Troops fired indiscriminately with **machine guns & bayonets**
- **End of the Revolt & Its Leaders**: Ended after **Sardar Patel** & **Muhammad Ali Jinnah** persuaded ratings to surrender. ssurance against victimisation by national parties.

Significance of the Revolt	Limitations of the Revolt

- **Impact on British Policy**: **Cabinet Mission** sent to India (**Jan 1946**)
  - **1 Dec 1946:** Only INA members accused of **murder/brutality** to be tried
  - **Jan 1947:** Imprisonment of first batch of INA prisoners remitted
  - **Feb 1947:** Indian troops withdrawn from **Indo-China & Indonesia**
- **Eroding British Control Over Armed Forces**: Showed declining loyalty of Indian armed forces personnel. Contributed to British realisation that rule through force had become untenable.
- **Acceleration of British withdrawal**: Occurred during independence negotiations. Widely seen as hastening British decision to leave India
- **Symbol of Nationalistic Awakening & Unity**: Displayed strong **Hindu-Muslim solidarity** despite rising communal tensions.
- **Precedents for Post-independence India**: Reinforced **civilian supremacy over the military**, as political leaders intervened to end the revolt. Demonstrated limits of **armed resistance** in the final phase of colonial rule. Suppressed by British through **superior military force**
	- **Absence of Centralised Leadership**: Largely **spontaneous & leaderless.** Naval Central Strike Committee lacked experienced military/political command
	- **Lack of Support from Major Political Organizations**: INC & **All-India Muslim League** condemned the revolt, urged surrender
	  - **Mahatma Gandhi** criticised action without political authority. **Vallabhbhai Patel** saw it as a threat to negotiated, non-violent transfer of power
	- **Limited Scope & Failure to Link with Wider Forces**: No coordinated support from **Indian Army.** Confined to naval personnel and urban centres — **Bombay, Karachi, Madras.** Did not evolve into general armed insurrection
	- **Superior British Military Response**: Deployment of **Royal Navy warships** & loyal troops. Rebels lacked heavy arms, ammunition, defensible positions
	- **Strategic Context of Independence Process**: Occurred amid advanced constitutional negotiations (incl. **Cabinet Mission**)
	  - Political leadership preferred **peaceful, negotiated transfer of power**.

The Royal Indian Navy Revolt of 1946 was more than a mutiny; it was a popular uprising that symbolized the erosion of British authority. Analyze.

Drishti Mains Question

New MHA Protocol on Vande Mataram and Jana Gana Mana

The **Ministry of Home Affairs (MHA)** has issued a fresh set of instructions to States and government bodies mandating that the **National Song, *Vande Mataram*, must be played or sung before the National Anthem,** *Jana Gana Mana*, when both are part of an event.

New Protocol Regarding the National Song and Anthem	
■ **Sequence of Play:** When both the National Song and the National Anthem are played at the same event, **Vande Mataram (National Song) must be played/sung first**, followed by **Jana Gana Mana (National Anthem)**. ● This establishes a clear order of precedence for official ceremonies. ■ **Mandatory Respect:** Audience must **stand to attention** during official version of **National Song** (**~3 min 10 sec**). Not required to stand if played in **newsreel/documentary/film**, to avoid disruption. ■ **Musical & Band Performance:** Preceded by a **roll of drums** to alert audience.	■ **Occasions for Playing:** ● **Presidential/Gubernatorial Events:** Arrival & departure of **President/ Governor/LG** at formal State functions. ● **Broadcasts:** Before & after **President's address** on **AIR/TV**. ● **Flag Ceremonies:** When **National Flag** is brought on parade. ● **Cultural Functions:** During **flag unfurling** at cultural/ceremonial events (other than parades). ■ **Instructions for Schools:** Day may begin with **community singing of National Song**. Authorities to promote singing of **National Song & Anthem**. ● New protocol linked to **Article 51A(a) — Fundamental Duty** to respect national symbols.

Key Facts About Vande Mataram

■ **Origin & Composition:** *Vande Mataram* (also pronounced *Bande Mataram*), composed by **Bankim Chandra Chatterjee**, was first published in *Bangadarshan* in **1875** and later included in *Anandamath* (1882).

  ● It is set to music by **Rabindranath Tagore**, and it emerged as a powerful symbol of India's cultural and political identity, embodying unity, sacrifice, and devotion.

■ **National Status:** On 24th January 1950, **Dr Rajendra Prasad,** the first President of India, announced that while **Jana Gana Mana would be the National Anthem, Vande Mataram**, for its key role in the freedom movement, would be honoured equally as the National Song.

  ● Constitution does not explicitly mention a national song. However, **Article 51A(a)** asks citizens to respect the Constitution, National Flag and National Anthem.

■ **Role in Freedom Movement:**

  ● **Adoption by Congress:** In 1896, **Gurudev Rabindranath Tagore** sang Vande Mataram at the Kolkata session of the Indian National Congress.

    ❖ At the **Varanasi session of the Indian National Congress (1905)**, the song 'Vande Mataram' was adopted for all-India occasions.

  ● **Mass Mobilisation & Press: Bande Mataram Sampradaya (1905)** formed in North Calcutta to promote devotion to the motherland.

    ❖ English daily **Bande Mataram launched in 1906** under Bipin Chandra Pal, later joined by Sri Aurobindo. It propagated ideas of Swadeshi, unity, and resistance.

  ● **Anti-Partition & Student Movements:** Vande Mataram was first used as a political slogan on 7th August 1905 during student processions at Calcutta Town Hall, becoming the rallying cry of the **Swadeshi and anti-partition movement**.

    ❖ Its mass appeal prompted **Lord Curzon** to order arrests for singing it.

  ● **Influence on Indian Revolutionaries Abroad:**

    ❖ In 1907, **Madam Bhikaji Cama raised the tricolour flag** for the first-time outside India in Stuttgart, Germany. The words Vande Mataram were written on the flag.

    ❖ In August 1909, when **Madan Lal Dhignra** was hanged in England, his last words before he went to the gallows were "Bande Mataram."

    ❖ In October 1912, **Gopal Krishna Gokhale** was welcomed in Cape Town with a grand procession chanting "Vande Mataram."

Key Facts About Jana Gana Mana (National Anthem)

■ **Origin & Composition:** Written and composed by Nobel Laureate **Rabindranath Tagore** in **1911**.

  ● It is the **first stanza** of the parent poem **"Bharoto Bhagyo Bidhata"**, which consists of **5 stanzas** in total.

  ● Jana Gana Mana is originally written in **Bengali** (specifically *Sadhu Bhasha*, a Sanskritized dialect).

■ **First Rendition:** It was first sung publicly on **27th December 1911**, at the **Calcutta Session** of the **Indian National Congress.**

■ **Official Adoption:** It was adopted as the National Anthem by the **Constituent Assembly of India** on 24th **January 1950**.

- **Translation:** Rabindranath Tagore translated the song into English while at **Madanapalle** (Andhra Pradesh). The translation is titled **"The Morning Song of India"**.
  - A Hindustani version titled Subh Sukh Chain was prepared under **Subhas Chandra Bose** for the Indian National Army.
- **No "Sindh" Modification:** In 2005, a petition to replace the word "Sindh" (now in Pakistan) with "Kashmir" was **rejected** by the Supreme Court.
  - The court ruled that "Sindh" in the anthem refers to the **culture/community** and not just the geographical region.

> **NOTE:** Rabindranath Tagore is the only person to have written the national anthems for two countries: **India** (*Jana Gana Mana*) and **Bangladesh** (*Amar Sonar Bangla*).

Republic Day 2026

77th Republic Day (2026) was celebrated on the theme **"150 Years of Vande Mataram"**, with **30 tableaux** under sub-themes **Vande Mataram** and **Atmanirbhar Bharat**, debut of **Bhairav Battalion**, and first-ever **EU military contingent participation** outside Europe.

- **In 2026: Padma Awards 2026**: **131 total** (**5 Vibhushan**, **13 Bhushan**, **113 Shri**). **Armed Forces Gallantry Awards**: **70 personnel** awarded.

Historical Significance of Republic Day

- **The Purna Swaraj Resolution:** In December 1929, the Indian National Congress passed the historic **'Purna Swaraj' (Complete Independence) resolution** at its **Lahore Session** (presided over by **Jawaharlal Nehru**).
  - It was decided that **26th January 1930**, would be observed as **Purna Swaraj Day** across India. On this day, Indians pledged to **reject British dominion status and fight for complete self-rule.**
  - From 1930 to 1947, 26th January was celebrated as "Independence Day" or "Poorna Swaraj Day."
- **Transition from Independence to Republic:** The Constituent Assembly first met in December 1946 at the **Constitution Hall (**now Central Hall of Parliament), formally initiating India's constitution-making process.
  - On 15th August 1947, India achieved independence from colonial rule but continued as a **British Dominion with King George VI as the head of state until the Constitution came into force.**
  - The constitutional transition was completed on **26th November 1949**, when the **Constituent Assembly formally adopted the Constitution,** a date explicitly recorded in the Preamble.

- On **26th January 1950**, the Constitution of India came into force, deliberately chosen to honour the **Purna Swaraj Declaration of 1930**.
  - With this, the **Government of India Act, 1935** was replaced. India formally became a **Sovereign Democratic Republic**.
  - The **President of India** replaced the British Monarch as the Head of State, symbolizing the true essence of a Republic.
- Later, the **42nd Constitutional Amendment (1976)** added the words *Socialist* and *Secular* to the Preamble.

Highlights of the Tableaux
Displayed at the Republic Day Parade

- **Assam**: Highlighted Asharikandi village & **Asharikandi's terracotta craft**.
- **Gujarat**: Tribute to **Madam Bhikaji Cama**; evolution of **Indian National Flag (1906–1947)**; sculpture of **Gandhi with Charkha** linking **Swadeshi** to **Atmanirbhar Bharat**.
- **Uttar Pradesh**: Highlighted **Bundelkhand's culture** and **modern development**.
- **Maharashtra**: Depicted **Ganeshotsav as national unity movement** by **Lokmanya Tilak**.
- **West Bengal**: Honoured **Vande Mataram's origin** (Bankim Chandra Chatterjee); statues of **Subhas Chandra Bose, Matangini Hazra, Khudiram Bose**.
- **Punjab**: Tribute to **Guru Tegh Bahadur** on **350th martyrdom year**; remembered as **Hind Di Chadar**.
- **Kerala**: Showcased **Kochi Water Metro** (India's 1st); celebrated **100% digital literacy**.
- **Tri-Services**: Theme **"Operation Sindoor – Victory Through Jointness"**; displayed **Rafale (SCALP), BrahMos, S-400, HAROP**, highlighting **joint warfare**.
- **Ministry of Culture**: Traced **150 years of Vande Mataram**.
- **Home Affairs (NDMA & NDRF)**: Honoured recovery efforts post **2001 Bhuj Earthquake**.

Hoysala Temples

Several 11th–13th century Hoysala-era temples in Karnataka are noted for their intricate soapstone carvings and distinctive star-shaped architecture.

Features of Hoysala Temples

- **Period:** 1050–1300 AD; major centres – Belur, Halebid, Sringeri (Karnataka).
- **Style:** Vesara (blend of Nagara & Dravida styles).
- **Material:** Soapstone (chloritic schist) – enabled minute, intricate carvings.
- **Ground Plans:** Ekakuta (1 shrine), Dvikuta (2), Trikuta (3), Chatushkuta/Panchakuta (4–5); Built on star-shaped (stellate) jagati platforms.

- **Sculptural Richness:** Friezes of elephants, horses, foliage, epics; Madanikas (celestial dancers) and Detailed mythological scenes.
- **Stellate Plan:** Star-shaped sanctum with multiple projections for ornamentation.
- **Ornamentation:** Highly decorated interiors & exteriors; intricate deity jewellery.
- **Shikhara:** Tiered towers connected by horizontal mouldings.

Prominent Examples

- **Hoysaleswara Temple (Halebidu):** Grand Shiva temple; dense mythological carvings and elaborate friezes.
- **Keshava Temple (Somanathapura):** 13th-century Trikuta Vaishnava temple; built by Somanatha Dandanayaka; intricate carvings.
- **Chennakeshava Temple (Belur):** Dedicated to Vishnu; built by King Vishnuvardhana; celebrated for detailed sculpture.
- **Veera Narayana Temple:** Built by Veera Ballala II (~1200 CE); noted for spacious ranga-mandapa and carved elephant rows.
- **Nageshwara & Govindeshwara Temples (Koravangala):** Early Hoysala phase; transition from Chalukyan style; refined sculptural work.
- **Bucheshwara Temple (1173 CE):** Mature Hoysala style; dense carvings and star-shaped platform.
- **Lakshminarasimha Temple (Javagal, 1250 CE):** Trikuta shrine; elegant elephant friezes and polished pillars.
  - Built during the reign of **Vira Someshwara.**
- **Lakshmidevi Temple (1114 CE):** Early monument; four-shrine layout; tantric influence (Mahakali sanctum). Commissioned by the **merchant woman Sahaja Devi.**
- **Panchalingeshwara Temple (Mandya):** Rare Panchakuta design; five aligned Shiva shrines.
- **Jain Basadis (Halebidu):** Parshvanatha, Shantinatha, Adinatha; simple, meditative Jain architecture.
- **Hulikere Kalyani:** 12th-century stepped tank; zodiac-linked shrines; sacred water architecture.

Hoysala Dynasty

- **Origin:** Initially feudatories of the Western Chalukyas of Kalyana; later became independent.
- **Founder:** Nripa Kama II.
- **Capital:** Initially **Belur** (11th century); Later shifted to **Dwarasamudra (Halebidu).**
- **Territory:** Ruled parts of present-day Karnataka and Tamil Nadu for over 300 years.
- **Notable Rulers:** Vishnuvardhana, Veera Ballala II, Veera Ballala III.
- **Vishnuvardhana:** Greatest ruler; expanded empire, major temple patron; converted from Jainism to Vaishnavism under Ramanuja's influence.

> **NOTE:** In 2023, **UNESCO** listed the **Chennakeshava Temple**, **Hoysaleswara Temple**, and **Keshava Temple** as a World Heritage Site titled *"Sacred Ensembles of the Hoysalas."*

Rajagopalachari Statue to Replace Lutyens at Rashtrapati Bhavan

PM announced that the statue of **Edwin Lutyens** at **Rashtrapati Bhavan** will be replaced by that of **C. Rajagopalachari.**

- **Edwin Lutyens** (the architect) & **C. Rajagopalachari (**First Indian Head of State **(Governor-General of India)** to reside in **Rashtrapati Bhavan.**

C. Rajagopalachari

- **Birth: 10 Dec 1878**, **Salem, Madras Province (TN)**
- **Identity:** Freedom fighter, statesman; **First & last Indian Governor-General of India**
- **Role in National Movement:** Inspired by **Bal Gangadhar Tilak**; joined **INC**
  - Hosted **Mahatma Gandhi** during Anti-Rowlatt agitation
  - Led **Vedaranyam Salt Satyagraha (1930)** (Tiruchi–Vedaranyam), parallel to Dandi March
- **Pre-Independence Governance:** PM of Madras Province (1937). Promoted **Khadi;** Advocated **abolition of Zamindari**
  - Proposed **C.R. Formula (1944)** through pamphlet *The Way Out* to resolve INC–Muslim League deadlock on Pakistan issue
- **Post-Independence Roles:** Governor of West Bengal
  - **Union Home Minister** (after Sardar Patel)
  - Contributed to drafting **First Five-Year Plan**
  - Piloted **Preventive Detention Act, 1950**
  - Founded **Swatantra Party (1959)** – advocated **market economy**
  - As **CM of Madras State**: Decontrolled foodgrain distribution & prices
- **Literary & Social Contributions:** Founded an **ashram (1925)** in Madras
  - Published **Vimochanam (Tamil)** & **Prohibition (English)**
  - **Sahitya Akademi Award (1958)** for *Chakravarthi Thirumagan* (Ramayana retelling)
  - Among first recipients of **Bharat Ratna (1954)** (with Dr. S. Radhakrishnan & C.V. Raman)

Edwin Lutyens

- British architect & town planner
- Designed **Rashtrapati Bhavan**, **North Block**, **South Block**, **India Gate**
- Area known as **Lutyens' Delhi** named after him.

Social Issues

Menstrual Health as a Fundamental Right

SC, in *Dr. Jaya Thakur v. Government of India & Ors. (2026)*, recognised **Menstrual Health and Hygiene (MHH)** as a **fundamental right under Article 21**.

SC's Rule on Menstrual Health

- **Article 21**: Lack of MHH access causes **stigma & humiliation**, violating **dignity & bodily autonomy**; forced absenteeism/ dropouts breach this right. MHH integral to **life with dignity**, covering **privacy** & **reproductive health**.
- **Article 14**: Ignoring biological needs creates **structural exclusion**; **substantive equality** requires addressing these disadvantages.
- **RTE Act, 2009**:
  - "Free education" includes removal of **financial barriers** like sanitary product costs. **Separate toilets** are a **substantive constitutional requirement**; non-provision is a **constitutional failure**.

Directions Issued by SC

- **Accountability & Feedback**: **DEOs** to conduct inspections and collect **anonymous student feedback**. NCPCR/State CPCRs to oversee implementation; SC directions + **Union MHM Policy** to act as **mandatory pan-India standards**.
- **Provision of Products**: All schools (govt & private) to provide **free oxo-biodegradable sanitary napkins** via **vending machines**.
- **MHM Corners**: Dedicated corners with **spare innerwear, uniforms, disposable bags**.
- **Sanitation Infrastructure**: Functional, gender-segregated toilets with water & soap at all times.
- **Waste Management**: Disposal as per **Solid Waste Management Rules, 2026**.
- **Male Sensitisation & Training**: NCERT/SCERTs to include **gender-responsive curricula**. **All teachers** to be trained to support menstruating students.

NFHS-5– 77.3% of women (15–24 yrs) use **hygienic menstrual methods**; ~**25**% still lack **basic menstrual support**

Key Challenges in Implementing the MHH Guidelines	Suggestions
- **Infrastructure Gaps**: Toilets lack **water, soap, disposal** & **vending machine maintenance**, especially in rural areas. No **cleaning staff/ O&M budgets** → facility deterioration. - **Procurement & Supply Constraints**: Scaling **affordable oxo-biodegradable pads** is logistically difficult. **No earmarked funding** may strain education budgets. - **Unsafe Waste Disposal Risks**: Lack of **technical capacity** & **standard protocols** for incinerators risks **non-compliance**. - **Feedback Authenticity Concerns**: Fear & hierarchy may limit **honest student feedback**. Despite WHO guidelines, schools often reinforce **gender taboos**, causing **stigma, embarrassment, exclusion**.	- **Inclusivity**: Include **trans-men** & **non-binary individuals**. - **Sashaktikaran**: Use **SHGs** for local production of **biodegradable napkins**. - **Assured Water Supply**: Link school toilets to **Jal Jeevan Mission** for 24/7 water. - **Privacy-First Design**: Add **privacy screens, latches, mirrors, hooks** in toilets. - **DBT Alternative**: Use "**Pad Credits**"/**DBT** where supply chains fail. - **Waste Disposal**: Engage **Safai Mitras** via **Swachh Bharat Mission** for safe disposal. - **Standard Procurement**: Centralised procurement cell to ensure that all napkins distributed meet the **ASTM D-6954** or **IS 17518** standards

"The recognition of menstrual health as a fundamental right marks a shift from welfare to entitlement." Examine this statement in light of Article 21

Drishti Mains Question

Corruption Perception Index 2025

Transparency International released **CPI 2025**, assessing **182 countries** on perceived public sector corruption (scale: **0 = highly corrupt, 100 = very clean**). The report analyses **global corruption trends, drivers, impacts & recommendations**.

Key Findings of the Corruption Perception Index (CPI) 2025

- **Global Average Decline:** For the first time in more than a decade, the global CPI average has dropped to just 42 out of 100. The vast majority of countries (122 out of 182) score below 50, indicating serious corruption problems worldwide.
- **Shrinking High Performers:** The number of countries scoring above 80 has shrunk from 12 a decade ago to just 5 this year (Denmark, Finland, Singapore, New Zealand, Norway).
- **Top and Bottom Performers:** Denmark (Score - 89) ranks highest for the 8th consecutive time, while Somalia and South Sudan (9) are at the bottom. Venezuela (10) and other conflict-affected or repressive regimes populate the lowest tiers.

- **India's Position:**
  - In 2025, India ranked 91st on the Corruption Perceptions Index (CPI) with a score of 39/100, improving slightly from its 96th rank in 2024.
  - India (score 39, rank 91) outperforms most South Asian neighbors but lags behind Bhutan (71, 18), and China (43, 76).
  - India is tied with the Maldives (39, 91). Others rank lower: Sri Lanka (35, 107), Nepal (34, 109), Pakistan (28, 136), Bangladesh (24, 150), with Afghanistan and Myanmar (16, 169).
- **Regional Averages:**
  - Full democracies average 71, flawed democracies average 47, and authoritarian regimes average just 32, demonstrating the strong correlation between democratic institutions and corruption control.

Transparency International

- **About:** Transparency International (TI) is a premier global civil society organization dedicated to combating corruption by promoting transparency, accountability, and integrity across government, business, and civil society worldwide.
  - It was founded in 1993 and headquartered in Berlin, Germany.
- **Core Mission:**
  - The organization envisions a world free from corruption, which it defines as "**the abuse of entrusted power for private gain.**" Its work spans government, business, civil society, and daily life.
- **Flagship Publication:**
  - The organization is best known for its annual Corruption Perceptions Index (CPI). It also produces the Global Corruption Barometer.

Causes of Corruption Identified in the Report

- **Weak Justice & Rule of Law:**
  - Politicised judiciary, prosecutorial interference, poor resourcing, lack of independence → **impunity & protection of elites**.
- **Undue Political Influence:**
  - Opaque financing, unregulated lobbying, conflicts of interest → **grand corruption & state capture**.
- **Shrinking Civic Space & Media Freedom:**
  - Restrictive NGO laws, censorship, violence against journalists (**829 killed since 2012**) → weakened accountability.
- **Public Financial Management Failures:**
  - Weak oversight in budgeting, procurement, debt management; patronage networks → **bribery & fund diversion**.

Consequences of Corruption

- **Erosion of Justice & Human Rights:**
  - Impunity weakens rule of law; denies remedies, especially to marginalised groups; reinforces corruption cycle.
- **Democratic Decline & State Capture:**
  - Weakens elections, parliaments, oversight; leads to policy capture, polarisation, authoritarian drift.
- **Suppression of Civic Space & Media:**
  - Attacks on journalists/civil society reduce accountability; corruption remains hidden.
- **Deterioration of Public Services & Inequality:**
  - Diverted funds harm healthcare, education, infrastructure; unofficial payments burden poor; trigger social unrest (e.g., **Gen-Z-led protests** that toppled governments in **Nepal** & **Madagascar** in **2025**).
- **Broader Economic & Social Impacts:**
  - Economic instability, reduced investment, climate fund diversion, public discontent; risk of fragility & conflict.

Recommendations Suggested
in the CPI 2025 to Curb Corruption

- **Independent & Transparent Justice Institutions:**
  - Insulate judicial appointments from political interference; adequately resource courts; enable victims to seek remedies.
- **Tackle Undue Influence on Political Decision-Making:**
  - Transparent political financing, donation caps, lobbying disclosure, conflict-of-interest management.
- **Easy Access to Justice:**
  - Provide direct/representative legal pathways, especially for marginalised groups.
- **Foster Civic Space & Anti-Corruption Reporting:**
  - Safeguard freedom of expression, journalists, whistleblowers, NGOs; ease funding access.
- **Financial Transparency & Oversight:**
  - Strengthen parliamentary scrutiny, audits, procurement and borrowing oversight; ensure inclusive participation.
- **Enforcement & Cooperation:**
  - Prevent, detect, punish corruption; seize stolen assets; curb cross-border money laundering; enhance multilateral action.

What are the socio-economic consequences of corruption on public service delivery and inequality?

Drishti Mains Question

REPORTS & INDICES

Network Readiness Index Report 2025

India improved by **4 ranks**, reaching **45th position** in **NRI 2025**, released by the **Portulans Institute** (non-profit research institute in Washington, DC).

- **Coverage**: 127 economies, **53 indicators**, under **4 pillars** – Technology, People, Governance, Impact
- **India's Score**: Improved from **53.63 (2024)** to **54.43 (2025)**
- **Global Leadership:**
  - **1st Rank:** Annual telecom investment, AI scientific publications, ICT services exports, E-commerce legislation
  - **2nd Rank:** FTTH/building internet subscriptions, Mobile broadband traffic, International internet bandwidth
  - **3rd Rank:** Domestic market scale, Income inequality
- **Income Group Rank**: **2nd among lower-middle-income countries**, after Vietnam

Chirality-Based Electronics

A study in **Nature** demonstrated a device that separates **electrons by chirality (handedness)** without strong magnetic fields, advancing **low-power device** development.

- **Chirality in Electrons:** In **topological semimetals**, electrons have **left- or right-handed chirality** (mirror-image quantum states).
  - Chirality denotes a **specific quantum state** of electrons moving in a crystal lattice.
- **Semimetals (Metalloids):** Brittle, **metallic appearance**, but **non-metal chemical properties**. Poor electrical/thermal conductors; act as **semiconductors**. Form **amphoteric oxides**.
- **Problem in Detection:** **Chiral electrons** mix with **non-chiral electrons**. Earlier methods needed **strong magnetic fields or chemical doping**, limiting large-scale use.
- **Role of Band Structure (Quantum Geometry):** Electron motion in crystals is governed by **band structure**. In **Palladium Gallium (PdGa)**, a **twisted band structure** causes sideways drift. **Drift direction depends on electron chirality**.

- **Device Mechanism:** Fabricated a **three-armed device**.
  - Current through **PdGa** uses its **quantum geometry** as a valve.
  - **Left-handed electrons** diverted to one arm, **right-handed** to another — demonstrating a **chiral valve**.
- **Path to Applications:** Potential for **low-power computing** and **novel magnetic memory devices**.

Desert Dust Bacteria's Impact on Himalayan Health

A recent study found that **pathogens carried by desert dust plumes from western India** reach the **Eastern Himalayas**, linked to **respiratory, skin & gastrointestinal diseases**.

- **About:** Conducted by **Bose Institute** (autonomous institute under **DST**). Based on **2+ years of continuous monitoring** of dust storms from arid western India.
  - Aimed to study impact of **airborne microbes via transboundary dust** in the **cold, low-oxygen Himalayan environment**.
- **Key Findings:** Dust storms travel **hundreds of kilometres**, crossing the **Indo-Gangetic Plain** before settling over Himalayan hilltops. Plumes carry **airborne bacteria**, including **pathogens**.
- **Mechanism of Spread:** Dual process– **Horizontal long-range transport** of desert dust with pathogens. **Vertical uplift** of polluted air from Himalayan foothills.
  - Alters **atmospheric bacterial community** in high-altitude regions.
- **Significance:** First quantitative study linking **transboundary dust transport** to changes in **Himalayan atmospheric microbiology** & public health risks. Inputs for **national health action plans** and **early warning systems** under **Viksit Bharat @ 2047**.

Nitric Oxide Against Drug-Resistant Pneumonia

A study found that **high-dose inhaled nitric oxide (300 ppm)** significantly reduces **drug-resistant pneumonia**, offering a potential strategy against **AMR**.

- **Drug-resistant pneumonia**, esp. due to **Pseudomonas aeruginosa**, is a major ICU complication, causing **~20% of hospital pneumonias**.

Drug-resistant Pneumonia

- **About: Inflammatory infection of lung alveoli** caused by bacteria resistant to one or more commonly used antibiotics.

- **Clinical Implications:** Delayed response to treatment, **prolonged hospitalization**, higher risk of **sepsis & mortality**.

Key Pathogens	Description / Clinical Association Impact
Streptococcus pneumoniae	Leading cause of **community-acquired bacterial pneumonia**.
Methicillin-resistant Staphylococcus aureus (MRSA)	Frequently implicated in **hospital-acquired** or healthcare-associated pneumonia.
Gram-negative bacteria (Pseudomonas aeruginosa, Klebsiella pneumoniae)	Common in **hospital-acquired pneumonia** (**HAP**) & **multidrug-resistant** cases.

Nitric Oxide

- **About: Colorless gas**, classified as an oxide of nitrogen.
  - **Stable free radical** with unpaired electron; highly reactive, **short half-life (seconds–minutes)**.
  - **Diffuses easily** across cell membranes.

- **Endogenous Production:** In mammals, it synthesized from **L-arginine** by **NO synthases** in mammals.

- **Key Physiological Functions**:

System	Key Function of Nitric Oxide (NO) Functions
Cardiovascular	Vasodilator → **increases blood flow**, lowers BP, inhibits platelet aggregation.
Nervous	Neurotransmitter/neuromodulator → **regulates synaptic plasticity** and memory formation.
Immune	Exerts antimicrobial & antitumor activity by **disrupting pathogen metabolism.**

- **Medical & Therapeutic Relevance**: Identified as **endothelium-derived relaxing factor (EDRF)**. Discovery led to the **1998 Nobel Prize in Physiology**.

AWARDS & HONOURS

Padma Awards 2026

On the eve of the 77th **Republic Day 2026**, the **President** approved the 2026 **Padma awards** list of **131 recipients**, comprising 5 Padma Vibhushan, 13 Padma Bhushan, and 113 Padma Shri awards.

- The **major awardees include** actor Dharmendra Singh Deol & former Kerala CM VS Achuthanandan, who have been honoured with the Padma Vibhushan posthumously.

Padma Awards

- **Nature**: Among **India's highest civilian honours**, along with **Bharat Ratna**, for **distinguished public service and human endeavour**

- **Instituted**: **1954**; restructured in **1955** into three awards (descending order):
  - **Padma Vibhushan** – *exceptional & distinguished service* (2nd highest civilian award)
  - **Padma Bhushan** – *distinguished service of high order*
  - **Padma Shri** – *distinguished service in any field*

- **Fields Covered**: Art, Social Work, Public Affairs, Science & Engineering, Civil Services, etc.

- **Eligibility**: **Open to all** – Indians, **foreigners, NRIs, PIOs, OCIs**; no bar of profession, rank, or gender.

- **People's Padma**: Since **2014**, focus on recognising **"unsung heroes."**

- **Selection Process**: By **Padma Awards Committee** (appointed annually by PM)
  - **Chair**: Cabinet Secretary; includes Home Secretary, Secretary to President + **4–6 eminent persons**
  - Approved by **PM & President**

- **Announcement & Conferment**: **Announced** on eve of **Republic Day & Conferred** by President (Sanad, medallion, replica). **Years Not Conferred**: 1978, 1979, 1993–97.

- **Key Rules**: Generally **not posthumous** (rare exceptions)
  - **5-year gap** required for higher Padma category. **Not a title**; cannot be used as prefix/suffix.
  - **Cap**: **120 awards/year** (excluding posthumous, NRI, foreign, OCI).

- **Article 18 (1)**: Prohibits State from conferring **titles** to ensure **social equality** (Exceptions: **Military & academic distinctions**)
- **SC (Balaji Raghavan vs UoI, 1996)**: Padma awards **not titles**
- **SC (Indira Jaising vs UoI, 2017)**: 'Senior Advocate' is **professional distinction**, not a title.

IMPORTANT DAYS

Birth Anniversary of Chhatrapati Shivaji Maharaj

Union Home Minister paid tribute to **Chhatrapati Shivaji Maharaj** on his birth anniversary (19th Feb).

- **About:** Born on 19th Feb 1630, **Shivneri Fort (near Pune)**. **Founder of Maratha Empire**; resisted Mughal rule; championed self-governance.

- **Major Battles:** Pratapgad (1659), Pavan Khind (1660), Surat (1664), Purandar (1665), Sinhagad (1670), Sangamner (1679).
  - **Wagh Nakh:** Used to kill **Afzal Khan** in **Battle of Pratapgad**.

- **Vision of Hindavi Swarajya:** Pledged to establish **Hindavi Swarajya (Self-Rule)** based on indigenous sovereignty, ethical governance, and freedom from foreign rule.

- **Promoted Swadharma, Swaraj, & Swabhasha**; replaced Persian with Marathi & Sanskrit in administration.
- **Military & Naval Genius:** Built an inclusive army from all sections of society. Pioneered **Guerrilla Warfare tactics (Ganimi Kava)**.
  - Known as **"Father of the Indian Navy"**, developed strong naval fleet & coastal forts (e.g., **Sindhudurg**) to secure the western coast.
- **Progressive Administration:** Governed through **Ashtapradhan Mandal** (Council of Eight Ministers).
  - Introduced **direct revenue assessment and collection** from cultivators, reducing intermediary exploitation.
- **Titles:** Chhatrapati, Shakakarta, Kshatriya Kulavantas, Haindava Dharmodhhaarak.

World Day of Social Justice 2026

Department of Social Justice & Empowerment marked **World Day of Social Justice (20th Feb 2026)**, reaffirming commitment to **social, economic, and political justice**, and the constitutional ideals of **liberty, equality, and fraternity**.

- **Observed:** 20th Feb; UN platform to promote **poverty eradication, decent work, gender equality, social inclusion**.
- **Theme 2026:** *"Renewed Commitment to Social Development and Social Justice."*
- **Origin:** Based on **1995 Copenhagen Declaration**; proclaimed by **UNGA (2007)**; first observed in **2009**.
- **Pillars of Social Justice:**
  - **Participation:** Enabling involvement in political, economic, and social life
  - **Access:** Ensuring resources and opportunities for all
  - **Rights:** Protecting human rights for everyone
  - **Diversity:** Valuing and respecting differences
  - **Equity:** Recognizing diverse needs and circumstances
- **Key Institutions:**
  - **ILO:** Promotes **Decent Work Agenda**; adopted **Declaration on Social Justice for a Fair Globalization (10 June 2008)**.
  - **UNDESA:** Focuses on policy integration; civil society advocates mainstreaming social justice in economic, labour, climate, and digital policies.
- **SDG Linkages: SDG 1** (No Poverty), **SDG 8** (Decent Work), **SDG 10** (Reduced Inequalities).

Death Anniversary of Pt Deendayal Upadhyaya

VP paid tribute to **Pandit Deendayal Upadhyaya** on his death anniversary (11th Feb 1968).

- **About:** Born on **25th Sept 1916**; Indian **politician, philosopher & ideologue** of **RSS** & **Bharatiya Jana Sangh (BJS)** (predecessor of BJP).

- **Focused on Antyodaya:** Uplifting the **last person** & most disadvantaged.
  - **Integral Humanism:** Emphasised **welfare, social justice, economic equality & self-reliance**.
- **Recognition: 25 Sept** observed as **Antyodaya Diwas** (since **2014**). **NRLM** renamed **Deendayal Antyodaya Yojana–NRLM (2015)**. **Mughalsarai Junction (UP)** renamed after him (**2018**).

Birth Anniversary of Zakir Hussain

President paid **tribute to Dr. Zakir Husain on 8th Feb**, honouring his role in education & democracy.

- **About:** Born on 8th Feb 1897; educated at **Hyderabad & AMU**, PhD in Economics.
- **Contributions: Co-founded** Jamia Millia Islamia (originally in Aligarh– National Muslim University).
  - **Vice-Chancellor of Jamia & AMU**; promoted inclusive education.
  - Active in **freedom struggle**; championed **education for nation-building**.
  - Chaired **National Committee on Basic Education (1937)** on Gandhi's request.
  - Member, **UNESCO Executive Board** (b/w 1956 & 1958).
- **Public Offices Held**: **Governor of Bihar** (1957–62), VP (1962–67), **India's 3rd President (1967–69)** — **1st Muslim President**.
- **Death**: 3rd May 1969; **first President to die in office**, succeeded by **V. V. Giri**.

Birth Anniversary of Shri Guru Ravidas Maharaj ji

PM paid tribute to **Shri Guru Ravidas Maharaj ji** on his 649th birth anniversary on Purnima Tithi of the Magha month (falling on 1st February 2026).

- **Birth**: c. 1450–1520, **Seer Goverdhanpur (Varanasi)**; belonged to **Chamar community**.
- **Spiritual Lineage**: Disciple of **Ramananda**, contemporary of **Kabir**, guru of **Meera Bai**.
- **Philosophy**: Advocated **Nirguna Bhakti** (formless God), rejected rituals and **Saguna worship**.
  - Imagined **Beghumpura** – an **egalitarian, sorrow-free society**.
  - Emphasized **Sahaj** – mystical oneness of truth.
  - Critiqued **Brahminical orthodoxy** and **caste discrimination**.
- **Literary Contributions**: Hymns in common language; included in **Guru Granth Sahib** and **Panchvani**.
- **Legacy**: Foundation of **Ravidassia religion**; holy book: **Amrit Bani Guru Ravidass**.

Raising Day of ICG

PM lauded the **Indian Coast Guard** on its **Raising Day** for its role in **maritime security**, **disaster response** & **marine ecosystem protection**.

- **Established**: 1st **Feb 1977**; based on the recommendations of **Nag Committee (1970)** & **Rustamji Committee (1974–75)**.
- **Legal Status**: Independent armed force under **Coast Guard Act, 1978**; motto: "**Vayam Rakshamah**".
- **Strategic Necessity**: Counter **sea-borne smuggling**, protect **offshore assets** (e.g., Mumbai High), and police **EEZ** under **UNCLOS**.
- **Head**: Director General Indian Coast Guard (**DGCG**), HQ in **New Delhi**.
- **Zones**: Divided into **Eastern & Western Seaboards** with **5 Regions** – (North-West, West, East, North-East, and Andaman & Nicobar) with HQs at **Gandhinagar, Mumbai, Chennai, Kolkata & Port Blair**; each led by an **Inspector General**.
- **Mandate**: Safeguard **offshore resources**, enforce **maritime laws**, aid mariners, protect marine environment, collect scientific data, and support Navy in war.

National Leprosy Day

On **National Leprosy Day** (last Sunday of January), the Ministry of Health conducted an **IEC** outreach programme related to **leprosy**.

Leprosy

- **About: Chronic infectious disease** caused by **Mycobacterium leprae**.
  - Affects **skin and peripheral nerves**; spreads via droplets from **untreated cases**.
  - **Curable** with **WHO-provided free Multidrug Therapy (MDT)**.
- **India's Status:** Achieved **elimination (<1/10,000 PR)** in **2005**; **PR in 2025: 0.57**.
- **Key Symptoms:** Reddish patches with sensory loss, thickened nerves, numbness, ulcers, muscle weakness.
  - **Advanced signs:** Claw hand, foot drop, facial nodules, nasal bleeding, loss of eyebrows.
- **India's Leprosy Elimination Programme Evolution:** NLCP (1954-55) → NLEP (1983) → National elimination in 2005.
- **Current Strategy: NSP 2023–2027**, aligned with **WHO Global Leprosy Strategy (2021–2030)**.
  - **Targets:** Interrupt transmission by 2027, End transmission by 2030, Recover from Covid-related setbacks.

161st Birth Anniversary of Lala Lajpat Rai

PM paid tribute to **Lala Lajpat Rai** on his 161st birth anniversary on **28th January**.

Lala Lajpat Rai

- Born on **28 Jan 1865** in **Dhudike, Punjab**; known as **"Punjab Kesari"**.
- Studied **law in Lahore**; influenced by **Swami Dayananda Saraswati** and joined **Arya Samaj**.
- Part of the **Lal-Bal-Pal** trio of **extremist nationalist leaders**.
- Authored **Young India**, **England's Debt to India**, **India's Will to Freedom**, and *Message of the Bhagavad Gita*.
- Co-founded **Punjab National Bank (1894)**; promoted **education and social reform**.
- **Died in 1928** due to **lathi-charge injuries** during protest against **Simon Commission**.

DEFENCE & SECURITY

Exercise MILAN 2026

Indian Navy has set up a dedicated **MILAN Village** in Visakhapatnam for cultural & social interactions during the **13th Exercise MILAN 2026 (15th–25th Feb 2026)**.

- The exercise will see participation from **70+ countries**, including first-time participants — Germany, Philippines & UAE.
- **Type:** Biennial multilateral naval exercise; **Launched: 1995** under Andaman and Nicobar Command
- **Initial Participants: Indonesia, Singapore, Sri Lanka, Thailand.** Now, among the largest maritime engagements in the **Indo-Pacific region**

Anjadip Vessel

Indian Navy to commission **Anjadip**, an indigenous **Anti-Submarine Warfare Shallow Water Craft (ASW-SWC)**, at **Eastern Naval Command, Chennai Port**, boosting anti-submarine capability in littoral waters.

- **Anjadip**: 3rd **of 8 ASW-SWC** ships; boost to **Aatmanirbhar Bharat** in defence.
  - Built by Garden Reach Shipbuilders & Engineers (GRSE)**, Kolkata**.
  - Milestone in Navy's shift towards a **"Builder's Navy"** (self-reliant warship construction).
- **Role: "Dolphin Hunter"** – detect, track, neutralize enemy submarines in coastal waters.
- **Indigenous systems:** Hull Mounted Sonar 'Abhay', Lightweight Torpedoes, ASW Rockets.
- **Capabilities:** Coastal Surveillance, Low-Intensity Maritime Operations (LIMO), Search & Rescue (SAR). **Water-Jet Propulsion**; top speed **25 knots**.

- The vessel is named after **Anjadip Island (Goa)** in **Arabian Sea**; claimed by **Vasco da Gama as Portuguese crown territory (24th Sept 1498)**.

Exercise Vajra Ghaat

Indian Army conducted **Exercise Vajra Ghaat** at the **Pokhran Field Firing Range, Jaisalmer**, showcasing the operational readiness of the **K9 Vajra self-propelled artillery system** in desert conditions.

- **Objective**: Validate refined **Tactics, Techniques and Procedures (TTPs)** to enhance battlefield survivability & operational effectiveness.
  - Led by **White Tiger Division**; demonstrated rapid deployment of heavy artillery in **Thar Desert** terrain.
- **Outcome**: Strengthens Army's combat posture in the western sector.
- **K9 Vajra: Tracked self-propelled howitzer**, derived from **South Korea's K9 Thunder**. Designed for **long-range fire with a high rate of accuracy**.
  - Compatible with **Indian & NATO-standard ammunition**. Features **all-welded steel armour**.
  - Procured under **'Buy Global' category** of the **Defence Procurement Procedure**.

India–Thailand Air Exercise

IAF conducted an **in-situ exercise** with the **Royal Thai Air Force (RTAF)** in the **Indian Ocean Region**, strengthening ties under **India's Act East Policy (2014)**.

- **Exercise Overview: IAF Deployed** —Su-30MKI, IL-78 tankers, AWACS.
  - **RTAF**— Participated with **SAAB Gripen jets**.
- **In-situ Format**: IAF operated from **Andaman & Nicobar Islands**. Thai Gripens operated from bases in **Thailand**.
- **Significance**: Deepens **Act East Policy (2014)** partnership. Complemented by Thailand's **Act West Policy (2016)**, aligned through maritime proximity.

India Leads CTF-154 Maritime Training Force

Indian Navy assumed command of **CTF-154 (under CMF)** for the first time, boosting India's role in **multinational maritime security training**.

CTF-154

- **Established: May 2023**, under **Combined Maritime Forces (CMF)**.
  - Multinational task force for **maritime security training & capacity building** in **Middle East and wider region**.
- **CMF: HQ - Bahrain**; **Members: 47 nations**.
- **Training Focus:** Maritime Domain Awareness, Law of the Sea, Maritime Interdiction Operations, Maritime Rescue & Assistance and leadership development.

- **Composition:** Core staff from **Canada, Egypt, Jordan, Seychelles, Turkey, USA**
- **Role:** It operates alongside **CTF-150** (maritime security), **CTF-151** (counter-piracy), **CTF-152** (Arabian Gulf security) and **CTF-153** (Red Sea security).
- **Exercises:** Maritime Security Enhancement Training; Compass Rose; Northern/Southern Readiness Exercises to counter piracy, illegal trafficking, irregular migration.

IAF to Train British Pilots

IAF to train British pilots at RAF Valley (UK) for the first time; decision taken during the 19th UK–India Air Staff Talks.

- **Deployment: 3 IAF Qualified Flight Instructors** to be posted at **RAF Valley** for **2 years** to train British fast-jet pilots on **Hawk T2** and **Texan T1**.
  - **Earlier Step:** First-ever **IAF officer** deployed as instructor at **RAF College Cranwell** (trains RAF officers).
- **Broader Engagement:** Indian officers now instructors at all three UK academies — **Dartmouth (Navy), Sandhurst (Army), Cranwell/RAF (Air Force)**.
- **Strategic Significance:** Boosts **interoperability, mutual trust**, and long-term defence ties under **UK–India Vision 2035**.
- **Military Exercises: Cobra Warrior**; **Ajeya Warrior**; Tarang Shakti.

Indigenous Dogs for Assam Rifles Dog Squad

Assam Rifles plans to phase out foreign dog breeds by **2050**, in line with the **2025 MHA directive** to induct more **Indian canine breeds** into armed forces' dog squads.

- **Tangkhul Hui:** Native to **Ukhrul (Manipur)**; disease-resistant; traditionally used for hunting.
- **Kombai:** Indigenous breed from **Tamil Nadu**; identified as partner breed.
- **Training:** Conducted at **Assam Rifles Dog Training Centre, Jorhat** (only such facility).
- **Role:** Detection of **arms, explosives, narcotics**—mainly in **Northeast & J&K**.
- **Transition Plan:** Currently uses **Belgian Malinois, German Shepherd, Labrador**; aims for full indigenous induction by **2027** and gradual phase-out of foreign breeds by **2050**.

Assam Rifles

- **Type:** Central Armed Police Force (CAPF); **India's oldest paramilitary force**.
- **Role:** Counter-insurgency in **Northeast**; guarding **Indo–Myanmar border**.
- **Origin:** Established in **1835** as **"Cachar Levy."**
- **Control:** Dual control — **MHA (administrative)** and **MoD (operational)**.

P-8I Anti-Submarine Warfare

Defence Procurement Board cleared proposal to acquire **6 more Boeing P-8I Poseidon** aircraft from the **US** to boost **Indian Navy's surveillance & combat** in the **Indian Ocean Region**.

- **No Offsets Clause:** Deal under **India–US Inter-Governmental Agreement (IGA)** framework.
  - Processed under **DAP 2020**, which removed **offset requirements for IGAs**; no **technology transfer or co-production**.
  - Prioritizes **strategic & operational urgency** over **domestic industrial participation**.
- **Boeing P-8I:** Multi-mission, long-range maritime patrol aircraft for ASW, Anti-Surface Warfare, ISR, Maritime Domain Awareness, and Search & Rescue.
  - Indian Navy operates **12 P-8I** aircraft at **INS Rajali (INAS 312)** & **INS Hansa (INAS 316)**.
- **Other US Deals:** Include procurements of **M982A1 Excalibur projectiles**, **Javelin missiles**, and **sustainment support for MH-60R helicopters**.

Intermediate Range Ballistic Missile Agni-III

Agni-III, an **Intermediate Range Ballistic Missile (IRBM)**, successfully test-fired from Integrated Test Range, Chandipur, Odisha under **Strategic Forces Command**; validated all **operational & technical parameters**.

- **Agni III:** Developed by **DRDO**; **two-stage**, solid-fuelled ballistic missile
  - **Range**: Over **3000 km**; **payload**: **1.5 tonnes**, with an estimated yield of **200–300 kilotons**
  - Capable of carrying **conventional & nuclear warheads**
  - **Surface-to-surface**; deployable from **rail & road mobile launchers**.

Agni Series

- Conceptualised in the **1980s as a part of Integrated Guided Missile Development Program (IGMDP)**, forms core of **nuclear deterrence**.
  - Started with a **two-stage technology demonstrator tested in 1989**. Evolved into– **Agni-I**: 700–1,250 km; **Agni-II**: 2,000–2,500 km; **Agni-III**: 3,000–3,500 km. All are **solid-fuel**, **mobile** & **Army-inducted**.
  - **Agni-IV**: Tested in **2014**; **two-stage IRBM** with **3,000–4,000 km** range; features **advanced indigenous systems**; currently in **field trials**.
  - **Agni-V**: **Intercontinental Ballistic Missile-class missile**, ~5,000+ km, canisterised, road-mobile launch.
  - **Agni-VI**: Under development; **8,000–10,000 km**; **land & submarine launch**; boosts **second-strike capability**.

- **Agni Prime**: New-gen, nuclear-capable, **1,000–2,000 km, two-stage canister missile**; **lighter** than earlier Agni missiles.

Exercise KHANJAR

13th India-Kyrgyzstan Joint Special Forces Exercise KHANJAR began in Missamari, Assam.

- **Exercise KHANJAR: Started in 2011**; held **annually**, alternately in India & Kyrgyzstan.

- **Indian Army**: Parachute Regiment (SF); **Kyrgyzstan Contingent**: ILBRIS Special Forces Brigade
- **Kyrgyzstan:** Landlocked Central Asian country; borders **Kazakhstan, China, Tajikistan, Uzbekistan**; Capital– **Bishkek**.
  - Shares **Fergana Valley** with **Uzbekistan & Tajikistan** – key to **regional stability**.
  - **Fergana Valley** rich in **hydrocarbons**; vital for India's energy security & strategic interests.

Mahatma Gandhi's Death Anniversary

The PM paid **homage** at **Gandhi Smriti** on **Mahatma Gandhi's** 78th death anniversary (30th January).

Gandhi Punyatithi / Martyrs' Day

- **Date of Assassination: 30 Jan 1948**, at **Birla House**, New Delhi by **Nathuram Godse**.
  - **Godse Executed: 15 Nov 1949**, Ambala Jail.
- **Mahatma Gandhi Born: 2 Oct 1869** – observed as **International Day of Non-Violence** (UN, 2007).
- **Commemoration: Martyrs' Day / Gandhi Punyatithi** – tributes at **Raj Ghat**. Also marked as **Sarvodaya Day** (Gandhian principle: upliftment of all).

Discombobulator

In Operation Absolute Resolve (Venezuela), the US used the Discombobulator weapon to disable enemy defenses.

- **About:** Discombobulator is a deployment of multiple non-lethal and electronic warfare technologies.

- **Anti-Personnel Capabilities (Disorientation):**
  - **ADS (Active Denial System):** Heat ray causing intense skin burn to disperse crowds.
  - **Acoustic Devices (LRAD):** Sonic cannons inducing nausea, vertigo, confusion.
  - **Visual Dazzlers:** High-intensity lasers causing temporary blindness.
  - **Vortex Ring Generator:** Delivers stink bombs or impact pulses to cause nausea.
- **Anti-Infrastructure Capabilities (Disabling Equipment):**
  - **Electronic Warfare (EW):** Jams air defenses, radars, sensors.
  - **CHAMP:** Microwave missile frying electronic circuits.
  - **Graphite Munitions:** Disables power grids by short-circuiting.
- **Cyber Warfare (Suter Programme):**
  - **Suter 1:** Monitors enemy radar.
  - **Suter 2:** Takes control of enemy sensors.
  - **Suter 3:** Hacks missile control links.

Long Range Anti-Ship Hypersonic Missile (LR-AShM)

At the **77th Republic Day Parade**, **DRDO** showcased the **LR-AShM** for the **first time.**

- **Type:** A **hypersonic glide missile** with **quasi-ballistic trajectory.**
- **Speed**: Reaches **Mach 10**, averages **Mach 5** with atmospheric "skips".
- **Range and Targets:** Engage both static and moving targets with **1,500 km (**up to **3,500 km)** range.
- **Stealth**: **Low-altitude, high-speed, manoeuvrable** flight makes it hard to detect/intercept.
- **Propulsion**: **Two-stage solid rocket motor**; glides unpowered in final phase.
- **Efficiency**: **High aerodynamic performance** ensures **range, speed, accuracy**.
- **Role**: **Sea-denial weapon** for **Indian Navy**, targeting warships in **IOR**.
- **Status**: Test successful (**Nov 2024**); induction expected in **2–3 years**; **Army, Air Force, naval variants** under development.

Indian Navy's First Training Squadron Visits Thailand

As part of the ASEAN–India Year of Maritime Cooperation (2026), the Indian Navy's 1st Training Squadron docked at Phuket, Thailand, for a Southeast Asia training deployment.

- **Key Activities**: **Professional exchanges**, **PASSEX** during 1TS deployment.

- **Existing Initiatives**: **Ex Ayutthaya**, **Indo–Thai CORPAT**, **SITMEX** (India–Thailand–Singapore).
- **Policy Alignment**: Supports **India's MAHASAGAR vision**.
- **Significance**: Reinforces India's role as a **responsible maritime partner** in the **Indian Ocean Region (IOR)**.

> India is set to assume the **Chair of the Indian Ocean Naval Symposium** (**IONS**) from Thailand in Feb 2026.

DRDO Successfully Demonstrates SFDR Technology

DRDO successfully conducted a **flight demonstration of Solid Fuel Ducted Ramjet (SFDR)** technology from **ITR, Chandipur (Odisha)**, placing **India among a select group of nations** with SFDR capability crucial for **long-range air-to-air missiles**.

- **SFDR: Air-breathing missile propulsion** using **atmospheric oxygen to burn solid fuel**; enables sustained supersonic speed & extended range.
- **Working:**
  - **Nozzle-less Booster**: Accelerates to supersonic speed in **3 seconds**.
  - **Ducted Ramjet Sustainer**: Burns **boron-based solid fuel** using atmospheric oxygen; powers flight for **50–200 seconds**.
  - **Hot Gas Valve**: Regulates combustion gases; made of **carbon-carbon composites** & **tungsten-copper alloys**.
  - **Cheek-Mounted Air Intakes**: Compress incoming air for sustained combustion.
- **Key Performance Metrics:**
  - **Altitude Flexibility**: Operates from **sea level to 20 km**.
  - **High Manoeuvrability**: Executes vertical manoeuvres up to 10 km.
  - **Precision Targeting**: Equipped with **radio-frequency seekers**, inertial navigation, and jam-resistant data links.
  - **Sustained Supersonic Speeds**: Maintains **Mach 2 to Mach 3.8** for longer durations.
  - **Extended Range**: **50 km to 340 km**; enables **beyond visual range (BVR)** engagement; operational range b/w **50 km & 340 km**
  - **Lethality**: Carries fragmentation warhead with proximity fuse for aerial targets.
- **Significance:**
  - **Larger No-Escape Zone**: Sustained speed till terminal phase reduces enemy evasion.
  - **Operational Versatility**: Applicable to **air-to-air** & **surface-to-air** missile systems.
  - **Strategic Boost**: Backbone of **Astra Mk-3 (BVRAAM)**; aimed to rival Euroepan **Meteor** & Chinese **PL-15**.
  - **Tactical Edge**: Enables **IAF** with **"First Look, First Kill"** capability from standoff ranges.

Feature	Ramjet	SFDR	Scramjet (Supersonic Combustion Ramjet)
Combustion	**Subsonic** (Air slows down inside engine)	**Subsonic** (Air slows down inside engine)	**Supersonic** (Air flows fast inside engine)
Fuel Type	Liquid Fuel (mostly)	**Solid Fuel** (Boron-based)	Liquid Hydrogen
Oxidizer	Atmospheric Oxygen	Atmospheric Oxygen	Atmospheric Oxygen
Primary Use	Cruise Missiles (e.g., BrahMos)	Air-to-Air Missiles (e.g., Astra Mk3)	Hypersonic Vehicles (e.g., **Hypersonic Technology Demonstrator Vehicle** (**HSTDV**))

SUMMITS & CONFERENCES

India–Germany Cooperation in Telecom and Digital Transformation

India & Germany held a meeting to advance cooperation in **telecommunications and digital transformation** under the **Indo-German Strategic Partnership**, building on the **Joint Declaration of Intent (JDI)** signed at the **India–Germany Summit 2026**.

- **JDI Framework:** Forward-looking, **non-binding framework** for telecom & digital governance cooperation. Based on openness, trust, innovation, resilience.
- **India's Digital Transformation Showcase: 1.23+ billion telecom subscribers; ~1 billion internet users**.
  - **5G coverage: ~99.9% of districts**.
  - Data tariffs ~**USD 0.10/GB** (among lowest globally).
  - **UPI: ~250 billion transactions annually**; adopted by partner countries as interoperable payments model.
- **German Technological Expertise:** Advances in **quantum encryption & secure information transport**. Demonstrated quantum communication over 35 km for 11 consecutive days.
- **Priority Areas for Collaboration: 5G/5G-Advanced**, early **6G standardisation**.
  - Network modernisation, trusted telecom architectures, supply chain resilience.
  - **AI at the edge**, industry-grade network slicing, **Open RAN** ecosystems.
- **Multilateral Cooperation:** India sought Germany's support for: Candidature for Director, Radiocommunication Bureau (ITU); Re-election to ITU Council (2027–2030); Hosting ITU Plenipotentiary Conference, 2030

Colombo Security Conclave

India termed **Seychelles joining CSC** as a **strategic step** in expanding **regional maritime security architecture**.

- **About:** Regional security grouping for **Indian Ocean Region (IOR)**
  - Started in **2011** as **India–Sri Lanka–Maldives** trilateral maritime cooperation. **Dormant after 2014; revived in 2020** as **CSC**
- **New Members**: Mauritius (2022), Bangladesh (2024), Seychelles (2025)

- **Permanent Secretariat**: Located in **Colombo, Sri Lanka**
- **Pillars of Cooperation:** Maritime Safety and Security (Core focus); Countering Terrorism and Radicalisation; Combating Trafficking and Transnational Organised Crime; Cyber Security and Protection of Critical Infrastructure; Humanitarian Assistance and Disaster Relief (HADR).
- **Strategic Significance for India**: **CSC** aligns with India's **SAGAR** & **MAHASAGAR** initiatives
  - Reinforces India as **"first responder"** and **net security provider** in IOR
  - Reduces **dependence of island nations** on **extra-regional powers** (e.g. **China**)
  - CSC is **security-focused & operational**, unlike the broader **dialogue-based IORA**

India-Arab Foreign Ministers' Meeting

India hosted the **India-Arab Foreign Ministers' meeting** & held a **security dialogue with Saudi Arabia** amid preparations for the PM's **Israel visit**, reflecting a **diplomatic balancing** act in West Asia.

- **Security Engagement with Saudi Arabia**: 3rd **India–Saudi Arabia Security Working Group meeting** held in Riyadh; focus on terror financing, cyber-terrorism, crime–terror nexus.
  - Mechanism estd. under **Strategic Partnership Council (2019)**; functions under Political, Consular and Security Cooperation Committee of the SPC.
- **Balancing Act with the Arab World:**
  - 2nd **India–Arab Foreign Ministers' Meeting** held in Delhi; attended by **Palestine's Foreign Minister** among others.
  - India backed **Sharm-el-Sheikh Peace Summit (2025)** & **UNSC Resolution 2803** (transitional administration, International Stabilisation Force for Gaza).
  - No response yet to **US invitation** to join **Board of Peace for Gaza**.
  - India flagged instability in **Libya, Sudan, Syria, Lebanon, Yemen**; raised concerns over **maritime security** & **UN peacekeeping role in Lebanon**.
- **Diplomatic Outreach to Iran**: **Deputy NSA visit to Tehran** for meetings with **Iranian security officials**, amid tensions over a possible **US–Israel strike on Iran**.

PLACES IN NEWS

India and France Amend Double Taxation Avoidance Convention

India–France signed an amending protocol to the **Double Taxation Avoidance Convention (DTAC, 1992)**, revising **capital gains taxation**, **Most-Favoured-Nation (MFN) clause**, and incorporating **Base Erosion and Profit Shifting (BEPS) provisions** to enhance tax certainty & boost bilateral investment, technology, and personnel flow.

Key Changes Made in India-France DTAC

- **Capital Gains Taxation:** Full taxing rights to **resident jurisdiction** of the company whose shares are sold.
- **MFN Clause: Deleted** from the Protocol, settling related issues.
- **Taxation of Dividends:** Replaces single **10% rate** with split rate—**5%** (≥10% shareholding) and **15%** (others).
- **Fees for Technical Services' (FTS):** Definition aligned with **India–US DTAA**.
- **Permanent Establishment:** Scope expanded to include **Service PE**.
- **Tax Cooperation:** Updated **Exchange of Information**; new article on **Assistance in Collection of Taxes** as per global standards.
- **BEPS Alignment:** Incorporates applicable provisions of BEPS Multilateral Instrument (MLI) into DTAC.

V.O. Chidambaranar Port

Union Minister of Ports, Shipping and Waterways inaugurated & laid foundation for **₹1,500+ crore** infrastructure and green energy projects at **VOC Port, Tuticorin (TN)**.

- **VOC Port** (earlier **Tuticorin Port**) renamed in **2011** after **V.O. Chidambaranar**, who launched **Swadeshi Steam Navigation Company (1906)**.
- **Artificial, all-weather deep-sea port** on **Coromandel Coast**, in **Gulf of Mannar**.
- Strategically near **East–West international sea route**; key for trade with **Mediterranean, Europe, US**.
- Naturally sheltered from storms/cyclones due to **Sri Lanka** to the southeast.
- **Port Modernisation:** First Indian port to produce & use **green hydrogen on-site** (pilot active since **late 2025**).
  - First to deploy **Digital Twin platform** for real-time operations & predictive maintenance.
  - First (Feb 2026) to implement advanced **anti-drone system** using radar & RF tech.
- **Cultural Preservation:** VOC Maritime Heritage Museum showcases Coromandel maritime history.

- **Outer Harbour Project:** Expansion to handle **mega vessels**; aims to become **South India's transshipment hub**.

Poland's Exit from the Ottawa Convention

Poland has withdrawn from the **1997 Anti-Personnel Mine Ban Treaty (Ottawa Convention)**, reversing its 2012 ratification despite destroying its stockpiles in **2016**.

- **Geopolitical rationale**: To secure the **Eastern Shield** along borders with **Russia (Kaliningrad)** & **Belarus**, amid the **Ukraine invasion**.

- **Ottawa Convention (1997)**: Originated from the **Canadian-led Ottawa Process** after failure of the **1980 Convention on Certain Conventional Weapons Review Conference** to restrict anti-personnel mines.
  - Prohibits **use, stockpiling, production, and transfer** of **anti-personnel mines** due to long-term civilian harm.
- **Types**: Anti-personnel mines – banned under **Ottawa Convention**.
- **Anti-tank mines** – not banned; regulated under **CCW, 1980 – Amended Protocol II (1996)**.
- **Domestic production**: Poland plans **self-sufficient manufacturing** of both types with domestic producers.
  - **Deployment policy**: Mines to remain in **stockpiles**; used only in case of a **"realistic threat of aggression"** to limit civilian risk.
- **Regional trend**: Post Russia's invasion of Ukraine, treaty commitments reassessed; **Poland** joined **Finland, Estonia, Latvia, Lithuania, Ukraine** in announcing withdrawal.
- **Global context**: India, Russia, US among **~three dozen countries** that never acceded to the **Ottawa Treaty**.

Statehood Day of Mizoram and Arunachal Pradesh

On 20th Feb, PM greeted **Arunachal Pradesh** & **Mizoram** on **Statehood Day** (statehood granted on **20 Feb 1987**).

- **53rd Constitutional Amendment Act, 1986** – Statehood to **Mizoram**.
- **55th Constitutional Amendment Act, 1986** – Statehood to **Arunachal Pradesh**.

Mizoram	Arunachal Pradesh
■ **About:** Became **23rd State** on **20th Feb 1987** after **Mizoram Peace Accord (1986)** b/w **GoI & Mizo National Front**; ended insurgency; upgraded from **UT (1972)** to statehood.	■ **About:** Became **24th State** on **20th Feb 1987**; earlier **North-East Frontier Agency (NEFA)**; renamed and made **UT (1972)**.
■ **Historical evolution:** Originally known as **Lushai Hills (Assam)**; renamed **Mizo Hills (1954)**.	■ **Colonial origin:** British control via **Treaty of Yandaboo (1826)** after the First Anglo-Burmese War (1824–1826); **1914 Shimla Treaty** demarcated **McMahon Line** (b/w Tibet & NEFA).
■ **Constitutional status:** Recognised as "tribal area" **under Sixth Schedule (Article 244(2))**, ensuring **tribal rights & autonomy**.	■ **Historical evolution:** Under **Assam's constitutional jurisdiction till 1962**; later made separate **UT** due to strategic importance.

Iran Temporarily Closes the Strait of Hormuz

Iran announced a temporary closure of parts of the Strait of Hormuz for live-fire naval drills, **"Smart Control of the Strait of Hormuz,"** coinciding with the second round of indirect Iran–US nuclear talks in Geneva.

- **Location:** Narrow chokepoint (**55–95 km wide**) b/w **Iran (north)** and **Oman & UAE (south)**.

- Connects **Persian Gulf (West)** to **Gulf of Oman & Arabian Sea (East)**; acts as the only sea outlet of the Persian Gulf.
- **Global energy hub:** ~**20% of global oil & gas** passes through.
  - **Key exporters**– Saudi Arabia, Iran, Iraq, Kuwait, UAE, Qatar.
  - **80%+ exports** destined for **Asian markets** (India, China, Japan, South Korea).

- **Impact on India:** ~**50% of crude oil** and **60% of natural gas imports** pass through the Strait.
- **Alternative Routes:** Saudi Arabia & UAE have bypass pipelines, but capacity is limited and cannot replace full Hormuz transit.
- **Historical Leverage:** Iran threatened closure during **1980s Iran–Iraq Tanker War** and **2012 sanctions on Iran**, but never fully executed a complete shutdown.

Arctic Sentry Mission

NATO announced the launch of **"Arctic Sentry"**, a mission to strengthen its presence in the **Arctic.**

- **About:** Multi-domain mission to strengthen **collective defence, coordination & stability** in the Arctic.
- **Objective:** Protect NATO territory; ensure security of the **Arctic & High North** (Arctic Circle and adjoining northern regions).
- **Feature:** Enhances **surveillance & security**; modelled on **Baltic Sentry** & **Eastern Sentry**.
- **Military Exercises & Preparedness:** Includes **Exercise Cold Response** & UK-led **Lion Protector**. Strengthen defence of **critical infrastructure** and counter-sabotage threats across **Norway, Iceland & Danish Straits**.

Arctic Region

- Lies **north of Arctic Circle (66°34' N)**; centred on **North Pole**.
- Includes **Arctic Ocean** & parts of **8 countries**: Canada, Denmark (Greenland), Finland, Iceland, Norway, Russia, Sweden, USA (**Arctic Council members**).
- Holds significant **minerals & rare earth reserves**.

- Growing geopolitical importance due to **emerging sea routes, resource potential & strategic proximity to major powers**.

Tamil Brahmi Inscriptions Discovered in Egypt

Discovery of **~30 inscriptions** in **Tamil Brahmi, Prakrit & Sanskrit** at tombs in Egypt's **Valley of the Kings** indicates **trade links** b/w **ancient Tamilagam, other parts of India, and the Roman Empire**.

- **Location: Valley of the Kings**, west bank of **River Nile**, within **Theban Necropolis (Egypt)**. Inscriptions left by individuals from **north-western, western & southern India** (majority from southern region).

- **Nature of Inscriptions:** Brief **graffiti (mainly personal names)** carved on tomb walls/corridors. Found alongside **Greek graffiti**, suggesting adoption of local practice of marking presence.

- **Key Findings:** Tamil Brahmi name **"Cikai Koṟaṉ"** appears **8 times across 5 tombs**, sometimes inscribed high on interior walls. **Cikai** linked to Sanskrit **śikhā** (tuft/crown).
  - **Koṟaṉ** from Tamil **koṟam** (victory/slaying); associated with **Chera goddess Koṟṟavai** and term **koṟṟavaṉ (king)**.
  - Other inscriptions: **"Kopāṉ varata kantan"** (Kopāṉ came and saw). Names like **Cātaṉ** & **Kiraṉ**.

- **Link with Berenike & Sangam Literature:** Element **koṟaṉ** appears in **Koṟṟapumāṉ** at **Berenike** (Red Sea port linked to Indo-Roman trade). Name found in **Sangam corpus** & **Pugalur inscriptions** (ancient Chera capital), dated **2nd–3rd centuries CE**.

Thwaites Glacier

Recent studies show **rapid thinning & retreat** of **Thwaites Glacier**, West Antarctica, raising concerns over **global sea-level rise**.

- **Location & Size:** Known as **"Doomsday Glacier"**, spans **120 km wide** and spanning **~1.9 lakh sq. km**; among **Antarctica's largest**.

- **Sea-Level Risk:** Contains enough ice to raise **global sea levels by over 0.5 metres** if fully collapsed.
  - Currently contributes **~4% of annual global sea-level rise**.
  - **Ice discharge nearly doubled** in the past **30 years**.
  - Possible **large-scale collapse** projected within **200–900 years**.

- **Geographical Vulnerability:** Rests on **inland-sloping bedrock below sea level**, allowing **warm ocean water** to melt it from **below**, weakening stability.

- **Ice Shelf Function**: Acts as a **brace**, slowing glacier flow; **thinning/fracturing** causes **faster ice loss**.

- **Global Impact**: Destabilisation may trigger **coastal flooding**, **erosion** & **storm surges**, endangering **low-lying cities**, **islands**, and **ports** worldwide.

India–Netherlands Green Hydrogen Partnership

India and the Netherlands launched the **Hydrogen Fellowship Programme** and signed an **MoU** for **green hydrogen research** & **collaboration**.

- **About the Programme:** Launched by **DST** with **Scheme Guidelines** & **Call for Proposals**; open to **doctoral, postdoctoral, and faculty researchers**.

- **Objective**: Enhance India's **hydrogen deployment readiness** focusing on system integration, safety, techno-economic analysis, life-cycle assessment, and indigenisation, especially for hard-to-abate sectors.

- **MoU Framework:** Signed b/w **University of Groningen** and **19 IITs** for faculty/student exchange, joint research, and knowledge sharing in green energy and hydrogen; no automatic financial commitments.

- **Policy Alignment:** Supports **National Green Hydrogen Mission**, **Energy Independence 2047** & **Net-Zero 2070** goals.

Seychelles

India & Seychelles discussed boosting maritime trade and blue economy ties at a Business Roundtable in Mumbai, highlighting **Seychelles' role in India's MAHASAGAR vision**.

- **Focus areas:** blue economy, tourism, healthcare, pharma, education, skills, financial services—aligned with India's neighbourhood-first & ocean-based cooperation for a peaceful Indian Ocean region.

Seychelles

- Sovereign island nation & **archipelagic state** of **155 islands** in the **western Indian Ocean**, northeast of **Madagascar** and off the **east coast of mainland Africa**

- Situated on the **Mascarene Plateau** (submarine plateau in Indian Ocean).
- **Africa's smallest & least populated country**.
- **Capital**: Victoria (Mahé Island).
- Strategically located on **maritime trade routes**; key to **anti-piracy operations, maritime security** & **Blue Economy**. Vital to India's **SAGAR vision** and **Indian Ocean diplomacy**.

Frontier Nagaland Territorial Authority

Tripartite agreement between **Union Govt., Nagaland Govt., and ENPO** to establish **Frontier Nagaland Territorial Authority (FNTA)**, addressing **political and developmental demands** of Eastern Nagaland; part of **12 key peace accords** in Northeast since **2019**.

- **Background:** ENPO (apex body of 8 Naga tribes) demanded a **separate state since 2010** due to **neglect, underdevelopment, and socio-economic backwardness**.
  - Centre proposed FNTA to **retain Nagaland's integrity** while offering **financial autonomy**.
- **Territorial Jurisdiction: 6 eastern districts –** Tuensang, Mon, Kiphire, Longleng, Noklak, Shamator
- **Key Features:**
  - **Autonomy:** Legislative & executive powers over 46 subjects (e.g., land, agriculture, rural dev.)

- **Administration:** Mini-Secretariat; headed by Addl. Chief Secy/Principal Secy
- **Finance:** Funds based on population & area; MHA to fund initial setup
- **Article 371(A):** Unaffected; FNTA operates within its protective framework
- FNTA ensures **local governance**, safeguards **Naga customs**, and prevents **fund diversion** by state capital.

India and GCC Sign Terms of Reference for FTA

India and the **GCC** signed **Terms of Reference** to begin **FTA negotiations**, advancing economic & strategic ties.

- **Objective: ToR** sets **scope & modalities** for FTA talks.
- **Economic Impact:** Aims to boost **trade, investment, jobs**, and ensure **food & energy security**.
- **Trade Statistics: FY 2024–25**: Trade at **$178.56 bn** (Exports: **$56.87 bn**, Imports: **$121.68 bn**); **15.42%** of India's global trade.
  - **Growth**: Avg **15.3% annually** (last 5 years).
  - **India's Key Exports**: Engineering goods, rice, textiles, machinery, gems, jewellery.
  - **India's Key Imports**: Crude oil, LNG, petrochemicals, gold.
- **Investment & Diaspora:** GCC is a major source of **FDI** for India– **$31.14 bn** (as of Sept 2025); hosts **~10 million Indians**.

Gulf Cooperation Council (GCC)

- Formed in **1981**; members: **Saudi Arabia, UAE, Bahrain, Qatar, Kuwait, Oman**.
- Promotes **political, economic, cultural unity**; based on **Islamic values, tribal ties, security interests**.

- Structure– **Supreme Council, Ministerial Council, Secretariat (Riyadh)**.
- Strategic location– **Persian Gulf**, key global trade routes.
- **Market size**: ~61.5 million people; **GDP:** ~$2.3 trillion (9th globally); key player in **energy & trade**.

Manipur Assembly Constitutional Deadlock

Manipur Congress president moved the **HC**, alleging **unconstitutional actions by the Governor** before **President's Rule (Feb 2025)** and seeking **dissolution of the Assembly under Article 174**.

- **Background of the Issue: Assembly Size**– 60 members; last met on **12 Aug 2024**
  - **Article 174(1)**: Mandates session within **6 months** → due by **11 Feb 2025**
  - **9 Feb 2025**: CM resigned; Governor cancelled session, declaring summoning order void
  - **Result**: Assembly not convened → **Article 174(1) violated**
- **Constitutional Debate: Petition Claims**– bypass of **floor test** & **constitutional morality.** Assembly rendered **untenable**, seeks **dissolution**
  - Alleges misuse of **gubernatorial power** to impose **President's Rule**
- **Judicial Response: HC observation**– issue involves **Article 174 interpretation** → referred to **Division Bench**

Gujarat Reclaims 'Tiger State' Status

Gujarat is set to regain its status as a **tiger-bearing state** with the confirmed presence of a **Royal Bengal Tiger** in **Jambughoda and Ratanmahal forests**.

- **Unique Biodiversity**: Only Indian state to host **Asiatic Lions, Royal Bengal Tigers**, and **Leopards**.
- **Tiger Migration**: Migrated **~60 km** from **Katthiwada WLS (MP)** to **Kanjeta–Jambughoda corridor** (~90 km forest patch).
  - NTCA to assist in introducing a **female mate; Herbivore Breeding Centre** near Kada Dam to augment **chital & sambar** prey base.
- **Jambughoda Wildlife Sanctuary:**
  - **Forest types:** Dry tropical, deciduous, with Teak, Mahua, Bamboo.
  - **Fauna:** Leopards, Sloth Bears, Chausinghas, Nilgais, Hyenas.
  - **Role:** Key ecological corridor and tiger habitat.
- **Ratanmahal Wildlife Sanctuary:** Located at Gujarat–MP border; habitat with dry teak, Bamboo, Mahua, Jamun. Known for highest Sloth Bear population in Gujarat.
  - **Ecological role:** Catchment of River Panam, vital for Dahod & Panchmahal water security.

Sela Lake and Sela Pass

Sela Lake (near **Sela Pass in Tawang,** Arunachal Pradesh) holds **geographical, and strategic importance**.

Sela Lake

- **High-altitude glacial lake** (13,000+ ft) in **Tawang**, formed by **glacial meltwater**.
- Surrounded by **alpine vegetation**, used for **yak grazing**, drains into **Nuranang River**.
- Culturally sacred in **Tibetan Buddhism**, revered by **Monpa community**, also called **Paradise Lake**.

Sela Pass

- **Strategic high-altitude pass** connecting **Tawang** with **Assam plains**, maintained by **BRO**.
- Near the **LAC**, played a role in the **1962 Sino-Indian War**.
- **Sela Tunnel** ensures **all-weather connectivity** from **Tezpur to Tawang**.
- Nearby **Jaswant Singh War Memorial** honors 1962 war martyrs.

Lakkundi Excavations Boost UNESCO Bid

Neolithic relics found near **Kote Veerabhadreshwar Temple** in **Lakkundi village, Karnataka**, support efforts to include the site in the **UNESCO World Heritage list**.
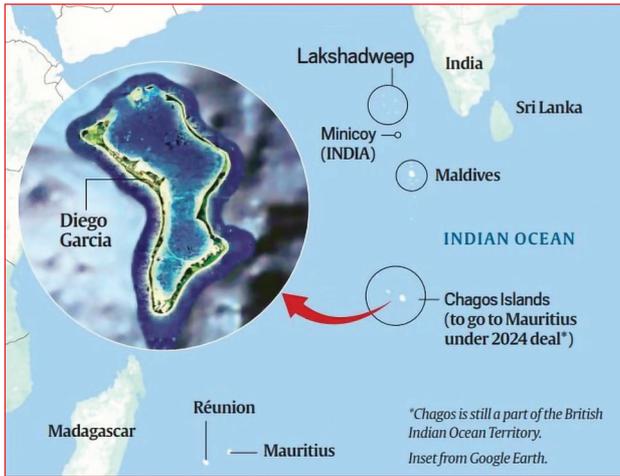
Lakkundi

- **Location**: ~12 km from **Gadag**; earlier known as **Lokkigundi**; called **"village of hundred wells and temples"**.
- **Historical Mentions**: In **11th–12th century inscriptions**; compared to **Amaravati** (capital of Indra) for prosperity.
  - **Rulers– Chalukyas, Yadavas, Hoysalas**; capital of **Hoysala king Veeraballala** in **1192 AD**.
- **Queen Attimabbe's Karmabhoomi**: Known for building **Jain temples, basadis, wells; Daana Chintamani Attimabbe Prashasti** named after her.
- **Cultural Links**: Flourished **Jainism** and 12th-century **sharanas** like **Ajaganna, Muktayakka**, linked to **Basaveshwara's movement**.
- **Architectural Features:** 13 surviving temples in **Kalyana Chalukya style**; features include **intricately carved stepwells**.
- **Support: Karnataka govt + INTACH** finalising proposal for **UNESCO Tentative List of WHS**.

UK Defends Chagos Deal

UK defended the Chagos transfer to Mauritius with a **lease-back of Diego Garcia**.

Chagos Archipelago

- **Location**: **58 islands** in the **Indian Ocean**, ~**500 km south of Maldives**; **Diego Garcia** is the largest (**7° south of the equator**).

Chagos is still a part of the British Indian Ocean Territory. Inset from Google Earth.

- **Colonial History**: **France (1715)** → **Britain (1814 Treaty of Paris)**; **1965**: UK **detached Chagos from Mauritius** to form **British Indian Ocean Territory (BIOT)**, paid **£3 million** to Mauritius.
- **Diego Garcia Base**: **UK–US military base (since 1966)**; operational **1986**; key role in **Gulf, Iraq, Afghanistan, post-9/11 wars**.
- **Legal Status**: **ICJ (2019)** ruled UK's detachment **unlawful**; **UK (2024)** agreed to **transfer sovereignty to Mauritius**, retaining **Diego Garcia via 99-year lease**.

Early 8th Century Telugu Inscription

A **rare 8th-century CE Telugu inscription** found at **Pitikayagulla, Andhra Pradesh**, offers key insights into **Telugu's early evolution** from **Prakrit influence** to an **independent administrative language**.

- Inscriptions recorded the construction of a **new embankment** by **Pranimilli Achari**, likely from the **Renadu region** under royal rule.
- **Telugu:**
  - **Family**: **Dravidian**; ~**130 million speakers** (AP, Telangana, India, abroad).
  - **Origin**: Evolved from **Proto-Dravidian (~5000 years ago)**; emerged as **independent language by ~10th century BCE**.
  - **Linguistic Links**: Culturally linked to **Tamil/Kannada**; **genetically closer to Central Dravidian**.
  - **Earliest Inscriptions**: ~**575 CE**, by **Renati Cholas** at **Kalamalla & Erragudipadu (AP)**.
  - **Recorded History**: Traced from ~**200 BCE** via names in **Prakrit/Sanskrit inscriptions**.

- **Recognition**: In **Eighth Schedule**; declared **Classical Language** in **2008**.

56th Statehood Day of Himachal Pradesh

PM greeted Himachal Pradesh on its **56th Statehood Day** on **25th Jan 2026**.

- **15 Apr 1948**: Became **Chief Commissioner's Province**.
- **26 Jan 1950**: Became a **Part-C State** under the Constitution.
- **1 Nov 1956**: Made a **Union Territory** after SRC recommendations.
- **1 Nov 1966**: **Punjab hill areas** (Kangra, Kullu, Lahaul-Spiti, etc.) merged into HP.
- **25 Jan 1971**: Became **India's 18th state** under **State of Himachal Pradesh Act, 1970**.
- **Borders**: Shares boundaries with **J&K, Ladakh, Punjab, Haryana, Uttarakhand**, and **China**.
- **Name Meaning**: *"Hima" + "Anchal"* = **Lap of Snow**.

> **UP Day:** Observed on **24th January** (since **2018**) to mark **renaming of United Provinces to Uttar Pradesh** on **24 Jan 1950**.

Granth Kutir

Recently, the **President of India** inaugurated the **Granth Kutir** at **Rashtrapati Bhavan.**

- **Purpose**: Dedicated book house for **India's classical knowledge traditions**.
  - **Languages**: **11 classical Indian languages** including Tamil, Sanskrit, Kannada, Malayalam, Marathi.
  - **Collection**: ~**2,300 books + 50 manuscripts** (on **palm leaf, bark, cloth, paper**).
- **Content Areas**: Epics, philosophy, linguistics, history, governance, science, devotional literature, Constitution.
- **Developed by**: Centre & State Govts, universities, research bodies, cultural organisations, individual donors.
  - **Supported by**: Ministry of Education, Ministry of Culture, IGNCA.
- **Significance**: Promotes **India's literary heritage**, supports **Gyan Bharatam Mission**, fosters **unity in diversity**, and preserves **classical languages and knowledge systems**.

PORTALS & APPS

ExoMiner++

NASA announced the **open-source release of ExoMiner++**, an AI tool to advance the **search for exoplanets**.

- **About**: It is a **deep-learning AI model** of **NASA,** successor to the earlier **ExoMiner** system for **exoplanet detection**.
- **Working:** Analyses **stellar brightness** over time, detects **periodic dips** caused by **planetary transits** across host stars.

- **Key Features:** Effectively distinguishes **true exoplanets** from **false positives**.
- **Explainable AI**: Provides **confidence scores**. Gives **transparent reasoning** for classifications
- **Data Sources:** Trained on data from: **Kepler Space Telescope** & **TESS.** Enables analysis of **many more stars simultaneously**.
- **Significance:** Identified ~**7,000 potential exoplanet candidates** from **TESS** data. Released as **open-source software**, & supports future missions.

SAMPANN–UMANG Integration

SAMPANN integrated with UMANG (Digital India platform) to enable **digital pension services** for **telecom pensioners**.

- **SAMPANN**: Digital pension platform by **Controller General of Communication Accounts**; launched **Dec 2018**; enables **end-to-end digital pension lifecycle**.
  - **Integration** enhances **access, transparency**, and **24×7 availability** of pension services via **UMANG**.
  - **Core Services via UMANG**: Access **PPO number**, check **Life Certificate validity**.
  - **DigiLocker Support**– enables **secure access** to pension records/documents.
  - **Impact**– reduces need for **physical visits**, ensures **pensioner-centric governance**.
- **UMANG**: Unified platform under **Digital India** offering **Central, State, and Local services** via **Android, iOS, and web**.

SPECIES IN NEWS

Loggerhead Turtle

Study finds **climate change** is weakening the **reproductive capacity & physical structure** of **loggerhead sea turtles**, threatening their long-term survival.

- **About:** Large omnivorous marine reptile; one of **7 extant sea turtle species**. Named for its **large, block-like head** with powerful jaw muscles.
- **Global Distribution:** Found in **Atlantic, Pacific, Indian Oceans & Mediterranean Sea**; **10 subpopulations**.
- **Threats: Warming oceans & declining food supply** → females breeding shift from **2-year to 4-year gap**; fewer eggs per nest.
  - As **capital breeders**, reproduction depends on stored energy from long-term foraging.
  - Long breeding migrations (hundreds–thousands km) b/w feeding & nesting sites.

- Decline in **ocean chlorophyll** → reduced food → depleted energy reserves.
- **Conservation Status: IUCN:** Vulnerable. **CMS:** Appendix II (1979); upgraded to Appendix I (1985). **WPA, 1972:** Schedule I
- **International Cooperation Mechanisms:** CMS MOUs: **Atlantic Coast of Africa**, **Indian Ocean–SouthEast Asia**. Single Species Action Plan: South Pacific Ocean.

Conservationists Raise Concerns Over 'Turtle Trails'

Union Budget 2026–27 proposal to develop **turtle trails** in **Odisha, Karnataka, Kerala** for **ecotourism** triggered concerns among conservationists

- **Turtle trails**– coastal pathways for **regulated ecotourism** at nesting sites.
- Threatens **darkness & tranquility** essential for **mass nesting**. Conservationists urge **habitat protection** and **fishing regulation** over tourism.

Olive Ridley

- **About:** Belongs to the **class Reptilia & family Cheloniidae.** Smallest sea turtle, **olive/gray-green** color, **heart-shaped carapace**.
- **Behaviour**: **Arribada** – mass nesting; **omnivorous**. Inhabit warm waters of **Pacific, Atlantic, Indian Oceans**. Long-distance migration– up to **9,000 km** b/w feeding & breeding.
- **Nesting**: 1–3 times, Dec–Mar; ~100 eggs/clutch
  - **Major Nesting Sites**– **Gahirmatha** & **Rushikulya** (Odisha) – among world's largest. **Devi River mouth** (Odisha), **Andaman Islands**
- **Protection:** Vulnerable **(IUCN)**, **CITES Appendix I**, Schedule I of the **Wildlife (Protection) Act, 1972**.

New Dragonfly Species Discovered in Kerala

New dragonfly species *Lyriothemis keralensis* found in **Kerala**, extending its range beyond **Northeast India**.

- **About:** *Lyriothemis keralensis* was misidentified as *L. acigastra* **since 2013**; confirmed as distinct after microscopic & museum specimen comparison.
- **Sexual Dimorphism**: Males – bright blood-red with black marlings; Females – yellow with black markings.
- **Seasonality**: Visible during **Southwest Monsoon** (late May–August); persists as aquatic larvae rest of the year.
- **Habitat & Concern**: Found in **irrigation landscapes** (pineapple, rubber plantations, shaded canals); mostly **outside protected areas**. Highlights need for **biodiversity-sensitive land-use**.

Eurasian Otter in Kashmir

A sighting of the **Eurasian Otter** along the **Sindh Canal** has provided the first direct photographic evidence of the species in the **Kashmir Valley**, where it was considered locally extinct in parts.

- **Also known as**: European/Common otter.
- **Family**: **Mustelidae** (weasel family); **Genus**: Lutra.
- **Physical Profile**: Streamlined body, **webbed feet**, powerful tail.
  - Prominent **vibrissae (whiskers)** to detect prey underwater.
  - Males larger than females.
- **Diet**: Primarily carnivorous. **~80% fish** (eels, salmonids). Also amphibians, crustaceans, waterbirds, small mammals, reptiles, insects, eggs.
- **Behaviour**: Solitary, territorial.
  - Mostly active at night (**nocturnal**) or during twilight (**crepuscular**).
  - Dens called **holts** near water bodies.
- **Ecological Significance**:
  - **Apex predator** in freshwater ecosystems.
  - **Keystone species** & **bio-indicator** of aquatic health.
  - Presence indicates **clean water, stable prey, functional riparian habitats**.
- **Conservation Status:**
  - **IUCN Red List**– Near Threatened (globally); **CITES**– Appendix I; **WPA, 1972**– Schedule II
- **Other Otter Species in India: Eurasian Otter**– Himalayas, Northeast India, Western Ghats. **Smooth-coated Otter**– Found throughout India. **Small-clawed Otter**– Himalayas and Southern India.

Thermogenesis in Sacred Lotus

A study highlighted the unique ability of the **sacred lotus (Nelumbo nucifera)** to generate heat during flowering.

- **Sacred Lotus: Native to North & Central India**; grows in **ponds, lakes, slow-flowing waters**. **Flowering**: Starts in **early summer**; each flower lasts **3–4 days**.
- **Thermogenesis in Lotus: Maintains internal temp**: **30–35°C**, even if air temp is ~10°C. **Trigger**: Begins in **female phase** as petals turn **pink**.
  - **Mechanism**: **Calcium ion surge** in receptacle activates **mitochondria**. Uses **alternative oxidase pathway** to convert **starch & fats** into **heat**.
- **Role in Pollination: Heat** releases **fragrance**, attracts **beetles**. **Petals form warm chamber** to shelter insects. In **male phase**, insects **carry pollen**, aiding **cross-pollination**.

Sikkim Sundari

Sikkim Sundari (*Rheum nobile*), a **rare high-altitude Himalayan plant**, has drawn attention for its unique biology & **striking appearance**.

- **Type**: **Giant herbaceous monocarpic** plant, blooms **once in lifetime** (**monocarpic plant**) after **7–30 years**.
- **Habitat**: **High-altitude Himalayas (4,000–4,800 m)** – **North Sikkim**, **Nepal**, **Bhutan**, **Tibet**, **Myanmar**.
- **Family**: **Polygonaceae**; grows in **glacial valleys, alpine slopes, tundra zones**.
- **Morphology**: **Translucent bracts** form a **natural glasshouse** – traps heat, shields from **UV & cold winds**, gives **tower-like appearance**.
- **Use**: **Edible stems** for their **acidic flavor (chuka)**; traditional **Himalayan & Tibetan medicinal use**.

MISCELLANEOUS

DRDO Conducts Gaganyaan's Drogue Parachute Test

DRDO successfully conducted a **qualification load test** of the **Drogue Parachute** for the **Gaganyaan programme** at the **RTRS facility** of **TBRL, Chandigarh**.

- **RTRS Capabilities:** Advanced, dynamic ground-based testing facility for **high-speed aerodynamic and ballistic evaluations**.
- **Drogue Parachute Significance:** Critical for safe crew module descent & recovery under Gaganyaan.
  - Acts as a **primary brake** to stabilise and decelerate before main parachutes deploy.
  - Tested at loads **higher than maximum flight conditions** to ensure safety margin.

Gaganyaan

- **About:** India's first human spaceflight programme; aims to send **3 astronauts** to **LEO (400 km)** for **3 days** and return safely.
- **Key tests:** Air Drop Test (IADT), Pad Abort Test (PAT) & Test Vehicle (TV) flights to validate safety systems.
- **Phases:** **Unmanned missions** followed by first **manned mission (expected early 2027)**.
- **Crew training for Gaganyaan:** Completed training in **Russia**; undergoing **mission-specific training in India**.
- **Key Technologies for Crew Safety: HLVM3**– Human-rated version of **LVM3**; uses **solid, liquid, and cryogenic stages** to carry crew to **400 km LEO**.
  - **Crew Escape System (CES):** High-burn-rate motors for safe abort during launch emergencies.
  - **Orbital Module: Crew Module**– Pressurised, Earth-like environment; ensures safe re-entry. **Service Module**– Provides propulsion, power, and thermal control in orbit.

India–UK Offshore Wind Taskforce

India & **UK** launched the **India–UK Offshore Wind Taskforce** under **India–UK Vision 2035** and the **4th Energy Dialogue** to boost cooperation in offshore wind energy.

- **Pillars of Cooperation:**
  - **Ecosystem & Market Design:** Seabed leasing, revenue certainty.
  - **Infrastructure & Supply Chains:** Port modernisation, local manufacturing.
  - **Financing & Risk Mitigation:** Blended finance, institutional capital.
- **Synergy with Green Hydrogen Mission:** Offshore wind energy to power coastal industrial & **green hydrogen clusters**. Competitive pricing under **National Green Hydrogen Mission**.

Offshore Wind Energy

- **About:** Electricity from **wind turbines in marine environments**; harnesses stronger, consistent wind resources.
- **Potential in India**: ~**70 GW** (NIWE, Chennai), mainly along **Gujarat & Tamil Nadu** coasts. **Non-Fossil Capacity– 272+ GW** total; **141+ GW solar**, **55 GW wind energy**.
- **Policy & Institutional Framework**: **National Offshore Wind Energy Policy (2015)**: Overarching framework.
  - **MNRE**: Nodal ministry; **NIWE**: Nodal agency (assessment & facilitation).
  - **VGF Scheme: ₹7,453 crore** to support early projects.

Sarvam AI Launches 'Vikram' LLMs

Sarvam AI (Bengaluru-based) unveiled two new LLMs, **"Vikram,"** at the **India-AI Impact Summit 2026**.

- The move follows **OpenAI's** launch of **IndQA**, a benchmark to assess AI understanding of Indian languages and cultural contexts, highlighting its growing focus on India.
- **Indigenous Development:** Models– **30-billion-parameter (30B)** & **105B parameters**.
  - Higher parameters → greater complexity & reasoning capacity.
- **Key Features & Capabilities**
  - **Indian Language Mastery:** Optimised for **all 22 Indian languages** with **voice-first design**.
    - Smaller **105B-parameter scale** (vs **DeepSeek's 600B R1**) but tailored for Indian use.
    - Tackles **Indic data scarcity**; enables accurate translation & local dialect content generation.
  - **Open Source:** Model code/weights to be publicly released for developer & research use.

- **Training Infrastructure:**
  - Trained using **GPUs** via **IndiaAI Mission's common compute programme**.
  - Sarvam selected to build India's first **sovereign LLM ecosystem** with an **open-source 120B model** for governance & public services.
  - **Besides Sarvam:**
    - **Soket**: will develop a similar India-focused model (defence, healthcare, education).
    - **Gnani**: Launched its own model.
    - **Gan AI**: Developing **70B multilingual text-to-speech model**.
- **Tribute to Science:** Chatbot & models are named "**Vikram**" after **Vikram Sarabhai**.

Second Phase of Vibrant Village Programme

Centre will launch **Phase II of VVP** (launched in 2023), expanding coverage to **1,954 strategic villages** along borders with **Pakistan, Nepal, Bangladesh, Bhutan & Myanmar**, beyond the China border.

- **VVP-II:** Central Sector Scheme (**100% Centre funding**); cleared by **Union Cabinet (April 2025)**.
- **States Covered:** Arunachal Pradesh, Assam, Bihar, Gujarat, J&K, Ladakh, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Rajasthan, Sikkim, Tripura, Uttarakhand, UP, West Bengal.
- **Financial Outlay:** ₹**6,839 crore** (till **FY 2028-29**). ₹**3 crore per village** proposed expenditure.
- **Strategic Objective:** Prevent border migration, creating security vacuum & demographic shifts. Promote sustainable livelihood opportunities.
- **Role of Border Population:** Make locals "**eyes and ears**" of Border Guarding Forces. Reduce illicit activities & trans-border crimes.
- **Comprehensive Development:** Saturation of existing schemes. Strengthen basic infrastructure. Develop villages as **growth centres** for economic & cultural integration.
- **Trust Building: MHA** to undertake culturally sensitive outreach. Encourage reporting of suspicious activities.

FCI–World Food Programme MoU on Rice Supply

Food Corporation of India (FCI) & **World Food Programme (WFP)** signed an **MoU** for rice supply to support global hunger relief operations.

- Supply of **200,000 MT rice** (up to **25% broken**) to WFP for global humanitarian assistance. Valid for **5 years**; extendable by mutual consent.

WFP

- **Establishment & Mandate:** Estd. in **1961** by **UNGA & FAO**.
  - Operates under UN authority with a **dual mandate– Emergency food relief** + long-term **food security & stability**.
- **Recognition: Nobel Peace Prize 2020** for combating hunger & preventing starvation as a weapon of war.
- **India-WFP Collaboration Framework:** Fortified Rice Rollout; Grain ATMs (Annapurti Devices); Jan Poshan Kendra; Smart Warehousing & Mobile Storage Units (Flospans)

Bharat VISTAAR

Ministry of Agriculture launched **Phase-1 of the AI-based 'Bharat VISTAAR' scheme** in Jaipur during the **AI Summit in Delhi** to digitally empower farmers.

- **Nature:** Multilingual **AI-based conversational advisory system**
- **Function:** Farmers ask agriculture-related queries via mobile/smartphone and receive instant solutions
- **Objective:** Make agriculture **accessible, affordable, technology-driven.** Provide **AI-based personalised advisory.** Strengthen **farmer self-reliance**
- **Helpline Access:** Dial **155261**. Available in **Hindi & English** (to expand to **11 languages**). Provides **real-time mandi prices across India**
- **Integrated Platform:** Combines **AgriStack**, Indian Council of Agricultural Research knowledge systems, IMD inputs, **market prices**, and **government schemes** into one interface
- **Farmer ID:** Digital **Farmer ID Card** storing farmer data. Integrates services like **PM Fasal Bima Yojana** & **Soil Health Card**
- **Services:** Guidance on **soil testing, seeds, fertilisers, irrigation, loans, insurance, scheme benefits.** Aims to **improve productivity and reduce risks**
- **Other Initiatives Launched:** Farmer-centric AI Hackathon; Agri Kosh AI Strategy Roadmap

SAHI & BODH Health AI Initiatives

Union Health Minister launched **Secure AI for Health Initiative (SAHI)** & **Benchmarking Open Data Platform for Health AI (BODH)** at the **India AI Impact Summit 2026**.

- **SAHI:** National **roadmap & policy framework.** Guides **responsible AI adoption.** Ensures **accountability, privacy protection, citizen-centric safeguards**
- **BODH:** Platform to **test, benchmark, validate** AI health solutions. Assesses **performance, safety, real-world readiness** before deployment

- **Digital Health Backbone:** Aligned with **National Health Policy (2017).** Builds on **Ayushman Bharat Digital Mission (2020).**
- **Data & Infrastructure:** Promotes **interoperable, consent-based health data systems.** Ensures **security & public trust**
- **Collaboration:** Coordinated role of **government, academia, industry.** Responsible integration of AI in healthcare
- **Impact:** Improved **diagnostics;** Faster **drug discovery;** Stronger **clinical decision-making;** More **affordable & accessible healthcare**

Bee Corridor

NHAI has launched a first-of-its-kind initiative to develop **'Bee Corridors'** along **National Highways** to promote **ecological infrastructure development**.

- **About:** Continuous stretch of **flowering trees, shrubs, herbs, grasses.** Ensures **year-round nectar & pollen** via staggered flowering cycles
- **Objective:** Shift from ornamental to **biodiversity-supportive plantations.** Protect **honeybees & other pollinators**
- **Species Selection:** Neem, Karanj, Mahua, Palash, Bottle Brush, Jamun, Siris. Retention of flowering weeds, dead wood, hollow trunks
- **Implementation Plan:** Along suitable highways & vacant **NHAI land.** Flowering clusters every **500 m–1 km**
- **Plantation Target:** ~**40 lakh trees** planned; ~**60%** under Bee Corridor. At least **3 pollinator corridors** in initial phase

PM RAHAT Scheme

After relocating to **Seva Teerth**, the **Govt.** launched the **PM RAHAT (Road Accident Victim Hospitalization and Assured Treatment) Scheme**.

- **Ministry**: Ministry of Road Transport and Highways.
- **Objective**: Immediate **cashless treatment** to road accident victims. Focus on **Golden Hour**; nearly **50% of deaths** preventable with timely care.
- **Cashless Treatment & Coverage:** Applicable on **all roads** (NHs, state roads, city streets). **Cashless treatment up to ₹1.5 lakh per victim** for first **7 days**.
  - **Stabilization care** is guaranteed for **24 hours** (non-life-threatening cases) & **48 hours** (life-threatening cases).
- **Technology Framework**: Seamless digital link from accident reporting to claim settlement via: **eDAR platform** (MoRTH) & **TMS 2.0** of **National Health Authority**.
- **Funding Mechanism**: Reimbursement through **Motor Vehicle Accident Fund (MVAF)**.
  - **Insured vehicle**: Paid from **General Insurance Companies' contributions**.

- **Uninsured / hit-and-run**: Covered by **GoI budgetary allocation**.
- **Emergency Response Support System (ERSS) Integration**: Linked with **dial 112** for ambulance access & locating nearest designated hospital (accessible to victim or Good Samaritan).
- **Grievance Redressal**:
  - District-level Grievance Redressal Officer nominated by District Road Safety Committee. Committee chaired by **District Collector/District Magistrate/Deputy Commissioner**.

Ol Chiki Script

President inaugurated the **Centenary Celebration of the Ol Chiki script** in **New Delhi**, organized by the **Ministry of Culture**, marking **100 years** of the script & its role in preserving **Santal identity**. A **commemorative coin & postage stamp** were released to mark the occasion.

- **About:**
  - **Invented in 1925** by **Pandit Raghunath Murmu** (Mayurbhanj, Odisha) to provide a distinct script for **Santhali**, earlier written in Roman, Devanagari, Oriya or Bengali.
  - **Literary Works of Pandit Raghunath Murmu**– **High Serena (1936)** – first book in Ol Chiki. **Bidu-Chandan** and other works reflecting Santhali culture.
- **Linguistic Structure**:
  - **30 letters**. Fully **phonetic script** (one symbol = one sound). Accurately represents **glottal stops** and specific vowel patterns of **Santhali** (belongs to Austroasiatic family).
- **Geographic Reach**: Primary medium for **Santhali speakers** in **Jharkhand, Odisha, West Bengal, Bihar, Assam**.
- **Constitutional Status**: Santhali (in Ol Chiki) included in **8th Schedule** via **92nd Constitutional Amendment Act, 2003**.
- **Democratic Accessibility**: Constitution of India translated into **Santhali (Ol Chiki)** in **Dec 2025**.

Seva Teerth

PM inaugurated **'Seva Teerth'**, an integrated complex housing the **PMO, NSCS & Cabinet Secretariat**.

- **Historical Significance**: Marks end of nearly **8 decades** of PMO functioning from **South Block** (now part of Yuge Yugeen Bharat National Museum); coincided with **95th anniversary (13th Feb 1931)** of New Delhi's inauguration as capital.
- **Inscription**: "Nagrik Devo Bhava" (Citizen is akin to God).

- **Architectural Influences:** Architect– **Dr Bimal Patel**.
  - **Design Influences**: Stone screen-work from **Chalukyan temples (11th–13th C.)**. Floral motifs from **geometric temple patterns**. Metal-clad domes inspired by **Buddha stupas**.
  - Part of **Central Vista redevelopment**; clad in **white & red sandstone**.
  - Features **open workspaces, 'India House' for international summits**, and **4-star green building standards**.
- **First Official Act**: Launch of **PM RAHAT Scheme** for assured hospitalization of **road accident victims**.

LHS 1903 System

Astronomers using **ESA's Cheops Space Telescope** discovered a **four-planet system** around red dwarf **LHS 1903**, with an arrangement challenging current **planet formation theories**.

- **System Overview:**
  - **Four planets**: 2 Super-Earths (rocky) + 2 mini-Neptunes (gaseous).
  - Orbit a **red dwarf (LHS 1903)**, **117 light-years** away.
- **Formation Paradox:** Conventional model: **Rocky planets near star; gas giants farther away**. In LHS 1903, the **outermost planet is rocky**, beyond gaseous planets.
- **Rocky Planets: Super-Earths**: Earth-like composition; **2–10 times Earth's mass**.
- **Sub-Neptunian Neighbours: Mini-Neptunes**– Larger than Earth, smaller than Neptune; **thick gaseous envelopes**.
- **Habitability Potential:** Fourth planet: ~**60°C surface temperature**; possible **habitability range**.
- **Star Characteristics (LHS 1903): Red dwarf**; **50% Sun's mass, 5% Sun's luminosity**. Most common star type in the **Milky Way**.

AI-Preneurs of India

Atal Innovation Mission (AIM) launched **"AI-Preneurs of India"**, a flagship coffee table book, at the **India AI Impact Summit 2026**.

- **Key Features:** Showcases journeys of **45 AI startups** from **Atal Incubation Centres (AICs)** network. Uses **founder-first storytelling**, focusing on **motivation, perseverance, challenges** rather than only technical achievements

AIM

- **About:** Launched by **NITI Aayog (2016).** Flagship initiative to promote **innovation & entrepreneurship.** Encourages **problem-solving mindset** in students. Strengthens ecosystem in **schools, universities, research institutions**

Key Program	Target Group	Key Features / Objective Key Features/Objective
Atal Tinkering Labs (ATLs)	School students (Grades 6–12)	To foster innovation through tools such as **3D printing**, robotics & electronics.
Atal Incubation Centres (AICs)	Startups & entrepreneurs	To promote startups through mentorship, funding & technical support.
Atal Community Innovation Centres (ACICs)	Underserved regions	Promote innovation in **Tier 2/3 cities**, tribal areas & underserved communities.
Atal New India Challenges (ANIC)	Technology-based innovators	Addressing national challenges through funding & mentorship.
Mentor India	Entrepreneurs & innovators	Engages **6,200+ mentors** across sectors to guide entrepreneurs & innovators.

SC Affirms Spectrum as Public Resource

SC clarified that **telecom spectrum** is a **public resource owned by the Union of India** & cannot be treated as a **corporate asset of TSPs** for sale or restructuring under the **IBC, 2016**.

- **Limited Privilege: Spectrum** is a **limited, conditional, revocable privilege**, not ownership.
  - Subject to **statutory provisions, licence conditions & public interest**.
  - Recording as an **intangible asset** in financial statements ≠ ownership.
  - Represents control over **future economic benefits**; **legal title vests with Union of India**.
- **Exclusion from IBC: IBC** excludes assets without ownership rights. Since **TSPs lack legal title to spectrum**, it cannot form part of insolvency or liquidation assets.
- **Supremacy of Telecom Laws: IBC** cannot restructure spectrum usage rights. Governed exclusively by **Telecommunications Act, 2023** & **TRAI Act, 1997**.
- **Public Trust Doctrine:** State acts as **trustee of spectrum**; management must serve **common good** and comply with **Article 14 (fairness & transparency)**.
- **Significance:** Setback for **financial creditors (e.g., SBI)** seeking to monetise spectrum for loan recovery. **DoT** can reclaim spectrum from defaulting operators like **Aircel** & **RCom**.

RBI Tightens Norms on Recovery Agents' Conduct

RBI issued draft guidelines —RBI **(Commercial Banks – Responsible Business Conduct) Second Amendment Directions, 2026** — to regulate engagement and conduct of **recovery agents** by banks & other regulated entities; effective from **1st July 2026**.

- **Prohibited Practices:** No **abusive language**, threats, excessive/anonymous calls, contact beyond prescribed hours, or **public humiliation** of borrowers/guarantors.
- **Definition of Harsh Methods:** Verbal, physical, or **reputational intimidation/harassment** of borrowers, guarantors, or their relatives/friends/co-workers.
- **False or misleading representations** about debt extent or consequences of non-repayment prohibited.
- **Institutional Responsibility:** Banks must frame a **formal policy** on loan recovery, engagement of recovery agents, and possession of security. Policy to include eligibility criteria, due diligence norms, **code of conduct, specified activities & performance evaluation standards**.
- **Grievance Redressal:** Mandatory **dedicated mechanism** for complaints on recovery practices.

Sawalkot Hydroelectric Project

Pakistan sought consultations with India on the Sawalkot Hydroelectric Project, invoking the Indus Waters Treaty, which India reportedly placed in "abeyance" following the Pahalgam terror attack.

- **Sawalkot Hydroelectric Project:** On Chenab River, Ramban district, J&K.
  - **Capacity & Type: 1,856 MW**, **run-of-the-river** project; concrete **gravity dam** with reservoir.
  - **Status:** Initiated in **1984**; long delays; now declared **Project of National Importance**.
  - **Output:** Expected generation of **7,000+ million units annually**; among India's largest hydro projects.
  - **Strategic Significance:** With **IWT in abeyance**, enhances India's control and optimal use of **Western Rivers**.
- **Other Chenab Hydel Projects:** Dulhasti – 390 MW (Kishtwar); Baglihar – 890 MW (Ramban); Salal – 690 MW (Reasi).

Ricin in Bioterrorism

NIA has taken over from the Gujarat ATS the probe into India's first alleged bioterrorism plot involving an attempt to weaponize Ricin (a lethal toxin from castor beans).

- **Ricin:** Potent Type II ribosome-inactivating protein (lectin). Sourced from Castor beans (Ricinus communis).
- **Extraction:** From castor oil residue; acetone used for refinement
- **Action:** Blocks protein synthesis → cell death
- **Toxicity:** Lethal in minute doses; inhalation/ingestion/injection; no antidote

- **Status:** Schedule 1 substance under CWC
- **Use:** Targeted assassinations; no mass-casualty success
- **Limitation:** Difficult large-scale production & aerosolization

Bodhan AI & Bharat EduAI Stack

Government launched Bodhan AI to develop an open-source Bharat EduAI Stack for integrating AI across the education system.

- **Bodhan AI:** Non-profit under **Ministry of Education**, developed by AI Centre of Excellence for Education **(IIT Madras)** to build an **AI-enabled DPI** for education.
- **Bharat EduAI Stack:** Open-source DPI to deploy **AI tools** across the education ecosystem.
  - **Key Features:** Personalised AI tutors; AI-assisted teacher training; Institutional administration systems; Data-driven policymaking using large learning datasets.
  - **Vision:** Make AI **inclusive, interoperable, sovereign** under the **"AI for All"** approach.
  - **Outcome:** Promote **equitable, affordable, accessible, high-quality education** through AI integration.

Regulation of Books by Armed Forces Personnel

Following controversy over unpublished book *Four Stars of Destiny* by **Gen. M.M. Naravane (retd.)**, the **MoD** is drafting new rules for book publication by serving & retired armed forces personnel.

- **Current Legal Vacuum for Retirees:** No consolidated law regulating book-writing by retired Army officers. Not governed by **Army Act, 1950** or **Army Rules, 1954** post-retirement; remains a **legal grey area**.
- **Applicability of Official Secrets Act (OSA):** Applies for life, even after retirement. Disclosure of **classified/operational/ national security information** is a **criminal offence**.
- **Regulations for Serving Personnel: Prior written permission mandatory** for any literary/remunerative activity.
  - Content routed through **chain of command** (up to **Army HQ/MoD**) for vetting.
  - Ensures no disclosure of **operational details, intelligence inputs, or internal procedures**.
  - Legal provisions exist to address incorrect/unlawful disclosures.
- **Comparison with Civil Servants: Central Civil Services (Pension) Rules** amended in 2021.
  - Retired officials from **intelligence/security organisations (RAW, IB)** barred from publishing sensitive content without prior clearance.

- **MOD Proposed Guidelines:** Standardise **manuscript clearance process**. Integrate provisions of service rules & OSA. Aim– close regulatory gaps for veterans.

Information Technology Amendment Rules, 2026

MeitY has notified the **Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Amendment Rules, 2026**, amending the **IT Rules, 2021** under the **IT Act, 2000**.

- Effective from the **20th Feb 2026**; stricter norms on synthetic media & content removal.
- **Reduced Takedown Timeline:** Content declared **illegal by a court or appropriate government** must be removed within **3 hours** (earlier **24–36 hours**).
  - **Sensitive Content: Non-consensual nudity** & **deepfakes** must be removed within **2 hours of reporting**.
- **Definition: "Synthetic content"** = **audio-visual information** created/altered algorithmically that appears indistinguishable from a natural person or real-world event.
  - **Exemption:** Minor **automatic smartphone touch-ups** excluded.
- **Mandatory Disclosure & Labelling:** AI-generated imagery must be labelled **"prominently."** Platforms must seek user disclosure for AI-generated content.
  - If user fails to disclose: Platform must prominently label, or **take down** (in cases of non-consensual deepfakes).
- **Loss of Safe Harbour:** Non-compliance risks loss of protection under **Section 79, IT Act**.
  - **Failure of Due Diligence:** Intermediaries knowingly permitting/promoting/ignoring violative **synthetic content** deemed non-compliant.
- **State Powers:** States may appoint **multiple authorised officers** for takedown orders.

Gravitational Control of Earth's Motion

A scientific reflection explains how **gravity governs Earth's motion** via **planetary motion** & **centripetal force**.

- **Binding Force:** Gravity binds **humans, oceans, atmosphere, and life** to Earth despite its motion.
- **Centripetal Action:** Gravity acts as a **centripetal force**, keeping the **Moon in Earth's orbit** & **Earth around the Sun**.
- **Planetary Motion:** Earth completes **one revolution/year**, covering **~1 billion km** at **~1,07,000 km/h**, driven by **gravitational attraction**.
- **Absence of Friction:** In space's **near-vacuum**, **negligible resistance** allows planets to move **continuously without energy input**, unlike friction-affected motion on Earth.
- **Rejection of Aether**: The **Michelson–Morley experiment (1887)** disproved **aether** (existence of an invisible medium), confirming Earth moves through **empty space**.

RBI Enhances Collateral-Free Lending for MSEs

Under the **Lending to MSME Sector (Amendment) Directions, 2026**, the **RBI** has directed banks **not to insist on collateral** for loans up to **₹20 lakh** to **Micro and Small Enterprises (MSEs)**.

- **Applicability**: For **all MSE loans** sanctioned or renewed **on or after 1st April 2026**
- **Limit Raised**: **Collateral-free loan limit** increased from **₹10 lakh to ₹20 lakh.** Aims to **strengthen last-mile credit** for small businesses with **limited assets**
- **Coverage under PMEGP**: New collateral-free loan norms apply to all units **financed under PM Employment Generation Programme**.
- **Additional Credit**: Banks may allow **collateral-free loans up to ₹25 lakh** based on borrower's track record & financial strength, as per internal policies. Subject to credit guarantee cover, where applicable
- **Exceptions: Voluntary pledging** of **gold/silver** within the **₹20 lakh limit** will not violate RBI directions

Right to Disconnect Bill 2026

To address **poor work–life balance** & **mental health issues**, a **Private Member's Bill** on the **Right to Disconnect** was reintroduced in Parliament, following earlier attempts in **2019** and **2025**.

- **Objective: Grants legal right** to **disengage from work communication** outside official hours without fear of reprisal.
  - As per **ILO**, Indians worked **56.2 hours/week (2024)** — highest globally.
  - **After-hours communication** causes **telepressure**, leading to **stress**, **sleep loss**, and **poor work–life balance**.
- **Provisions: No adverse action** (e.g. disciplinary measures, poor appraisals, denial of promotion) for **ignoring work communication after hours**.
  - Companies must draft a **comprehensive policy** in consultation with **trade unions/employee reps**, covering:
    - ❖ Defined working hours & permissible after-hours communication
    - ❖ Emergency protocols & grievance redressal
    - ❖ Digital wellness measures
- **Global Scenario:** The Bill is inspired by countries like **France**, **Belgium**, **Portugal** & **Australia**, which have enacted laws to **protect personal time**.

India's Next-Generation Tsunami Warning System

India will set up a **₹300-crore Regional Service Centre (RSC)** in the **Andaman and Nicobar Islands** to **enhance tsunami monitoring & early warning** capabilities.

- **Regional Role:** Will serve **India** and **Indian Ocean countries** like **Sri Lanka**.
- **Current System Limitation:** Existing system detects mostly **earthquake-triggered tsunamis**. **~20% of global tsunamis** caused by **non-seismic events** (e.g. submarine landslides, volcanic activity) remain undetected.
- **Next-Generation Capability:** Will detect **seismic & non-seismic tsunamis**. Enhances **speed**, **accuracy** & **reliability** of warnings in the **Indian Ocean region**
- **Technology & Infrastructure: ~270 km sub-sea cables** to be laid along **tectonic subduction zones**. Enables **faster acoustic signal detection**; reduces **data gaps** from buoy/satellite issues.

PRIYA Trial on Vitamin B12

PRIYA trial (2012–2020, under PMNS) showed that **vitamin B12 supplementation** in adolescents improved **neonatal ponderal index**, supporting **policy inclusion of B12** in **iron–folic acid programmes** for adolescents and reproductive-age women.

Vitamin B12

- **Water-soluble**, made by **microorganisms**, sourced mainly from **animal foods**.
- Essential for **RBC formation**, **DNA synthesis**, **brain & nerve function**.
- **High deficiency** in India due to **poor diet**, sometimes **absorption issues** (intrinsic factor).
- Deficiency leads to **anaemia** and **neurological disorders**.

India's First Lung Cancer Treatment Guidelines

Health Minister released **India's first national Lung Cancer Treatment & Palliation Guidelines** to improve **patient outcomes**.

Lung Cancer Treatment and Palliation Guidelines

- **Aim**: Standardised, evidence-based **diagnosis, treatment & palliative care** across India.
- **15 recommendations** tailored to **Indian healthcare context**.
- Focus on **early diagnosis**, **screening high-risk groups**, **treatment pathways**, and **palliative care**.
- Developed by **DHR** & **DGHS** with oncology experts.

SC Bars Stem Cell Therapy for Autism

SC ruled stem cell therapy for **ASD** not allowed outside **approved trials** due to **lack of proven safety & efficacy**; directed **Union Govt** to set up a **regulatory authority** for **stem cell research**.

SC Judgement

- **Informed Consent**: Invalid without **scientific evidence** on safety, efficacy, risks & alternatives.
- **Patient Autonomy**: Consent cannot justify **unproven or unethical treatments** outside standard care.
- **Legal Violation**: Contravenes **New Drugs and Clinical Trial Rules, 2019** and **National Guidelines for Stem Cell Research, 2017** issued by **Indian Council of Medical Research.**

Stem Cells

- **About: Unique cells** that generate specialized cells; key for **repair & regeneration**
- **Types**: **Embryonic** (Pluripotent) – Any cell type; **Tissue-Specific** – Limited to their origin tissue; **iPSCs** – Lab-made, mimic embryonic cells.
- **Stem Cell Therapy**: Regenerative medicine using stem cells for tissue repair.
- **Regulation:** In **India**, allowed **only in approved clinical trials.**
  - Regulated by **National Guidelines for Stem Cell Research 2025** (by **ICMR & DBT**).

Autism (ASD)

- **Neurodevelopmental disorder** affecting **social interaction, communication, behaviour**
- Affects ~**1 in 100 children globally**; often **underreported** in LMICs
- Caused by **genetic + environmental factors** (not vaccines)
- May co-occur with **epilepsy, anxiety, depression, sleep issues**
- **Intellectual abili**ty varies: from severe impairment to above average

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Private Bill Seeks Mandatory 10-Year Census

A Private Member's Bill introduced in Rajya Sabha seeks to amend the **Census Act, 1948** to **legally mandate a decennial Census**, citing its importance for **welfare scheme delivery** & **public service planning**.

- **About Private Member's Bill: Introduced by MPs** who are not Ministers (not part of govt). Allows MPs to propose **laws/amendments** on matters significant to their constituencies.
- **Key Features:** Only **non-government MPs** can introduce. Enables **independent legislative proposals**. MPs can also move **resolutions** on specific issues.

- **Procedure:**
  - **Drafting & Notice**: MP submits bill with **1 month's notice**.
  - **Introduction**: Introduced in **Parliament**, followed by discussion.
  - **Debate**: Held if selected, usually on **Friday afternoon sessions**.
  - **Decision**: May be **withdrawn or voted on**.
- **Decline**: Only **14 PMBs** passed by both Houses since **Independence**. **None passed** both Houses **since 1970**.

SC Flags Delay in Regular DGP Appointments

SC flagged continued use of **"acting" DGPs** by States, violating the **Prakash Singh judgment (2006)** on regular DGP appointments.

Prakash Singh Judgment (2006)

- **No "acting" DGPs**; appointments must be **free from political influence**.
- **DGPs to be selected** from top **3 empanelled officers** by **UPSC**, with **2-year fixed tenure**.
- **SC orders (2018 & 2019)**: States must send proposals to UPSC **3 months before** DGP retirement.

Superintendence over the State Police

- **Police** is a **State subject** under **7th Schedule**.
- **Section 3, Police Act, 1861**: Superintendence of police in each State rests with the **State Government**.
- **District level**: Authority shared by **District Magistrate** & **Superintendent of Police**.
- State Police headed by **DGP-rank officers**.

India AI Stack

India launched the India AI Stack to **enable large-scale AI use in health, agriculture, education & governance**.

- **AI Stack**: Integrated **5-layer framework** enabling reliable, affordable, inclusive AI application development, deployment & scaling for population-scale impact across sectors.
- **Key Layers:**
  - **Application Layer**: User-facing AI tools for **health diagnostics, farm advisories, language translation, e-Courts, weather forecasting**.
  - **AI Model Layer**: India-centric sovereign models via **IndiaAI Mission**, **BharatGen**, **Bhashini**, **IndiaAIKosh** for Indian languages and public services.
  - **Compute Layer**: Processing support through subsidised **GPUs/TPUs**, **IndiaAI Compute Portal**, national GPU clusters, supercomputers, domestic semiconductors.

- **Data Centres & Network Infrastructure Layer**: Backbone via optical fibre network, near-universal **5G**, expanding data centres (Mumbai, Bengaluru, Hyderabad).
- **Energy Layer**: Reliable power from **500+ GW installed capacity**, **51%+ non-fossil**, battery storage, pumped storage, nuclear support.

Jhodia Community and Soura Language

Odisha's proposal to include the **Jhodia community** in the **ST list** & **Soura language** demand was **referred back** as not supported by the **Office of the Registrar General of India (ORGI)**, the Centre informed Lok Sabha.

Jhodia Community

- Reside in **Koraput, Rayagada, Kalahandi** (Odisha).
- Earlier treated as **synonym of Paroja tribe**, got **ST benefits till 1997**.
- **Socially, economically backward**; depend on **subsistence farming, forest produce**; face **educational & economic deprivation**.

Soura (Sora) Language

- Spoken by **Saora tribe**; part of **Austroasiatic (Munda) family**; also called **Sora, Savara, Saura**.
- Script: **Sorang Sompeng**, developed in 1936 by Mangei Gomango; culturally significant.
- Not in **Eighth Schedule** — lacks official recognition, support, preservation.
- No fixed criteria/timeline for inclusion; **Pahwa (1996)** & **Sitakant Mohapatra (2003)** committees remained inconclusive.

India Expands Kavach 4.0 Coverage

Indian Railways commissioned **472.3 km of Kavach 4.0** in a single day — a record rollout — expanding total coverage to **1,306.3 km** across **5 railway zones**.

- **Kavach: Indigenous Automatic Train Protection (ATP) system**, evolved from Train Collision Avoidance System (TCAS) (2012); renamed Kavach ("armour").
  - **Version 4.0**: Most advanced; upgraded via **operational feedback**.
- **Design & Suitability:** Suited for **high-density, multi-line networks**; ensures **faster response, high reliability**, integrates with **existing signalling**.
- **Technology Base:** Uses **microprocessors, GPS, radio** communication for real-time train monitoring.

- **Safety Functions:** Prevents **Signal Passing at Danger (SPAD)**, **overspeeding**, **collisions**; ensures safety in **low visibility**, alerts for **wrong direction & level crossing gates**.
  - **Safety Integrity Level(SIL)-4 compliant**, approved by Research Designs and Standards Organisation (RDSO).

Sunlight-Powered Self-Charging Energy Device

Indian scientists developed a **sunlight-powered energy storage device** that **captures and stores solar energy** in a single unit, enabling **self-charging power systems**.

- **About:** The innovation, called a **photo-capacitor,** was developed by **CeNS, Bengaluru (DST)**. **Integrates solar capture & storage**; reduces **size, cost, complexity, energy loss**.
- **Technology Used:** Uses **binder-free nickel–cobalt oxide (NiCo$_2$O$_4$) nanowires** on **nickel foam** via **hydrothermal process**; forms **porous 3D network** for efficient sunlight absorption & charge storage.
- **Performance: Enhanced capacitance under sunlight**, durable over **thousands of cycles**, stable in **varying light**.
- **Applications:** Suitable for **portable electronics, wearables, off-grid power systems**.

Ad Hoc Judges Under Article 224A

SC Collegium approved appointment of **retired judges as ad hoc judges** in Allahabad HC to address **judicial pendency**.

- **Article 224A: Retired HC judge** can act as **ad hoc judge** on **CJI of HC's reference** with **President's consent**.
  - Enjoys **full jurisdiction, powers, privileges** of an HC judge; **not a permanent judge**.
  - **Allowances** fixed by the **President**.
  - Consent of retired judge mandatory.
  - **2021**: **SC** issued **guidelines** to promote use of Article 224A to tackle **HC case backlog**.
- **Ad hoc Judges to SC Article 127**: If **SC quorum not met**, CJI (with **President's consent**) can request a **qualified HC judge** to act as **ad hoc SC judge**.
- **Attendance of Retired Judges at SC Sittings: Under Article 128**– CJI (with **President's consent**) can request retired SC/ qualified retired HC judge to act as SC judge.

Sampoornata Abhiyan 2.0

NITI Aayog launched **Sampoornata Abhiyan 2.0**, a **3-month campaign (28 Jan – 14 Apr 2026)** to fast-track **full coverage of key development indicators** in **Aspirational Districts & Blocks**.

- **About:** Builds on **2024 campaign**; targets **5 KPIs in 112 Aspirational Districts** & **6 KPIs in 513 Aspirational Blocks** under the **Aspirational Districts and Blocks Programme**.

- **Aspirational Blocks – Focus Areas**: Child nutrition & measurement (ICDS); Basic amenities in Anganwadi Centres; Girls' sanitation facilities in schools; Bovine vaccination (Foot and Mouth Disease)
- **Aspirational Districts – KPIs**: Birth weight measurement; TB case notification; Village/Urban Health Sanitation & Nutrition Days; Functional girls' toilets in schools; Animal vaccination coverage
- **Implementation Agency: Three-month action plans**, monthly tracking, awareness & behaviour change campaigns, and field-level monitoring by district officers.
- **Institutional Support: NITI Aayog**, with Central Ministries, States & UTs, to support planning, implementation, capacity building & sustainable service delivery.

Miniratna Category-I Status for Yantra India Limited

Defence Minister granted **Miniratna Category-I status** to **Yantra India Limited** for its swift transformation into a **profit-making DPSUs** within **four years**.

- **About YIL:** One of **7 DPSUs** formed post **Ordnance Factory Board corporatisation** on **1st Oct 2021**; under Department of Defence Production.
- **Key Products:** Makes **carbon/glass fibre composites**, **aluminium alloys**, & assemblies for ammunition, armoured vehicles, artillery guns, and main battle tanks.
- **Significance:** YIL's Board empowered to approve **capital expenditure up to ₹500 crore** without prior govt. approval.
  - Supports **Aatmanirbhar Bharat**, promotes indigenisation, cuts import dependence, boosts defence exports & industry participation.

NBDSA Flags Communal Code Violations

~60% of orders passed by the **News Broadcasting & Digital Standards Authority (NBDSA)** over the past 3 years cited violations of the communal harmony code by private TV & digital news broadcasters.

NBDSA

- **Independent self-regulatory body** set up by **News Broadcasters & Digital Association (NBDA),** representing private TV & digital news broadcasters; funded by members.
- Enforces **objectivity, fairness, decency** & **communal harmony** under **News Broadcasting & Digital Standards Regulations, 2008**.
- Can act **suo motu** or on **complaints**; powers include **warnings, censures, content modification/removal**, penalties, or closure.

- **Chairperson**– eminent jurist; includes **news editors** and experts in **law, education, literature, public administration**.
- **Two-tier grievance redressal**– approach broadcaster first, then escalate to NBDSA.

Biomaterials

India is seeing rising **policy & industrial focus on biomaterials** as cleaner substitutes, driven by the shift towards **circular economy models**, **low-carbon manufacturing**, and **fossil-fuel import substitution**.

- **About:** Derived **wholly/partly from biological sources** or via **biological processes**.
  - Substitute for **petroleum-based materials** in **packaging, textiles, construction, healthcare**.
  - Examples: **Bioplastics** (plant sugars/starch), **bio-based fibres**, **biodegradable sutures**, **tissue scaffolds**.
- **Significance: Reduces fossil imports**, utilises **agri-residues**, supports **climate & circular economy goals**, boosts **export competitiveness**.
  - **Bioplastics market (India)**: ~$500 million (2024) with strong growth.
  - **Key investments:** Balrampur Chini Mills' PLA plant (UP), startups like **Phool.co**, **Praj Industries**.
- **Types:**
  - **Drop-in**: Chemically identical to fossil-based; fit **existing manufacturing systems** (e.g., **Bio-PET**).
  - **Drop-out**: Chemically different; need **new processing/recycling/composting systems** (e.g., **Polylactic Acid**).
  - **Novel**: **Bio-engineered** with new properties (e.g., **self-healing materials**, **bio-active implants**).
- **Global Examples**:
  - **EU**: Compostable packaging in Packaging Waste Regulation
  - **UAE**: World's largest **PLA facility** via **Emirates Biotech**
  - **US**: **USDA BioPreferred Program** promoting biomaterials

Indian Computer Emergency Response Team (CERT-In)

CERT-In's 2025 performance underscored its key role in securing India's growing **digital ecosystem** amid rising **cyber threats**.

- **CERT-In**: National cyber incident response body under **MeitY**, mandated by **IT Act, 2000**.
- **Functions**: Prevents and responds to **phishing, ransomware, online fraud, AI scams**, and attacks on **critical infrastructure**.
  - **Strengthens sectoral resilience** through **CSIRT-Fin** – BFSI sector; **CSIRT-Power** – Power sector; network of **State/sectoral CSIRTs**

- **Frameworks**: Anchors **Cyber Swachhta Kendra**, **National Cyber Coordination Centre**, **Cyber Crisis Management Plan**.
- **Recognition**: By **WEF**, **University of Oxford**, **France's ANSSI**.
- **Significance**: Supports **national security**, **economic stability**, and **Digital India vision**.

Minimum Import Price (MIP) on Penicillin G

The government imposed **MIP** on **Penicillin G**, its **salts**, **6-APA**, and **amoxicillin** to curb **low-cost imports** and support the **sustainability of domestic API producers**.

- China supplies around **70% of raw materials** used by India's pharmaceutical industry.
- The **MIP will be in force for 1 year**, with **exemptions** for **100% EOUs**, **SEZ units**, and **advance authorisation imports** (not sold domestically).
- It complements earlier steps like **PLI scheme** and **Nov 2025 MIP on sulphadiazine**, aiming to **protect domestic API makers** without affecting **exports** or **input affordability**.

Penicillin G

- **Penicillin G (*Benzylpenicillin*)** is a **narrow-spectrum antibiotic** given **IV or IM** due to poor oral absorption; also used for **prophylactic treatment** against sensitive bacteria.

Expert Panel for Transgender Healthcare

The **Ministry of Social Justice** constituted a **multidisciplinary medical expert panel** to guide **healthcare policies for transgender persons**.

- **Transgender persons** have distinct **healthcare needs**; govt forms **expert panel** post SC directive in **Jane Kaushik vs UoI (2025)**.
- Aligns with **Articles 14, 15, 19, 21** – dignity, equality, non-discrimination.
- **Trans population**: ~**4.88 lakh (2011 Census)**; highest in **UP, AP, Maharashtra**.

Timeline of Reforms

- **2009**: EC includes **"others"** option in registration forms.
- **2014**: SC in **NALSA vs UoI** recognizes **transgender as Third Gender**.
- **2019**: **Transgender Persons (Protection of Rights) Act** enacted.

Bharat Parv 2026

Bharat Parv 2026, a **6-day cultural and tourism festival**, was held from **26–31 Jan** at **Red Fort, New Delhi**, organised by the **Ministry of Tourism** as part of **Republic Day celebrations**.

- **Held annually since 2016**, it showcases **India's cultural, culinary, spiritual diversity**.
- **2026 edition** commemorated **150 years of "Vande Mataram"** (by Bankim Chandra Chatterjee).
  - Promoted **"Ek Bharat, Shreshtha Bharat"** & **"Dekho Apna Desh"**.
- Featured **41 Republic Day tableaux**, **48 folk/classical performances**, and **22 armed forces band shows**.
- **60+ food stalls** offered **regional, millet-based, and tribal cuisines**, highlighting **sustainability and local food traditions**.

Coking Coal Declared a Critical Mineral

Government of India declared **Coking Coal** as a **Critical and Strategic Mineral** under **Section 11C** of **MMDR Act, 1957**.

- **First Schedule of MMDR Act**: **Part A (**includes **Coking Coal)** & **Part D (Coking Coal** listed as **Critical and Strategic Mineral)**.

Coking Coal

- **About: Coking coal (metallurgical coal)** is a special grade of **bituminous coal** used to produce **coke**.
  - Coke is **indispensable** for reducing **iron ore to pig iron** in **blast furnace steelmaking**.
- **Properties: Strong caking property** (softens and swells on heating). **Low impurities**: low **ash, sulphur, phosphorus**.
- **Steel Production Link: ~780 kg of coking coal** required to produce **1 tonne of steel**.
- **Global Production:** Major producers - **China, Australia, Russia, USA, Canada**.
- **India**: 2nd-**largest crude steel producer** globally. ~**95% of coking coal demand imported**, mainly from Australia (57.58 million tonnes in 25).
  - **Domestic resources: ~37.37 billion tonnes**.
  - **Reserves:** Jharkhand, Madhya Pradesh, West Bengal, Chhattisgarh.

RBI–ESMA Memorandum of Understanding

RBI signed an **MoU** with the **European Securities and Markets Authority (ESMA)** during the visit of the **European Council** President and **European Commission** President to India.

- **About:** Enables **formal recognition of CCIL** and other **RBI-regulated CCPs** by **ESMA**.
  - Allows **smooth participation of European market players** with Indian CCPs.

- Reduces **regulatory and operational barriers** for **European banks and investors** accessing Indian markets.
- **Provisions: Consultation, cooperation, and information exchange** between **RBI** and **ESMA**. ESMA to **rely on RBI's** regulatory framework.
- **Nature of Agreement: Non-binding MoU.** Does not override **domestic laws**.
- **Significance: Effective from date of signing**.
  - Operative for an **unlimited period**. Provides a **long-term institutional framework** for **India–EU financial market cooperation**.

Personality Rights in India

Delhi HC issued notices in a case concerning protection of **personality rights** of **Salman Khan**.

Personality Rights

- **About:** Protect an individual's **name, image, voice, likeness, mannerisms**.
  - Grant **control over commercial use** of one's public persona.
  - Emanate from **right to privacy** and **property interests**.
- **Types**
  - **Right of Publicity**: Protection against **unauthorised commercial exploitation** of image/likeness. Comparable to **trademark-like protection**.
  - **Right to Privacy**: Protection from **non-consensual public representation** of personality.
- **Constitutional & Legal Basis**
  - **Article 21** – Right to life & personal liberty, includes **privacy** (K.S. Puttaswamy case).
  - **Copyright Act, 1957: Moral rights** of authors/performers against distortion or misuse.
  - **Section 14 of Trademarks Act, 1999**: Bars trademarks falsely implying association with a living person or one deceased within **20 years**, without consent.
  - **Section 66C of Information Technology Act, 2000:** Punishment for **identity theft** (misuse of electronic identity/credentials).
- **Key Judgement**
  - **Aishwarya Rai Bachchan case:** Delhi High Court restrained unauthorised impersonation.
  - **Use permitted only when: No public deception**, and **no implied endorsement**.
  - **Foreign entities cannot invoke Article 19 rights** in India.

Made in India C-295 Aircraft

First 'Made in India' C-295 aircraft set to roll out from **Airbus-Tata FAL, Vadodara.**

- India and Spain signed a deal in 2021 for 56 C-295 aircraft (16 from Spain, 40 to be made in India by TASL) to enhance the IAF's medium-range transport capabilities.

India-Spain Ties

- **Strategic Partnership:** Working to elevate ties; Spain joined **Indo-Pacific Oceans Initiative (IPOI)**.
- **Trade:** Spain is India's **6th largest EU trade partner**; **USD 9.32 bn** trade (2024); **16th largest FDI source** with USD 4.29 **bn**.
- **Exports to Spain:** Fuels, chemicals, iron & steel, textiles, machinery, seafood, leather.
- **Imports from Spain:** Mechanical appliances, chemicals, plastics.
- **Cultural Milestone:** 2026 marked as **'Dual Year' of Culture, Tourism & AI**; **70 years of diplomatic ties**.

Languages of India and the Enduring Legacy of the Tirukkural

The **Union Education Minister** released **55 literary works** by Centres for Classical Languages and a **sign-language version of the Tirukkural**, to promote **India's linguistic heritage**.

Classical Languages

- **Initiated** in **2004** to preserve India's **ancient literary and cultural legacy**.
- **11 Total Recognized Languages**: Tamil (**2004**)**,** Sanskrit (**2005**)**,** Kannada (**2008**), Telugu (**2008**)**,** Malayalam (**2013**)**,** Odia (**2014**) and Marathi, Pali, Prakrit, Assamese, Bengali (**2024**).
- **Nodal Ministry**: Initially **Ministry of Home Affairs**, later **Ministry of Culture.**
- **Revised Criteria (2024)** by **Linguistic Experts Committee (Sahitya Akademi)**:
  - Antiquity: **1500–2000 years;** Presence of **heritage literature; Knowledge texts** (esp. prose), **inscriptions, epigraphy;** Literature may differ from **modern forms.**
- **Benefits**: **National awards**, **UGC academic chairs**; **Centres of Excellence** at **CIIL, Mysuru** for research and preservation.

Tirukkural

- **Author**: **Thiruvalluvar (**~2,000 years ago); **Language**: Tamil; **Content**: 1,330 couplets
- **Themes**: **Aram** (virtue); **Porul** (wealth/governance); **Inbam** (love).
- **Significance**: **Universal, secular guide** on **ethics, economy, governance, and human relationships.**

Amendments to New Drugs and Clinical Trials Rules, 2019

Health Ministry amends NDCT Rules, 2019 to **streamline drug research and approvals** under the **Ease of Doing Business** framework.

- **Test Licence Waiver**: Replaced by **prior intimation** for **non-commercial drug manufacture** for research.
  - **Excludes**: **Cytotoxic, narcotic, and psychotropic drugs** – still need licence.
- **Timeline Reduction**: Saves **90 days** in drug development.
  - For high-risk drugs, **licence processing time** cut from **90 to 45 days**.
- **Clinical Study Ease**: **No prior permission** needed for **low-risk BA/BE studies**; only **online intimation to CDSCO**.
- **Digital Integration**: Implementation via **NSWS** and **SUGAM portal** for **paperless, transparent submission**.
- **Jan Vishwas Alignment**: Reforms follow **trust-based governance**, support **India as a pharma R&D hub**.

Tantya Mama and Bhil Tribe

MP has announced the installation of a **metal statue of Tantya Mama**, a revered Bhil tribal freedom fighter.

Tatya Mama

- **Bhil tribal freedom fighter** from **MP**, resisted **British rule (1878–1889)**.
- Fought against **revenue oppression** post-1857; targeted **wealthy landlords** & British allies.
- Known as **"Robin Hood of Malwa"**; affectionately called **"Mama"**.
- Represents **40% of MP's 1.53 crore tribal population**; tribals form **21% of MP's population** (highest in India).

Bhil Tribe

- **Largest tribal group in India**: **4.61 million** (37.7% of total STs, Census 2011). Spread across **Gujarat, MP, Rajasthan, Maharashtra, Chhattisgarh, Andhra Pradesh**.
- **Religious Practices: Predominantly Hindu** with **animistic elements**. Worship **serpent gods**, **nature deities**; some follow **Islam** (e.g., Nirdhi, Tadvi Bhils in Maharashtra).
- **Colonial Resistance**: Declared **"Criminal Tribes" under CTA, 1871**.
  - **Bhagat Movement (1883) by Govind Guru:** Mangarh Massacre (1913) – "Adivasi Jallianwala"
  - **Eki Andolan (1920) by Motilal Tejawat:** Anti-exploitation tribal mobilisation.

- **Cultural Heritage**
  - Art: **Pithora paintings (MP)**, **Bhil dot art**.
  - Festivals: **Bhagoria (MP)**, **Gol Gadhedo (Gujarat)**.

Sound-Based Helium Leak Sensor

A **novel acoustic-based helium leak sensor** using **topological materials** and a **Kagome lattice** detects helium by measuring **frequency shifts** in **trapped sound waves**, caused by changes in **sound speed** due to helium—without any chemical reaction.

Helium

- **Inert noble gas**; 2nd most abundant in the **universe**, but **rare on Earth**.
- **Origin**: Produced by **alpha decay** of **uranium/thorium**; extracted from **natural gas**.
- **Key Applications: MRI cooling**, **rocket purging**, **leak detection**, **airships**, **deep-sea breathing mixtures**, **shielding gas** in **high-heat welding** (e.g., aluminium, titanium).
- **Supply & Geopolitics: Global shortage** due to **finite reserves** & high demand.
  - **India's potential**: **Bakreswar-Tantloi** (Rajmahal basin). **Major producers**: **USA**, **Algeria**, **Russia**.

Equity Infusion into SIDBI

Union Cabinet approved ₹5,000 crore equity infusion into **SIDBI** over **3 years** to boost **MSME credit flow**.

- **MSME Reach**: Expected to grow from **76.26 lakh (FY25)** to **102 lakh (FY28)** – adding **25.74 lakh** new MSMEs.
- **Employment Impact**: MSMEs employ **30.16 crore people** (avg. **4.37 jobs/unit**); projected to create **1.12 crore jobs** by **FY28**.
- **Financial Strength**: Helps SIDBI maintain strong **CRAR** amid rise in **risk-weighted assets** from increased lending.

SIDBI

- **About**: Apex institution for **MSME financing & development**, under **Ministry of Finance**.
- **Legal Status**: Formed under **SIDBI Act, 1989**; HQ – **Lucknow**; one of **5 AIFIs** regulated by **RBI**.
  - **Other AIFIs**: **EXIM Bank**, **NABARD**, **NHB**, **NaBFID**.
- **Mandate: Promotion, financing, development** of MSMEs via **capital access**, **value chain integration**, and **sustainable growth**.
- **Functions**:
  - **Refinancing & direct loans** (term & working capital)

- Credit guarantees, capacity building, and innovation support
- Coordinates Govt. schemes like PLI and digital credit platforms.

Solid Waste Management (SWM) Rules, 2026

SWM Rules, 2026, notified by MoEFCC under the Environment Act, 1986, superseded 2016 rules and mandate stricter segregation in urban and rural areas, effective 1st April 2026.

- **Four-Stream Segregation at Source**: Mandatory segregation into Wet, Dry, Sanitary, and Special Care waste; with composting/bio-methanation, Material Recovery Facilities, secure storage, and authorised disposal respectively.

- **Polluter Pays Principle**: Environmental compensation for non-compliance; guidelines by Central Pollution Control Board (CPCB), enforcement by SPCBs/PCCs.

- **Bulk Waste Generators (BWGs)**: Defined as entities with ≥20,000 sq m area, ≥40,000 L/day water use, or ≥100 kg/day waste; contribute ~30% of waste.
  - India generates ~1.85 lakh tonnes/day of solid waste (CPCB, 2023–24).
  - Centralised Online Portal will track waste (generation–collection–disposal), replacing physical reporting.

- **Extended BWG Responsibility (EBWGR)**: BWGs must process wet waste on-site or obtain a responsibility certificate.

- **RDF Mandate**: Industries to raise RDF use from 5% to 15% in 6 years to support circular economy (cement/WtE).

- **Landfill Restrictions**: Only non-recyclable & inert waste allowed; higher fees for unsegregated waste.

- **Legacy Waste**: Time-bound biomining & bioremediation with quarterly reporting.

- **Hilly & Island Areas**: Local bodies may levy user fees on tourists and regulate inflow based on waste capacity.

- **Institutional Mechanism**: State-level committees chaired by the Chief Secretary to oversee implementation.

National Improvised Explosive Device Data Management System

Union Home Minister inaugurated NIDMS, India's first centralised digital database of bomb blasts since 1999, developed by the National Security Guard (NSG).

NIDMS

- **Purpose**: Secure national-level digital platform for systematic collection, collation, and dissemination of Improvised Explosive Devices-related data.

- Key Features:
  - **Two-way, integrated online platform** for NIA, ATS, State Police, CAPFs, and others.
  - **Real-time data sharing** for faster, evidence-based investigations.
  - **'One Nation, One Data Repository'** approach for IED-related data; uses AI to integrate multiple data sources for a robust security grid.
  - Linked with ICJS-2 – Inter-Operable Criminal Justice System (Phase-II) ecosystem under 'One Data–One Entry' (CCTNS, e-Prisons, e-Forensics, NAFIS).

NSG

- **Established**: Formally in 1986 after a 1984 Union Cabinet decision.
- **Purpose**: Federal contingency counter-terrorism force.
- **Modelled on**: UK's SAS & Germany's GSG-9.
- **Doctrine**: Swift strike & immediate withdrawal.
- **Components**:
  - **Special Action Group (SAG)** – from Army (counter-terror ops)
  - **Special Ranger Groups (SRG)** – from CAPFs and State Police (support)
- **Regional hubs**: Mumbai, Chennai, Kolkata, Hyderabad, Ahmedabad; new hub in Ayodhya.
- **National Bomb Data Centre (NBDC)**: Nodal agency under NSG for IED incident data.

SC Directs States on Police–Media Briefing Policy

SC directed all States to frame a uniform policy for police media briefings within 3 months, based on the manual by amicus curiae Gopal Sankaranarayanan, to balance transparency and rights of the accused.

- **Gopal Sankaranarayanan Police Manual** integrates international best practices and Union govt inputs, aiming for a rights-compatible, investigation-safe framework that protects dignity, privacy, and fair-trial rights of all parties while ensuring accurate public information.

- It mandates police briefings to prevent harm, counter rumours, seek public cooperation, and uphold law and order. SC stressed that in the social media era, only verified and necessary information should be released to combat misinformation and protect public order.

Tamil Nadu Opposes UGC Circular on Third Language

Tamil Nadu opposed UGC's circular mandating a third language in higher education, calling it an indirect Hindi imposition, and reaffirmed its commitment to the two-language policy.

- **Rejection of Three-Language Formula:** Tamil Nadu **rejected the three-language formula under NEP 2020**, viewing the **UGC circular** as infringing on its **State policy**. **NEP 2020** mandates learning **three languages**, including **two Indian languages** and one **English/modern Indian/ foreign language**.

- **Adherence to Two-Language Policy:** Tamil Nadu **reaffirmed its two-language policy (Tamil and English)**, framed by **C.N. Annadurai in 1968**.

  - The issue underscores **Centre–State tensions** over education (a **Concurrent List** subject). In **2022**, the State Assembly **unanimously opposed** the Parliamentary Committee's proposal to **impose Hindi** in central institutions.

ASEAN–India Digital Ministers' Meeting (ADGMIN)

6th **ADGMIN** was **virtually co-chaired by India and Vietnam**, with the theme **"Adaptive ASEAN: From Connectivity to Connected Intelligence"**.

- ADGMIN is an **annual forum** of **Telecom and Digital Ministers** from **11 ASEAN countries** and Dialogue Partners like **India, Australia, China, and the US**.

Highlights of the Meeting

- **ADGMIN 2024** adopted the **ASEAN–India Joint Statement on Advancing Digital Transformation**, focusing on **DPI, FinTech, Cybersecurity, AI, capacity building**, and **sustainable financing**.

  - Progress on the **ASEAN-India 2025 Work Plan** was reviewed; the **2026 Work Plan** was welcomed. The **ASEAN-India Fund for Digital Future** was operationalized to support joint digital initiatives.

- **India showcased** its digital strides: **near-universal 4G, fastest 5G rollout, BharatNet, mobile manufacturing**, and offered expertise in **Aadhaar, UPI, DigiLocker, Sanchar Saathi**.

  - On **AI**, India highlighted the **IndiaAI Mission** focusing on **Safe and Trusted AI**, offering collaboration in **AI capacity building, standards, and use cases**.

National Monetisation Pipeline 2.0

Union Finance Minister launched **NMP 2.0**, prepared by **NITI Aayog**, to operationalise the **Asset Monetisation Plan 2025–30** announced in **Union Budget 2025–26**.

- **NMP 1.0:** Achieved ~**90% of ₹6 lakh crore** target; set baseline best practices.

- **NMP 2.0 (Budget 2025–26):** Monetisation of **operational public assets**; medium-term roadmap, asset visibility for investors & implementation framework.

- **Asset Recycling:** Leverage private efficiency to unlock capital from **brownfield assets** for new **CAPEX** without raising budgetary outgo.

- **Sectors Covered:** Roads, Railways, Power, Oil & Gas, Civil Aviation, Ports, Telecom, Coal, Mines.

- **Governance:** Monitored by **Core Group of Secretaries on Asset Monetisation (CGAM)**, chaired by **Cabinet Secretary**; whole-of-government approach.

- **Revenue Allocation:** Proceeds credited to **Consolidated Fund of India** (Ministries), **PSUs/Port Authorities**, and **State Consolidated Fund** (mining royalties); separate head for direct private investment in construction/major maintenance.

- **NMP 2.0 Award Targets:** Aggregate potential ₹**16.72 lakh crore**, incl. ₹**5.8 lakh crore private investment** (2.6 times higher than NMP 1.0).

- **Monetisation Instruments:** PPP concessions, InvITs, securitisation of cash flows.

- **Economic Vision:** Aligned with **Viksit Bharat**; optimise resources & provide long-term roadmap for private participation.

E175 Jets in India

Adani Defence & Aerospace and Brazil's **Embraer** signed an enhanced **MoU** to set up an **E175 regional jet Final Assembly Line (FAL)** in India under **Make in India**.

- Aims to build **Regional Transport Aircraft (RTA) ecosystem**: manufacturing, supply chain, pilot training.

- **E175 Jet**: up to **88 passengers**; suited for **Tier-2 & Tier-3 high-frequency routes**.

  - India to need **500+ aircraft (80–146 seats)** in next **20 years**.

- Aligns with **RCS-UDAN**; supports indigenous aviation ecosystem for underserved markets.

- Scope includes **aftermarket services** and securing orders for FAL viability.

Namo Bharat Rapid Rail and Meerut Metro

The PM inaugurated **Namo Bharat Rapid Rail** and **Meerut Metro** from a single platform.

- **Meerut Metro (**connecting Meerut South and Modipuram) is India's fastest metro, operating on Namo Bharat infrastructure.

Namo Bharat Rapid Rail

- **About:** India's first Regional Rapid Transit System (RRTS); semi-high-speed rail for NCR connectivity.

- **Speed:** Design – 180 km/h; Operational – 160 km/h; Average – ~100 km/h.

- **Objective:** Reduce road & rail congestion for 100–200 km regional commuting.

- **Difference:**
  - **Vs Metro:** Fewer stops, higher speed, regional focus.
  - **Vs Vande Bharat:** Shorter regional routes, higher frequency.
- **Flagship Corridor:** Delhi–Ghaziabad–Meerut (82 km); fully operational from Feb 2026.

North Eastern Science & Technology Cluster Project

MDoNER, through **NEC,** has sanctioned the NEST **project,** to create a self-sustaining ecosystem of **research, entrepreneurship,** and **skill development.**

- **Nodal Agency & Duration:** Implemented by **IIT Guwahati** for **5 years.**
- **Thematic Verticals:** Grassroot Technologies Innovation Hub; Semiconductor & AI Technology Hub; CoE in Bamboo-Based Technology & Entrepreneurship; Innovation Centre on Biodegradable & Eco-friendly Plastics
- **Structure:** Hub-and-Spoke model
  - **Hub:** IIT Guwahati
  - **Spokes:** NITs (Agartala, Meghalaya), IIM Shillong, Tezpur University, etc.
- **Key Components:** Incubation & Tinkering Labs; Specialized training; Technology transfer & marketing; Research & skill infrastructure development

North Eastern Council (NEC)
■ **Established:** North Eastern Council Act, 1971 (Operational from 1972)
■ **Nature:** Statutory advisory body
■ **Headquarters:** Shillong, Meghalaya
■ **Role:** Nodal agency for economic & social development of the 8 North Eastern States
■ **Member States:** Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura
■ **Administrative Control:** Ministry of DoNER
■ **Composition:** Union Home Minister – Ex-officio Chairman; Governors of 8 states; CMs of 8 states; 3 members nominated by the President

International Criminal Court

Former **Philippine President Rodrigo Duterte** will face a **pre-trial hearing at ICC** over alleged **crimes against humanity** linked to his **anti-drug campaign,** which reportedly led to **thousands of killings.**

- **About ICC: First permanent international tribunal** to prosecute individuals for serious international crimes; operates on **principle of complementarity** (court of last resort).
  - Intervenes only when national authorities are **unwilling or unable** to prosecute.

- Not an **appellate body** over domestic courts.
- **Legal basis**: Established by the **Rome Statute** (adopted **17ᵗʰ July 1998**; in force **1ˢᵗ July 2002**).
  - **Headquarters**: The Hague, Netherlands.
- **Jurisdiction & Core Crimes:** Prosecutes **individuals (not states)** for **Genocide, Crimes against Humanity, War Crimes, Crime of Aggression** (aggression jurisdiction activated **2018**). Jurisdiction over crimes committed after **1ˢᵗ July 2002**.
- **Triggering Jurisdiction:** Territory or national of a **State Party**.
  - **UNSC referral** (including non-members).
  - **Proprio motu (on its own)** investigation by Prosecutor with **Pre-Trial Chamber approval**.
- **Membership: 125 States Parties** (Feb 2026); **India, USA, China, Israel** are non-parties.
  - **India's stand**: Concerns over **sovereignty** and **UNSC referral powers** being politically motivated.
- **Structure**: Presidency, Judicial Divisions, Office of the Prosecutor, Registry; oversight by Assembly of States Parties (ASP).
- **Enforcement**: No police force; depends on **member states' cooperation** for arrest and sentence enforcement.
- **ICC vs ICJ**: **ICC** prosecutes **individuals**; **ICJ** settles **state disputes**.

India Attends Board of Peace Meet as Observer

India participated as an **observer** in the **inaugural Board of Peace meeting (Washington D.C.),** reaffirming its commitment to a **Two-State solution** in the **Israel–Palestine conflict**.

- **Board of Peace**: US-established body (seen as potential UN rival); **27 nations** (e.g., **Saudi Arabia, UAE, Argentina**); focuses on **Gaza Strip redevelopment** with USD 10 billion US commitment.
  - **India** participated as an **observer**, not full member.
- **Global Alignment**: Supports **Gaza Peace Plan** & **UNSC Resolution 2803**; seeks engagement in **West Asian stability**.
  - **West Bank Issue**: India signed joint statement (100+ entities) criticizing Israeli settlement expansion as violation of international law.
- **Two-State Solution**: Supports a **sovereign, independent, viable State of Palestine (based on 1967 borders)** coexisting with **Israel**.
- **Diplomatic approach**: Reflects a **"de-hyphenated" yet principled policy** balancing India–Arab League relations & Israel ties.