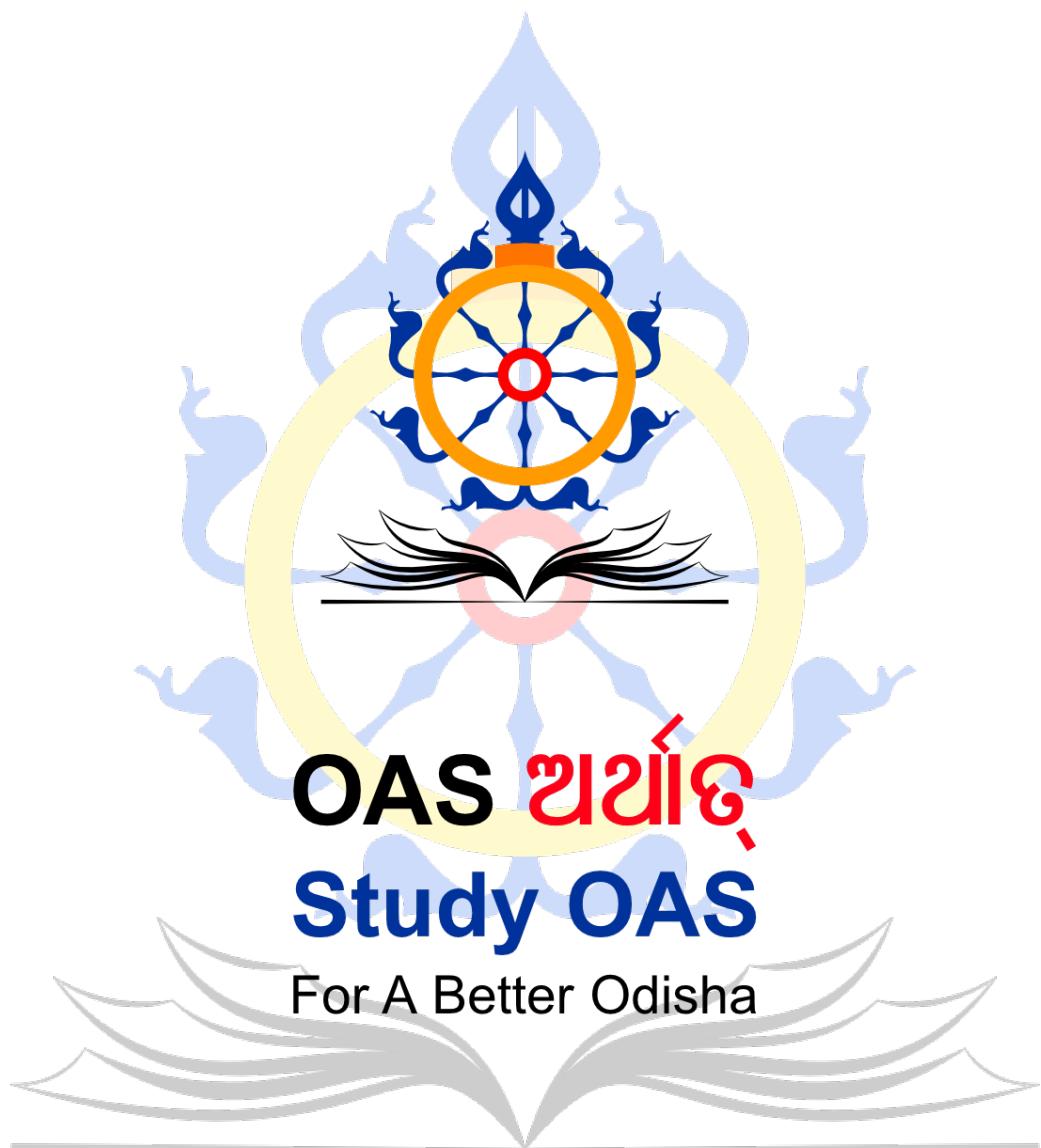


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Governance and Policy

Cabinet Approves 3% Hike in DA/DR for Central Government Employees and Pensioners

What's the News?

- The **Union Cabinet** has approved a **3% increase in Dearness Allowance (DA)** for central government employees and **Dearness Relief (DR)** for pensioners, effective **October 1, 2025**.
- This hike raises the DA/DR rate from **55% to 58%** of basic pay/pension, in line with the **7th Central Pay Commission** formula.
- The decision benefits **49.19 lakh employees** and **68.72 lakh pensioners**, with an estimated annual financial impact of **₹10,084 crore** on the exchequer.

Rationale and Implementation

- Purpose:**
 - To **compensate for inflationary price rises** based on movements in the **Consumer Price Index for Industrial Workers (CPI-IW)**.
 - Part of the government's biannual DA revision cycle (January and July/October).
- Recent Trends:**
 - A **2% DA hike** was granted in **March 2025**, effective from **January 1, 2025**, raising the rate from 53% to 55%.
 - The current 3% hike maintains alignment with inflation trends and ensures **real income protection** for government personnel.
- Impact on Salaries:**
 - An employee with a **basic pay of ₹18,000** will receive an additional **₹540/month** (3% of ₹18,000).
 - A pensioner with a **minimum pension of ₹9,000** will get an extra **₹270/month**.

Additional Info

- Dearness Allowance (DA):**
 - A **cost-of-living adjustment** granted to offset inflation.
 - Fully taxable** under the **Income Tax Act, 1961**.
 - Revised **twice a year** (typically January and July), though implementation may vary.
- 7th Central Pay Commission (CPC):**
 - Recommended linking DA to **CPI-IW** with a **base year of 2016=100**.
 - DA is calculated using a **12-month average** of CPI-IW data.
 - DA becomes **merger-eligible** if it crosses **50%**, though no merger has been implemented post-7th CPC.
- Financial Implications:**
 - The **combined DA/DR burden** now constitutes a significant portion of the **Revenue Expenditure**.
 - The ₹10,084 crore annual cost reflects the scale of central government employment and pension liabilities.
- Historical Context:**

- DA was introduced post-**World War II** as a **wartime compensation measure**.
- Over time, it evolved into a **permanent inflation-indexed allowance** for public sector employees.

Staff Selection Commission Introduces Major Exam Reforms for Transparency and Fairness

What's the News?

- The **Staff Selection Commission (SSC)** has rolled out a comprehensive set of reforms to enhance **transparency, fairness, and candidate convenience** in its recruitment examinations.
- Key changes include allowing candidates to **access their question papers, recorded responses, and official answer keys** post-examination, enabling evidence-based challenges to discrepancies.
- The objection fee for challenging questions has been **reduced from ₹100 to ₹50 per question**, and **Aadhaar-based authentication** has been made mandatory to prevent impersonation.

Key Reforms & Operational Details

- Equi-Percentile Normalisation:** Although single-shift implementation reduces the need, the **equi-percentile method** remains part of SSC's evaluation toolkit to ensure fairness across multi-shift exams in future cycles.
- Digital Security Measures:** Question papers are now transmitted via a **secure digital vault** to prevent leaks, and stricter monitoring protocols have been introduced.
- Re-exam Provision:** A **re-examination** for affected candidates of CGLE Tier-I 2025 is scheduled for **October 14, 2025**, following anomalies detected in select centres.

Additional Info

- Staff Selection Commission (SSC):**
 - Constituted in **1975** under **Government of India's Ministry of Personnel, Public Grievances and Pensions**.
 - Responsible for recruitment to **Group B (Non-Gazetted)** and **Group C (Non-technical)** posts across central government departments.
- Recent Exam Scale:**
 - CGLE 2025** received **28 lakh applications**, with **13.5 lakh candidates** appearing across **126 cities** and **255 centres** in its Tier-I phase.
- Candidate Support Infrastructure:**
 - Official X (Twitter) handle:** @SSC_GoI launched for verified updates.
 - Dedicated grievance portal and toll-free helpline** operational for faster redressal.
 - Past question papers** to be periodically released as official sample sets for aspirant preparation.

Revised National Highways Fee Rules for Non-FASTag Vehicles

What's the News?

- The Ministry of Road Transport and Highways has amended the **National Highways Fee (Determination of Rates and Collection) Rules, 2008**, introducing a differential penalty structure for vehicles without a valid or functional **FASTag**.
- Effective **November 15, 2025**, non-FASTag users will be charged **double the applicable user fee** if they pay in **cash**, but only **1.25 times** the fee if they use **Unified Payment Interface (UPI)** at toll plazas.
- The move aims to **promote digital payments**, **enhance transparency in toll collection**, and **reduce congestion** at National Highway fee plazas.

Penalty Structure & Rationale

- Cash Payment:** 2x the standard user fee (e.g., ₹100 FASTag fee → ₹200 in cash)
- UPI Payment:** 1.25x the standard user fee (e.g., ₹100 FASTag fee → ₹125 via UPI)
- Objectives:**
 - Encourage **FASTag adoption and digital transaction culture**
 - Reduce **manual handling of cash** and associated inefficiencies
 - Improve **traffic flow** and **user experience** at toll plazas
 - Strengthen **auditability** and **revenue accountability** in toll operations

Additional Info

- FASTag Programme:**
 - Launched by the **National Highways Authority of India (NHAI)** under the **Ministry of Road Transport and Highways**
 - Operates on **Radio Frequency Identification (RFID)** technology for seamless toll deduction
 - Made **mandatory** for all classes of vehicles on National Highways from **February 15, 2021**
- Unified Payment Interface (UPI):**
 - Developed by the **National Payments Corporation of India (NPCI)**
 - A real-time payment system facilitating **inter-bank transactions** via mobile platforms
 - Supports the government's broader **Digital India** and **less-cash economy** vision

Election Commission Launches Pan-India SIR of Voter Rolls

What's the News?

- The **Election Commission of India (ECI)** has initiated a **pan-India Special Intensive Revision (SIR)** exercise to update and **purify electoral rolls** across all states and Union Territories.
- Announced by **Chief Election Commissioner Gyanesh Kumar**, the exercise follows the successful implementation of SIR in **Bihar**, where **69 lakh**

names were removed from voter lists due to deaths, duplicates, and ineligible entries.

- The nationwide SIR will follow a **standardized verification model**, incorporating **Aadhaar as the 12th proof of identity** (though not as proof of citizenship or domicile), and will allow claims and objections even after final publication.

Special Intensive Revision (SIR): Objectives & Process

- Primary Goal:** Ensure **accurate, authentic, and updated electoral rolls** by removing ineligible voters and adding eligible ones.
- Key Features:**
 - Door-to-door verification** by Booth Level Officers (BLOs).
 - Use of **digital tools** and **biometric validation** for de-duplication.
 - Public display of draft rolls** with time for claims/objections before finalization.
 - Inclusion of Aadhaar** as a supporting ID document per Supreme Court directives.
- Bihar Pilot Outcomes:**
 - 65 lakh deletions** in the draft list (August 1, 2025).
 - Additional **3.66 lakh removals** before final publication (September 30, 2025).
 - Final voter count in Bihar: **7.43 crore**.

Additional Info

- Legal & Constitutional Framework:**
 - Conducted under **Article 324** of the Constitution, which vests superintendence, direction, and control of elections in the ECI.
 - Governed by the **Representation of the People Act, 1950** (Section 10-13) for electoral roll preparation and revision.
- Aadhaar & Voter ID:**
 - Supreme Court ruling (2025):** Aadhaar can be used as **proof of identity** but **not citizenship or date of birth**.
 - Section 9 of Aadhaar Act, 2016:** Explicitly states Aadhaar is **not proof of domicile or citizenship**.
- Electoral Reforms Context:**
 - Part of ECI's broader **electoral integrity initiative** ahead of upcoming state and national elections.
 - Aligns with **National Electoral Roll Purification and Authentication Programme (NERPAP)** launched in 2015.

Cabinet Approves ₹24,634 Crore for Railway Multi-Tracking Projects Across Four States

What's the News?

- The **Union Cabinet Committee on Economic Affairs** has approved **four major railway multi-tracking projects** worth **₹24,634 crore** to enhance rail connectivity and logistics efficiency in **Maharashtra, Madhya Pradesh, Gujarat, and Chhattisgarh**.

- These projects will add **894 km** to the Indian Railways network through third and fourth lines on high-density corridors, benefiting **3,633 villages** with a combined population of over **85 lakh**, including **two Aspirational Districts**—Vidisha (MP) and Rajnandgaon (Chhattisgarh).
- Prime Minister Narendra Modi hailed the move as a boost to **PM GatiShakti**, enhancing freight movement, passenger convenience, and job creation.

Project Details & Strategic Significance

- Approved Projects:**
 - Bhusaval-Wardha (Maharashtra):** 314 km, ₹9,197 crore
 - Gondia-Dongargarh (Maharashtra-Chhattisgarh):** 85 km, ₹2,223 crore
 - Vadodara-Ratlam (Gujarat-Madhya Pradesh):** 259 km, ₹8,885 crore
 - Itarsi-Bhopal-Bina (Madhya Pradesh):** 237 km, ₹4,329 crore
- Completion Timeline:** All projects targeted for completion by **2030-31**.
- Operational Impact:**
 - Will increase freight capacity by **78 million tonnes per year**.
 - Key for transporting **coal, cement, steel, food grains, containers, and fly ash**.
 - Decongests the **Golden Quadrilateral and Diagonal rail corridors**, which carry **41% of India's rail traffic**.

Additional Info

- PM GatiShakti National Master Plan:**
 - Launched in **October 2021** with a vision to integrate **infrastructure planning across 16 ministries**.
 - Aims to reduce logistics costs from **14% to 8% of GDP** and improve multimodal connectivity.
- Aspirational Districts Programme:**
 - Launched in **2018** by **NITI Aayog** to transform 112 districts through convergence, collaboration, and competition.
 - Focus areas include **health, education, agriculture, financial inclusion, and infrastructure**.

Supreme Court Grants Centre Four Weeks to Respond on J&K Statehood Restoration

What's the News?

- The **Supreme Court of India** has granted the **Central Government four weeks** to file its response to multiple petitions seeking the **restoration of statehood to Jammu and Kashmir (J&K)**.
- The petitions urge the Court to enforce the **Centre's earlier assurance**—given during the **December 2023 Article 370 verdict**—to restore J&K's statehood “at the earliest”.
- During the hearing on **October 10, 2025**, the **Solicitor General of India** informed the Court that discussions with the J&K administration are ongoing and described

the issue as “**sui generis**” (unique in nature), citing broader administrative and security considerations.

Constitutional & Political Context

- The current legal push follows the **Supreme Court's landmark judgment of December 11, 2023**, which:
 - Unanimously upheld** the abrogation of **Article 370**.
 - Directed the **conduct of assembly elections in J&K by September 2024**.
 - Explicitly directed the **Union to restore statehood “at the earliest”**.
- Petitioners argue that the **continued delay violates India's federal structure** and undermines democratic governance in the Union Territory.
- The Court is hearing pleas filed by **J&K residents**, including academician **Zahoor Ahmad Bhat** and socio-political activist **Ahmad Malik**, who seek judicial enforcement of the Centre's commitment.

Additional Info

- Article 370 (Historical Context):**
 - Granted **special autonomous status** to J&K under **Part XXI** of the Indian Constitution (Temporary, Transitional and Special Provisions).
 - Abrogated via **Presidential Order C.O. 272** on **August 5, 2019**, followed by the **Jammu and Kashmir Reorganisation Act, 2019**.
- Jammu and Kashmir Reorganisation Act, 2019:**
 - Divided the former state into **two Union Territories: J&K (with legislature) and Ladakh (without legislature)**.
 - Enabled the **President and Lieutenant Governor** to exercise powers typically reserved for elected state governments.
- Supreme Court's December 2023 Directives:**
 - Ordered **elections by September 2024** (yet to be fully implemented as of October 2025).
 - Emphasized that **statehood restoration is constitutionally expected**, though no fixed timeline was mandated.
- Current Administrative Status:**
 - J&K remains a **Union Territory with a legislature**, but **no elected government** since 2018.
 - Governed by a **Lieutenant Governor** appointed by the President under **Article 239A**.

Supreme Court Bars Retrospective Application of Age Limits in Surrogacy Law

What's the News?

- The **Supreme Court of India** ruled that the **age restrictions** under the **Surrogacy (Regulation) Act, 2021** cannot be applied **retrospectively** to couples who had initiated the surrogacy process before the law came into force.
- The Court held that imposing the age cap - **23-50 years for women** and **26-55 years for men** - on such couples would violate their **right to reproductive autonomy**.

- The judgment specifically protects couples who had already **created and frozen embryos** prior to the enactment of the law, stating that their right to use those embryos for surrogacy cannot be denied based on subsequent statutory age limits.

Key Aspects of the Judgment

- Personal Choice is Protected:** The court said the right to decide about **having children** is a fundamental personal freedom under **Article 21** of the Constitution.
- Past Actions Are Valid:** For couples who had already taken steps like **freezing embryos** before the new law, the court protected their right to continue the surrogacy process, treating those actions as a solid commitment.
- New Rules Apply to the Future:** The new **age limits** for surrogacy only apply to couples starting the process **after** the law began, not those who started earlier. Also, there are no age limits for getting pregnant naturally.

What is "Retrospective Application"?

- Simple meaning:** A law has "retrospective application" when it affects actions, rights, or situations that happened **before** the law was passed.
- Example:** If a new rule says "only people under 50 can apply for X," and you applied at age 48 **before** the rule existed, applying that rule to you now would be **retrospective**.
- In this surrogacy case:** The Supreme Court said the age limits in the 2021 Surrogacy Act **cannot be applied to couples who had already started the surrogacy process** (e.g., created frozen embryos) **before the law came into force**.

What is "Reproductive Autonomy"?

- Simple meaning:** The right of a person to make **free and informed decisions** about their own body and whether or not to have children.
- Includes:** Choosing to use assisted reproductive methods like surrogacy, IVF, or even choosing **not** to have children.
- Not just about women:** While often discussed in the context of women's rights, it applies to all individuals seeking to build a family.

Additional Info

- Surrogacy (Regulation) Act, 2021:**
 - Enacted to regulate altruistic surrogacy and prohibit commercial surrogacy in India.
 - Key provisions include:
 - Only **Indian married couples** (minimum 5 years of marriage) can avail surrogacy.
 - Single women** (widows/divorcees aged 35–45) are eligible; **single men and LGBTQ+ individuals are excluded**.
 - Surrogate must be a **close relative**, married, with at least one child, and can act as surrogate only once.
- Constitutional Context:**
 - Article 21:** Right to life and personal liberty includes reproductive rights (established in cases like *Suchita Srivastava v. Chandigarh Admin*, 2009).

- Article 14:** The Court implicitly invoked equality by questioning differential treatment between natural and assisted reproduction.

Judicial Precedents:

- Baby Manji Yamada v. Union of India* (2008): Highlighted regulatory gaps in surrogacy, leading to legislative action.
- Janhit Abhiyan v. Union of India* (2022): Upheld the constitutional validity of the 2021 Act but left room for interpretation on individual rights.

Government Launches Employees' Enrolment Campaign 2025 to Expand EPFO Coverage

What's the News?

- The **Ministry of Labour and Employment** has launched the **Employees' Enrolment Campaign 2025 (EEC 2025)** to bring a large number of workers under the **Employees' Provident Fund Organisation (EPFO)** social security net.
- The campaign will run from **November 1, 2025, to April 30, 2026**, offering employers a one-time opportunity to **regularise past non-compliance** with minimal penalties.
- It targets employees who joined establishments between **July 1, 2017, and October 31, 2025**, but were not enrolled in EPFO for any reason, provided they are **currently employed and alive**.

Key Features of EEC 2025

- Waiver of Employee Contribution:** The employee's **share** of provident fund contributions for the past period (2017–2025) will be **waived entirely, if not already deducted** from wages.
- Employer Liability:** Employers must pay **only their own share** of PF contributions for the eligible period.
- Nominal Penalty:** A **flat penalty of ₹100** (lump sum) replaces standard punitive damages, significantly reducing compliance burden.
- Universal Eligibility:** All establishments—including those under inquiry under Section 7A of the EPF Act or related pension schemes—can participate.
- No Retrospective Action:** EPFO will **not initiate suo motu compliance actions** against employers for employees who **left before the declaration date**.

Linkage with Other Schemes

- Employers enrolling under EEC 2025 will be **eligible for benefits** under the **Pradhan Mantri-Viksit Bharat Rojgar Yojana**, subject to its terms and conditions.
- Declarations must be submitted **online** via EPFO's portal, linked to the **Electronic Challan-cum-Return (ECR)** with a Temporary Return Reference Number.

Legal Framework:

- Governed under the **Employees' Provident Funds and Miscellaneous Provisions Act, 1952**.
- Builds on the success of the **2017 enrolment campaign**, which covered left-out employees from 2009–2016.

Centre Unveils ₹6.42 Lakh Crore Master Plan to Harness Brahmaputra Hydropower

What's the News?

- The Union Government has announced a ₹6.42 lakh crore master plan to develop 65 GW of hydropower capacity in the Brahmaputra River basin, primarily across Arunachal Pradesh and Assam.
- The initiative aims to counter strategic concerns arising from China's upstream dam projects on the Yarlung Tsangpo (Brahmaputra's upper course) while boosting clean energy generation and regional development.

Brahmaputra Basin Hydropower Strategy

- Objective:** Evacuate 65 GW of hydroelectric power through a phased development of 11 major projects in Arunachal Pradesh and Assam.
- Estimated Investment:** ₹6.42 lakh crore, making it one of India's largest infrastructure undertakings in the Northeast.
- Strategic Rationale:**
 - Mitigate risks from China's mega-dam projects (e.g., 60 GW planned on Yarlung Tsangpo), which could affect downstream water flow.
 - Strengthen India's energy security and support net-zero commitments by leveraging non-fossil fuel sources.
- Key Projects:** Include the 10 GW Siang Upper Hydroelectric Project, 3,097 MW Dibang Multipurpose Project, and 2,880 MW Subansiri Lower Hydroelectric Project.

Additional Info

- River Nomenclature & Geography:**
 - Known as Yarlung Tsangpo in Tibet (China), Siang/Dihang in Arunachal Pradesh, and Brahmaputra in Assam.
 - Originates near Mount Kailash in Tibet Autonomous Region (China), flows ~2,900 km through India and Bangladesh before emptying into the Bay of Bengal.



No Bilateral Water-Sharing Treaty:

- Unlike India-Bangladesh (Ganges Water Treaty, 1996), India and China have no formal treaty on sharing Brahmaputra waters.
- Only a 2002 Memorandum of Understanding (MoU) for hydrological data sharing during monsoon (May 15–Oct 15) to aid flood forecasting in India.

Chinese Dam Projects – Key Concerns:

- China has constructed multiple dams on the Yarlung Tsangpo, including:
 - Zangmu Dam (510 MW, operational since 2015)
 - Dagu, Jiexu, and Jiequ run-of-the-river projects
- Plans for a mega-dam (~60 GW) near Medog County (Great Bend area), potentially the world's largest hydropower project, announced in 2020–21.
- Indian concerns: Reduced dry-season flow, ecological disruption, and strategic leverage over downstream water security.

Strategic & Geopolitical Dimensions:

- Water infrastructure in Tibet viewed by India as part of China's "water hegemony" strategy in South Asia.
- Brahmaputra basin overlaps with disputed India-China border areas (e.g., Arunachal Pradesh, claimed by China as "South Tibet").
- Hydropower projects often co-located with military infrastructure, raising dual-use concerns.

India's Response & Policy Measures:

- Data monitoring:** Central Water Commission (CWC) and India Meteorological Department (IMD) track flow changes.
- Diplomatic engagement:** Regular discussions under India-China Expert Level Mechanism (ELM) on transboundary rivers (since 2006).
- Domestic development:** Accelerated hydropower projects in Arunachal Pradesh (e.g., 65 GW master plan) to assert riparian rights and preempt upstream control.

Environmental & Regional Impacts:

- Brahmaputra carries ~30% of India's total river water but contributes only ~5% of current hydropower capacity.
- Northeast states fear ecological degradation, landslides, and displacement from large dams.
- Bangladesh also downstream; India shares data with Dhaka, adding a trilateral dimension.

Legal & Institutional Context:

- UN Watercourses Convention (1997):** Neither India nor China is a signatory.
- India adheres to the principle of "prior appropriation" and riparian rights under customary international law.
- National Security Council (NSC)** includes water security in strategic assessments related to China.

Government Launches DLC Campaign 4.0: Largest-Ever Drive for Digital Life Certificates

What's the News?

- The Department of Pension & Pensioners' Welfare (DoPPW) will conduct the 4th Nationwide Digital Life Certificate (DLC) Campaign from November 1 to 30,

2025, targeting the generation of **2 crore DLCs**—the largest such drive to date.

- The campaign, branded **DLC 4.0**, will span **2,000 districts and sub-divisional headquarters**, with special focus on **face authentication technology** and **doorstep services** for elderly and disabled pensioners.

Key Features of DLC Campaign 4.0

- **Target:** Generate **2 crore DLCs** nationwide, surpassing the **1.62 crore** achieved in DLC 3.0 (2024).
- **Technology:**
 - **Face authentication** (Aadhaar-based) as primary mode, eliminating need for biometric devices.
 - Over **50 lakh pensioners** used face authentication in 2024; expanded rollout in 2025.
- **Doorstep Services:**
 - **India Post Payments Bank (IPPB)** deploying **1.8 lakh postmen and Gramin Dak Sewaks** equipped with mobile devices for on-site DLC generation.
 - Services available to **all pensioners**, irrespective of bank or pension type.
- **Physical Camps:**
 - **19 pension-disbursing banks** organizing camps in **over 300 cities**.
 - Special home/hospital visits for **aged, sick, or differently-abled pensioners**.

Institutional Collaboration & Outreach

- **Partners:**
 - **UIDAI** and **Ministry of Electronics & IT (MeitY)** for tech infrastructure.
 - **57 Pensioners' Welfare Associations** for local coordination.
- **Awareness Drive:** Multi-channel campaign via TV, radio, SMS, and social media to inform beneficiaries about submission options.
- **Universal Access:** Ensures pension continuity for **central government, state government, and PSU pensioners**.

Additional Info

- **Legal & Policy Context:**
 - **Rule 8 of CCS (Pension) Rules, 1972:** Mandates annual submission of life certificate by **November 30** for uninterrupted pension.
 - **Jeevan Pramaan Portal:** Launched in 2014; over **12 crore DLCs** generated cumulatively as of 2025.
- **Constitutional Link:**
 - **Article 309:** Empowers Parliament to regulate pension conditions for government employees.
 - **Digital India & Ease of Living:** DLC aligns with broader governance digitization under **National e-Governance Plan (NeGP)**.

EPFO Simplifies Rules, Permits 100% Provident Fund Withdrawal

What's the News?

- The **Employees' Provident Fund Organisation (EPFO)** has introduced sweeping reforms to simplify withdrawal procedures, now allowing members to withdraw **up to 100% of their eligible Provident Fund (PF) balance**, including both **employee and employer contributions**.
- The changes were approved at the **238th Central Board of Trustees (CBT) meeting** chaired by Union Labour Minister **Mansukh Mandaviya** and aim to enhance financial flexibility while safeguarding retirement security for over **7 crore active EPFO members**.

Key Reforms Introduced

- **Full Withdrawal Permitted:** Members can now access their entire PF balance under defined conditions—previously restricted to retirement or unemployment.
- **Streamlined Categories:** 13 existing withdrawal conditions merged into **three simplified categories**:
 - **Essential Needs:** Education, marriage, medical treatment.
 - **Housing Needs:** Purchase, construction, or loan repayment.
 - **Special Circumstances:** No justification required (e.g., emergencies, job loss).
- **Increased Withdrawal Limits:**
 - **Education:** Up to **10 withdrawals** (earlier: 3 combined with marriage).
 - **Marriage:** Up to **5 withdrawals**.
 - **Minimum service period** reduced to **12 months** for all partial withdrawals
- **Automatic Processing:** Claims settled **without documentation** through digital auto-approval.
- **Retirement Protection:** **25% of total contributions** must remain in the account to continue earning **8.25% annual interest** and preserve a core retirement corpus.

Pension & Compliance Updates

- **Extended Waiting Periods:**
 - Final PF settlement: **2 months** → **12 months**
 - Final pension withdrawal: **2 months** → **36 months**
- **Vishwas Scheme:**
 - Launched to resolve **27,000+ pending legal cases** involving **₹2,406 crore** in penal damages.
 - Reduced penalty rates: **0.25% per month** (≤ 2 months delay), **0.5%** (≤ 4 months), **1%** thereafter.
 - Full case closure upon payment; valid for **6 months** (extendable).

Digital & Service Enhancements

- **Doorstep Digital Life Certificate (DLC):** In partnership with **India Post Payments Bank (IPPB)**; **₹50 fee borne by EPFO** for EPS-95 pensioners.
- **EPFO 3.0:** New cloud-based digital platform featuring:
 - **Instant claim settlement**
 - **Multilingual self-service portal**
 - **Payroll-integrated auto-contributions**

Additional Info

- Legal Framework:** Governed under the **Employees' Provident Funds and Miscellaneous Provisions Act, 1952**.
- Coverage:** EPFO manages funds for **over 30 crore subscribers** across **10+ lakh establishments**.
- Interest Rate:** **8.25% per annum** for FY 2024–25—among the highest globally for statutory savings.

Centre Launches First State Mining Readiness Index to Drive Sector Reforms

What's the News?

- The **Ministry of Mines** has released India's first **State Mining Readiness Index (SMRI)** along with state rankings to promote mining sector reforms
- The initiative fulfills a commitment made in the **Union Budget 2025–26** and aims to encourage competitive federalism in mineral governance
- States are evaluated on key performance indicators such as **auction performance, early mine operationalisation, exploration thrust, and sustainable mining practices** for non-coal minerals

State Mining Readiness Index (SMRI): Overview

- Objective:** To benchmark state-level performance, incentivize policy reforms, and accelerate responsible mining activities across India
- Categorisation:** States grouped into three categories based on **mineral endowment**:
 - Category A (Mineral-rich): Madhya Pradesh, Rajasthan, Gujarat**
 - Category B: Goa, Uttar Pradesh, Assam**
 - Category C: Punjab, Uttarakhand, Tripura**
- Focus Areas:**
 - Timely auction of mineral blocks
 - Reduction in time lag between grant of mining lease and actual operationalisation
 - Promotion of geological exploration
 - Adherence to environmental and social safeguards in mining operations

Additional Info

- Policy Context:**
 - Builds on the **National Mineral Policy 2019**, which emphasizes transparency, competitiveness, and sustainability
 - Supports **Atmanirbhar Bharat** by enhancing domestic mineral production and reducing import dependency
- Related Initiatives:**
 - Coal India Ltd and Singareni Collieries Company Ltd (SCCL) announced Performance-Linked Rewards (PLR) of ₹1,03,000 each for ~2.5 lakh non-executive workers, linking productivity with welfare**
 - Mines and Minerals (Development and Regulation) Amendment Act** provisions on auction regime and district mineral foundations (DMFs) form the legal backbone

Centre Increases Notary Limit in Four States via Amendment Rules 2025

What's the News?

- The **Ministry of Law and Justice**, through the Department of Legal Affairs, notified the **Notaries (Amendment) Rules, 2025**.
- The amendment significantly **increased the maximum number of Notaries** that can be appointed by the State Governments of **Gujarat, Tamil Nadu, Rajasthan, and Nagaland**.
- This step was taken in response to requests from the respective State Governments, acknowledging the growth in **population, administrative divisions** (districts/tehsils/talukas), and the resultant rising demand for notarial services.

Notaries (Amendment) Rules, 2025: Key Changes

The amendment modifies the **Schedule to the Notaries Rules, 1956**, raising the limit for the maximum number of Notaries in the four states:

State	Previous Limit	New Limit	Increase
Gujarat	2,900	6,000	3,100
Tamil Nadu	2,500	3,500	1,000
Rajasthan	2,000	3,000	1,000
Nagaland	200	400	200

Notaries and Legal Framework

- Legal Basis:** The amendment is issued under the powers conferred by **Section 15 of the Notaries Act, 1952**.
- Role of a Notary:** A Notary is a public official authorized to:
 - Verify, authenticate, and certify** the execution of documents.
 - Witness signatures** and administer **oaths** (e.g., for affidavits).
 - The primary function is to **prevent fraud** and maintain the integrity of legal, commercial, and official transactions.

Additional Info

- Notaries Act, 1952:**
 - Provides for the appointment, powers, and functions of notaries in India.
 - Notaries are **legal professionals authorized** to certify documents, administer oaths, and attest signatures for domestic and international use.
- Constitutional Link:**
 - Entry 78, **Union List (Seventh Schedule)**: “Notaries” is a Union subject, giving Parliament exclusive legislative power.

Government Amends VOPPA Order to Strengthen Edible Oil Sector Regulation

What's the News?

- The **Department of Food and Public Distribution**, under the **Ministry of Consumer Affairs, Food & Public Distribution**, has notified the **Vegetable Oil Products**,

- Production and Availability (Regulation) Order, 2025** (VOPPA Order, 2025).
- The amendment mandates **mandatory registration and monthly reporting** for all entities in the edible oil supply chain to enhance transparency, data accuracy, and policy responsiveness.

Key Provisions of VOPPA Order, 2025

- Covered Entities:** All edible oil **manufacturers, processors, blenders, re-packers**, and related stakeholders.
- Registration Requirement:** Must register via the **National Single Window System**.
- Monthly Reporting:** Submit data on **production, stock, and availability** through the dedicated portal.
- Compliance Enforcement:**
 - Non-compliance treated as a **violation** under the amended VOPPA Order and the **Collection of Statistics Act, 2008**.
 - Penal action and field inspection** drives planned for non-compliant units.

Additional Info

- Legal Framework:**
 - VOPPA Order, 2011:** Originally empowered the government to regulate production and availability of vegetable oil products.
 - Collection of Statistics Act, 2008:** Provides legal backing for mandatory data submission by industries.
- Digital Governance Tools:**
 - National Single Window System (NSWS):** A unified portal for regulatory clearances and compliance across sectors.
 - Edible Oil Portal:** Dedicated platform for sector-specific reporting, enhancing traceability and accountability.

Amendment to IT (Intermediary Guidelines & Digital Media Ethics Code) Rules, 2025

What's the News?

- The Ministry of Electronics and Information Technology (MeitY) has introduced draft/notification amendments to the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 (IT Rules 2021) aimed at tightening regulation of social media and digital content.
- Under the proposed changes:
 - Only senior officials (e.g., a Joint Secretary level officer or a DGP-level officer) can issue orders for takedown of social media content.
 - New requirements to label and transparently manage AI-generated (deepfake/synthetic) media.
- Immediate impact: Social media intermediaries must update compliance mechanisms; users and platforms will face stricter oversight especially for content flagged as disinformation or synthetic media.

Key Changes in the Amendment

Content removal oversight

- Takedown orders will now be valid only when issued by a senior official (e.g., Joint Secretary in the ministry or Director General of Police) rather than lower-level bureaucrats or delegated officers.
- This is intended to provide a higher threshold for governmental intervention in removal of online content.

Regulation of synthetic/AI-generated media

- New rule mandates explicit labelling of "deepfakes" or synthetic media so that users can distinguish between authentic and manipulated content.
- Intermediaries must deploy transparency and traceability mechanisms for such media.

Enhanced intermediary obligations

- The amendments build on the IT Rules 2021 framework which classifies platforms crossing certain user-thresholds as "Significant Social Media Intermediaries" (SSMIs) and imposes due diligence obligations.
- Under the new draft amendments, intermediaries may face increased liability if they fail to remove synthetic or misleading content flagged by the government.

Legal Framework:

- The amendments are made to the **Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021**, which were framed under the parent **Information Technology Act, 2000**.
- The rules are linked to **Section 79** of the IT Act, which provides a "**safe harbour**" to intermediaries, protecting them from liability for third-party content. This protection is conditional on the intermediary removing unlawful content upon receiving "actual knowledge" through a court order or government notification. The new, more specific intimations aim to strengthen this process.

Sharp Decline in Lokpal Complaints Raises Governance Concerns

What's the News?

- The **Lokpal of India** has witnessed a steep drop in public complaints - from a peak of **2,469 in 2022–23** to just **233 by September 2025** - amid growing concerns over its operational effectiveness and transparency.
- Despite being empowered to investigate corruption allegations against the **Prime Minister, Union Ministers**, and senior officials, the body has initiated preliminary inquiries in only **289 cases** out of **6,955 total complaints** received since its inception in 2019, and granted prosecution sanctions in merely **seven cases**.

Performance & Institutional Challenges

- Complaint Trends:**
 - 6,264 complaints (90%)** were received in the first four years (2019–2023).
 - Only **691 complaints** have been filed in the last three years, indicating waning public trust.
- Procedural Barriers:**
 - A significant number of complaints are reportedly dismissed on **technical grounds** like format errors, even when they involve serious corruption allegations.

• **Institutional Delays:**

- The **prosecution wing** of the Lokpal was notified only in **June 2025** - over a decade after the **Lokpal and Lokayuktas Act, 2013** was enacted.
- No **annual reports** have been published since **2021-22**, raising transparency issues.

Controversial Expenditure

- In October 2025, the Lokpal invited tenders for **seven luxury BMW 3 Series sedans** for its chairperson and members, drawing criticism from civil society and RTI activists who argue that an anti-corruption body should exemplify fiscal prudence.

Additional Info

• **Lokpal and Lokayuktas Act, 2013:**

- Enacted following the **2011 anti-corruption movement** led by Anna Hazare.
- Mandates establishment of an independent ombudsman to inquire into corruption at the Union level.

• **Constitutional & Legal Context:**

- Though not a constitutional body, the Lokpal derives authority from a **Parliamentary Act** and functions under **executive oversight**.
- **Article 74(1):** While not directly linked, the Council of Ministers (headed by the PM) is responsible for appointments and administrative support to such statutory bodies.

• **Sanctioned Strength:**

- **8 members** (including Chairperson); currently **7 members** are in place, led by **Justice A.M. Khanwilkar (retd.)**.

EC Announces Special Intensive Revision of Electoral Rolls in 12 States/UTs

What's the News?

- The **Election Commission of India (ECI)** has announced a **Special Intensive Revision (SIR)** of electoral rolls.
- This exercise is the second phase of a pan-India drive and will be conducted in **12 States and Union Territories**, covering approximately **51 crore voters**.
- The goal is to create a more transparent, inclusive, and **error-free electoral roll** by verifying all registered voters and adding new eligible ones.
- The final electoral rolls are scheduled to be published in February 2026.

What is Special Intensive Revision (SIR)?

- **Intensive Verification:** Unlike a routine annual summary revision, the SIR is an intensive, ground-up exercise.
- **House-to-House Visit: Booth Level Officers (BLOs)** will conduct house-to-house visits to have all registered electors fill out a new enumeration form.
- **Key Objectives:**
 - To ensure all eligible citizens are included in the electoral roll.

- To remove ineligible entries, such as **deceased, permanently shifted, or duplicate voters**.

- **Historical Context:** The last such intensive revision was conducted in most states around two decades ago (2002-2005). The process involves mapping current electors against the rolls from that last SIR.

States and UTs Covered in Phase 2

- The 12 States and Union Territories included in this phase are:

- Andaman & Nicobar Islands
- Chhattisgarh
- Goa
- Gujarat
- Kerala
- Lakshadweep
- Madhya Pradesh
- Puducherry
- Rajasthan
- Tamil Nadu
- Uttar Pradesh
- West Bengal

Additional Info

- **Qualifying Date:** The revision will use **January 1, 2026**, as the qualifying date for new voter registration.

• **Constitutional & Legal Framework:**

- **Article 324:** Vests the **superintendence, direction, and control** of the preparation of electoral rolls in the Election Commission of India.
- **Article 326:** Stipulates that every citizen who is **18 years or older** on the qualifying date and not otherwise disqualified is eligible to be registered as a voter.
- **Representation of the People Act, 1950:**
 - **Section 15:** Mandates that an electoral roll shall be prepared for every constituency under the ECI's supervision.
 - **Section 21:** Empowers the ECI to revise the electoral rolls, including directing a special revision at any time for reasons to be recorded in writing.

Cabinet Approves Terms of Reference for 8th Central Pay Commission

What's the News?

- The **Union Cabinet** has approved the **Terms of Reference (ToR)** for the **8th Central Pay Commission (CPC)**.
- This commission is tasked with reviewing and recommending changes to the salary, allowances, and pension structure for central government employees.
- The recommendations are expected to be implemented retrospectively from **January 1, 2026**, in line with the ten-year cycle following the 7th CPC's implementation in 2016.
- The move will impact nearly **50 lakh** central government employees and over **65 lakh** pensioners.

Key Mandate: The Terms of Reference (ToR)

The 8th CPC has been given a broad mandate to frame its recommendations. It must consider the following key factors:

- **Fiscal Prudence:** The overall economic condition of the country and the financial resources of the central government.
- **Developmental Needs:** The need to ensure adequate resources remain available for developmental expenditure and welfare measures.
- **Pension Liability:** The unfunded cost of non-contributory pension schemes.
- **Impact on States:** The likely financial impact on **State Governments**, which typically adopt the CPC's recommendations with some modifications.
- **Market Comparison:** The prevailing pay and benefits in **Central Public Sector Undertakings (CPSUs)** and the **private sector**.

Commission Structure and Timeline

- **Composition:** The 8th CPC will be a temporary body composed of:
 - **Chairperson:** Justice Ranjana Prakash Desai (former Supreme Court Judge).
 - **Member (Part-Time):** Professor Pulak Ghosh (IIM Bangalore).
 - **Member-Secretary:** Pankaj Jain (Petroleum Secretary).
- **Deadline:** The Commission is required to submit its report within **18 months** from the date of its constitution.
- **Interim Reports:** The panel may also submit interim reports if necessary.

Additional Info

- **What is a Pay Commission?**
 - It is an expert body constituted by the **Government of India** to review and make recommendations on the pay structure, allowances, and other service conditions of central government employees.
 - Pay Commissions are typically set up every **10 years**.
- **The Fitment Factor:**
 - This is a key component of pay revision. It is a multiplier used to fix the new basic pay based on the basic pay of the previous commission.
 - The **7th CPC**, for instance, had recommended a uniform fitment factor of **2.57**.
 - When the new pay scale is implemented, the **Dearness Allowance (DA)** component is typically merged into the basic pay and the DA calculation is reset to zero.

Centre Launches 'KOYLA SHAKTI' Dashboard for Coal Sector

What's the News?

- The **Union Minister of Coal and Mines** has launched the 'KOYLA SHAKTI' – Smart Coal Analytics Dashboard (SCAD).

- This is a unified digital platform designed for the **real-time monitoring and analysis** of India's entire coal sector operations, from production to consumption.
- The platform was developed by the **National Industrial Corridor Development Corporation (NICDC)**, under the direction of the **Ministry of Coal**.
- Simultaneously, the **Coal Land Acquisition, Management, and Payment (CLAMP) Portal** was also launched to digitise land acquisition processes.

KOYLA SHAKTI Dashboard: Digital Backbone of Coal Ecosystem

- **Purpose:** Acts as the **Smart Coal Analytics Dashboard (SCAD)** for real-time monitoring and analytics across the coal supply chain.
- **Integrated Stakeholders:**
 - Coal-producing companies (including private miners)
 - Central ministries (Coal, Railways, Power, Ports, Finance, etc.)
 - State departments (via **e-Khanij** platforms)
 - Power utilities, steel/cement industries, and port authorities
- **Key Features:**
 - **Unified visibility** of production, dispatch, logistics, and consumption
 - **Real-time tracking** of coal movement via rail, road, and multimodal transport
 - **Predictive analytics** for demand forecasting and bottleneck resolution
 - **Incident response alerts** for operational disruptions
 - **Standardized metrics** and performance indicators across agencies
 - **Scalable architecture** for future digital integrations

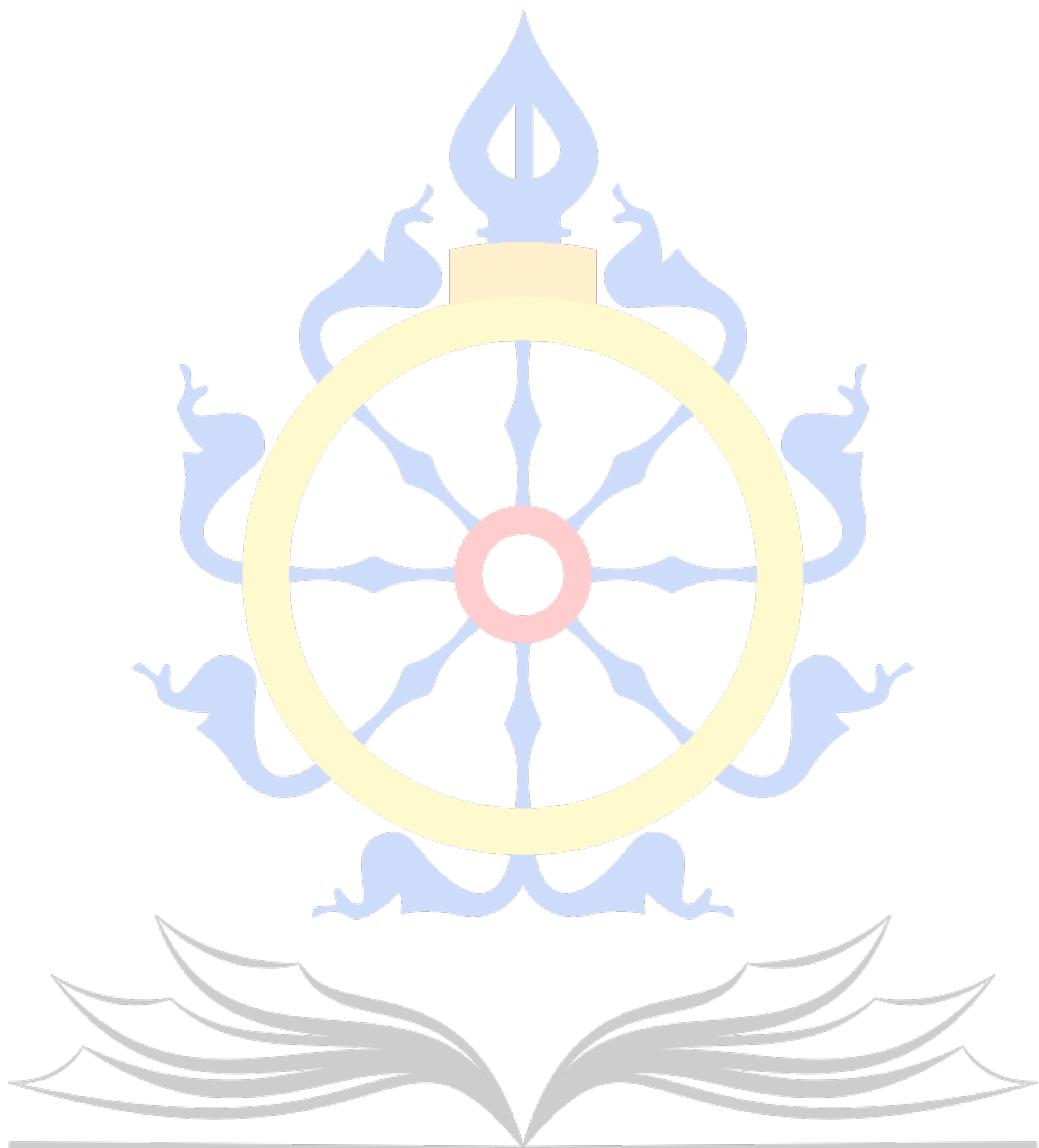
CLAMP Portal: Transparent Land Management

- **Purpose:** Digitizes end-to-end land acquisition, compensation, and **Rehabilitation & Resettlement (R&R)** processes for coal-bearing areas.
- **Key Features:**
 - **Centralized land records repository**
 - **End-to-end digital workflow** from land identification to compensation payment
 - **Inter-agency coordination** among coal PSUs, district administrations, and revenue departments
 - **Citizen-centric design** ensuring timely and equitable compensation
 - **Enhanced accountability** through audit trails and real-time status tracking

Additional Info

- **Constitutional & Administrative Context:**
 - Coal is a **Union subject (Entry 53, Union List)**, giving the Central Government exclusive legislative and executive authority.
 - The **Ministry of Coal** operates through **Coal India Ltd (CIL)** and other PSUs, which account for ~80% of domestic production.
- **Related Digital Initiatives:**

- **e-Khanij Portal:** State-level mineral concession management system integrated with KOYLA SHAKTI.
- **PM Gati Shakti:** National master plan for multi-modal connectivity; KOYLA SHAKTI complements its logistics optimization goals.



Social Issues

India Wins ISSA Award 2025 for Outstanding Achievement in Social Security

What's the News?

- India has been conferred the **International Social Security Association (ISSA) Award 2025 for "Outstanding Achievement in Social Security"** in recognition of its transformative expansion of social protection coverage.
- Union Minister for Labour and Employment **Mansukh Mandaviya** received the award at the **ISSA World Social Security Forum** held in **Kuala Lumpur, Malaysia**.
- The award acknowledges India's success in increasing social security coverage from **19% in 2015 to 64.3% in 2025**, now benefiting over **940 million citizens**.

Significance of the Achievement

- Global Recognition:** India is the **fifth country globally** to receive this prestigious ISSA award, highlighting its leadership in inclusive social protection.
- Unprecedented Scale:** The expansion has been driven by a suite of government schemes targeting informal workers, gig workers, farmers, and vulnerable populations.
- Enhanced Global Role:** India now holds **30 seats in the ISSA General Assembly**—the highest vote share of any member nation—reflecting its growing influence in shaping global social security standards.

Additional Info

- International Social Security Association (ISSA):**
 - Founded in **1927**, headquartered in **Geneva, Switzerland**.
 - A global institution bringing together social security agencies from over **160 countries**.
 - Promotes excellence in social security administration and policy.
- Key Indian Social Security Schemes:**
 - Pradhan Mantri Shram Yogi Maan-dhan (PM-SYM):** Pension scheme for unorganised sector workers earning \leq ₹15,000/month.
 - e-Shram Portal:** National database of unorganised workers; over **30 crore** registered as of 2025.
 - Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY):** Health insurance covering **50 crore** beneficiaries.
 - National Social Assistance Programme (NSAP):** Provides financial assistance to elderly, widows, and persons with disabilities.

NCRB 2023 Report Highlights Alarming Rise in Farmer Suicides, Crimes Against Women and Children

What's the News?

- The **National Crime Records Bureau (NCRB)** has released its "Crime in India – 2023" report, revealing a **disturbing rise in farmer suicides, crimes against women, and cybercrimes** across the country.
- In 2023, **10,786 individuals from the farming sector** died by suicide—equivalent to **nearly 30 suicides per day** or **one every 48 minutes**—accounting for **6.3% of all suicides** in India.
- Crimes against women rose slightly to **448,211 cases** (from 445,256 in 2022), while **cybercrimes surged by 31.2% to 86,420 cases**.

Key Findings from the NCRB 2023 Report

Farmer Suicides

- Breakdown:**
 - 4,690 farmers/cultivators**
 - 6,096 agricultural labourers**
- Top States:**
 - Maharashtra:** 38.5% (highest share)
 - Karnataka:** 22.5%
 - Andhra Pradesh:** 8.6%
 - Madhya Pradesh:** 7.2%
 - Tamil Nadu:** 5.9%
- Socioeconomic Profile:**
 - 66.2%** of victims had an annual income **below ₹1 lakh**.

Crimes Against Women

- Total Cases:** 448,211 (crime rate: **66.2 per lakh women**)
- Top States by Volume:**
 - Uttar Pradesh** (66,381)
 - Maharashtra** (47,101)
 - Rajasthan** (45,450)
- Top Offences:**
 - Cruelty by husband/relatives** (133,676 cases, 29.8%)
 - Kidnapping/abduction** (88,605 cases, 19.8%)
 - Assault to outrage modesty** (83,891 cases, 18.7%)
 - Rape**: 29,670 cases (6.6%)
- POCSO Act:** 40,046 child sexual abuse cases registered under Special Laws.

Cybercrime & Urban Crime

- Cybercrime:** 86,420 cases (+31.2% YoY); **68.9%** were **financial frauds**.
- Metropolitan Cities:** Reported **944,291 crimes** (+10.6% YoY), with **theft (44.8%)** as the dominant offence.
- Pune Specifics:**
 - 68% rise** in crimes against children
 - 23% increase** in crimes against women
 - 36.4% jump** in cybercrime cases.

Additional Info

- **National Crime Trends:**
 - Total cognizable crimes: **62.4 lakh** (+7.2% from 2022).
 - Overall crime rate: **448.3 per lakh population** (up from 422.2 in 2022).
- **Chargesheeting Rates:**
 - Crimes against women: **77.6%**
 - Pune (IPC crimes): **94%** (3rd highest among metros).
- **Policy & Institutional Context:**
 - **National Suicide Prevention Strategy (2022)** aims to reduce suicide mortality by **10% by 2030**.
 - **PM-KISAN, Kisan Credit Card, and Pradhan Mantri Fasal Bima Yojana** are key schemes to address agrarian distress, yet gaps in implementation persist.
 - **Indian Cyber Crime Coordination Centre (I4C)** and **Cyber Crime Prevention Against Women & Children (CCPWC)** schemes are operational but face challenges in rural reach and forensic capacity.
- **Data Limitations:**
 - NCRB data reflects **reported crimes only**; underreporting remains significant, especially in domestic violence and cyber fraud.
 - Farmer suicide data excludes indirect agrarian distress indicators like debt, landlessness, or climate shocks.

India Records Decline in Births, Slight Rise in Deaths in 2023: Vital Statistics Report

What's the News?

- According to the **Vital Statistics of India 2023** report released by the **Registrar General of India (RGI)**, India recorded **2.52 crore registered births** in 2023—**2.32 lakh** fewer than in 2022. Meanwhile, **registered deaths** rose marginally to **86.6 lakh** from **86.5 lakh** in 2022.
- The data, based on the **Civil Registration System (CRS)**, shows continued demographic transition with declining fertility and stable mortality trends post-pandemic.

Key Demographic Indicators (2023)

- **Births:**
 - **2.52 crore** registered (98.4% registration coverage).
 - **74.7%** were **institutional births** (excluding Sikkim).
- **Deaths:**
 - **86.6 lakh** registered—**no significant spike** compared to 2022.
 - Sharp rise in deaths observed only in **2021** (1.02 crore), attributed to the **second wave of COVID-19**.
- **Sex Ratio at Birth (SRB):**
 - **National average:** Not explicitly stated, but state-wise data reveals wide disparities.
 - **Lowest SRB:** Jharkhand (899), Bihar (900), Telangana (906), Maharashtra (909).

- **Highest SRB:** Arunachal Pradesh (1,085), Nagaland (1,007), Goa (973), Kerala (967).

State-wise Birth Registration Performance

- **>90% timely registration** (within 21 days):
 - Gujarat, Puducherry, Chandigarh, Dadra & Nagar Haveli and Daman & Diu, Tamil Nadu, Lakshadweep, Andaman & Nicobar, Haryana, Himachal Pradesh, Goa, Punjab.
- **80–90%:** Odisha, Mizoram, Maharashtra, Chhattisgarh, Andhra Pradesh.
- **50–80%:** 14 states/UTs including **Uttar Pradesh, Bihar, West Bengal, Delhi, MP, Rajasthan, J&K**.

Additional Info

- **Legal Framework:**
 - **Registration of Births and Deaths Act, 1969:** Mandates compulsory registration within 21 days.
 - **Civil Registration System (CRS):** Digitally integrated with **Aadhaar, PAN, and voter ID** for improved linkage and service delivery.
- **Link to SDGs:**
 - **SDG 3.1 & 3.2:** Maternal and child health monitoring depends on accurate birth/death data.
 - **SDG 5:** Skewed SRB reflects gender inequality and hinders progress on women's rights.
- **Historical Context:**
 - **2021:** Recorded **1.02 crore deaths**—a 25.5% jump from 2020 (81.2 lakh)—largely pandemic-driven.
 - **2022–23:** Mortality normalised, indicating post-pandemic recovery in health systems.

Global Multidimensional Poverty Index (MPI) 2025: Key Insights for India

What's the News?

- The **United Nations Development Programme (UNDP)** and the **Oxford Poverty & Human Development Initiative (OPHI)** released the **Global Multidimensional Poverty Index (MPI) 2025 Report**, titled “*Overlapping Hardships: Poverty and Climate Hazards*”.
- The report reveals that **1.1 billion people across 109 countries** live in acute multidimensional poverty, with **India achieving one of the world's fastest poverty reductions** in recent decades.

What is the Global MPI?

- A **non-income-based poverty metric** assessing simultaneous deprivations in **health, education, and standard of living**.
- First launched in the **2010 Human Development Report**, jointly published by **UNDP** and **OPHI**.
- Aligns with **Sustainable Development Goal 1 (No Poverty)** by identifying who is poor, how they are poor, and the intensity of their deprivation.

India's MPI Performance

- India's multidimensional poverty rate declined sharply from **55.1% (2005–06)** to **16.4% (2019–21)**, lifting **over 414 million people** out of acute poverty.

- This progress is attributed to flagship welfare schemes:
 - **Pradhan Mantri Awas Yojana (PMAY)** – improved housing
 - **Swachh Bharat Mission** – enhanced sanitation
 - **Ujjwala Yojana** – access to clean cooking fuel
 - **Jal Jeevan Mission** – piped drinking water
- Despite progress, **child poverty remains severe**, with high deprivation in **nutrition, sanitation, cooking fuel, and housing**.

Climate-Poverty Nexus

- **99% of India's poor** reside in **climate-vulnerable regions**, frequently exposed to **heatwaves, floods, and air pollution**.
- Globally, **887 million poor people** face **at least one climate hazard**, and **309 million confront three or more concurrent hazards**.

Global and Regional Trends

- **Sub-Saharan Africa and South Asia** account for **83% of global multidimensional poverty**, with Sub-Saharan Africa alone housing **49.2% of the world's poor**.
- **740 million poor people**—nearly two-thirds—live in **middle-income countries**, challenging income-based poverty classifications.
- **83.5% of the multidimensionally poor** live in rural areas, though these regions house only **55% of the global population**.

MPI Indicators (Weighted Dimensions)

- **Health (1/3 weight)**: Nutrition, child mortality
- **Education (1/3 weight)**: Years of schooling, school attendance
- **Standard of Living (1/3 weight)**: Cooking fuel, sanitation, drinking water, electricity, housing, assets

Challenges for India

- **Rural-urban disparity**: 83% of India's poor are rural, with persistent gaps in healthcare and education.
- **Data limitations**: Lack of real-time, district-level MPI data hampers precise policy targeting.
- **Gender and child deprivations**: Women and children disproportionately affected by malnutrition and lack of services.
- **Fiscal constraints**: Limited state capacity to scale climate-resilient social protection.



Empowerment

Tribal Village Vision 2030: Grassroots Empowerment in 1 Lakh Tribal Villages

What's the News?

- On **October 2, 2025**, a **Special Gram Sabha** was convened across **1 lakh tribal-dominated villages and Tolas** to formally adopt the **Tribal Village Vision 2030 Declaration**.
- This initiative is part of the **Adi Karmayogi Abhiyan**, launched by the **Ministry of Tribal Affairs**, marking the **world's largest tribal grassroots leadership programme**, covering **11 crore citizens** across **30 States and Union Territories**.
- The event coincided with **Gandhi Jayanti**, reinforcing the Gandhian ideals of **Gram Swaraj** (village self-governance) and **participatory democracy**.

Tribal Village Vision 2030: Objectives and Framework

- Core Vision:** To enable tribal communities to collectively shape their socio-economic and cultural future through **local ownership, responsive governance, and sustainable development** by 2030.
- Key Components:**
 - Adoption of a **village-specific development declaration** through democratic Gram Sabha processes.
 - Establishment of **Adi Sewa Kendras** in each village to deliver public services and facilitate convergence of central schemes.
 - Promotion of **voluntary community service (shramdaan)** and youth leadership under **Adi Sewa Parv**.
- Digital Enablement:**
 - Use of the **AI-based Adi Vaani App for multilingual communication** (supports 50+ tribal languages) to ensure inclusive participation.

Additional Info

- Adi Karmayogi Abhiyan:**
 - A flagship programme under the **Ministry of Tribal Affairs** to build a cadre of community change-makers.
 - Over **20 lakh officials, women, and youth** trained as **Adi Karmayogis** to drive last-mile delivery of welfare schemes.
- Linked Flagship Schemes:**
 - PM JANMAN (Pradhan Mantri Janjatiya Awas Mission):** Focuses on housing, infrastructure, and livelihoods for Particularly Vulnerable Tribal Groups (PVTGs).
 - Dharti Aaba Abhiyan 2.0:** Aims at land rights, forest rights (under FRA, 2006), and ecological sustainability in tribal areas.
- Janjatiya Gaurav Varsh:**
 - The Government declared **November 15, 2024, to November 15, 2025**, as **Janjatiya Gaurav Varsh** to commemorate tribal contributions to India's freedom struggle and development.

- Constitutional Anchors:**
 - Fifth Schedule:** Empowers Governors to direct tribal welfare and restrict land alienation.
 - Panchayats (Extension to Scheduled Areas) Act, 1996 (PESA):** Mandates Gram Sabha consent for land acquisition, resource management, and development planning in Scheduled Areas.

India's Female Workforce Participation Reaches 42% in 2023–24

What's the News?

- India's **female labour force participation rate (LFPR)** has surged from **23% in 2017–18** to **42% in 2023–24**, marking one of the most significant increases globally and the **highest rise among BRICS nations** over the past decade.

Key Drivers of the Rise

- Policy Initiatives:** The government has implemented targeted measures to promote women's economic inclusion, including:
 - Exemption from examination fees** for competitive exams.
 - 730 days of Child Care Leave** for central government employees.
 - 180 days of maternity leave** (among the longest globally).
 - Joint posting of spouses** to reduce work-life conflict.
- Skill & Employment Programs:** Cross-ministerial schemes focus on equipping women with **market-relevant skills** and facilitating entry into formal sectors.
- Social Infrastructure: One Stop Centres (OSCs)** provide integrated support—medical, legal, psychological, and shelter—for women facing violence, enabling workforce retention.

Formal Sector Inclusion

- During **2024–25 alone**, **26.9 lakh net female subscribers** were added to the **Employees' Provident Fund Organisation (EPFO)**, indicating a strong shift toward formal employment.
- This aligns with campaigns like **Employees' Enrolment Campaign 2025**, which eases compliance for employers enrolling previously uncovered women workers.

Contextual Notes

- While the **Labour Ministry reports 42% LFPR**, international bodies like the **ILO estimate India's female LFPR at around 31% for 2023**, highlighting methodological differences in data collection.
- Rural areas have seen particularly sharp gains—**female LFPR rose from 24.6% in 2017–18 to 41.5% in 2022–23**.

Additional Info

- Constitutional & Policy Links:**

- **Article 39(a) & (d):** Directive Principles urging equal pay and livelihood security.
- **National Policy for Women (2016):** Emphasizes economic empowerment and safety at work.
- **SDG 5 (Gender Equality) and SDG 8 (Decent Work):** Central to India's development commitments.
- **Global Benchmark:** The global average female LFPR stands at **48.7% (2023)**, compared to **73% for men**, underscoring both progress and remaining gaps for India.

MeitY Launches SOAR Program to Boost Digital Inclusivity and Self-Reliance

What's the News?

- The **Ministry of Electronics and Information Technology (MeitY)** has launched the **SOAR (Societal Outreach for Augmenting Research) Program**.
- This national initiative aims to bridge the digital divide and foster technological self-reliance (**Aatmanirbharta**) across India.
- The program will be implemented by the **Centre for Development of Advanced Computing (C-DAC)**, MeitY's premier R&D organization.
- SOAR is designed to empower diverse communities, including students, farmers, artisans, and women, by equipping them with essential digital skills and tools.

About the SOAR Program

- **SOAR** is a comprehensive outreach initiative focused on taking the benefits of technology to the grassroots level.
- It seeks to create a digitally empowered society and a knowledge-based economy by promoting the adoption of indigenous technologies.
- The program aligns directly with the goals of major national missions like **Digital India** and **Aatmanirbhar Bharat Abhiyan**.

Key Objectives of SOAR

The program is built around a multi-pronged strategy to achieve its goals:

- **Enhance Digital Literacy:** To provide targeted training and skilling programs to improve digital fluency among citizens.
- **Promote Technology Adoption:** To encourage the use of digital tools and homegrown technologies in critical sectors like agriculture, healthcare, and education.
- **Foster Innovation:** To create an ecosystem that supports local research, development, and innovation, thereby reducing dependency on foreign technology.
- **Empower Communities:** To ensure that marginalized and underserved populations are included in the nation's digital transformation journey.

Pillars of Implementation

C-DAC will execute the SOAR program through several key pillars:

- **Skilling and Capacity Building:** Conducting workshops, training sessions, and certification courses tailored to the needs of different communities.

- **Technology Dissemination:** Showcasing and deploying C-DAC's indigenous technological solutions to address local challenges.
- **Community Engagement:** Partnering with academic institutions, local governments, and non-profit organizations to expand outreach and impact.
- **Research Augmentation:** Encouraging students and local innovators to participate in R&D activities, creating a pipeline of future tech leaders.

Additional Info

- **Implementing Agency - C-DAC:**
 - The **Centre for Development of Advanced Computing (C-DAC)** is an autonomous scientific society under **MeitY**.
 - It is a pioneer in India's IT, electronics, and supercomputing fields, responsible for developing the **PARAM series of supercomputers**.
- **Related Government Initiatives:**
 - **Digital India:** The SOAR program directly contributes to the vision of transforming India into a digitally empowered society and knowledge economy.
 - **Aatmanirbhar Bharat Abhiyan:** By promoting indigenous technologies and local innovation, SOAR supports the national goal of self-reliance.
 - **Skill India Mission:** The program's focus on digital skilling complements the broader national agenda of creating a skilled workforce.

Model Youth Gram Sabha Initiative Launched to Strengthen Grassroots Democracy Among Students

What's the News?

- The **Ministry of Panchayati Raj**, in collaboration with the **Ministry of Education (DoSEL)** and the **Ministry of Tribal Affairs**, has launched the **Model Youth Gram Sabha (MYGS) Initiative** nationwide.
- The program aims to provide school students with hands-on experience in **grassroots democratic processes** through simulated **Gram Sabha** sessions.
- It will be implemented across **1,000+ schools**, including **Jawahar Navodaya Vidyalayas (JNVs)**, **Eklavya Model Residential Schools (EMRSs)**, and state government schools.

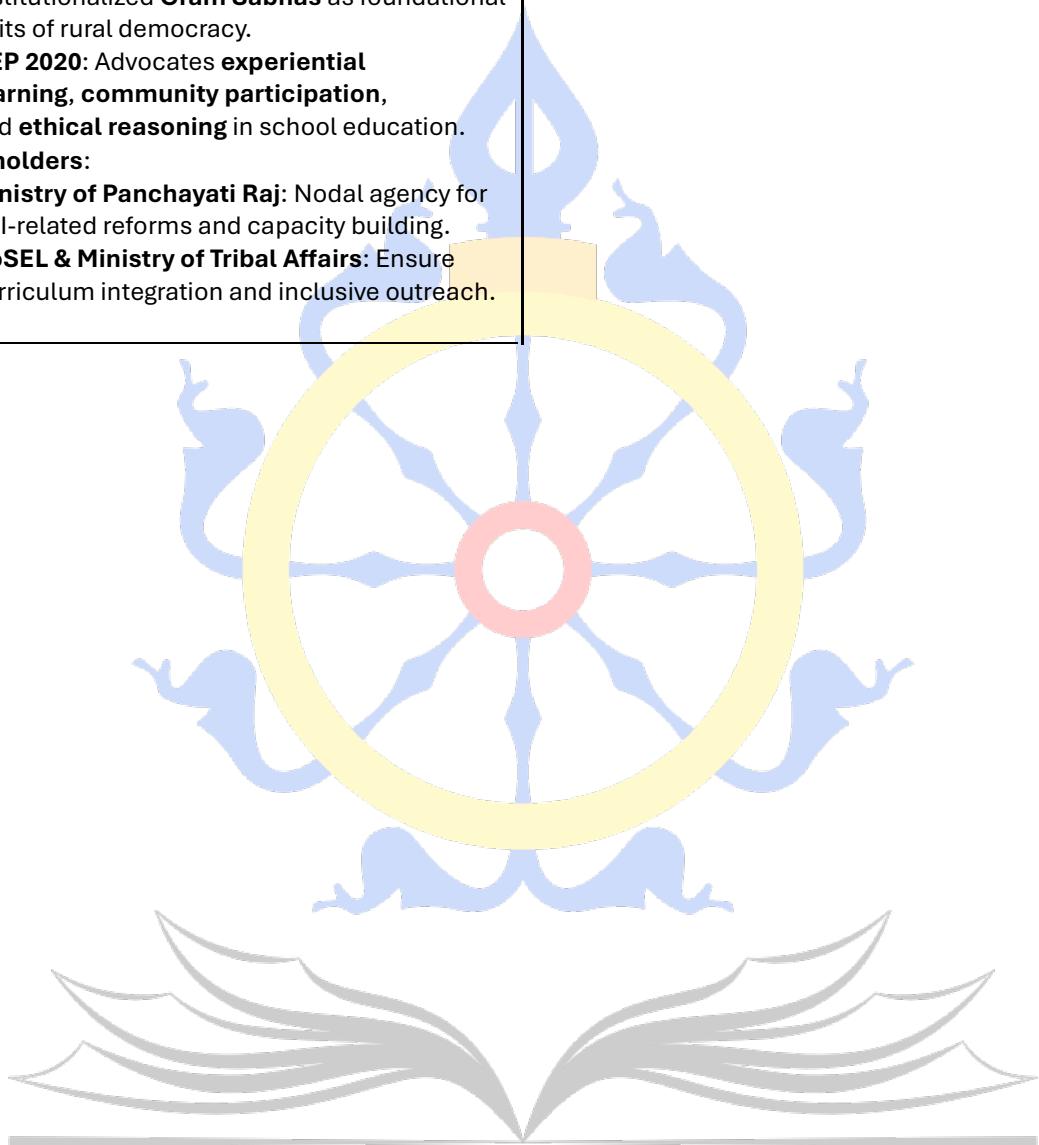
About the Model Youth Gram Sabha (MYGS)

- **Objective:**
 - Foster **democratic leadership**, **civic awareness**, and **participatory governance** among students.
 - Align experiential learning with **National Education Policy (NEP) 2020**'s vision of value-based, community-oriented education.
- **Key Components:**
 - **Training modules** and a dedicated **MYGS digital portal** for structured learning and resource access.

- **Mock Gram Sabha sessions** focusing on collective decision-making, transparency, and accountability.
- Emphasis on “**learning by doing**”, teamwork, and real-life exposure to **Panchayati Raj Institutions (PRIs)**.
- **Future Expansion:**
 - Proposal to extend the model to urban areas through **Model Ward Sabhas** for city-based students.

Additional Info

- **Constitutional & Policy Linkages:**
 - **73rd Constitutional Amendment (1992):** Institutionalized **Gram Sabhas** as foundational units of rural democracy.
 - **NEP 2020:** Advocates **experiential learning, community participation, and ethical reasoning** in school education.
- **Key Stakeholders:**
 - **Ministry of Panchayati Raj:** Nodal agency for PRI-related reforms and capacity building.
 - **DoSEL & Ministry of Tribal Affairs:** Ensure curriculum integration and inclusive outreach.



Culture and Arts

László Krasznahorkai Awarded Nobel Prize in Literature 2025

What's the News?

- The **Nobel Prize in Literature 2025** has been awarded to **Hungarian author László Krasznahorkai** "for his compelling and visionary oeuvre that...".
- The announcement was made on **October 9, 2025**, by the **Swedish Academy**, recognizing Krasznahorkai as one of Hungary's most distinguished literary figures.
- In an interview following the announcement, Krasznahorkai expressed that the award came as a **surprise** and shared his happiness at the recognition.

Literary Significance & Style

- Key Themes:**
 - Apocalyptic vision, social decay, and existential despair.
 - Interplay between **beauty and violence**, often set against historical or mythical backdrops.
 - Exploration of **artistic creation**, impermanence, and spiritual longing.
- Signature Style:**
 - Known for **long, winding sentences** with minimal punctuation, creating a hypnotic, immersive rhythm.
 - Blends **Central European absurdism** with Eastern philosophical contemplation.
- Notable Works:**
 - Sátántangó** (1985): A landmark novel depicting life on a decaying collective farm; later adapted into a critically acclaimed film by Béla Tarr.
 - The Melancholy of Resistance** (1989): A feverish allegory of societal collapse and authoritarianism.
 - Seiobo There Below** (2008): A collection of 17 stories structured in a **Fibonacci sequence**, exploring art, ritual, and transcendence.

Shree Jagannath Temple to Digitise Madala Panji in New Digital Library

What's the News?

- The **Shree Jagannath Temple Administration (SJTA)** in Puri, Odisha, has announced the establishment of a **Digital Library** to preserve and digitise the **Madala Panji**—the centuries-old chronicle of the **12th-century Jagannath Temple**—along with rare palm-leaf manuscripts, temple rituals, archival records, and oral traditions.
- The initiative aims to **safeguard Odisha's cultural and religious heritage** while enabling **global digital access** for researchers, scholars, and devotees,

subject to permissions from the **Gajapati Maharaja** and the **Chhatisha Nijog** (the traditional temple committee).

- The **Tadhau Karana**, the hereditary custodian of the Madala Panji, has agreed to support the digitisation process, and trained **sevayats (temple servitors)** and their descendants will be engaged in the project.

Madala Panji: Significance & Historical Value

- Historical Record:**
 - The Madala Panji is the **official chronicle** of the Jagannath Temple, documenting **temple events, royal patronage, ritual practices**, and **political history** of Odisha across dynasties.
 - It is traditionally maintained on **palm-leaf manuscripts** bundled in large circular rolls, hence the name "Madala" (meaning drum or round bundle).
- Dynastic Documentation:**
 - It records the contributions of rulers from the **Eastern Ganga dynasty**, including **King Anangabhima Deva III** (13th century), credited with constructing the current temple structure.
 - The chronicle also covers later periods under the **Gajapati rulers, Mughal interactions**, and **British colonial interventions**.
- Cultural Authority:**
 - The Madala Panji is not merely archival—it is **ritually revered** and considered a **living document** integral to temple governance and religious legitimacy.

Additional Info

- Temple Administration Framework:**
 - The **Shree Jagannath Temple Act, 1955** governs the administration of the temple, with the **Gajapati Maharaja of Puri** serving as the ceremonial head and the **SJTA** managing day-to-day affairs.
 - The **Chhatisha Nijog** is a 36-member committee of hereditary servitors responsible for ritual decisions and preservation of temple traditions.
- Digital Preservation Context:**
 - This initiative aligns with India's **National Mission for Manuscripts (NMM)**, launched in 2003 under the **Ministry of Culture**, which has digitised over **5 crore manuscript pages** nationwide.
 - The **Raghunandan Library**, another repository of rare texts near the temple (recently relocated due to the Parikrama project), is also slated for digitisation.

Environment

₹1,500 Crore Incentive Scheme Launched to Boost Critical Mineral Recycling

What's the News?

- The Ministry of Mines has notified the **Critical Mineral Recycling Incentive Scheme** with a total outlay of **₹1,500 crore** under the **National Critical Minerals Mission (NCMM)**.
- The scheme aims to develop domestic capacity for recovering **critical minerals**—including **lithium, cobalt, nickel, rare earth elements (REEs), and platinum group metals**—from secondary sources such as **e-waste, spent lithium-ion batteries, permanent magnets, catalytic converters, and alloy scraps**.
- Guidelines were issued on **September 8, 2025**, and the application window will remain open for **six months**, until **April 1, 2026**.

Scheme Structure & Incentive Mechanism

- Beneficiary Categories:**
 - Group A:** Large recyclers/startups with **global revenue \geq ₹200 crore**, requiring **minimum investment of ₹100 crore and 10,000 tonnes/year** processing capacity.
 - Group B:** Smaller recyclers/startups with **revenue $<$ ₹200 crore**, requiring **₹25 crore investment and 5,000 tonnes/year** capacity.
- Fund Allocation:**
 - Total outlay:** ₹1,485 crore (of the ₹1,500 crore)
 - Lithium-ion battery recycling:** ₹700 crore
 - E-waste recycling:** ₹650 crore
 - Other waste streams:** ₹135 crore
- Incentive Types:**
 - Capital Expenditure (Capex) Subsidy:** 14–20%, depending on speed of commissioning post-environmental clearance.
 - Operational Expenditure (Opex) Support:** Linked to incremental sales:
 - Group A:** ₹60 crore (Year 2), ₹150 crore (Year 5)
 - Group B:** ₹30 crore (Year 2), ₹75 crore (Year 5)
 - Incentive caps:** ₹50 crore (Group A), ₹25 crore (Group B).

Additional Info

- National Critical Minerals Mission (NCMM):**
 - Launched to secure supply of **30 critical minerals** vital for **clean energy, electric vehicles, electronics, and defence**.
 - Aims to reduce **import dependence** and promote a **circular economy** for high-value materials.
- Strategic Importance:**
 - Over **70% of global critical mineral reserves** are concentrated in a few countries (e.g., China, DRC), posing **supply chain risks**.

- Recycling can recover up to **95%** of critical minerals from end-of-life products, enhancing **resource security**.

Implementation Framework:

- Coordinated by **Jawaharlal Nehru Aluminium Research Development and Design Centre (JNARDDC)**.
- Supported by private players like **Attero**, with **20+ e-waste collection centres** planned nationwide.

India's First Cooperative Multi-Feed Compressed Biogas Plant Inaugurated in Maharashtra

What's the News?

- Union Home Minister Amit Shah inaugurated India's first cooperative multi-feed Compressed Biogas (CBG) plant in Kolhapur, Maharashtra.
- The plant, promoted by **Shri Chhatrapati Sahakari Sakhar Karkhana**, is a pioneering model that integrates **sugarcane waste, agricultural residue, and organic municipal waste** as feedstock.
- The initiative aligns with the **National Bioenergy Programme** and supports the **Sugarcane Development and Sugar Industry** by enabling sugar mills to diversify into **green energy production**.

Compressed Biogas (CBG) & Cooperative Model

- Plant Capacity:**
 - Produces **5 TPD (tonnes per day)** of CBG.
 - Generates **15 TPD of organic manure** as a by-product.
- Feedstock Mix:**
 - Sugarcane trash and press mud** from sugar mills.
 - Agricultural residues** (e.g., rice straw, corn stover).
 - Municipal solid waste (organic fraction)** sourced from urban local bodies.
- Cooperative Structure:**
 - Owned and operated by a **sugar cooperative**, ensuring farmer participation and revenue diversification.
 - Part of a broader plan to support **15 sugar mills** in Maharashtra to set up similar CBG units with government backing.

Additional Info

- SATAT Initiative (Sustainable Alternative Towards Affordable Transportation):**
 - Launched in **2018** by **Ministry of Petroleum & Natural Gas** in collaboration with **MoPNG, MoRTH, and MoF**.
 - Aims to produce **15 MMT (million metric tonnes)** of CBG annually by **2028–29** through **5,000 plants**.

- CBG is priced at ₹46–52/kg, comparable to CNG, and used as **transport fuel and industrial feedstock**.
- **National Bioenergy Programme:**
 - Merged Biogas and Biomass-based Power Generation schemes under **Ministry of New and Renewable Energy (MNRE)**.
 - Provides **central financial assistance (CFA)**:
 - ₹10,000 per tonne/day for CBG plants (max ₹40 lakh).
 - ₹25 lakh for community biogas plants.

Wildlife Week 2025: Advancing Human-Wildlife Coexistence Through Strategic Conservation Initiatives

What's the News?

- India is observing **Wildlife Week 2025** from **October 2-8**, with the central theme focusing on "**Human-Wildlife Coexistence**" as a sustainable approach to conservation.
- The **Ministry of Environment, Forest and Climate Change (MoEFCC)**, in collaboration with the **Wildlife Institute of India (WII)** and **Project Tiger** authorities, has launched several key conservation projects during this annual observance.
- The week-long celebrations include the introduction of **community-based conflict mitigation strategies** in high human-wildlife interaction zones across 15 states.
- The **National Board for Wildlife (NBWL)** has approved enhanced compensation mechanisms for farmers affected by wildlife damage, alongside new technology-driven monitoring systems for endangered species.

Human-Wildlife Coexistence Framework

- The **2025 theme** emphasizes shifting from traditional conservation approaches to **integrated landscape management** that accommodates both human development needs and wildlife protection.
- Key initiatives launched include:
 - **Wildlife Corridor Protection Program** covering **32 critical corridors** across India
 - **AI-powered early warning systems** deployed in **500+ villages** near protected areas
 - **Community Conservation Agreements** with **12,000+ households** in buffer zones of tiger reserves
 - **Compensation Plus** scheme providing **up to ₹5 lakh** for crop damage and livestock loss
- The framework incorporates **indigenous knowledge systems** alongside modern conservation science, recognizing traditional communities as **stewards of biodiversity**.
- Special focus has been placed on **elephant corridors**, with **20 high-risk corridors** identified for immediate intervention through underpasses, overpasses, and alternative migration routes.

Additional Information

- **Historical Context:**

- **Wildlife Week** was established in **1955** following the passage of the **Wild Life (Protection) Act, 1972**
- Annual observance occurs during the first week of October, culminating on **World Habitat Day**
- Originally focused on hunting regulations, evolved to emphasize **ecosystem-based conservation**

Legal Framework:

- Governed by the **Wild Life (Protection) Act, 1972** (amended in **2002, 2006**)
- **Section 38J** establishes **National Tiger Conservation Authority (NTCA)**
- **Schedule I** provides absolute protection to endangered species with highest penalties
- **Section 51A** addresses human-wildlife conflict management provisions

Conservation Programs:

- **Project Tiger** (1973): Currently protects **5,214 tigers** across **54 reserves**
- **Project Elephant** (1992): Manages **2,998 elephant corridors** across **16 states**
- **Integrated Development of Wildlife Habitats**: Budget allocation of **₹210 crore** for 2025-26
- **Recovery Programme for Critically Endangered Species**: Covers **24 species** with targeted conservation

Recent Developments:

- **National Human-Wildlife Conflict Management Protocol** released in **2024**
- **Wildlife Crime Control Bureau (WCCB)** has established **12 regional units** for rapid response
- **Community Response Teams** trained in **75 districts** for immediate conflict resolution
- **Digital India Biodiversity Framework** enables real-time wildlife movement tracking

Three Major Indian Ports Recognised as Green Hydrogen Hubs Under National Mission

What's the News?

- The **Ministry of New and Renewable Energy (MNRE)** has formally designated three major ports—**Deendayal Port Authority (Gujarat)**, **V.O. Chidambaranar Port Authority (Tamil Nadu)**, and **Paradip Port Authority (Odisha)**—as **Green Hydrogen Hubs** under the **National Green Hydrogen Mission (NGHM)**.
- This move aims to catalyze the development of an **integrated hydrogen ecosystem**, attract **green investments**, and position India as a **global hub for green hydrogen production, utilization, and export**.
- The recognition aligns with India's **net-zero emissions target by 2070** and leverages ports as strategic nodes for clean energy innovation and sustainable logistics.

Green Hydrogen Hubs: Strategic Framework

- The hubs will function as **Hydrogen Valley Innovation Clusters (HVICs)**, promoting:

- **Cluster-based development** to enhance project viability in early stages.
- **Infrastructure convergence** for production, storage, and transport of green hydrogen.
- **Economies of scale** through regional concentration of hydrogen-related activities.
- Key benefits include:
 - **Reduced logistical challenges** by minimizing long-distance hydrogen transport.
 - **Industrial participation** from sectors like steel, refining, and shipping.
 - **Export potential** via maritime routes on India's eastern and western coasts.
- The **revised scheme guidelines**, issued on **June 27, 2025**, provide the framework for identifying and supporting such hubs based on renewable energy availability, port infrastructure, and industrial demand.

Additional Info

- **National Green Hydrogen Mission (NGHM):**
 - Launched in **January 2023** with a total outlay of **₹19,744 crore**.
 - Aims to produce **5 MMT (million metric tonnes)** of green hydrogen annually by **2030**.
 - Targets **reduction of fossil fuel imports and decarbonization of hard-to-abate sectors** (e.g., fertilizers, refining, steel).
- **Green Hydrogen Definition:**
 - Hydrogen produced via **electrolysis of water using renewable electricity** (solar, wind, etc.).
 - Emits **zero carbon**, unlike grey (from natural gas) or blue (with carbon capture) hydrogen.
- **Port Authorities Recognized:**
 - **Deendayal Port (Kandla)**: Western India's largest port, with strong solar and wind potential in Gujarat.
 - **V.O. Chidambaranar Port (Tuticorin)**: Strategic location for Indo-Sri Lanka maritime trade and renewable-rich southern grid.
 - **Paradip Port**: Proximity to Odisha's industrial belt and offshore wind potential.

IUCN Releases 2025 World Heritage Outlook: Climate Change Emerges as Top Threat to Natural Sites

What's the News?

- The **International Union for Conservation of Nature (IUCN)** has released the **2025 World Heritage Outlook**, its latest global assessment of the conservation status of all **271 natural and mixed World Heritage sites** across 115 countries.
- The report identifies **climate change** as the single greatest threat to these sites, surpassing traditional pressures like infrastructure development and illegal logging.

Key Findings of the 2025 Outlook

- **Climate Change Dominates Threat Landscape:**
 - Affects **over 60%** of natural World Heritage sites, including iconic locations like the **Great Barrier Reef (Australia)**, **Sundarbans**

(India/Bangladesh), and **Kilimanjaro National Park (Tanzania)**.

- Manifests through coral bleaching, glacial melt, altered fire regimes, and species migration.
- **Positive Trends:**
 - **85 sites** show improved conservation outlook since 2020 due to stronger governance, community involvement, and anti-poaching measures.
 - **India's Kaziranga and Western Ghats** maintain "Good" status with effective management frameworks.

Methodology & Global Significance

- **Independent Assessment:** Conducted every 3–5 years by IUCN's **World Heritage Team** and **World Commission on Protected Areas (WCPA)**, using scientific data, field reports, and stakeholder inputs.
- **Coverage:** Encompasses **231 natural** and **40 mixed** sites, protecting **over 470 million hectares**—equivalent to **8% of global protected terrestrial and marine areas**.
- **Policy Alignment:** Supports implementation of the **Kunming-Montreal Global Biodiversity Framework (2022)**, particularly **Target 3** (30x30: protect 30% of land and sea by 2030).

Additional Info

- **India's Natural World Heritage Sites (7):**
 - **Natural:** Kaziranga, Manas, Keoladeo, Sundarbans, Nanda Devi & Valley of Flowers, Western Ghats
 - **Mixed:** Khangchendzonga National Park
 - **Threats:** Sundarbans faces **sea-level rise and salinity intrusion**; Western Ghats contend with **fragmentation and invasive species**.
- **Institutional Framework:**
 - **UNESCO World Heritage Convention (1972):** Governs site designation; IUCN serves as **official advisory body** on natural sites.
 - **National Responsibility:** Site management lies with **State Parties**; India's **Ministry of Environment, Forest and Climate Change (MoEF&CC)** coordinates with **National Board for Wildlife (NBWL)**.
- **Constitutional Link:**
 - **Article 48A (DPSP):** Directs the State to protect and improve the environment.
 - **Article 51A(g):** Imposes fundamental duty on citizens to preserve natural heritage.

Global Forests and Coral Reefs in Crisis: Key Findings from 2025 Assessments

What's the News?

Two major global environmental assessments released in October 2025 highlight alarming trends:

- The **Forest Declaration Assessment 2025** reports that **8.1 million hectares (M ha)** of forest were lost in 2024, leaving the world **63% off-track** to meet the 2030 zero-deforestation target pledged at **COP26**.
- A parallel scientific report confirms Earth has crossed its **first climate tipping point: widespread**,

irreversible dieback of warm-water coral reefs, with 84% of reefs across 82 countries affected by bleaching since January 2023.

Forest Crisis: Scale and Drivers

- **Deforestation & Degradation:**
 - 8.1 M ha deforested and 8.8 M ha degraded in 2024; 94% of loss occurred in tropical regions.
 - 6.7 M ha of tropical primary forests—critical for biodiversity—were destroyed, mainly in Latin America and Africa.
- **Emissions Impact:** Forest loss contributed 3.1 Gt CO₂e in 2024—equivalent to 150% of U.S. energy sector emissions.
- **Primary Driver:** Agricultural expansion accounts for 86% of global deforestation over the past decade, fueled by subsidies for livestock, soy, and monocrops.

Coral Reef Collapse: A Tipping Point Crossed

- **Bleaching Extent:** From January 2023 to early 2025, 84% of global coral reef area experienced bleaching-level heat stress—the worst event on record.
- **Ecological & Human Impact:**
 - Coral reefs support 25% of marine species and livelihoods of nearly 1 billion people.
 - Losses impair coastal protection, fisheries, and tourism, with recovery unlikely under current warming trajectories.
- **Scientific Consensus:** At 1.4°C of global warming, reefs have exceeded thermal tolerance thresholds, marking an irreversible shift.

Global & Indian Policy Context

- **International Commitments:**
 - Glasgow Leaders' Declaration (2021) and Kunming-Montreal Global Biodiversity Framework pledged to halt deforestation and restore 30% of degraded ecosystems by 2030—targets now severely off-track.
 - Only 10.6 M ha (0.3% of biophysical potential) is under active restoration globally.
- **India's Role:**
 - Targets 26 M ha of forest restoration by 2030 via Green India Mission, CAMPA, and National Afforestation Programme.
 - However, recent amendments to the Forest Conservation Act have reduced protections for forested lands and undermined rights of forest-dependent communities, per the Forest Declaration Assessment.

India's Biodiversity Under Stress: IUCN Flags Key Sites and Species in 2025 Assessments

What's the News?

Recent assessments by the International Union for Conservation of Nature (IUCN) and India's own scientific

surveys reveal deepening threats to the country's natural heritage:

- The IUCN World Heritage Outlook 4 (2025) has placed India's Western Ghats, Manas National Park (Assam), and Sundarbans National Park (West Bengal) in the “significant concern” category for conservation outlook.
- India's wild elephant population has declined by 18%, from 27,312 in 2017 to 22,446 in 2025, based on the first-ever DNA-based national count.
- The Indian wolf (*Canis lupus pallipes*) has been recognized as a “potential distinct species” and classified as Vulnerable, with only ~3,000 individuals estimated in the wild across India and Pakistan.

IUCN World Heritage Outlook 2025: Key Findings for India

- **Sites of Concern:**
 - Western Ghats, Manas NP, and Sundarbans NP face escalating pressures from climate change, infrastructure expansion, tourism, and invasive species.
 - All three are transboundary or ecologically sensitive ecosystems: Sundarbans (shared with Bangladesh), Manas (with Bhutan), and Western Ghats (a global biodiversity hotspot).
- **Other Indian Sites:**
 - Four sites—Great Himalayan NP, Kaziranga, Keoladeo, and Nanda Devi-Valley of Flowers—are rated “good with some concerns”.
 - Only Khangchendzonga NP (Sikkim) retains a “good” conservation status—the sole Indian site in this top tier.
- **Top Threats in Asia:**
 - Climate change is now the #1 threat to natural World Heritage sites (replacing hunting), followed by tourism, invasive species, and road/rail infrastructure.

Wildlife Population Trends: Elephants and Wolves

- **Asian Elephants:**
 - 22,446 individuals (95% CI: 18,255–26,645), down from 27,312 in 2017.
 - **Regional Distribution:**
 - **Western Ghats:** 11,934 (53% of national total)
 - **Northeast & Brahmaputra floodplains:** 6,559
 - **Karnataka** (6,013) remains the top state, followed by **Assam** (4,159) and **Tamil Nadu** (3,136).
 - **Threats:** Habitat fragmentation due to linear infrastructure, encroachment, and human-elephant conflict.
- **Indian Wolf:**
 - Recognized as a distinct evolutionary lineage within the *Canis* genus, warranting elevated conservation priority.
 - Only 12.4% of its range falls within protected areas, leaving it highly vulnerable to habitat loss, livestock conflict, and persecution.

- Classified as **Vulnerable** on the **IUCN Red List (2025)**, with a declining population trend.

Additional Info

- **Constitutional & Policy Framework:**
 - **Article 48A** (DPSP): Directs state to protect forests and wildlife.
 - **Article 51A(g)**: Imposes citizen duty to preserve natural environment.
 - **Wildlife (Protection) Act, 1972**: Provides legal basis for Project Elephant (1992) and species protection.
- **Key Programs:**
 - **Project Elephant**: Covers 32 elephant reserves across 16 states.
 - **National Board for Wildlife (NBWL)**: Mandated to approve infrastructure projects in eco-sensitive zones.
- **Global Linkages:**
 - All flagged sites are **UNESCO World Heritage Sites** inscribed for **outstanding universal value**.
 - IUCN assessments feed into **UNESCO's Reactive Monitoring** and can trigger "In Danger" listing.

Global Forest Finance Must Triple by 2030: UNEP's State of Finance for Forests 2025 Report

What's the News?

- The **United Nations Environment Programme (UNEP)** has released the first **State of Finance for Forests (SFF) 2025 Report**, warning that global investments in forests must **triple**—from **US\$84 billion in 2023 to US\$300 billion annually by 2030**—to meet climate, biodiversity, and land restoration targets.
- The report highlights severe underfunding, low private sector engagement, and persistent harmful financial flows undermining forest conservation globally and in India.

Key Global Findings

- **Severe funding gap:**
 - Current annual investment: **US\$84 billion** (91% public, 9% private).
 - Required by 2030: **US\$300 billion**—a **US\$216 billion shortfall**.
- **Public finance dominance:**
 - Led by **China and the U.S.**; tropical forest nations contribute only **17% of domestic spending**.
- **Private sector under-engagement:**
 - Only **US\$7.6 billion** from private sources, mostly via **certified commodity chains (39%)** and **impact investing (23%)**.
 - High-risk tropical commodities causing **97% of global deforestation** receive minimal investment.
- **Harmful financial flows:**

- **US\$1.8 trillion** in bank financing to deforestation-linked firms in 2023—far exceeding green investments.

India-Specific Trends

- **Public-led forest finance:**
 - Dominated by schemes like **CAMPA** and **Green India Mission**.
 - Domestic spending **over 30 times higher** than international aid received—demonstrating strong national commitment.
- **Minimal private participation:**
 - Negligible involvement in **carbon markets** or **biodiversity credits**.
- **Equity and community focus:**
 - Emerging emphasis on **community-led restoration** and **gender-inclusive financing**, though access remains limited (<0.5% of international funds reach local actors).

Recommendations

- **Triple forest investments** by 2030 via **blended finance, carbon pricing, and subsidy reforms**.
- **Redirect harmful subsidies** (e.g., **US\$700 billion** in agriculture subsidies) toward **nature-positive incentives**.
- **Mobilize private capital** through **green bonds, biodiversity credits**, and transparent frameworks.
- **Empower local communities and women** with **direct financing channels**.
- **Strengthen data systems** to track forest finance and integrate forests into **national climate finance strategies**.

India's Elephant Population Estimated at 22,446 in First DNA-Based Census

What's the News?

- The **Synchronous All India Elephant Estimation (SAIEE) 2021–25**, India's first **DNA-based national elephant census**, has estimated the country's wild **Asian elephant (*Elephas maximus indicus*)** population at **22,446 individuals**.
- Conducted by the **Wildlife Institute of India (WII)** under the **Union Ministry of Environment, Forest and Climate Change (MoEFCC)**, the survey introduces a **genetic mark-recapture methodology**, establishing a **new scientific baseline** for future monitoring.

Key Findings of SAIEE 2025

- **National population:**
 - Estimated at **22,446** (95% confidence interval: **18,255–26,645**).
 - Not directly comparable to the **2017 figure of 27,312** due to methodological shift.
- **Regional distribution:**
 - **Western Ghats: 11,934** (53% of total)
 - **North Eastern Hills & Brahmaputra floodplains: 6,559**
 - **Shivalik Hills & Gangetic Plains: 2,062**
 - **Central India & Eastern Ghats: 1,891**
- **Top states:**

- **Karnataka (6,013), Assam (4,159), Tamil Nadu (3,136), Kerala (2,785), Uttarakhand (1,792), Odisha (912).**

Conservation Challenges Identified

- **Habitat fragmentation:**
 - Caused by **linear infrastructure** (railways, highways, power lines), **mining**, and **agricultural expansion**.
 - **Western Ghats:** Farmland fencing and plantations disrupt corridors.
 - **Central India:** Mining in Odisha and Jharkhand forces elephants to migrate—**Chhattisgarh's population rose by 82.6%** due to influx from disturbed habitats.
- **Human-elephant conflict:**
 - **Central India**, though home to <10% of elephants, accounts for **~45% of human fatalities** from elephant encounters.
 - New elephant colonies in **Madhya Pradesh** (Sanjay Dubri, Bandhavgarh) and **Maharashtra's Gadchiroli** increase crop raids and property damage.
- **Data gaps:**
 - **Northeastern states** faced limited field coverage due to terrain and security constraints.

Recommendations

- Treat **2025 estimate as new baseline** for all future assessments.
- **Restore and secure elephant corridors** through inter-state coordination.
- Institutionalize **genetic monitoring** in national wildlife surveys.
- Scale up **community-based conflict mitigation** and early-warning systems.
- Integrate **elephant landscape planning** into infrastructure and mining clearances.

Additional Info

- **Legal & Policy Framework:**
 - **Project Elephant (1992):** Provides financial and technical support for conservation; currently covers **32 Elephant Reserves** across 14 states.
 - **Wildlife (Protection):** Lists Asian elephant in **Schedule I**, granting highest protection.
 - **IUCN Status: Endangered** since 1986; India hosts **>60%** of global population.
- **Methodological Shift:**
 - SAIEE 2025 aligned with **All India Tiger Estimation protocols**, using **dung DNA sampling** and **camera traps** for individual identification—enhancing accuracy over earlier indirect methods.
- **Landscape Significance:**
 - **Brahmagiri–Nilgiri–Eastern Ghats block** hosts India's largest sub-population, spanning **5 Elephant Reserves** (Mysuru, Nilgiri, Wayanad, Nilambur, Coimbatore).

IUCN Declares Fossil Fuels a Direct Threat to Nature, Backs Global Phase-Out Treaty

What's the News?

- At its **World Conservation Congress in Abu Dhabi (October 2025)**, the International Union for Conservation of Nature (IUCN) adopted **Motion 042**, becoming the **first multilateral environmental body** to explicitly **name fossil fuel production and combustion as a direct driver of biodiversity loss and climate breakdown**.
- The motion calls for a **just and equitable global phase-out of fossil fuels** and endorses the development of a **Fossil Fuel Non-Proliferation Treaty**.

Key Provisions of Motion 042

- **Explicit recognition:** Identifies **coal, oil, and gas extraction and use**—not just emissions—as **core threats to ecosystems and species**.
- **Global phase-out demand:** Urges all governments to **halt new fossil fuel projects, end subsidies**, and **transition equitably away from fossil fuel dependence**.
- **Support for a Fossil Fuel Non-Proliferation Treaty:** Aims to establish a **legally binding global framework to manage fossil fuel supply**, complementing the **Paris Agreement's demand-side focus**.
- **Centering Indigenous rights:** Co-sponsored by **Indigenous groups and civil society**, the motion affirms that “**there is no conservation without Indigenous rights**”.

Significance & Implications

- **Unification of agendas:** Bridges the **climate and biodiversity crises**, recognizing that **nature-based solutions alone cannot offset fossil fuel-driven damage**.
- **Momentum for COP30:** Builds pressure ahead of **COP30 in Belém, Brazil (2025)**, urging leaders to move beyond vague net-zero pledges to **concrete supply-side action**.
- **Moral and policy influence:** Though **not legally binding**, IUCN resolutions carry **significant weight in shaping international environmental law, national policies, and multilateral negotiations**.
- **Precedent-setting:** Marks a **paradigm shift** from targeting emissions to confronting the **root cause—fossil fuel production**—aligning conservation with climate justice.

examples of countries that have successfully reduced their reliance on fossil fuels

1. Denmark

- **Renewable electricity:** Over **80% of electricity** comes from **wind and solar** (2024).
- **Coal phase-out:** Committed to **ending coal use by 2030**.
- **Offshore wind leadership:** Home to **Ørsted**, a global leader in offshore wind energy, which transformed from a fossil-fuel utility to 100% renewable generation.
- **Policy enablers:** Long-term energy agreements across political parties, carbon taxes, and community ownership models.

2. Costa Rica

- **Electricity generation:** Over 98% renewable for more than a decade—primarily **hydropower** (70%), plus geothermal, wind, and biomass.
- **Fossil fuel use:** Still relies on oil for transport (≈70% of final energy), but actively pursuing **electrification**.
- **National Decarbonization Plan (2019):** Aims for **net-zero emissions by 2050**, with full transport electrification and green hydrogen development.

3. Germany

- **Coal exit:** Passed **Coal Phase-Out Act (2020)** to shut all coal plants by **2038** (accelerated to **2030** in some states).
- **Energiewende** (Energy Transition):
 - Renewables supplied **52% of electricity** in 2023.
 - Phased out **nuclear power** in 2023 while reducing coal dependence.
- **Challenges:** Still uses **natural gas**, especially post-Russia-Ukraine war, but investing heavily in **green hydrogen** and grid modernization.

4. Uruguay

- **Rapid transition:** Went from <10% renewables (2007) to >95% **renewable electricity** by 2020—mostly **wind, hydro, and biomass**.
- **Mechanisms:**
 - Long-term **power purchase agreements (PPAs)** with private developers.
 - Stable regulatory framework and public-private partnerships.
- **Result:** Cut electricity emissions by ~90% in 15 years without major subsidies.

5. Norway

- **Electric transport leader:** 80% of new car sales in 2023 were **battery electric vehicles (BEVs)**, driven by:
 - Tax exemptions, toll waivers, and charging infrastructure.
- **Electricity:** 96% **hydropower**.
- **Paradox:** Still a major **oil and gas exporter**, but uses **sovereign wealth fund** (from fossil revenues) to invest in global green tech.

Additional Info

- **About IUCN:**
 - Founded in **1948**, it is the **world's largest environmental network**, comprising over **1,400 member organizations**, including **200+ government agencies** and **800+ NGOs**.
 - Maintains the **IUCN Red List of Threatened Species**, the global standard for extinction risk.
- **Fossil Fuel Non-Proliferation Treaty Initiative:**
 - Proposed by **Pacific Island nations and civil society**, it seeks to:
 - **End new exploration and production,**
 - **Phase out existing production equitably,**
 - **Support a just transition** for workers and communities.
 - Currently backed by **over 80 countries at the UN level**, though not yet adopted as a formal treaty.
- **Contextual Relevance for India:**
 - India is **not a sponsor** of Motion 042.

- Balances **energy security** (coal accounts for ~70% of electricity) with **renewable expansion** (500 GW non-fossil target by 2030).
- Faces growing scrutiny on **coal mine expansions in biodiversity-rich zones** (e.g., Hasdeo Aranya, Eastern Ghats).

India Climbs to 9th Global Position in Total Forest Area: FAO Report

What's the News?

- India has achieved a significant milestone in global environmental conservation by rising to the **9th position** worldwide in terms of total forest area.
- This is an improvement from the 10th position held in the previous assessment.
- The country has concurrently maintained its **3rd position** globally in terms of **annual forest area gain**.
- The findings were released in the **Global Forest Resources Assessment (GFRA) 2025** report by the **UN Food and Agriculture Organization (FAO)**.

Global Forest Resources Assessment (GFRA) 2025

- The **GFRA** is a comprehensive evaluation of global forest resources and is released every five years by the **FAO**.
- **India's Status (2025):**
 - Total forest area stands at approximately **72.7 million hectares (ha)**.
 - India's forest cover accounts for roughly **2%** of the world's total forest area.
 - India follows Australia, the Democratic Republic of the Congo, and Indonesia in the total forest area rankings.
- **Annual Forest Gain (2015–2025):**
 - India recorded an annual net gain of approximately **1,91,000 ha**.
 - India's 3rd rank in annual gain trails only China (1.69 million ha/year) and Russia (942,000 ha/year).
- Countries with larger forest areas include:
 - **Russia** (832.6 million ha)
 - **Brazil** (486 million ha)
 - **Canada** (368.8 million ha)
 - **United States** (308.9 million ha)
 - **China** (227 million ha)
 - **Democratic Republic of Congo** (139 million ha)
 - **Australia** (133.5 million ha)
 - **Indonesia** (95.9 million ha)

Additional Info

- **Global Forest Resources Assessment (GFRA):**
 - Conducted by **FAO** every five years.
 - Tracks forest cover, deforestation rates, and management practices across 236 countries.
- **National Policy Context:**
 - **National Forest Policy, 1988:** Aims to maintain **33% forest/tree cover** of total geographical area.
 - **India's Nationally Determined Contributions (NDCs)** under Paris Agreement:

- Target to create an additional **2.5–3 billion tonnes of carbon sink** through forest and tree cover by 2030.
- **Constitutional & Institutional Framework:**
 - **Article 48A:** Directive Principle mandating the state to protect and improve the environment.
 - **Article 51A(g):** Fundamental Duty for citizens to protect natural ecosystems.
 - **Forest Conservation Act, 1980:** Regulates diversion of forest land for non-forest purposes.

UNEP Report 'Eye on Methane 2025' Highlights Need for Mitigation Action

What's the News?

- The **UN Environment Programme (UNEP)** has released a report titled "**Eye on Methane 2025: From Measurement to Momentum**".
- The report, published by UNEP's **International Methane Emissions Observatory (IMEO)**, highlights significant advancements in monitoring methane but calls for an urgent shift from data collection to concrete **mitigation action**.
- This comes as atmospheric concentrations of methane reached **record levels in 2024**.

Key Report Highlights

- **Measurement to Momentum:** The report stresses that while technology for measuring methane has improved, this data must now be used to implement policies that reduce emissions.
- **Major Emission Sources:** The primary sectors responsible for methane emissions are identified as **fossil fuels, agriculture, and waste**.
- **Methane Alert and Response System (MARS):**
 - This satellite-based system is crucial for detecting large methane plumes worldwide.
 - In 2024, MARS issued over **1,500 notifications** to governments and companies regarding major emission events.

Global Methane Pledge (GMP):

- This is a voluntary commitment by countries to work collectively to reduce global methane emissions.
- The target is to cut emissions by at least **30% by 2030**, compared to 2020 levels.
- The report's findings are intended to support countries in achieving the goals of the pledge.

Additional Info

- **International Methane Emissions Observatory (IMEO):**
 - Hosted by **UNEP**, IMEO works to improve the transparency and understanding of global methane emissions.
 - It integrates data from multiple sources, including satellites, ground measurements, and industry reporting, to create a public dataset of empirically verified methane emissions.
- **Methane (CH₄):**

- A powerful **greenhouse gas** that is much more potent than carbon dioxide at trapping heat in the short term.
- It is responsible for a significant portion of the global warming experienced today.

A Start for North-South Carbon Market Cooperation

What's the News?

- India and Switzerland are operationalizing a bilateral agreement for carbon market cooperation, representing a significant "North-South" (developed to developing country) partnership.
- This cooperation is one of the first of its kind globally under **Article 6.2 of the Paris Agreement**.
- The framework allows Switzerland to finance green projects in India in exchange for carbon credits, which it can use to meet its own national climate targets.
- The Swiss **KliK Foundation** is the primary entity mandated by the Swiss government to procure these credits, known as **Internationally Transferred Mitigation Outcomes (ITMOs)**.

What is Article 6.2 of the Paris Agreement?

- **Article 6** of the Paris Agreement provides a framework for countries to cooperate voluntarily to achieve their climate targets, or **Nationally Determined Contributions (NDCs)**.
- **Article 6.2** specifically allows for "**Cooperative Approaches**".
 - This enables countries to enter into bilateral or multilateral agreements to trade **ITMOs**.
 - For example, a country like Switzerland (buyer) can fund a solar power plant in India (host).
 - The resulting emission reductions (ITMOs) are transferred to Switzerland, which counts them towards its own **NDC**.
- **Key Principle:** To prevent "**double counting**," the host country (India) must authorize the transfer and make a "**corresponding adjustment**" (CA), meaning it can no longer count those same emission reductions toward its own NDC.

Key Features of the Switzerland-India Cooperation

- **Buyer Role:** Switzerland, through the **KliK Foundation**, will provide finance for mitigation projects in India.
 - The KliK Foundation is a private entity mandated under the **Swiss CO₂ Act** to offset emissions from motor fuel importers.
- **Host Role:** India's **Ministry of Environment, Forest and Climate Change (MoEFCC)** oversees the approval of these projects.
- **Eligible Projects:** India has specified high-potential sectors eligible for generating ITMOs, including:
 - Renewable energy with storage (only the stored component)
 - Green hydrogen and Green Ammonia
 - Sustainable Aviation Fuel (SAF)
 - High-end energy efficiency technologies
- **Finance Model:** This is a **results-based payment** model. Finance is channelled to private

sector projects in India upon successful verification of emission reductions.

Additional Info

- **Article 6 Mechanisms:**
 - **Article 6.2:** Bilateral (country-to-country) "Cooperative Approaches" (this deal).
 - **Article 6.4:** A new *global* carbon market mechanism, supervised by a **UNFCCC** body, intended to replace the **Clean Development Mechanism (CDM)** of the Kyoto Protocol.
 - **Article 6.8:** A framework for **non-market approaches**, such as development aid, that do not involve trading credits.
- **Key Terms:**
 - **ITMOs (Internationally Transferred Mitigation Outcomes):** The official term for a carbon credit (representing one tonne of CO₂ equivalent) traded between countries under Article 6.2.
 - **NDCs (Nationally Determined Contributions):** The climate action targets pledged by each country under the Paris Agreement.

Scientists Launch AmazonFACE "Climate Time Machine" Ahead of COP30

What's the News?

- Scientists in Brazil have activated a "climate time machine" experiment known as **AmazonFACE (Free-Air CO₂ Enrichment)**.
- Located near Manaus, the project is led by Brazil's **National Institute of Amazonian Research (INPA)** with support from the **UK** and **Brazilian** governments.
- It aims to simulate the atmospheric **carbon dioxide (CO₂)** levels expected by **2050** to see how the Amazon rainforest will respond.
- The experiment's launch is timely as Brazil prepares to host the **UN Climate Conference (COP30)** in Belém.

About the AmazonFACE Experiment

- **Objective:** To determine if the Amazon rainforest can continue to act as a **carbon sink** (absorbing more CO₂ than it releases) in a high-CO₂ future.
- **Methodology:**
 - The experiment uses tall towers to pump large amounts of CO₂ into 30-meter-diameter open-air rings in the forest.
 - This setup raises the CO₂ concentration within the rings to approximately **600 parts per million (ppm)**, about **40-50%** higher than current levels, mimicking mid-century atmospheric conditions.
- **Significance:** This is the first **FACE** experiment to be conducted in a highly diverse tropical rainforest.

Key Scientific Question: Fertilization vs. Nutrients

- **Carbon Fertilization Effect:** The experiment will test the long-held hypothesis that elevated CO₂ will act as a "fertilizer," boosting photosynthesis and causing trees to grow faster and absorb more carbon.

- **Nutrient Limitation:** A major uncertainty, which AmazonFACE will investigate, is whether the Amazon's **nutrient-poor soils** (especially lacking phosphorus) will limit this potential growth, nullifying the fertilization effect.
- **The Amazon "Tipping Point":**
 - Scientists are concerned the Amazon is approaching a **tipping point** due to deforestation, rising temperatures, and droughts.
 - This is a critical threshold where the forest could irreversibly degrade into a drier, savanna-like ecosystem, releasing 15-20 years' worth of global CO₂ emissions.
 - The experiment will provide crucial data on the forest's resilience against this collapse.

Additional Info

- **Global Context:**
 - **FACE experiments** have historically shown mixed results—some temperate forests responded positively to CO₂, but tropical responses remain uncertain due to complex soil and biodiversity dynamics.
- **India's Linkage:**
 - India also hosts long-term ecological research sites (e.g., **ICRISAT, IISc**) but lacks a tropical FACE facility.
 - Findings may influence India's **National Action Plan on Climate Change (NAPCC)** and **Net Zero by 2070** strategy.
- **Environmental Stakes:**
 - The Amazon stores **~120 billion tonnes of carbon**; even partial dieback could accelerate global warming.
 - Over **75% of the Amazon** is already showing signs of reduced resilience due to deforestation and drought.

UNEP's 2025 Adaptation Gap Report Highlights Widening Climate Finance Shortfall for Developing Nations

What's the News?

The **United Nations Environment Programme (UNEP)** released its **Adaptation Gap Report 2025**, titled "*Running on Empty*", warning that **climate adaptation finance for developing countries is drastically insufficient** and declining even as needs surge. The report estimates that **\$310–365 billion annually** will be required by **2035** for adaptation in developing nations—yet current public finance flows stand at just **\$26 billion (2023)**, covering **less than 10%** of actual needs.

Key Findings of the Report

- **Shrinking Finance:** International public adaptation finance **fell from \$28 billion (2022) to \$26 billion (2023)**, reversing earlier progress.
- **Widening Gap:** The annual adaptation finance gap now ranges between **\$284–339 billion**, with inflation-adjusted needs potentially reaching **\$440–520 billion/year by 2035**.

- **Glasgow Pledge Off Track:** The **COP26 commitment to double adaptation finance by 2025** (to ~\$40 billion from 2019 levels) is unlikely to be met.
- **Private Sector Underperformance:** Despite potential, private adaptation finance remains **minimal**—estimated at **under \$5 billion/year**—due to high perceived risks and lack of de-risking mechanisms.

Policy and Implementation Gaps

- **Uneven Planning:** While **most countries** have **National Adaptation Plans (NAPs)** or policies, many are outdated or lack integration with sectoral strategies (e.g., agriculture, health, infrastructure).
- **Weak Monitoring:** Only **30% of countries** have robust **Monitoring, Evaluation & Learning (MEL)** systems to track adaptation outcomes.
- **Risk of Maladaptation:** Poorly designed interventions—such as sea walls that disrupt ecosystems—may **increase long-term vulnerability**.
- **Debt Concerns:** Overreliance on **loans instead of grants** risks pushing vulnerable nations into “adaptation debt traps.”

Global and Multilateral Responses

- **COP29 Agreement:** A New Collective Quantified Goal (NCQG) of **\$300 billion/year by 2035** for total climate finance (mitigation + adaptation) was adopted—but this falls short of adaptation needs alone.
- **Baku–Belém Roadmap (2024):** Emphasizes **grant-based, concessional finance** and calls for **blended finance models** to mobilize private capital.
- **Multilateral Fund Surge:** In 2024, the **Green Climate Fund (GCF)**, **Global Environment Facility (GEF)**, and **Adaptation Fund** collectively disbursed **\$920 million**—an **86% increase** over the prior five-year average.

India's Relevance

- **High Vulnerability:** India faces escalating risks from **heatwaves, erratic monsoons, coastal erosion, and glacial melt**, affecting over **600 million people** directly dependent on climate-sensitive sectors.
- **Policy Leadership:** India has integrated adaptation into **National Action Plan on Climate Change (NAPCC)** and state-level plans, but **local implementation and finance remain weak**.
- **Finance Dependence:** As a lower-middle-income country, India relies heavily on **international public finance** for large-scale resilience projects, especially in **agriculture, water, and urban infrastructure**.

Climate Inequality Report 2025 Highlights

Disproportionate Emissions from Wealth Ownership

What's the News?

The **Climate Inequality Report 2025**, released by the **World Inequality Lab**, reveals that **wealthy individuals contribute far more to global emissions through their ownership of capital assets**—such as shares in fossil fuel companies—than through personal consumption. The

report finds that the **top 1% of global wealth holders are responsible for 41% of emissions linked to private capital ownership**, compared to just **15% of consumption-based emissions**. This underscores a critical shift in climate policy discourse: addressing **asset ownership**, not just lifestyle choices, is essential for climate justice.

Key Findings of the Report

- **Emissions Disparity:**
 - Under the **ownership-based approach**, per-capita emissions of the global top 1% are **680 times higher** than those of the bottom 50%.
 - In the **consumption-based model**, the same ratio is **75 times**.
- **Country-Level Insights:**
 - In the **US**, the top 10% account for **72% of ownership-based emissions** (vs. 24% under consumption).
 - In **France** and **Germany**, the top 1% contribute **44–45%** of ownership-linked emissions, versus **2–3%** in consumption models.
- **Wealth Concentration Risk:**
 - If the wealthy control climate investments, their global wealth share could rise from **38.5% (2025)** to **46% by 2050**, deepening inequality.

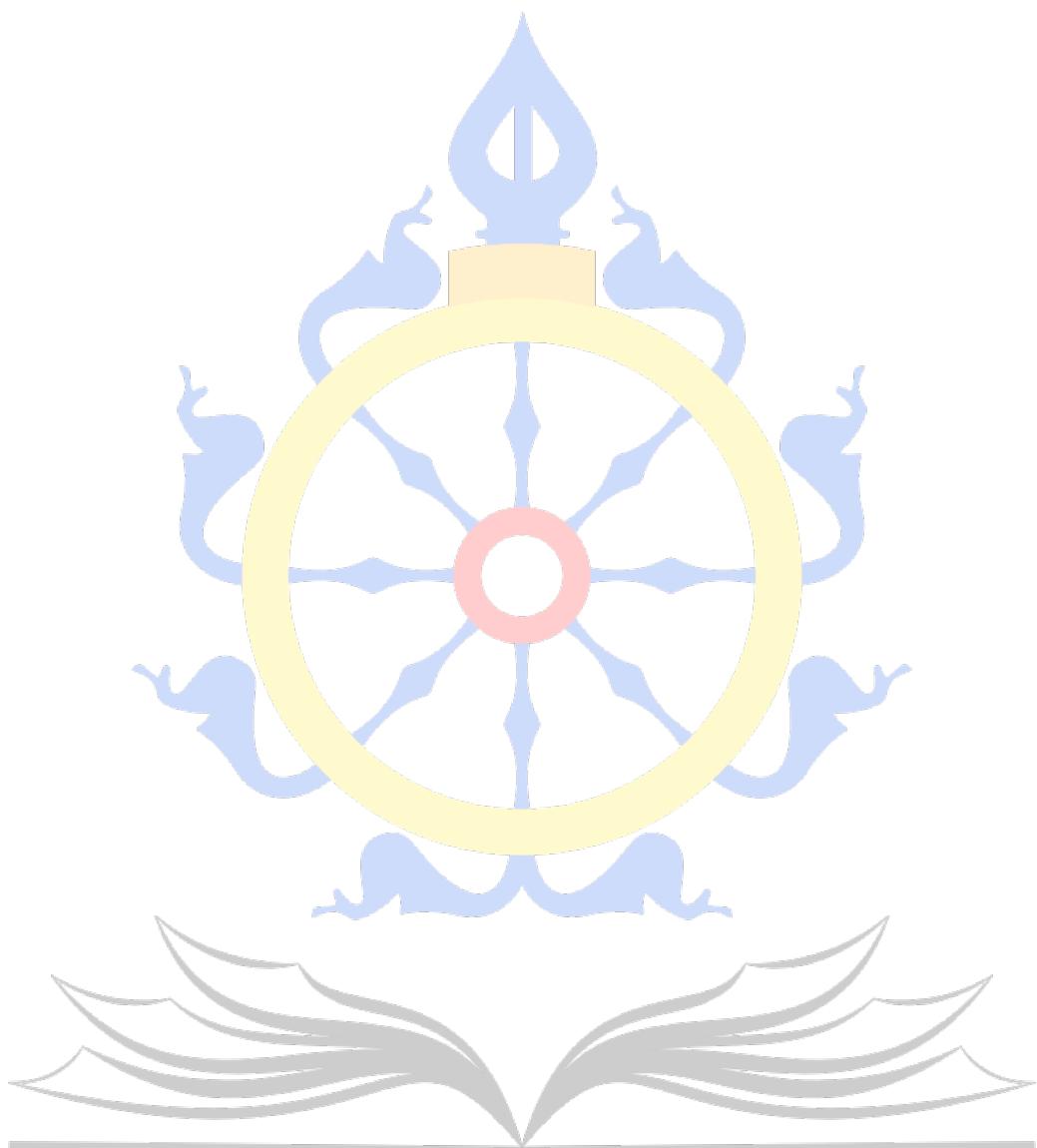
Policy Recommendations

- **Carbon-Adjusted Wealth Tax:**
 - Impose a tax on the **carbon intensity of financial assets** (e.g., stocks in oil & gas firms).
 - Estimated revenue: **€36 billion (France)**, **€74 billion (Germany)**, **\$534 billion (US)** at **€150/tonne CO₂ rate**.
- **Ban on New Fossil Investments:**
 - Prohibit new domestic investments in fossil fuel exploration and infrastructure.
- **Public Green Investment:**
 - Scale up **publicly owned low-carbon infrastructure** through **sovereign green funds** to ensure inclusive transition.
- **Progressive Climate Finance:**
 - Redirect capital flows via **regulatory mandates and incentives for clean portfolios**, especially for institutional investors.

Relevance for India & Global South

- **Vulnerability vs. Responsibility:**
 - India and other developing nations bear **disproportionate climate impacts** despite minimal historical emissions.
 - The bottom 50% globally contribute **<10%** of total emissions but face **highest adaptation costs**.
- **Equity in Climate Action:**
 - Calls for **Common But Differentiated Responsibilities (CBDR)** gain renewed urgency.
 - Supports India's stance at **COP29/COP30** for **grant-based climate finance** and **technology transfer**.
- **Domestic Implications:**

- Highlights need to regulate **ESG disclosures** and **greenwash-free investment standards** in Indian financial markets.



Centre Issues Advisory on Rational Use of Cough Syrups in Children

What's the News?

- The **Union Ministry of Health and Family Welfare** has issued a nationwide advisory to all **States and Union Territories** on the rational and judicious use of cough syrups in the paediatric population.
- The advisory follows reports of **child deaths in Madhya Pradesh and Rajasthan**, with at least **12 fatalities** linked to the consumption of certain cough syrups.
- While laboratory tests confirmed **no presence of toxic contaminants** like **Diethylene Glycol (DEG)** or **Ethylene Glycol (EG)** in the tested samples, the Ministry emphasized that **most childhood coughs are self-limiting** and do not require pharmacological intervention.

Key Guidelines from the Advisory

- Age-Based Restrictions:**
 - Children below 2 years:** Cough and cold medications **must not be prescribed or dispensed**.
 - Children below 5 years:** Such medications are **generally not recommended**.
 - Children above 5 years:** Use only after **careful clinical evaluation, with strict dosing, shortest effective duration, and avoidance of multi-drug combinations**.
- Non-Pharmacological First-Line Approach:**
 - Emphasis on **adequate hydration, rest, and supportive care** as primary management for acute cough illnesses.
- Procurement & Dispensing Norms:**
 - All healthcare facilities must ensure use of products manufactured under **Good Manufacturing Practices (GMP)** and containing **pharmaceutical-grade excipients**.
- Implementation Directive:**
 - The advisory must be disseminated across **PHCs, CHCs, district hospitals, government dispensaries, and medical institutions**.

Additional Info

- Recent Incidents:**
 - Madhya Pradesh:** 9 child deaths reported; samples tested by **Central Drugs Standard Control Organisation (CDSCO)**, **National Centre for Disease Control (NCDC)**, and **National Institute of Virology (NIV)** showed **no DEG/EG contamination**.
 - Rajasthan:** 2 deaths linked to **Dextromethorphan Hydrobromide Syrup IP 13.5 mg/5 ml**, a formulation **not recommended for paediatric use**; the syrup was confirmed **free of Propylene Glycol**, a potential source of DEG/EG.
- Regulatory Actions:**

- Sale of implicated syrups suspended** in **Rajasthan**.
- Three-member probe panel** constituted; a doctor and pharmacist suspended in **Bharatpur PHC**.

- Public Health Context:**
 - Dextromethorphan (DXM)**, a common OTC cough suppressant, can cause **drowsiness, dizziness, nausea, agitation, and confusion** in young children and is **contraindicated under age 2**.
 - The advisory aligns with **WHO guidelines** on rational use of medicines in children and aims to curb **irrational polypharmacy** in primary care settings.

Cabinet Approves ₹1,500 Crore for Biomedical Research Career Programme Phase-III

What's the News?

- The **Union Cabinet** has approved **₹1,500 crore** for the **Biomedical Research Career Programme (BRCP) Phase-III**, to be implemented from **2025–26 to 2029–30**.
- The programme, spearheaded by the **Indian Council of Medical Research (ICMR)** under the **Department of Health Research (DHR)**, aims to strengthen India's biomedical research ecosystem by nurturing **young scientific talent** and promoting **high-impact, translational research**.
- BRCP Phase-III will support **over 1,000 early- and mid-career scientists** through fellowships, research grants, and infrastructure development across **medical colleges, research institutes, and public health institutions**.

Programme Components & Strategic Objectives

- Fellowship Support:**
 - Early-career scientists:** 5-year fellowships with **₹1.5 lakh/month salary and ₹15 lakh/year research grant**.
 - Mid-career scientists:** 5-year support with **₹2 lakh/month and ₹25 lakh/year research grant**.
- Institutional Strengthening:**
 - Upgradation of **100 medical colleges** with modern research infrastructure.
 - Establishment of **Centres of Excellence** in priority areas like **antimicrobial resistance (AMR), non-communicable diseases (NCDs), maternal and child health, and emerging infections**.
- Translational Focus:**
 - Emphasis on **bench-to-bedside research**, including **diagnostics, vaccines, therapeutics, and digital health solutions**.

- Mandatory **industry or public health collaboration** for selected projects to ensure real-world applicability.
- **Capacity Building:**
 - Training in **good clinical practice (GCP), research ethics, data science, and regulatory pathways.**
 - Support for **international exposure and patent filing.**

Additional Info

- **Historical Context:**
 - **BRCP Phase-I** launched in **2009** with ₹450 crore; **Phase-II** (2017–22) allocated ₹750 crore.
 - Over **700 scientists** supported so far; led to **1,200+ publications, 50+ patents, and 15+ startups** in biotech and medtech.
- **Policy Alignment:**
 - Supports **National Health Policy 2017** goal of raising public health R&D spending to **2% of GDP.**
 - Complements **Atal Jai Anusandhan Biotech Mission** and **National Biopharma Mission** under **BIRAC.**

Mandatory Batch Testing Protocol for Pharmaceutical Products Implemented Nationwide

What's the News?

- The **Central Government** has directed all states to implement **mandatory batch testing** of all pharmaceutical products before market release.
- This directive follows incidents of **contaminated cough syrup** causing fatalities, particularly among children in **Madhya Pradesh**.
- The **Drug Controller General of India (DCGI)** is enforcing stricter quality control measures across the pharmaceutical manufacturing chain.
- State drug authorities have been instructed to strengthen surveillance and testing mechanisms at manufacturing facilities and distribution points.

Strengthening Pharmaceutical Quality Control

- The new protocol mandates that **drug manufacturers** must test every batch of both **raw materials** and **finished products** before release to the market.
- **State drug controllers** have been directed to verify compliance through regular inspections and random sampling.
- The measure aims to prevent recurrence of incidents involving **substandard medicines** containing harmful contaminants like **diethylene glycol** and **ethylene glycol.**
- Regulatory authorities will now implement a **three-tier testing system** comprising manufacturer testing, state laboratory verification, and central laboratory confirmation for critical products.

Additional Information

- **Regulatory Framework:**

- Based on provisions of the **Drugs and Cosmetics Act, 1940** and **Drugs and Cosmetics Rules, 1945**
- Implementation overseen by the **Central Drugs Standard Control Organization (CDSCO)**
- **Section 26A** of the Act empowers the DCGI to set quality standards for drugs

Recent Context:

- Triggered by multiple international alerts regarding contaminated cough syrups from Indian manufacturers
- **WHO** had issued medical product alerts about substandard cough syrups causing child fatalities in several countries
- Previous voluntary guidelines have been converted to mandatory requirements with enforcement mechanisms

Quality Control Infrastructure:

- India has **28 State Drug Testing Laboratories** and **3 Central Drug Testing Laboratories**
- New directive requires upgrading testing capabilities to detect contaminants at **parts per million (ppm)** levels
- Implementation timeline requires full compliance within **six months** across all manufacturing units

Related Initiatives:

- **Pharma Vision 2047** - National strategy for pharmaceutical sector development
- **Ayushman Bharat Drug Price Control Order (AB-DCPO)** - Ensuring quality affordable medicines
- **National Pharmaceutical Pricing Authority (NPPA)** - Works in coordination with quality control measures

WHO Global Report Reveals Tobacco Use Trends and Future Projections Through 2030

What's the News?

- The **World Health Organization (WHO)** has released its comprehensive **global report on trends in tobacco use prevalence** covering the period from **2000-2024**, with projections extending through **2030**.
- The report provides **official estimates** of tobacco consumption patterns across global, regional, and national levels, serving as the primary monitoring mechanism for **Sustainable Development Goal indicator 3.a.1.**
- It includes specialized data on **tobacco and e-cigarette consumption** among children aged **13-15 years**, drawn from recent national school-based surveys worldwide.
- The findings will guide global tobacco control efforts and inform policy decisions by member states, including India, as they work toward achieving international health targets.

Global Tobacco Control Assessment

- The report presents detailed **prevalence estimates** of tobacco use among populations aged **15 years and older**, tracking progress on the implementation of the **WHO Framework Convention on Tobacco Control (FCTC)**.
- Key metrics reveal that tobacco use remains a leading cause of preventable mortality, responsible for approximately **8 million deaths annually** worldwide.
- The analysis identifies significant regional variations in tobacco consumption patterns, with the highest burden observed in **low- and middle-income countries**.
- Projections indicate that without accelerated intervention, global tobacco use prevalence may decline only marginally to **19.2% by 2030**, falling short of the **20% reduction target** established in global health frameworks.
- The report highlights concerning trends in **youth tobacco initiation** and the growing popularity of **nicotine delivery systems**, including e-cigarettes, particularly in certain regions.

Additional Information

- **Global Monitoring Framework:**
 - Serves as official reporting mechanism for **SDG Indicator 3.a.1** (strength of implementation of the WHO FCTC)
 - Updated biennially to track progress toward **Global Action Plan for Noncommunicable Diseases 2013-2020** targets
 - Informs the **WHO Fourteenth General Programme of Work** (2022-2026) priorities
 - Provides baseline for developing the post-2025 global tobacco control strategy
- **Indian Context:**
 - India ratified the **WHO FCTC** in **2004** and implemented the **Cigarettes and Other Tobacco Products Act (COTPA), 2003**
 - **National Tobacco Control Programme (NTCP)** covers all states with **2,250 tobacco cessation centers** across **650 districts**
 - Current **graphic health warnings** cover **85%** of tobacco product packaging
 - Recent data shows **28.6% reduction** in overall tobacco use since **2016-17**, with adult prevalence now at **21.4%**
- **Policy Framework:**
 - **COTPA, 2003** with **2020 amendments** strengthening advertising and public place restrictions
 - **Prohibition of Electronic Cigarettes Act, 2019** banning production, sale, and use of e-cigarettes
 - **National Health Policy 2017** designates tobacco control as a priority area
 - **Ayushman Bharat** incorporates tobacco cessation services into primary healthcare infrastructure
- **Recent Developments:**
 - **Global Adult Tobacco Survey (GATS) 3** shows smokeless tobacco use declined from **21.4% to 15.4%**

- Smoking prevalence reduced from **10.7% to 6.8%** according to latest national data
- Youth tobacco use (15-24 years) decreased from **14.8% to 10.4%** in recent surveys
- **85% pictorial health warnings** implemented on all tobacco products with periodic updates

Tobacco Free Youth Campaign 3.0 Launched to Safeguard Student Health

What's the News?

- The **Ministry of Education**, in collaboration with the **Ministry of Health & Family Welfare**, has launched the **Tobacco Free Youth Campaign 3.0 (TFYC 3.0)** on **October 9, 2025**.
- This **60-day national campaign** aims to **prevent tobacco initiation** among youth, support cessation efforts, and promote a **tobacco-free learning environment** across schools and higher education institutions.
- The campaign aligns with India's broader vision of creating a **tobacco-free generation**, addressing the alarming statistic that **8.4% of students aged 13-15** currently use tobacco, with an average initiation age of just **10 years**.

Campaign Components & Implementation Strategy

- **Key Activities:**
 - Enforcement of **100-yard tobacco-free zones** around all educational institutions.
 - **Counselling and support sessions** for students seeking to quit tobacco or other substance use.
 - **Awareness drives**, debates, rallies, and competitions on platforms like **MyGov** (e.g., World No Tobacco Quiz, School Challenge).
 - **Capacity-building workshops** for school heads, teachers, and **NSS/NCC volunteers**.
- **Institutional Framework:**
 - States and Union Territories have been urged to implement the **Guidelines for Tobacco-Free Educational Institutions (ToFEI)**.
 - Recognition for institutions compliant with ToFEI norms to incentivize participation.

Additional Info

- **Legal & Policy Backing:**
 - **Cigarettes and Other Tobacco Products Act (COTPA), 2003:** Prohibits sale of tobacco within **100 yards of educational institutions** (Section 6(a)) and bans advertising, promotion, and sponsorship of tobacco products.
 - **National Tobacco Control Programme (NTCP):** Launched in 2007-08 under the **National Health Mission**, it provides technical and financial support to states for tobacco control activities.
- **Health Burden:**
 - Tobacco use causes over **13 lakh (1.3 million) deaths annually** in India.

- India is a signatory to the **WHO Framework Convention on Tobacco Control (WHO FCTC)**, ratified in 2004.
- **Previous Campaigns:**
 - **TFYC 1.0 and 2.0** focused on school-level awareness and enforcement; **TFYC 3.0** expands to **higher education** and integrates **digital engagement** and **community mobilization**.

AYUSH Ministry Launches SPARK 4.0

What's the News?

- The **Ministry of AYUSH** has launched the **fourth edition of the Studentship Program for Ayurveda Research Ken (SPARK 4.0)** to cultivate scientific temperament and research capabilities among **Bachelor of Ayurvedic Medicine and Surgery (BAMS)** students.
- Under the program, **300 selected BAMS undergraduates** from **NCISM-recognized colleges** will receive a **studentship grant of ₹50,000 each** to undertake mentored research projects.
- The **registration window** for SPARK 4.0 is open from **October 15 to November 15, 2025**, and the initiative is coordinated by the **Central Council for Research in Ayurvedic Sciences (CCRAS)**.

SPARK Program: Objectives and Impact

- **Primary Goal:** Bridge the gap between traditional Ayurvedic knowledge and evidence-based scientific research by engaging students early in their academic journey.
- **Key Features:**
 - Hands-on training in **research methodology, experimental design, and data analysis**.
 - Mentorship by experienced Ayurveda researchers and faculty.
 - Emphasis on **original, hypothesis-driven projects** aligned with national health priorities.
- **Past Performance:**
 - Since inception, **591 students** from **289 Ayurveda institutions** across India have participated in SPARK editions 1.0 to 3.0.
 - Many alumni have gone on to publish research papers, present at national conferences, and pursue postgraduate studies in integrative medicine.

Additional Info

- **Central Council for Research in Ayurvedic Sciences (CCRAS):**
 - An **autonomous body** under the **Ministry of AYUSH**, established in **1969**.
 - Mandated to **formulate, coordinate, and promote research** in Ayurveda and Sowa-Rigpa.
 - Operates **30 research institutes** and **20 peripheral units** nationwide.
- **National Commission for Indian System of Medicine (NCISM):**

- Replaced the **Central Council of Indian Medicine (CCIM)** in 2021 under the **NCISM Act, 2020**.

- Regulates **education and practice** of Ayurveda, Siddha, Sowa-Rigpa, and Unani systems.

Policy Context:

- SPARK aligns with the **National Education Policy (NEP) 2020**, which emphasizes **critical thinking, multidisciplinary learning, and undergraduate research**.
- Supports **AYUSH 12th Five-Year Plan** goals to integrate traditional medicine into the national health research ecosystem.

Funding & Scale:

- Total outlay for SPARK 4.0: **₹1.5 crore** (300 × ₹50,000).
- Selection based on **merit, project feasibility, and institutional infrastructure**.

First Indigenous Antibiotic and Gene Therapy Breakthrough

What's the News?

- India has developed its **first indigenously discovered antibiotic, Nafithromycin**, effective against drug-resistant respiratory infections, offering new hope in combating antimicrobial resistance.
- Simultaneously, Indian researchers have achieved a significant **breakthrough in gene therapy** with the successful completion of India's first indigenous clinical trial for **Hemophilia** treatment.
- These developments mark major milestones in India's journey toward **self-reliance in pharmaceutical innovation** and advanced medical treatments.
- Developed through collaboration between Indian research institutions, potentially involving **Indian Council of Medical Research (ICMR)** and **Department of Biotechnology (DBT)**.

Nafithromycin: India's Indigenous Antibiotic

- **Overview:**
 - Nafithromycin represents India's **first indigenously discovered antibiotic** developed through domestic research efforts.
 - Specifically designed to combat **drug-resistant respiratory infections** that have become increasingly challenging to treat.
- **Key features and efficacy:**
 - Operates on a **3-day treatment regimen**, significantly shorter than conventional antibiotic courses.
 - Demonstrated to be **10 times more effective** than existing antibiotics in clinical trials.
 - **Targets both typical and atypical pathogens** responsible for respiratory infections
 - Shows **minimal side effects** compared to current treatment options.
- **Significance for public health:**

- Addresses growing concern of **antimicrobial resistance (AMR)**, a major public health threat globally.
- Reduces dependence on imported antibiotics, enhancing **pharmaceutical self-sufficiency**.
- Potential to significantly improve treatment outcomes for respiratory infections in resource-constrained settings.

Indigenous Gene Therapy Breakthrough

- **Hemophilia treatment advancement:**
 - India has successfully conducted its **first indigenous clinical trial** for gene therapy in Hemophilia treatment.
 - The trial recorded an impressive **60-70% correction rate with zero bleeding episodes** during the study period.
- **Technical significance:**
 - Represents a major leap in India's **biomedical research capabilities** and technical expertise.
 - Demonstrates India's growing capacity in **advanced therapeutic modalities** previously dominated by Western nations.
 - Provides hope for permanent or long-term treatment solutions for genetic disorders
- **Healthcare implications:**
 - Could dramatically reduce the **lifelong treatment burden** for Hemophilia patients
 - Potentially decreases dependence on expensive imported clotting factor concentrates.
 - Establishes foundation for developing gene therapies for other genetic disorders in India.

CDSCO Launches Digital System to Track High-Risk Pharma Solvents

What's the News?

- The **Central Drugs Standard Control Organisation (CDSCO)** has launched a new digital monitoring system to track the entire supply chain of high-risk pharmaceutical solvents.
- This initiative is a direct response to recent incidents where Indian-made cough syrups were found to be contaminated, leading to deaths.
- The system aims to ensure the quality of raw materials and prevent adulteration by

The Digital Monitoring System

- **QR Code Mechanism:** The system is a **QR code-based** "track and trace" mechanism.
- **Mandatory Compliance:** Manufacturers, importers, and distributors of these high-risk solvents must now affix QR codes to all containers (e.g., drums).
- **Data Tracking:** The QR code will store critical data for the entire supply chain, including:
 - Manufacturer's name and details
 - Batch number
 - Quantity
 - Certificate of Analysis (CoA)
 - Details of the vendors to whom it is sold

- **Portal Integration:** This data must be uploaded to the **Online National Drug Licensing System (ONLDS) portal**, which has been upgraded for this purpose.

Targeted Solvents and Contamination Risks

- **High-Risk Solvents:** The digital monitoring focuses on solvents (excipients) commonly used in liquid medicines like cough syrups, including:
 - **Propylene Glycol (PG)**
 - **Glycerine** (also known as Glycerin Monostearate - GMS)
 - **Sorbitol**
 - **Polyethylene Glycol (PEG)**
- **The Adulteration Danger:** These solvents are at high risk of being contaminated with, or illegally substituted by, toxic industrial-grade chemicals:
 - **Diethylene Glycol (DEG)**
 - **Ethylene Glycol (EG)**
- **Health Impact:** **DEG** and **EG** are industrial solvents (used in antifreeze and brake fluids) that are extremely toxic. Ingestion can cause severe health crises, including acute kidney injury and death, particularly in children.
- **Objective:** The new system aims to ensure that only "**pharma grade**" solvents are used in medicines, preventing the illicit use of cheaper, non-standard "industrial grade" materials.

Additional Info

- **Central Drugs Standard Control Organisation (CDSCO):**
 - CDSCO is India's national regulatory body for pharmaceuticals and medical devices.
 - It operates under the **Ministry of Health and Family Welfare**.
 - It is responsible for regulating the import, manufacture, and distribution of drugs under the **Drugs and Cosmetics Act, 1940**.

Maha MedTech Mission Launched to Strengthen India's Medical Technology Sector

What's the News?

- The **Anusandhan National Research Foundation (ANRF)**, in collaboration with the **Indian Council of Medical Research (ICMR)** and the **Bill & Melinda Gates Foundation**, has launched the **Maha MedTech Mission** - a strategic initiative to boost innovation, affordability, and self-reliance in India's medical technology sector.
- The mission aims to reduce dependence on high-cost imports and accelerate the development and commercialization of **high-quality, affordable medical devices**.

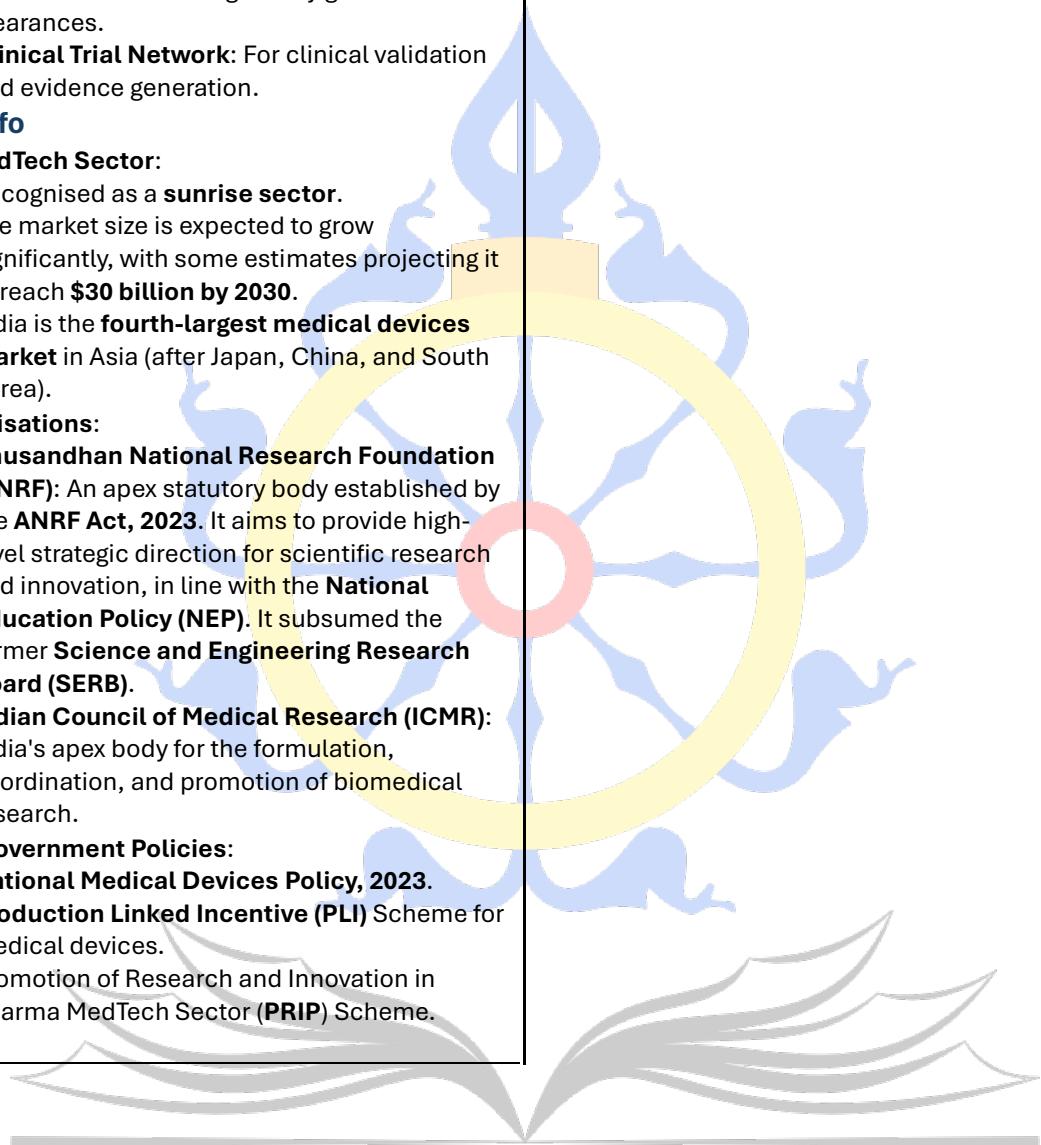
Mission Scope and Support

- **Funding:** The mission will provide milestone-linked funding to various entities, including academic institutions, R&D labs, hospitals, startups, and MSMEs.
 - Funding support will range from **₹5 crore to ₹25 crore** per project.
 - Exceptional cases may receive up to **₹50 crore**.

- **Technology Focus:** The initiative covers a broad spectrum of innovations:
 - Innovative medical devices and **in-vitro diagnostics (IVD)**.
 - Implants, assistive devices, and surgical tools.
 - Software-based medical solutions, including **AI/ML-enabled platforms** and robotics.
- **Ecosystem Support:** Beyond funding, the mission will provide enabling support through other national initiatives:
 - **Patent Mitra:** For intellectual property (IP) protection and technology transfer.
 - **MedTech Mitra:** For regulatory guidance and clearances.
 - **Clinical Trial Network:** For clinical validation and evidence generation.

Additional Info

- **India's MedTech Sector:**
 - Recognised as a **sunrise sector**.
 - The market size is expected to grow significantly, with some estimates projecting it to reach **\$30 billion by 2030**.
 - India is the **fourth-largest medical devices market** in Asia (after Japan, China, and South Korea).
- **Key Organisations:**
 - **Anusandhan National Research Foundation (ANRF):** An apex statutory body established by the **ANRF Act, 2023**. It aims to provide high-level strategic direction for scientific research and innovation, in line with the **National Education Policy (NEP)**. It subsumed the former **Science and Engineering Research Board (SERB)**.
 - **Indian Council of Medical Research (ICMR):** India's apex body for the formulation, coordination, and promotion of biomedical research.
- **Related Government Policies:**
 - **National Medical Devices Policy, 2023.**
 - **Production Linked Incentive (PLI) Scheme** for medical devices.
 - **Promotion of Research and Innovation in Pharma MedTech Sector (PRIIP) Scheme.**



Education

PM Modi Launches ₹62,000 Crore Youth-Focused Skilling and Education Initiatives

What's the News?

- Prime Minister Narendra Modi launched a suite of youth-centric initiatives worth over ₹62,000 crore on October 4, 2025, with a focus on skill development, employment, and higher education access.
- The flagship scheme, PM-SETU (Pradhan Mantri Skilling and Employability Transformation through Upgraded ITIs), entails an outlay of ₹60,000 crore to modernize 1,000 government Industrial Training Institutes (ITIs) across India under a hub-and-spoke model.
- Additional initiatives include the revamped Bihar Mukhyamantri Nishchay Svyam Sahayata Bhatta Yojana, Bharat Ratna Jan Nayak Karpoori Thakur Skill University, and 1,200 Vocational Skill Labs in Navodaya Vidyalayas and Eklavya Model Residential Schools.

PM-SETU: Structure & Strategic Impact

- **Hub-and-Spoke Model:**
 - 200 Hub ITIs: Equipped with advanced infrastructure, industry-aligned trades, digital learning platforms, and incubation centres.
 - 800 Spoke ITIs: Linked to hubs for resource sharing, curriculum standardization, and mentorship.
- **Key Features:**
 - Introduction of **modern machinery, AI-enabled learning, and industry partnerships.**
 - Focus on **global employability** by aligning curricula with **international skill standards.**
 - Expected to benefit **over 1 million trainees annually** across sectors like manufacturing, IT, green energy, and healthcare.
- **Complementary Measures:**
 - 46 All-India ITI Toppers felicitated at the 4th National Skill Convocation to promote dignity of skilled labour.

Additional Info

- **Bihar-Specific Schemes:**
 - **Mukhyamantri Nishchay Svyam Sahayata Bhatta Yojana:** Provides ₹1,000/month for 24 months to 5 lakh graduate youth, along with **free skill training.**
 - **Bihar Student Credit Card Scheme:** Offers **interest-free education loans up to ₹4 lakh** for higher studies.
- **Institutional Developments:**
 - Inauguration of **NIT Patna's Bihta campus** and foundation stones for academic facilities at **four Bihar universities.**
 - Establishment of **Bharat Ratna Jan Nayak Karpoori Thakur Skill University** to promote vocational and industry-oriented education.

India Achieves Historic Milestone in THE World University Rankings 2026

What's the News?

- In the Times Higher Education (THE) World University Rankings 2026, India has emerged as the country with the second-highest number of ranked institutions globally, surpassed only by the United States - a historic first for the nation.
- The University of Oxford (UK) retained its top position for the 10th consecutive year, followed by the Massachusetts Institute of Technology (MIT) and a tie between Princeton University and the University of Cambridge.
- This surge reflects India's expanding higher education footprint, with a record number of Indian universities qualifying under THE's rigorous global benchmarking framework.

India's Performance & Global Context

- **Representation:** India now features more institutions in the THE rankings than ever before, securing the **second spot in terms of country representation** - a significant leap from previous years.
- **Institutional Quality:** While the focus has been on quantity, select Indian institutions are also gaining recognition for **academic excellence**. For instance, KIIT (Kalinga Institute of Industrial Technology) ranked 259th globally in the Academic Excellence parameter.
- **Global Shifts:**
 - The U.S. and U.K. continue to dominate the top 10, but their overall dominance is showing signs of waning.
 - **China** has five universities in the top 40, while **Hong Kong** saw six institutions enter the top 200, driven by improvements in teaching metrics.

Additional Info

- **THE Ranking Methodology:**
 - Evaluates universities across **five pillars:**
 - **Teaching** (29.5%)
 - **Research Environment** (29%)
 - **Research Quality** (30%)
 - **International Outlook** (7.5%)
 - **Industry Impact** (4%)
 - Uses **18 performance indicators**, including **157 million citations, 18 million publications**, and surveys of over **93,000 scholars**.
 - Institutions must teach undergraduates and publish **at least 1,000 research papers over five years** to qualify.
- **Similar Rankings**
 - **QS World University Rankings:** Published annually by **Quacquarelli Symonds (QS)**, a British company. It evaluates universities based

on academic reputation, employer perception, faculty-student ratio, research citations, and international diversity.

- **Academic Ranking of World Universities (ARWU):** Also known as the **Shanghai Ranking**, it is released by **ShanghaiRanking Consultancy**. It focuses heavily on research output, including Nobel Prizes, highly cited researchers, and papers published in top journals like *Nature* and *Science*.

India and UK Launch Ramanujan Junior Researchers Programme

What's the News?

- India and the United Kingdom have jointly launched the **Ramanujan Junior Researchers Programme**, a new research initiative backed by India's **Department of Science and Technology (DST)**.
- Named after the legendary Indian mathematician **Srinivasa Ramanujan**, the programme aims to enable young Indian scientists in **theoretical physics and mathematics** to conduct collaborative research at the **London Institute for Mathematical Sciences (LIMS)**.
- The initiative was announced following UK Prime Minister **Keir Starmer's** recent visit to India.

Programme Structure and Phases

- **Phase 1 – Ramanujan Junior Visitors:**
 - Targets **PhD students** from the **Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR)**.
 - Up to **six students** will spend several months at LIMS, London, attending lectures and engaging in joint research.
- **Phase 2 – Ramanujan Junior Fellowships:**
 - Open to **early-career Indian researchers** (post-PhD) across the country.
 - Offers **three-year research positions** at LIMS to build long-term Indo-UK scientific partnerships.

Implementing Institutions:

- **Department of Science and Technology (DST):** Primary Indian funding and coordinating agency.
- **London Institute for Mathematical Sciences (LIMS):** Independent research institute at the **Royal Institution**, London; known for theoretical research and links to Nobel laureates.

UNESCO Report Highlights Persistent Gender Gaps in Global Education Despite Progress

What's the News?

- According to the **UNESCO Global Education Monitoring (GEM) Report 2025**, over **133 million girls worldwide remain out of school**, despite significant progress in gender parity in education since the **1995 Beijing Declaration**.

- While enrolment rates for girls have improved globally—especially in primary and secondary education—deep disparities persist, particularly in **Sub-Saharan Africa, conflict-affected regions**, and among **poor and rural populations**.

Key Findings of the UNESCO GEM Report 2025

- **Enrolment Gains (1995–2025):**
 - **91 million more girls** enrolled in primary education.
 - **136 million more girls** in secondary education.
 - Female higher education enrolment rose from **41 million to 139 million**.
- **Persistent Exclusion:**
 - **133 million girls** still not in school, with the highest concentration in **Sub-Saharan Africa**.
 - In countries like **Guinea and Mali**, nearly **no poor rural girls** attend school.
- **Regional Disparities:**
 - **Central and Southern Asia:** Achieved gender parity in secondary enrolment.
 - **Oceania:** Reversed progress—girls now at a disadvantage.
 - **Latin America & Caribbean:** Boys lag in secondary completion, highlighting shifting gender dynamics.

Beyond Enrolment: Systemic Barriers

- **Curriculum & Stereotypes:** Many textbooks **reinforce gender roles** instead of challenging them.
- **Sexuality Education:** Mandatory in only **~66% of countries** at primary level and **~75% at secondary level**.
- **Leadership Gap:** Women constitute the **majority of teachers** but hold only **30% of leadership roles** in higher education globally.

Additional Info

- **Beijing Declaration and Platform for Action (1995):**
 - Landmark UN framework calling for **full and equal participation of women** in education, politics, and economy.
 - Emphasized **transformative education**, not just access.
- **Link to Sustainable Development Goals (SDGs):**
 - **SDG 4:** Ensure inclusive and equitable quality education.
 - **SDG 5:** Achieve gender equality and empower all women and girls.

Ministry of Education Launches AI and Computational Thinking Curriculum for Schools

What's the News?

- The **Ministry of Education (MoE)**, in collaboration with **Intel India**, has introduced a comprehensive curriculum on **Artificial Intelligence (AI)** and **Computational Thinking (CT)**.
- This new curriculum is designed for all students from **Class 3 to Class 12**.
- The initiative aims to create an "AI-ready generation" by equipping students with essential 21st-century skills,

aligning with the goals of the **National Education Policy (NEP) 2020**.

Key Objectives and Focus

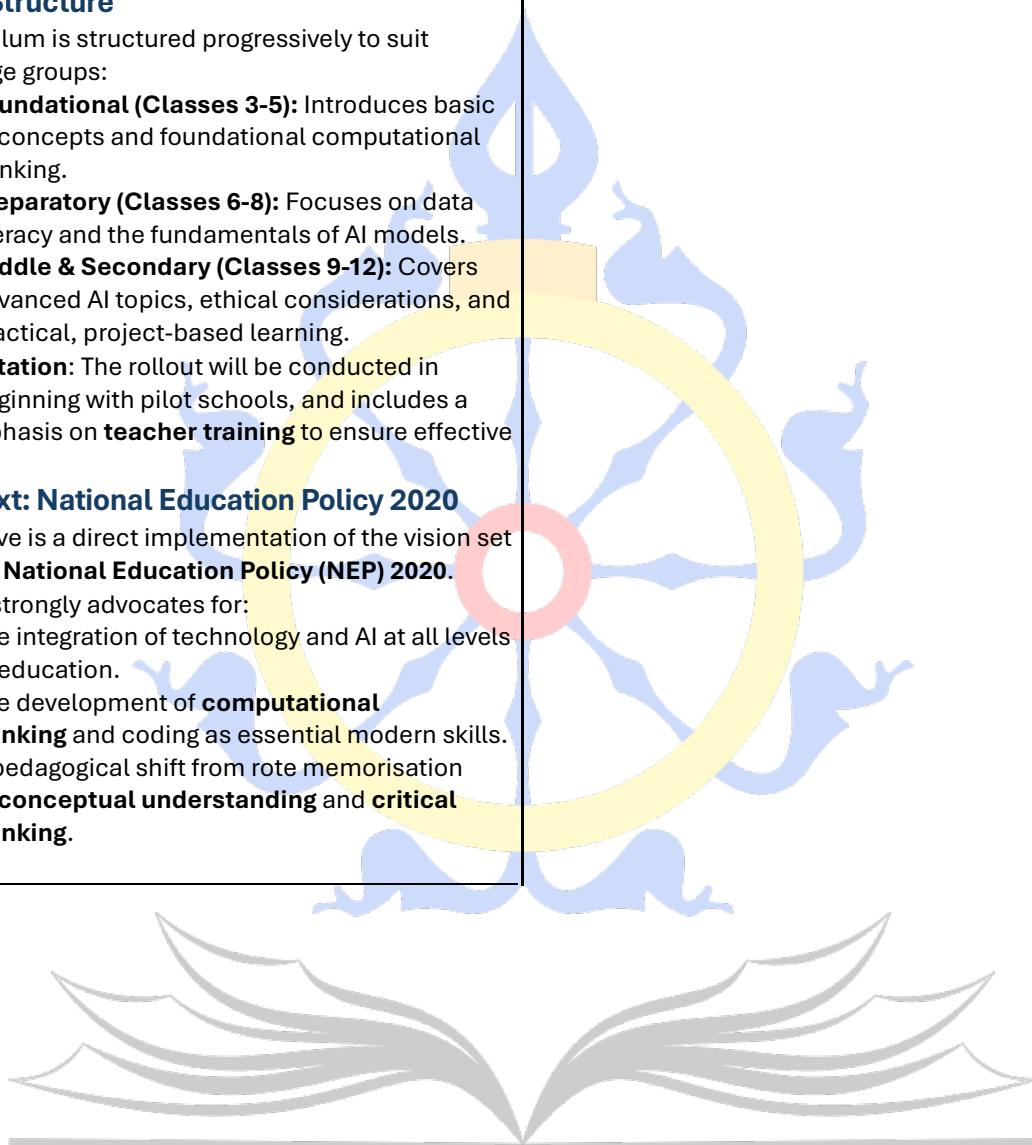
- **Skill Development:** The primary goal is to foster critical thinking, problem-solving, creativity, and innovation among students.
- **Beyond Coding:** The curriculum's focus extends beyond technical coding to include foundational skills such as:
 - Data literacy
 - Understanding AI models
 - AI ethics and safety
 - Practical applications of AI

Curriculum Structure

- The curriculum is structured progressively to suit different age groups:
 - **Foundational (Classes 3-5):** Introduces basic AI concepts and foundational computational thinking.
 - **Preparatory (Classes 6-8):** Focuses on data literacy and the fundamentals of AI models.
 - **Middle & Secondary (Classes 9-12):** Covers advanced AI topics, ethical considerations, and practical, project-based learning.
- **Implementation:** The rollout will be conducted in phases, beginning with pilot schools, and includes a strong emphasis on **teacher training** to ensure effective delivery.

Policy Context: National Education Policy 2020

- This initiative is a direct implementation of the vision set forth in the **National Education Policy (NEP) 2020**.
- NEP 2020 strongly advocates for:
 - The integration of technology and AI at all levels of education.
 - The development of **computational thinking** and coding as essential modern skills.
 - A pedagogical shift from rote memorisation to **conceptual understanding** and **critical thinking**.



Economy

RBI Introduces Measures to Support Exporters Amid Global Trade Volatility

What's the News?

- The **Reserve Bank of India (RBI)** has announced a series of regulatory relaxations to ease operational and compliance challenges faced by Indian exporters amid rising global trade uncertainties.
- Key measures include extension of forex outlay and repatriation timelines, simplification of reconciliation procedures in trade monitoring systems, and a comprehensive revision of the **External Commercial Borrowings (ECB)** framework.
- These steps aim to enhance liquidity, reduce compliance burden—especially for small exporters—and improve the overall ease of doing cross-border business.

Key Regulatory Measures

- Extended Forex Outlay Period:**
 - For **Merchanting Trade Transactions**, the permissible forex outlay period is increased from **4 to 6 months**, enabling smoother execution of complex trade deals.
- Repatriation Timeline Extension:**
 - Indian exporters can now retain funds in their **foreign currency accounts in International Financial Services Centres (IFSCs)** for **3 months** (up from 1 month), encouraging IFSC account usage and boosting forex liquidity.
- Simplified Reconciliation Process:**
 - Exporters and importers can now **self-declare** realization of payments for bills valued up to **₹10 lakh**, allowing automatic closure in the **Export Data Processing and Monitoring System (EDPMS)** and **Import Data Processing and Monitoring System (IDPMS)**.
- Revised ECB Framework** (to be issued shortly):
 - Expansion of eligible **borrower and lender base**.
 - Rationalization of **borrowing limits and maturity period restrictions**.
 - Removal of **cost-of-borrowing caps**.
 - Review of **end-use restrictions** and simplified **reporting norms**.

Additional Info

- Merchanting Trade:**
 - A form of international trade where goods do not enter India but are shipped directly from a third country to another, with the Indian entity acting as an intermediary.
 - Governed under **Foreign Exchange Management (Current Account Transactions) Rules, 2000**.
- IFSC Banking Units (IBUs):**
 - Operate under the **International Financial Services Centres Authority (IFSCA) Act, 2019**.

- Allow Indian entities to access global financial markets with relaxed regulatory norms.
- Located in **GIFT City, Gujarat**, India's first operational IFSC.

- External Commercial Borrowings (ECBs):**
 - Regulated under **RBI's Master Direction – External Commercial Borrowings, Trade Credits and Structured Obligations**.
 - Key instrument for Indian corporates to access **foreign capital** for investment and working capital.
 - Previously restricted by **minimum average maturity period, all-in-cost ceilings**, and **sector-specific end-use rules**.
- EDPMS & IDPMS:**
 - RBI-mandated systems for **real-time monitoring** of export and import transactions.
 - Managed by **Authorised Dealer (AD) banks** to ensure compliance with FEMA regulations.

RBI Unveils Measures to Boost Internationalisation of Indian Rupee

What's the News?

- The **Reserve Bank of India (RBI)** has introduced a set of regulatory measures to promote the use of the **Indian Rupee (INR)** in cross-border trade and investment.
- Key initiatives include permitting **Indian banks to lend in rupees to residents of Bhutan, Nepal, and Sri Lanka**, expanding investment options for balances in **Special Rupee Vostro Accounts (SRVAs)**, and introducing **reference exchange rates for major trading partner currencies**.
- These steps aim to reduce reliance on the US dollar, lower transaction costs, enhance forex market depth, and support India's external sector resilience amid global trade uncertainties.

Key Measures for Rupee Internationalisation

- INR Lending to Neighbouring Countries:**
 - Authorised Dealer (AD) banks and their overseas branches can now extend **INR-denominated loans** to residents and banks in **Bhutan, Nepal, and Sri Lanka** for bilateral trade.
 - This ensures better rupee liquidity for partner economies and simplifies trade settlements.
- Expanded SRVA Investment Avenues:**
 - Balances in **Special Rupee Vostro Accounts**—used for INR-based export-import settlements—can now be invested in **corporate bonds and commercial papers**, in addition to existing options like government securities.
 - This enhances returns for foreign entities and deepens India's corporate debt market.
- New Reference Exchange Rates:**

- **Financial Benchmarks India Limited (FBIL)** will soon publish reference rates for currencies of **India's major trading partners**, beyond the current USD, EUR, GBP, and JPY .
- This reduces the need for multiple currency conversions and makes INR-based invoicing more efficient.

Additional Info

- **Special Rupee Vostro Account (SRVA):**
 - Introduced in **July 2022** under the **Foreign Exchange Management Act (FEMA), 1999**.
 - Allows foreign banks to open INR accounts with Indian banks for **trade settlement in rupees**.
 - Active SRVA agreements currently exist with **Russia, Sri Lanka, and the Maldives**; around 20 countries have signed MoUs .
- **Rationale for Rupee Internationalisation:**
 - Reduces **current account deficit (CAD) pressure**: CAD stood at **\$2.4 billion (0.2% of GDP)** in Q1:2025–26, down from \$8.6 billion a year earlier .
 - **Forex reserves at \$700.2 billion** (as of September 26, 2025) cover over **11 months of merchandise imports**, reinforcing external stability .

Centre Releases ₹1.01 Lakh Crore as Advance Tax Devolution to States

What's the News?

- The **Union Government** has released an **advance instalment of ₹1,01,603 crore** as tax devolution to **State Governments**, over and above the regular monthly transfer scheduled for October 10.
- The move, announced by the **Ministry of Finance**, aims to support states in accelerating **capital expenditure** and meeting **welfare and developmental outlays** during the upcoming festive season.
- This advance release reflects the Centre's commitment to **cooperative federalism** and fiscal support to states amid elevated spending demands.

Rationale and Fiscal Context

- **Purpose of Advance Release:**
 - Enable states to **front-load capital spending** during the festive season when economic activity peaks.
 - Ensure uninterrupted implementation of **infrastructure and social welfare schemes**.
- **Fiscal Framework:**
 - Tax devolution is governed by the recommendations of the **15th Finance Commission**, which allocates **41% of the Centre's divisible pool of taxes** to states.
 - The advance does **not alter the annual devolution amount** but provides **liquidity support** ahead of schedule.
- **Timing Significance:**
 - Festive periods (October–December) typically see higher consumer demand and state-level procurement; early fund availability helps

boost aggregate demand and economic momentum.

Additional Info

- **Tax Devolution Mechanism:**
 - Mandated under **Article 270** of the **Constitution of India**.
 - Based on the **Finance Commission's formula**, which considers factors like population (1971 and 2011), income distance, area, and forest cover.
 - **15th Finance Commission (2020–25)** introduced a **10% weight to demographic performance** (fertility rate) to incentivize population control.
- **Recent Trends:**
 - Total tax devolution to states in **FY 2024–25** was **₹10.35 lakh crore**.
 - In **FY 2025–26**, the Budget estimates **₹11.46 lakh crore**, reflecting a **10.7% increase**.
- **Festive Season Impact:**
 - States typically spend **25–30% of their annual capital outlay** in Q3 (Oct–Dec).
 - Advance releases help avoid **quarter-end expenditure bunching** and improve **project execution efficiency**.

RBI Constitutes Six-Member Payments Regulatory Board

What's the News?

- The **Reserve Bank of India (RBI)** has constituted a **six-member Payments Regulatory Board (PRB)**, with **RBI Governor** serving as its **Chairperson**.
- The PRB replaces the earlier **Board for Regulation and Supervision of Payment and Settlement Systems (BPSS)**, following amendments to the **Payment and Settlement Systems Act, 2007**, which came into effect on **May 9, 2025**.
- The Board will be responsible for the **regulation and supervision of all payment systems**—electronic and non-electronic, domestic and cross-border—strengthening India's digital payments infrastructure.

Composition & Functions of the PRB

- **Members:**
 - **Chairperson:** RBI Governor
 - Deputy Governor, RBI (in charge of Payment & Settlement Systems)
 - Executive Director, RBI (Payment & Settlement Systems)
 - Secretary, Department of Financial Services (DFS)
 - Secretary, Ministry of Electronics and Information Technology (MeitY)
 - **Aruna Sundararajan, IAS (Retd)**, former Telecom Secretary.
- **Permanent Invitee:** Principal Legal Advisor, RBI
- **Key Mandate:**
 - Oversee **licensing, regulation, and supervision** of payment system operators (e.g., UPI, wallets, card networks).

- Ensure **security, interoperability, and consumer protection** in digital transactions.
- Promote **innovation and competition** while maintaining systemic stability.

Additional Info

- **Legal Framework:**
 - The **Payment and Settlement Systems Act, 2007** empowers RBI to regulate payment systems in India.
 - The **2025 amendment** institutionalized the PRB as a **statutory body**, enhancing its autonomy and decision-making authority compared to the previous internal committee (BPSS).
- **Strategic Context:**
 - India recorded **131 billion digital transactions in 2024**, with **UPI accounting for over 80%** of real-time payments volume.
 - The PRB aligns with the **G20 Roadmap for Enhancing Cross-Border Payments** and supports India's ambition to export its payment stack (e.g., **UPI123Pay, UPI Lite, Bharat BillPay**) globally.
- **Regulatory Precedents:**
 - RBI has previously mandated **onshoring of payment data**, introduced **tokenization norms**, and capped **merchant discount rates (MDR)** to foster inclusive digital finance.
 - The PRB will now oversee implementation of upcoming frameworks like **Open Network for Digital Commerce (ONDC) integration** and **Central Bank Digital Currency (CBDC) interoperability**.

Hurun India Rich List 2025: Mukesh Ambani Tops with ₹9.55 Lakh Crore Net Worth

What's the News?

- **Mukesh Ambani & family** have reclaimed the top position in the **Hurun India Rich List 2025** with a net worth of **₹9.55 lakh crore**, surpassing **Gautam Adani & family**, whose wealth stands at **₹8.14 lakh crore**.
- **Roshni Nadar Malhotra & family** entered the top three for the first time with **₹2.84 lakh crore**, becoming **India's richest woman**.
- The list features **over 350 billionaires**, with combined wealth of **₹167 lakh crore**—nearly **half of India's GDP**—and highlights rising participation of **women, young entrepreneurs, and self-made wealth creators**.

Key Highlights & Trends

- **Top 10 Richest Indians (2025):**
 1. **Mukesh Ambani & family** – ₹9,55,410 crore (Reliance Industries)
 2. **Gautam Adani & family** – ₹8,14,720 crore (Adani Group)
 3. **Roshni Nadar Malhotra & family** – ₹2,84,120 crore (HCL)
 4. **Cyrus S. Poonawalla & family** – ₹2,46,460 crore (Serum Institute)
 5. **Kumar Mangalam Birla & family** – ₹2,32,850 crore (Aditya Birla Group)

6. **Niraj Bajaj & family** – ₹2,32,680 crore (Bajaj Group)
7. **Dilip Shanghvi** – ₹2,30,560 crore (Sun Pharma)
8. **Azim Premji & family** – ₹2,21,250 crore (Wipro)
9. **Gopichand Hinduja & family** – ₹1,85,310 crore (Hinduja Group)
10. **Radhakishan Damani & family** – ₹1,82,980 crore (Avenue Supermarts)

- **Notable Developments:**
 - **Wealth Decline:** Ambani's wealth fell by **6%**, while Adani's dropped by **30%** year-on-year.
 - **New Entrants:** Shah Rukh Khan joined the billionaire club with **₹12,490 crore**, becoming the **richest Bollywood star**.
 - **Youngest Billionaires:** Aravind Srinivas (31, Perplexity AI) and Kaivalya Vohra (22, Zepto co-founder) represent India's new-gen wealth creators.
 - **Gender Representation:** **101 women** featured, including **26 dollar billionaires**.

Additional Info

- **Hurun India Rich List:**
 - Published annually by **Hurun Research Institute** in collaboration with **M3M India**.
 - Tracks **individual and family wealth** across sectors like **pharma, industrial goods, chemicals, and IT**.
- **Sectoral Distribution:**
 - **Pharmaceuticals:** 137 billionaires
 - **Industrial Products:** 132 billionaires
 - **Chemicals & Petrochemicals:** 125 billionaires
- **Geographical Concentration:**
 - **Mumbai:** 451 billionaires
 - **New Delhi:** 223 billionaires
 - **Bengaluru:** 116 billionaires
- **Wealth Creation Pattern:**
 - **66%** of billionaires are **self-made**
 - **74%** of new entrants built fortunes independently

PSBs Sanction ₹10,907 Crore in Solar Loans

What's the News?

- **Public Sector Banks (PSBs)** have sanctioned over **5 lakh loan applications** amounting to **₹10,907 crore** under the **Prime Minister's Surya Ghar: Muft Bijli Yojana**.
- The scheme provides **collateral-free loans at concessional interest rates** to support households in installing **rooftop solar systems**.
- Loans are processed digitally via the **JanSamarth Portal**, ensuring a streamlined, paperless, and fast-track experience for beneficiaries.

Scheme Overview & Key Features

- **Objective:** Promote decentralized solar power generation and reduce electricity bills for households through **net metering**.
- **Target:** Install **1 crore rooftop solar systems** across India.

- Loan Enhancements:**
 - Co-applicants now allowed to improve credit eligibility.
 - Removal of capacity-based caps, enabling larger system installations based on consumer needs.
- Implementation Support:**
 - Ministry of New and Renewable Energy (MNRE) oversees the scheme.
 - PSBs act as primary financial conduits, offering loans up to ₹7.5 lakh per beneficiary.

Additional Info

- PM Surya Ghar: Muft Bijli Yojana:**
 - Launched in February 2024 as part of India's Panchamrit strategy to achieve 500 GW of non-fossil energy capacity by 2030.
 - Provides central financial assistance (CFA) of up to ₹78,000 per system, in addition to bank loans.
 - Aims to generate 45,000 MW of rooftop solar capacity nationally.
- JanSamarth Portal:**
 - A unified digital platform for credit-linked government schemes.
 - Integrates 200+ banks and NBFCs and supports 12+ welfare schemes, including solar, MSME, and education loans.

CBIC Introduces System-Based Auto-Approval for IFSC Code Registration

What's the News?

- The Central Board of Indirect Taxes and Customs (CBIC) has rolled out a system-based auto-approval mechanism for the registration of incentive bank accounts and IFSC codes across all customs locations in India.
- Under this reform, requests for registering the same incentive bank account and IFSC code for a given importer or exporter will be automatically approved without manual intervention.
- The move aims to expedite IGST refunds, duty drawback processing, and other export-related incentive disbursements directly into beneficiaries' bank accounts.

Trade Facilitation & Digital Governance

- Objective:** Enhance Ease of Doing Business by reducing procedural delays in customs-related financial processes.
- Operational Workflow:**
 - Exporters/importers submit bank account and IFSC details once during initial registration.
 - Subsequent requests to use the same bank account and IFSC for incentive claims are auto-approved by the system.
 - Eliminates repetitive document submission and manual verification bottlenecks.
- Impact:**
 - Faster disbursal of export incentives like RoDTEP, RoSCTL, and drawback claims.

- Reduces compliance burden and improves predictability for trade stakeholders.

Additional Info

- Legal Basis:** The reform is implemented through a **CBIC circular**, building on earlier procedural guidelines such as **Circular No. 25/2023-Customs** (dated July 28, 2023), which outlined documentation and timelines for AD Code and IFSC registration.
- AD Code (Authorised Dealer Code):**
 - A unique 14-digit code issued by banks for foreign trade transactions.
 - Mandatory for filing shipping bills and claiming export benefits.
 - Now seamlessly linked with auto-approved IFSC for faster validation.

RBI Launches Retail Sandbox for Digital Rupee to Boost Innovation

What's the News?

- The Reserve Bank of India (RBI) has launched a retail sandbox for its Central Bank Digital Currency (CBDC), known as the **Digital Rupee (e₹-R)**, to enable fintech firms, banks, and technology providers to develop and test innovative use cases in a controlled environment.
- This move expands the ongoing **e₹-R pilot**, which began on **December 1, 2022**, and now includes over **7 million users** across select cities and customer segments.
- The sandbox aims to accelerate **real-world adoption**, enhance **user experience**, and explore applications in **offline payments, programmable money, cross-border remittances, and financial inclusion**.

Digital Rupee: Objectives & Sandbox Framework

- Key Goals of CBDC:**
 - Reduce dependency on physical cash.
 - Increase settlement efficiency and reduce transaction costs.
 - Counter private cryptocurrencies with a sovereign-backed digital alternative.
 - Strengthen India's digital payment infrastructure under **Digital India** and **G20 Fintech priorities**.
- Sandbox Features:**
 - Allows participants to test **new wallet interfaces, merchant payment solutions, and interoperability protocols**.
 - Focus on **offline functionality**—critical for rural and low-connectivity areas.
 - Enables experimentation with **programmable features**, such as time-bound or purpose-specific transfers (e.g., subsidies, scholarships).
- Current Pilot Scope:**
 - Involves **11 banks**, including **SBI, HDFC, ICICI, and Axis**.
 - Covers cities like **Mumbai, Delhi, Bengaluru, Bhubaneswar, and Indore**.
 - Supports **peer-to-peer (P2P) and peer-to-merchant (P2M) transactions** via mobile apps.

Additional Info

- **CBDC Structure in India:**
 - **Two-tier model:** RBI issues e₹, while banks and intermediaries distribute it to end users.
 - **Wholesale CBDC (e₹-W):** Launched in **November 2022** for interbank settlements; used for **government securities transactions**.
 - **Retail CBDC (e₹-R):** For public use; legal tender with **same status as physical currency** under the **RBI Act, 1934**.

RBI Consolidates 9,000 Circulars into 238 Master Directions to Ease Compliance

What's the News?

- The **Reserve Bank of India (RBI)** has initiated a major regulatory streamlining exercise by consolidating approximately **9,000 existing circulars** into **238 Master Directions**, effective as of **October 9, 2025**.
- This move aims to **reduce regulatory burden and compliance costs** for regulated entities while enhancing the **accessibility and clarity** of regulatory instructions.
- The consolidation covers regulatory instructions issued by the **Department of Regulation** across **11 categories of regulated entities** and **30 functional areas**, and is being implemented on an “**as is**” basis without substantive changes.

Regulatory Rationalization Framework

- The **238 Master Directions** replace a fragmented set of guidelines, including earlier **Master Circulars and ad-hoc circulars**, many of which were overlapping or outdated.
- Key features of the initiative:
 - **Entity-specific consolidation:** Separate sets of directions for each type of regulated entity (e.g., commercial banks, NBFCs, payment system operators) to clarify applicability.
 - **Public consultation:** Drafts of all 238 Master Directions and the list of circulars proposed for repeal were released for stakeholder feedback until **November 10, 2025**.
 - **No policy change:** The exercise is **purely consolidatory**—it does not introduce new regulations or alter existing policy intent.
- Expected outcomes:
 - **Faster compliance** due to centralized, updated references.
 - **Reduced legal and operational risk** from conflicting or obsolete instructions.
 - **Improved regulatory efficiency** for both RBI and supervised institutions.

Additional Info

- **Background of Master Directions:**
 - First introduced by RBI to **replace annual Master Circulars**, which required yearly updates.
 - Master Directions are **dynamic documents**—updated only when policy changes occur, ensuring greater stability.

Regulated Entity Categories (11 types):

- Scheduled Commercial Banks
- Regional Rural Banks (RRBs)
- Urban Cooperative Banks (UCBs)
- Non-Banking Financial Companies (NBFCs)
- Primary Dealers
- Credit Information Companies
- Payment System Operators (e.g., UPI, wallets)
- All-India Financial Institutions (AIFIs)
- Miscellaneous Non-Banking Companies
- Residuary Non-Banking Companies
- Financial Market Infrastructures

RBI Launches Unified Markets Interface for Asset Tokenisation Using Wholesale CBDC

What's the News?

- The **Reserve Bank of India (RBI)** has launched the **Unified Markets Interface (UMI)**, a next-generation financial market infrastructure designed to **tokenize financial assets** and enable their settlement using **wholesale Central Bank Digital Currency (CBDC)**.
- Announced by **RBI Governor Sanjay Malhotra** at the **Global Fintech Fest 2025**, the initiative aims to enhance **market efficiency, transparency, and financial inclusion** through digital innovation.
- Early pilot results indicate **improved settlement speeds** and **operational efficiency**, with the platform leveraging **blockchain technology** to convert real-world assets into tradable **digital tokens**.

Unified Markets Interface (UMI): Key Features & Objectives

- **Core Function:** Enables **tokenisation of financial assets**—such as bonds, securities, and receivables—and facilitates their **instant settlement** using **wholesale CBDC**, a digital form of central bank money used by regulated financial institutions.
- **Technology Backbone:** Built on **distributed ledger technology (DLT)**, supporting **smart contracts for fractional ownership, automated compliance, and 24/7 market access**.
- **Integration with Existing Frameworks:**
 - Complements the **Account Aggregator (AA) ecosystem**, which already connects **17 AAs, 650 Financial Information Users (FIUs), 150 Financial Information Providers (FIPs)**, and over **160 million active accounts**.
 - Aligns with RBI's broader **digital public infrastructure (DPI)** vision for secure, consent-based data sharing and interoperable financial services.

Additional Info

- **Wholesale CBDC vs Retail CBDC:**
 - **Wholesale CBDC:** Issued only to **banks and financial institutions** for interbank settlements and market operations. UMI uses this variant for institutional asset trading.

- **Retail CBDC (e₹-R):** Designed for **public use**, similar to digital cash. RBI has separately launched a **retail CBDC sandbox for fintechs** to test use cases.
- **Asset Tokenisation:**
 - Involves converting ownership rights of physical or financial assets into **digital tokens** on a blockchain.
 - Benefits include **liquidity enhancement, lower transaction costs, global accessibility, and programmable compliance**.
- **Related RBI Fintech Initiatives** (launched alongside UMI):
 - **AI-powered UPI HELP:** For grievance redressal.
 - **IoT Payments with UPI:** Enabling payments via smart devices.
 - **Banking Connect:** Streamlining bank-customer onboarding.
 - **UPI Reserve Pay:** For merchant cash management.

Aghion & Howitt: Formalizing “Creative Destruction”

- Developed a **mathematical model** (1992) of **creative destruction**—a concept originally proposed by **Joseph Schumpeter**.
- Demonstrated how **new innovations** displace older technologies, creating:
 - **Winners:** Firms with breakthrough products gain monopoly profits temporarily.
 - **Losers:** Incumbents lose market share, leading to resistance.
- Highlighted a policy dilemma:
 - **Under-investment:** Social benefits of R&D often exceed private returns → calls for **subsidies**.
 - **Over-investment:** Incremental innovations may yield disproportionate private profits → risk of **excessive R&D**.

NITI Aayog Unveils Strategy for Deep-Sea Fisheries to Advance India’s Blue Economy

What’s the News?

- The Royal Swedish Academy of Sciences awarded the **2025 Sveriges Riksbank Prize in Economic Sciences** (commonly called the **Nobel Prize in Economics**) to **Joel Mokyr, Philippe Aghion, and Peter Howitt** “for having explained innovation-driven economic growth”.
- **Joel Mokyr** received **one half** of the prize for identifying the **prerequisites for sustained growth through technological progress**, while **Aghion and Howitt** jointly received the other half for developing the **theory of sustained growth through creative destruction**.
- The award recognizes their complementary contributions in explaining how economies transitioned from centuries of stagnation to over 200 years of continuous growth through **technological innovation, scientific understanding, and market-driven renewal**.

Core Contributions of the Laureates

Joel Mokyr: The Role of “Useful Knowledge” and Open Societies

- Argued that sustained growth requires a continuous flow of “**useful knowledge**”, comprising:
 - **Propositional knowledge:** Understanding *why* things work (scientific principles).
 - **Prescriptive knowledge:** Knowing *how* to build or implement (technical instructions).
- Showed that pre-Industrial Revolution societies lacked integration between the two, limiting innovation.
- Emphasized that **openness to change, scientific culture, and skilled artisans** were critical for turning ideas into scalable innovations.

Key Challenges in Current Deep-Sea Fisheries

- **Underdeveloped Sector:** Despite an estimated **7.16 million tonnes (MT)** of fishable resources in India’s EEZ, deep-sea fishing remains largely untapped.
- **Limited Global Presence:** Only **4 Indian-flagged vessels** operate in international high seas, compared to **1,883 from Sri Lanka and 1,216 from Iran**.
- **Regulatory Gaps:** No dedicated legal framework governs fishing beyond 12 nmi, enabling **Illegal, Unreported, and Unregulated (IUU) fishing** and jurisdictional ambiguity.
- **Infrastructure & Cost Barriers:** High operational costs, lack of mother vessels, cold-chain logistics, and processing facilities hinder scalability.
- **Data Deficiency:** Absence of real-time stock assessments and ecosystem monitoring limits evidence-based management.

NITI Aayog’s Three-Phase Roadmap

1. **Foundation Phase (Short-term):**
 - Enact a **Deep-Sea Fisheries Act** to regulate activities beyond 12 nmi.
 - Establish a **National Deep-Sea Fisheries Authority** for unified oversight.
2. **Scaling Phase (Medium-term):**
 - Modernise fleet with **50–100 deep-sea vessels** under public-private partnerships.
 - Develop **deep-sea fishing hubs** at key ports (e.g., Kochi, Visakhapatnam, Paradip).
3. **Leadership Phase (Long-term):**

- Position India as a **global leader in sustainable high-seas fisheries**.
- Integrate AI, satellite monitoring, and blockchain for **traceability and compliance**.

Additional Info

- **Constitutional & Policy Context:**
 - **Entry 2(a), Concurrent List:** "Fisheries" is a shared subject, enabling central legislation for EEZ.
 - **Pradhan Mantri Matsya Sampada Yojana (PMMSY):** Complements this strategy with ₹20,050 crore outlay (2020–25) for infrastructure and value chains.
 - **UNCLOS (1982):** India's EEZ rights under **Articles 55–75** provide legal basis for resource management.
- **Global Benchmarks:**
 - **China:** Operates >2,600 distant-water vessels with state subsidies.
 - **New Zealand:** Uses **Individual Transferable Quotas (ITQs)** for sustainable stock management.
- **Sustainability Safeguards:**
 - Mandate **Environmental Impact Assessments (EIAs)** for deep-sea projects.
 - Adopt **precautionary approach and ecosystem-based fisheries management (EBFM)** principles.

ADB and World Bank Sign \$3 Billion Exposure Exchange Agreement

What's the News?

- The **Asian Development Bank (ADB)** has signed a **US\$ 3 billion sovereign exposure exchange agreement (EEA)** with the **World Bank** to expand ADB's lending capacity for developing member countries across Asia and the Pacific.
- This marks ADB's **first EEA with the World Bank** and its **sixth overall** with multilateral development banks (MDBs) since 2020, bringing the total exchanged amount to **US\$9 billion**.
- The agreement aims to enhance financial support for developing nations facing overlapping economic and developmental challenges.

Understanding Exposure Exchange Mechanism

- **Definition:** A sovereign exposure exchange is a **risk management mechanism** that allows MDBs to reduce portfolio concentration risks.
- **How it works:**
 - MDBs exchange exposure to countries where they hold large sovereign loans with those where exposure is limited or nonexistent.
 - This provides **capital relief** to the participating institutions.
 - Enables systematic collaboration among development banks to expand lending capacity.
- **Significance:**
 - Reduces concentration risk in loan portfolios.
 - Expands overall lending capacity within the MDB system.

- Strengthens financial resilience of development banks during economic uncertainties.

Direct Benefits to India

- **Enhanced funding access:**
 - As a **founding member** and one of the **largest borrowers** from ADB, India stands to benefit from increased lending capacity.
 - Greater availability of funds for critical infrastructure projects under initiatives like **Bharatmala, Sagarmala, and Smart Cities Mission**.
 - Potential for increased financing for social sector programs targeting **SDG implementation** in India.
- **Strengthened regional development architecture:**
 - Improved financial stability of multilateral institutions translates to more reliable funding streams for Indian development projects.
 - Enhanced risk management capabilities of ADB ensures continued support during economic uncertainties.
 - More robust regional financial systems support India's economic stability and growth trajectory.
- **Historical context:**
 - India has received over **\$50 billion** in cumulative financing from ADB since joining in 1966.
 - Current active ADB projects in India total approximately **\$14 billion** across various sectors.
 - India ranks among the top three borrowers from ADB globally.

Additional Information

Asian Development Bank (ADB)

- Established in 1966 with headquarters in Manila, Philippines.
- Aims to reduce poverty in Asia-Pacific through sustainable economic and social development.
- Has 49 regional member countries across Asia and the Pacific.
- Focuses on infrastructure, health, climate resilience, and natural resource management.
- India is a founding member and fourth-largest shareholder; recent projects include green growth and logistics.
- Publishes annual *Asia Development Outlook*.
- Prioritizes inclusive, resilient, and environmentally sustainable growth under its operational strategy.
- Provides loans/grants for development projects and supports SDG implementation in the region.

World Bank

- Mission: End extreme poverty and boost shared prosperity on a livable planet.
- Comprises IBRD (middle-income) and IDA (poorest nations); part of the World Bank Group.
- Releases annual country income classifications (e.g., 2024-25 updates based on GNI per capita).
- Focuses on climate action, pandemic preparedness, and financial sector resilience in developing nations.

- India is a major borrower transitioning from IDA to IBRD; flagged for climate risks like wet-bulb temperatures.

India's Forex Reserves Hit Record \$702.28 Billion

What's the News?

- India's **foreign exchange (forex) reserves** surged by **\$4.496 billion** during the latest reporting week, reaching a new all-time high of **\$702.28 billion**.
- This milestone surpassed the previous record of \$698.8 billion registered in the preceding week.
- The significant jump was primarily attributed to a sharp increase in the value of India's **gold reserves**, according to the latest data from the **Reserve Bank of India (RBI)**.

Forex Components Update

- All components of the forex reserves witnessed an increase during the week:
 - Foreign Currency Assets (FCAs):** The largest component of the reserves, FCAs, increased by **\$856 million** to **\$618.52 billion**.
 - Gold Reserves:** This component saw the most significant rise, jumping by **\$3.59 billion** to **\$62.61 billion**.
 - Special Drawing Rights (SDRs):** Rose by **\$43 million** to **\$17.65 billion**.
 - Reserve Position with the IMF:** Increased by **\$7 million** to **\$3.50 billion**.

Additional Info

- What are Forex Reserves?**
 - These are assets held by a nation's central bank (the **RBI** in India) primarily in foreign currencies, gold, and other international reserve assets.
 - They act as a crucial buffer against external economic shocks, help manage currency volatility (the **Rupee**), and maintain confidence in the economy.
- Key Components:**
 - FCAs:** Include assets like US dollars, Euros, and other major global currencies. Their value fluctuates based on both RBI's transactions and the appreciation or depreciation of these currencies.
 - SDRs:** An international reserve asset created by the **International Monetary Fund (IMF)**, which countries can use to supplement their official reserves.

SBI Named "World's Best Consumer Bank 2025" by Global Finance

What's the News?

- The **State Bank of India (SBI)** has been named the **"World's Best Consumer Bank 2025"** by the New York-based financial magazine, **Global Finance**.
- This marks the **second consecutive year** SBI has won this global accolade, having also received the award for 2024.

- The award was presented during the 32nd annual Best Bank Awards ceremony, held alongside the **IMF/World Bank Annual Meetings** in Washington D.C.

Significance of the Award

- The award recognizes SBI's commitment to **customer-centric innovation** and excellence in service delivery on a global scale.
- The selection by **Global Finance** magazine, a prominent publication, identifies top performers among banks and financial service providers worldwide.
- Winning for the second year in a row highlights the bank's **sustained performance** and leadership in the consumer banking sector.

State Bank of India (SBI)

- Type:** Public Sector Bank (PSB).
- Headquarters:** Mumbai, Maharashtra.
- Background:** SBI is India's largest commercial bank in terms of assets, deposits, branches, customers, and employees.
- Origin:** The bank's lineage traces back to the **Bank of Calcutta** (established in 1806), which later became part of the **Imperial Bank of India**. The Imperial Bank was nationalised and renamed the State Bank of India in 1955.

MeitY Approves Seven Projects Worth ₹5,528 Crore Under SPECS 2.0

What's the News?

- The **Ministry of Electronics and Information Technology (MeitY)** has approved **seven new projects** under the **Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors (SPECS) 2.0**.
- This scheme is also referred to as the **Electronics Components Manufacturing Scheme (ECMS) 2.0**.
- These projects represent a total investment of **₹5,528 crore**.
- Key investors include **Tata Electronics, TDK, and Salcomp**.
- The projects are expected to generate over **12,000 direct and indirect jobs**.

Key Components to Be Manufactured

- Copper Clad Laminates (CCL):** Will meet **100% of domestic demand**, currently fully imported.
- Multi-layer & HDI Printed Circuit Boards (PCBs):** To fulfill **20% of India's domestic demand**.
- Camera Modules:** To satisfy **15% of domestic sub-assembly needs** for smartphones, drones, EVs, and medical devices.
- Polypropylene Films:** Critical for **capacitors** used in telecom, consumer electronics, and renewable energy systems.
- Export Potential:** **60% of total output** is projected to be exported, strengthening India's role in **global electronics value chains**.

Implementation & Scale

- Tenure:**
 - Capex-linked incentives:** 5 years

- **Turnover-linked incentives:** 6 years (including 1-year gestation)
- **Investor Response:**
 - **249 applications** received so far
 - Total projected investment: **₹1.15 lakh crore**
 - Anticipated production: **₹10.34 lakh crore**
 - Estimated jobs: **1.42 lakh**

Approved Companies:

- **Kaynes Circuits India Pvt Ltd:** ₹3,280 crore across 4 projects in Tamil Nadu (PCBs, camera modules, CCL)
- **Ascent Circuits:** ₹991 crore for multi-layer PCBs
- **Syrma Strategic Electronics:** ₹765 crore for PCBs
- **SRF Ltd:** ₹496 crore for polypropylene films

About the SPECS 2.0 / ECMS 2.0 Scheme

- **Objective:** To strengthen the domestic electronics manufacturing ecosystem, reduce import dependency, and build a resilient supply chain.
- **Incentive:** The scheme offers a financial incentive of **25% on capital expenditure (CapEx)** for investments in new plants, machinery, and equipment.
- **Launch Context:** SPECS was launched as part of a broader government strategy, which also includes the **Production Linked Incentive (PLI) Scheme** for large-scale electronics manufacturing.
- **Target Area:** It specifically targets the downstream value chain of electronic components, semiconductors, display fabrication units, and ATMP (Assembly, Testing, Marking, and Packaging) units.

NITI Aayog Unveils Roadmap for Global Leadership in Advanced Manufacturing

What's the News?

- **NITI Aayog's Frontier Tech Hub** has released a strategic roadmap titled "**Reimagining Manufacturing: India's Roadmap to Global Leadership in Advanced Manufacturing**".
- The roadmap was developed in collaboration with the **Confederation of Indian Industry (CII)** and **Deloitte**.
- It outlines a 10-year action plan to transform India into one of the **top three global advanced manufacturing hubs by 2035**.
- The strategy aims to increase the manufacturing sector's contribution to GDP from the current 15-17% to **over 25% by 2035** and create **more than 100 million new jobs**.
- This initiative is positioned as a key milestone towards the **Viksit Bharat @ 2047** vision.

Key Technologies and Sectoral Focus

- The roadmap identifies four high-impact frontier technologies as key enablers for this transformation:
 - **Artificial Intelligence (AI) & Machine Learning (ML)**
 - **Advanced Materials**
 - **Digital Twins**
 - **Robotics**
- These technologies will be strategically deployed across **13 priority manufacturing sectors**.

- The sectors are grouped into five key clusters: **engineering, consumer products, life sciences, electronics, and chemicals**.

A Phased 10-Year Strategic Roadmap

The 10-year plan (FY2026–FY2035) is structured in three phases:

- **Phase 1 (FY2026 - FY2028): Ecosystem Build and Adoption**
 - Positioning advanced manufacturing as a strategic priority under the **National Manufacturing Mission (NMM)**.
 - Establishing a **Global Frontier Technology Institute (GFTI)** in India to serve as a Center of Excellence (CoE).
 - Developing a **future-ready skilling ecosystem** and creating technology access platforms, especially for **MSMEs**.
- **Phase 2 (FY2029 - FY2031): Acceleration**
 - Focusing on driving the '**Servicification of Manufacturing**'.
 - This involves transforming the sector from being a product manufacturer to a provider of integrated, high-value solutions.
- **Phase 3 (FY2032 - FY2035): Monitoring**
 - Involves continuous monitoring of the maturity and adoption levels of frontier technologies across the industry.

Challenges and Opportunity Cost

- The report identifies several structural challenges currently constraining India's manufacturing sector:
 - Inadequate infrastructure in industrial corridors.
 - A significant shortage of highly skilled talent prepared for advanced technology.
 - Low investment in **Research and Development (R&D)**.
 - Fragmented supply chains that limit scale and integration.
- The roadmap cautions that failing to adopt these key frontier technologies poses a significant risk.
- This "**cost of inaction**" could lead to a potential loss of **\$270 billion** in additional manufacturing GDP by 2035, and **\$1 trillion** by 2047.

Science & Technology

Central Railway Completes Loco Trials of Indigenous KAVACH System Across All Divisions

What's the News?

- The **Central Railway** has successfully completed **locomotive trials** of **KAVACH**, India's indigenously developed **Automatic Train Protection (ATP) system**, on the **Panvel–Roha** section of the Mumbai division.
- With this, Central Railway becomes the **first zonal railway** to finish loco trials across **all five of its divisions**—Mumbai, Bhusawal, Nagpur, Pune, and Solapur—within **six months** of awarding the KAVACH work order in **March 2025**.
- The trials validate KAVACH's capability to **prevent collisions**, enforce **signal compliance**, and enhance **rail safety** through real-time interventions.

KAVACH System: Features and Rollout Status

- Key Safety Functions:**
 - Automatic braking** if a train approaches a red signal without slowing down.
 - Speed regulation** in restricted zones.
 - Auto-whistling** at unmanned level crossings.
 - Onboard display** of signal aspects and track conditions.
 - SOS emergency alert** for immediate response during critical situations.
- Current Implementation:**
 - Stationary KAVACH units** installed at selected stations across all five divisions.
 - Onboard equipment** being fitted in locomotives at **Bhusawal** and **Kalyan** sheds.
 - An **Integrated KAVACH Control Centre** operational at **Bhusawal**.
- Human Resource Development:**
 - Around **3,000 Central Railway personnel** trained in KAVACH installation, operation, and maintenance.

Additional Info

- KAVACH Overview:**
 - Developed by the **Research Designs & Standards Organisation (RDSO)** in collaboration with Indian industry partners.
 - Certified with **SIL-4 (Safety Integrity Level 4)**—the highest global safety standard for railway systems.
 - Designed to be **cost-effective** (₹50 lakh per km vs. ₹5–10 crore per km for foreign ATP systems like ETCS).
- National Rollout Plan:**
 - Phase 1:** Cover **1,200 km** of critical routes by **March 2026**.
 - Target:** Equip **2,000+ locomotives** and secure **34,000 km** of network under KAVACH by **2030**.

- Budget Allocation:** ₹1,300 crore allocated under **Amrit Bharat Station Scheme** and **Modernisation Plan**.
- Strategic Importance:**
 - Supports 'Make in India' and 'Atmanirbhar Bharat' in critical rail infrastructure.
 - Aims to reduce **train accidents due to human error**, which account for **over 60%** of rail incidents in India.

Nobel Prize in Physiology or Medicine 2025 Awarded for Immune Tolerance Breakthrough

What's the News?

- The 2025 Nobel Prize in Physiology or Medicine has been awarded jointly to **Mary E. Brunkow (USA)**, **Fred Ramsdell (USA)**, and **Shimon Sakaguchi (Japan)** for their **groundbreaking discoveries on peripheral immune tolerance**.
- Their work elucidated how **regulatory T cells (Tregs)** prevent the immune system from attacking the body's own tissues, thereby protecting against **autoimmune diseases** such as type 1 diabetes, multiple sclerosis, and IPEX syndrome.
- The Nobel Assembly highlighted that their findings have **transformed immunology** and paved the way for **novel therapies in autoimmunity, cancer immunotherapy, and organ transplantation**.

Peripheral Immune Tolerance: Scientific Breakthrough and Medical Impact

- Core Discovery:**

The laureates identified and characterized **regulatory T cells (Tregs)**—a specialized subset of immune cells that act as "peacekeepers" by suppressing excessive or misdirected immune responses.
- Key Contributions:**
 - Shimon Sakaguchi (1995):** First demonstrated that immune tolerance is not solely maintained in the thymus (**central tolerance**) but also actively regulated in peripheral tissues by a distinct T-cell population—later named **regulatory T cells**.
 - Mary Brunkow & Fred Ramsdell (2001):** Discovered that a mutation in the **Foxp3 gene** in mice caused fatal autoimmune disorders; they later linked human **Foxp3 mutations** to **IPEX syndrome** (immune dysregulation, Polyendocrinopathy, Enteropathy, X-linked).
 - Sakaguchi (2003):** Confirmed that **Foxp3 is the master regulator** for the development and function of Tregs, unifying genetic and cellular understanding of immune tolerance.
- Therapeutic Implications:**
 - Autoimmune diseases:** Treg-based therapies aim to restore immune balance.

- **Cancer:** Modulating Treg activity can enhance anti-tumor immune responses.
- **Transplantation:** Boosting Treg function may reduce organ rejection without broad immunosuppression.

Additional Info

- **Nobel Prize Background:**
 - Established by **Alfred Nobel's will (1895)**; first awarded in **1901**.
 - Administered by the **Karolinska Institute**, Stockholm.
 - Prize amount: **11 million Swedish kronor** (~\$1.6 million CAD) shared among laureates.
- **Regulatory T Cells (Tregs):**
 - Express the **CD4+**, **CD25+**, **Foxp3+** marker profile.
 - Constitute **5–10%** of peripheral **CD4+ T cells** in healthy humans.
 - Dysfunction leads to **loss of self-tolerance** and chronic inflammation.
- **IPEX Syndrome:**
 - Rare X-linked disorder caused by **Foxp3 mutations**.
 - Presents in infancy with **severe diarrhea, type 1 diabetes, eczema**, and fatal autoimmunity without intervention.
 - Treated with **immunosuppressants** or **hematopoietic stem cell transplantation**.

DDWS and BISAG-N Partner to Develop GIS-Driven Platform

What's the News?

- The **Department of Drinking Water & Sanitation (DDWS)**, under the **Ministry of Jal Shakti**, has signed a **Memorandum of Agreement (MoA)** with the **Bhaskaracharya National Institute for Space Applications and Geo-informatics (BISAG-N)** to develop a **GIS-integrated Decision Support Platform** for the **Jal Jeevan Mission (JJM)** and **Swachh Bharat Mission (Grameen) (SBM(G))**.
- The platform will enable **real-time visualization, analytics, and granular monitoring** of rural water supply and sanitation infrastructure at the **household and scheme levels**.
- This initiative strengthens the **digital backbone** of rural development missions and aligns with the **PM GatiShakti National Master Plan** for integrated infrastructure planning.

GIS-Integrated Platform: Features & Objectives

- **Core Functions:**
 - Creation of **unique IDs** for **Rural Piped Water Supply Schemes (RPWSS)**.
 - **Household-level tracking** of functional tap connections under JJM.
 - **Thematic mapping** of sanitation assets (e.g., individual household latrines, solid/liquid waste management systems).
- **Technical Support by BISAG-N:**

- End-to-end development including **database design, vector data capture, digital photogrammetry, and ground control surveying**.
- Integration of **satellite imagery** and **geo-tagged field data** for accuracy.

Strategic Benefits:

- Enhances **convergence** with other rural schemes (e.g., MGNREGA, PMAY-G).
- Improves **resource allocation, transparency, and accountability** in implementation.
- Supports **evidence-based policy decisions** through spatial analytics.

Additional Info

- **Jal Jeevan Mission (JJM):**
 - Launched in **2019** with the goal of providing **Functional Household Tap Connections (FHTCs)** to all rural households by **2024** (extended to **2028** for full coverage).
 - As of **October 2025**, over **85% of rural households** have FHTCs.
 - Funded through **50:50 Centre-State cost sharing** (90:10 for Himalayan & NE states).
- **Swachh Bharat Mission (Grameen):**
 - Phase II (2020–25) focuses on **Open Defecation Free Plus (ODF+)** status—ensuring **sustained toilet usage** and **solid/liquid waste management** in all villages.
- **BISAG-N:**
 - An **autonomous institute** under the **Ministry of Electronics and Information Technology (MeitY)**.
 - Specializes in **geospatial technology applications** for governance, agriculture, disaster management, and infrastructure.

Nobel Prize in Physics 2025 Awarded for Macroscopic Quantum Phenomena in Electric Circuits

What's the News?

- The **Nobel Prize in Physics 2025** has been awarded jointly to **John Clarke** (University of California, Berkeley), **Michel H. Devoret** (Yale University & UC Santa Barbara), and **John M. Martinis** (UC Santa Barbara) for “**the discovery of macroscopic quantum mechanical tunnelling and energy quantisation in an electric circuit**.”
- Their groundbreaking experiments in the **mid-1980s** demonstrated that **quantum effects**—typically **confined to atomic scales**—can manifest in **human-scale engineered systems**, specifically **superconducting electrical circuits**.
- This work laid the experimental foundation for **quantum computing, ultra-precise sensors, and quantum simulation technologies**.

Breakthrough: Quantum Physics at Macroscopic Scale

- **Core Discovery:**

- Using **Josephson junctions** (two superconductors separated by a thin insulator), the trio showed that **collective electron pairs (Cooper pairs)** in a superconducting circuit behave as a **single quantum entity**, exhibiting:
 - **Quantum tunnelling:** The system “tunnels” through an energy barrier it classically cannot surmount.
 - **Energy quantisation:** The circuit absorbs/emits energy only in discrete, quantized units—like an artificial atom.
- **Experimental Setup:**
 - Conducted at **UC Berkeley** under extreme electromagnetic shielding to isolate quantum signals.
 - Measured **voltage emergence** from a zero-voltage quantum state via tunnelling—a macroscopic signature of quantum behavior.
- **Impact:**
 - Validated theoretical predictions by **Anthony Leggett** (Nobel 2003) on **macroscopic quantum coherence**.
 - Enabled the development of **superconducting qubits**, now a leading platform for **quantum computers** (e.g., Google’s Sycamore, where Martinis played a key role).

Additional Info

- **Quantum Tunnelling:**
 - A quantum phenomenon where a particle passes through a potential barrier despite lacking classical energy to overcome it.
 - First explained by **George Gamow (1928)** to describe **alpha decay** in radioactive nuclei.
- **Josephson Junction:**
 - Invented by **Brian Josephson (Nobel 1973)**.
 - Critical component in **SQUIDs (Superconducting Quantum Interference Devices)** used in MRI, geology, and quantum metrology.

Nobel Prize in Chemistry 2025 for Molecular Framework Innovations

What's the News?

- The **Royal Swedish Academy of Sciences** has awarded the **2025 Nobel Prize in Chemistry** to **Susumu Kitagawa** (Japan), **Richard Robson** (Australia), and **Omar M. Yaghi** (USA) for their groundbreaking work on **porous molecular frameworks**.
- The trio has been recognized for their pioneering research in developing **Metal-Organic Frameworks (MOFs)**, a new class of materials with extraordinary properties for capturing and storing molecules.
- Their work has created significant advancements in **sustainable chemistry** with applications spanning clean energy, environmental protection, and healthcare sectors.
- The Nobel Committee highlighted how their discoveries have “laid the foundation for materials that address some of humanity’s most pressing challenges.”

Molecular Framework Revolution

- **MOFs** represent a new generation of **highly porous materials** with surface areas that can exceed **7,000 square meters per gram**—equivalent to covering a football field with a single teaspoon of material.
- These frameworks function as **molecular sieves** capable of selectively capturing specific gases, making them invaluable for:
 - **Carbon capture** technologies to mitigate climate change
 - **Hydrogen and methane storage** for clean energy applications
 - **Water harvesting** systems that extract moisture from arid air
 - **Drug delivery** mechanisms with precise release capabilities
- The research has enabled the creation of over **100,000 different MOF structures**, each tailored for specific applications through precise chemical engineering.

Additional Information

- **Scientific Significance:**
 - MOFs represent a paradigm shift from traditional porous materials like zeolites
 - Their modular nature allows scientists to “design” materials with specific properties
 - These frameworks can reversibly adsorb and release molecules without structural damage
- **Environmental Applications:**
 - MOF-based systems can capture **CO₂ emissions** at concentrations as low as **400 parts per million**
 - Water harvesting devices using MOFs can extract **3-5 liters of water daily** from desert air with 20% humidity
 - These materials show potential for removing **toxic heavy metals** from contaminated water sources

UPI Evolution: Biometric and Wearable Technology Transform Digital Payment Landscape

What's the News?

- **National Payments Corporation of India (NPCI)** and **Reserve Bank of India (RBI)** have announced revolutionary updates to the **Unified Payment Interface (UPI)** ecosystem, introducing **biometric authentication** and **wearable glass-based payment** systems.
- The new features eliminate the need for **PIN entry** for certain transactions, allowing users to authenticate payments through **fingerprint scanning** or **facial recognition** on their devices.
- **Navi UPI** became the first platform in India to implement **biometric-based payments** at scale, marking a significant milestone in digital payment accessibility.
- These innovations were unveiled at the **Global Fintech Fest 2025** in Mumbai, representing a strategic move to

enhance India's position as a global leader in digital payments.

Next-Generation UPI Authentication

• Biometric Payment System:

- Users can now authenticate UPI transactions using their smartphone's **fingerprint scanner** or **face recognition** technology instead of manually entering PINs.
- The feature is **optional** and each transaction continues to be verified by the **issuing bank** for security.
- Initially applicable for transactions up to **₹5,000**, providing a balance between convenience and security.
- Particularly beneficial for **senior citizens** and **first-time digital payment users** who face challenges with traditional PIN-based systems.

• Wearable Technology Integration:

- **UPI Lite** has been extended to support payments via **wearable smart glasses**.
- Users can complete small-value transactions by simply **scanning a QR code** and issuing a **voice command**, eliminating the need for a mobile phone or physical interaction.
- Designed for everyday payments including **retail purchases, food transactions, and public transportation**.

• Enhanced Security Features:

- **Aadhaar-based face authentication** has been introduced for setting or resetting UPI PINs using **UIDAI's FaceRD App**.
- Biometric enablement is automatically disabled if the UPI PIN is reset.
- Users inactive for **90 days** must reconfirm their consent for biometric authentication.

Additional Information

• NPCI Framework:

- Established in **2009** under the guidance of **RBI** and **Indian Banks' Association**
- Operates under the **Payment and Settlement Systems Act, 2007**
- Key entity driving India's digital payment revolution with **over 15 billion monthly transactions** processed through UPI

• UPI Ecosystem Evolution:

- Launched in **2016** with basic payment functionality
- **UPI 2.0** introduced in 2018 added features like overdraft facility and invoice sharing
- **UPI Lite** launched in 2022 enabled offline small-value transactions
- Current update represents the **third major evolution** of the UPI system

• Security Infrastructure:

- Transactions processed through **NPCI's secure payment gateway** with end-to-end encryption
- Complies with **RBI's Cyber Security Framework for Payment System Operators**
- Biometric data remains **on-device** and is never transmitted to servers

- **Two-factor authentication** remains mandatory for higher value transactions

India and UK Launch Joint Connectivity and Innovation Centre for 6G and AI-Driven Telecom

What's the News?

- India and the United Kingdom have jointly launched the **India-UK Connectivity and Innovation Centre (CIC)** with an initial investment of **₹282 crore (approximately £24 million)** over four years.
- The Centre aims to accelerate **6G research, AI-native telecom networks, Non-Terrestrial Networks (NTNs), and telecom cybersecurity**, fostering **digital inclusion** and **resilient communication infrastructure**.
- The initiative was announced during high-level bilateral engagements and reflects a strategic commitment to **co-develop next-generation telecom technologies** by leveraging complementary strengths of both nations.

Focus Areas & Strategic Objectives

• 6G and AI-Driven Networks:

- Develop **AI-native architectures** for future telecom systems to enable intelligent, self-optimising networks.
- Jointly shape global **6G standards** through collaboration between Indian and UK research institutions and industry players.

• Non-Terrestrial Networks (NTNs):

- Integrate satellite and aerial platforms (e.g., drones, HAPS) into terrestrial networks to expand connectivity to remote and underserved regions.

• Telecom Cybersecurity:

- Build **secure and resilient** communication ecosystems, addressing emerging threats in 5G/6G transitions.

• Innovation Ecosystem:

- Serve as a **joint R&D hub** connecting academia, startups, and industry from both countries.
- Promote **co-innovation, technology transfer, and capacity building** in advanced connectivity domains.

India, UK Recent Relations

- India and the UK signed the **Comprehensive Economic and Trade Agreement (CETA)** on **24 July 2025**, marking a major milestone in bilateral trade ties.
- Alongside CETA, both countries endorsed a long-term **India-UK Vision 2035**, aiming to deepen cooperation across sectors like technology, education, and green energy.
- A **Social Security Agreement** was also implemented in 2025 to ease labor mobility and reduce costs for businesses deploying workers across both countries.

Astronomers Observe Real-Time Ring Formation Around Celestial Body Chiron

What's the News?

- Astronomers have, for the first time, observed **active ring formation** around **(2060) Chiron**, a minor icy body orbiting between **Saturn and Uranus**.
- Using advanced telescopic imaging and stellar occultation techniques, scientists detected **four distinct rings** evolving around Chiron—marking the **first real-time observation of ring system formation** around a small celestial object in the outer solar system.

About Chiron: A Hybrid Celestial Object

- Classification:** Chiron is a **centaur**—a rare class of objects exhibiting characteristics of both **asteroids and comets**.
- Discovery:** First identified in **1977** by astronomer **Charles Kowal**, it was the inaugural member of the centaur group.
- Orbit & Size:**
 - Orbits the Sun every **~50 years** in the region between **Jupiter and Neptune**.
 - Diameter: Approximately **200 km**.
- Composition:** Made of **rock, water ice, and organic compounds**, with occasional **comet-like outbursts** of gas and dust.

Key Observations: The Ring System

- Number of Rings:** **Four** identified:
 - Three dense inner rings** at distances of **273 km, 325 km, and 438 km** from Chiron's center.
 - One diffuse outer ring** at **~1,400 km**, primarily composed of **water ice and fine dust**.
- Formation Mechanism:** Likely triggered by:
 - A recent collision** with another small body, or
 - Ejection of debris** from Chiron's own surface due to internal activity or rotational instability.
- Significance of Timing:** Unlike static rings (e.g., Saturn's), Chiron's rings appear to be **actively forming**, offering a rare window into **dynamic ring evolution processes**.

UIDAI Launches SITAA to Counter Deepfakes and Strengthen Aadhaar Authentication

What's the News?

- The **Unique Identification Authority of India (UIDAI)** has launched **SITAA (Secure Identity Transaction Assurance and Authentication)**, a new AI-powered security framework to safeguard **Aadhaar-based authentication** against emerging threats like **deepfakes, spoofing, and presentation attacks**.

What is SITAA?

- AI-Driven Authentication Layer:** SITAA integrates advanced **machine learning models and liveness detection algorithms** to verify the physical presence of an individual during biometric or facial authentication.
- Real-Time Threat Detection:** It continuously monitors authentication attempts for anomalies such as

synthetic media, screen replays, or mask-based impersonation.

- Modular Integration:** Designed to plug into existing **Aadhaar e-KYC, Aadhaar-enabled Payment System (AePS), and DigiLocker** workflows without disrupting user experience.

Key Features & Objectives

- Combat Deepfake Fraud:** With AI-generated fake identities rising globally, SITAA addresses vulnerabilities in facial recognition systems used in banking, telecom, and government services.
- Zero Additional Cost to Users:** The system operates at the backend; citizens need not install new apps or undergo extra steps.
- Compliance with Data Protection Norms:** Aligns with principles of the **Digital Personal Data Protection Act, 2023**, ensuring minimal data retention and purpose limitation.
- Scalable for Private Sector:** Banks, fintech firms, and telecom providers can adopt SITAA via UIDAI's certified authentication partners.

Additional Info

- Aadhaar Authentication Volume:** Over **70 crore** Aadhaar authentications occur monthly across public and private services, making robust security critical.
- Global Context:** India is among the first countries to deploy a national-level, AI-based anti-deepfake layer for a digital ID system.
- Related Frameworks:**
 - Aadhaar (Authentication) Regulations, 2016:** Governs secure authentication protocols.
 - India Stack:** SITAA strengthens the **identity layer** of India's digital public infrastructure stack.
 - MeitY's AI Strategy:** Supports the government's vision of "**Responsible AI for All**" by embedding security in foundational digital systems.

Scientists Discover 'Time Rondeau Crystal,' a New Phase of Matter

What's the News?

- Scientists have discovered a new phase of matter known as the "**time rondeau crystal**."
- This novel state of matter exhibits a unique temporal pattern where **ordered and disordered states coexist and repeat over time**.
- The discovery, made by researchers from the **University of Oxford** and the **Technical University of Munich**, expands our understanding of non-equilibrium quantum systems and is related to, but distinct from, a standard **time crystal**.

Understanding the Time Rondeau Crystal

- A time rondeau crystal is a **non-equilibrium phase of matter**, meaning it only exists when being actively driven by an external energy source.
- Its defining feature is a complex rhythm where the system alternates between a structured, ordered phase

- (like a crystal) and a chaotic, disordered phase (like a gas) in a **predictable, repeating cycle**.
- The name is inspired by a "rondeau," a form of music or poetry where a recurring refrain (the ordered state) is interspersed with changing verses (the disordered states).
- This is different from a regular **time crystal**, which simply repeats a single ordered pattern over time, much like a clock ticking. The rondeau crystal has a more intricate, multi-state temporal structure.

Experimental Creation

- The researchers created this new phase using a **Bose-Einstein Condensate (BEC)**, a state of matter where atoms are cooled to near absolute zero and act as a single quantum entity.
- They used a condensate of **lithium atoms** and periodically "kicked" it with laser pulses.
- This periodic driving forced the system into a stable state where it cycled through the ordered and disordered patterns at a frequency different from the driving laser's frequency, confirming the existence of the time rondeau crystal.

Additional Info

- Time Crystal:**
 - A phase of matter whose constituent particles repeat a pattern in **time**, not just in space like a conventional crystal (e.g., diamond or salt).
 - It breaks "**time-translation symmetry**," meaning its state is not the same at every moment, even under a periodic drive. It essentially has its own internal "tick" independent of the external push it receives.
- Bose-Einstein Condensate (BEC):**
 - A state of matter formed when a gas of bosons (a type of particle) is cooled to temperatures very close to **absolute zero (-273.15°C)**.
 - At this point, a large fraction of the atoms collapse into the lowest quantum state, behaving as a single macroscopic quantum entity or "superatom."

Earth's Magnetic Field Has a Growing Weak Spot

What's the News?

- Scientists are closely monitoring a large and growing area of weakness in the Earth's magnetic field known as the **South Atlantic Anomaly (SAA)**.
- This region, where the magnetic field is significantly weaker than the global average, is expanding westward and splitting into two distinct lobes.
- While the SAA poses **no direct threat to life on Earth**, it presents a significant radiation risk to satellites and spacecraft, including the **International Space Station (ISS)**.

What is the South Atlantic Anomaly (SAA)?

- The SAA is an extensive region centered over South America and the southern Atlantic Ocean where the **Earth's magnetic field is about one-third weaker** than the average.

- The Earth's magnetic field acts as a protective shield, deflecting harmful charged particles from the sun (solar wind) and cosmic rays.
- In the SAA, this shield is less effective, allowing these particles to dip closer to the planet's surface.
- This region is where the **inner Van Allen radiation belt**—a zone of trapped energetic particles—makes its closest approach to the Earth.

Why Does This Weak Spot Exist?

- The Earth's magnetic field is generated by the churning motion of molten iron in the planet's outer core, a process called the **geodynamo**.
- The SAA is believed to be caused by a massive, dense feature deep within the Earth called the **African Large Low-Shear-Velocity Province (LLSVP)**.
- This continent-sized slab of ancient, dense rock sits at the boundary between the hot liquid outer core and the stiffer mantle.
- The LLSVP disrupts the flow of molten iron in the core beneath it, which in turn weakens the magnetic field generated in the region above, creating the anomaly we observe on the surface.

Observation of Solar Effects on Moon's Exosphere by Chandrayaan-2

What's the News?

- ISRO's **Chandrayaan-2** orbiter has achieved a **world-first scientific breakthrough** by observing the effects of **Coronal Mass Ejections (CMEs)** from the Sun on the Moon's exosphere, a feat no other space agency has accomplished.
- The observation was made using the **Chandra Atmospheric Composition Explorer-2 (CHACE-2)** instrument onboard the Chandrayaan-2 orbiter, providing unprecedented data on lunar space weather.
- This discovery validates **theoretical predictions** about solar impacts on the Moon's extremely thin atmosphere, previously unconfirmed through direct observation.

Understanding the Lunar Space Weather Phenomenon

- Coronal Mass Ejections explained:**
 - CMEs are massive bursts of **solar wind and magnetic fields** released from the Sun's corona.
 - They propel billions of tons of **charged particles** through space at high velocities.
 - These events represent significant solar activity that impacts celestial bodies without protective magnetic fields.
- Moon's unique vulnerability:**
 - The Moon has a **surface-boundary exosphere** (extremely thin atmosphere) with minimal particle interaction.
 - Complete **absence of global magnetic field** leaves the Moon fully exposed to solar radiation.

- Lunar exosphere is highly sensitive to even minor variations in solar activity due to its direct contact with the lunar surface.
- **Observed impact:**
 - CME events caused a **dramatic increase in total pressure** of the dayside lunar exosphere.
 - Number density of neutral atoms and molecules increased by **more than an order of magnitude**.
 - Enhanced liberation of atoms from lunar surface temporarily altered atmospheric conditions.

Additional Information

- **Technical context:**
 - **CHACE-2 instrument:** Specialized payload designed to analyze lunar exosphere composition.
 - **Lunar exosphere formation:** Results from solar radiation interaction, solar wind (hydrogen, helium ions), and meteorite impacts.
 - **Research methodology:** Direct measurement of exospheric changes during CME events provided unprecedented data.
- **Historical perspective:**
 - **Chandrayaan-2 mission:** Launched in 2019, continues to provide valuable scientific data despite lander module challenges.
 - **India's space journey:** From modest beginnings to achieving sophisticated scientific observations in lunar space.
 - **ISRO's growing capabilities:** Demonstrates progression from basic satellite launches to advanced space science research.

Google Claims First Verifiable Quantum Advantage with Willow Chip

What's the News?

- **Google's quantum computing division** has announced a major breakthrough, claiming to have achieved the world's first **"verifiable" quantum advantage**.
- The feat was accomplished using a new, powerful quantum processor named "**Willow**" and a novel algorithm called the "**Quantum Echoes**" algorithm.
- This development marks a significant step toward building a practical, **fault-tolerant quantum computer** by demonstrating that a quantum machine can solve a problem that is beyond the reach of classical supercomputers, and importantly, the answer can be independently verified.

Verifiable Quantum Advantage vs. Quantum Supremacy

This achievement introduces a more rigorous standard for measuring quantum computing progress.

- **Quantum Supremacy:**
 - This term, previously used by Google, refers to a quantum computer performing a calculation—any calculation, even a contrived

- one—that is practically impossible for a classical computer.
- A major criticism of supremacy claims was the difficulty in **verifying** if the quantum computer's answer was correct, as classical computers couldn't perform the check in a reasonable time.

- **Verifiable Quantum Advantage:**

- This is a more advanced milestone where the problem solved by the quantum computer is designed to be **intractable for classical computers to solve, but easy for them to check**.
- This verifiability lends much stronger evidence to the claim and addresses a key challenge in the field, moving beyond theoretical demonstrations to more concrete, trustworthy results.

The Willow Chip and Quantum Echoes Algorithm

The breakthrough was enabled by new hardware and a purpose-built algorithm.

- **The Willow Chip:**

- This is Google's next-generation quantum processor, engineered specifically to handle and mitigate errors—a fundamental challenge in quantum computing.
- Its architecture is designed to implement sophisticated **quantum error correction** codes, which are essential for building reliable quantum computers.

- **Quantum Echoes Algorithm:**

- This algorithm was created to solve a complex problem in quantum evolution that is exceptionally difficult for classical machines to simulate.
- It effectively tests the quantum processor's ability to control its quantum states and suppress errors, pushing the limits of current hardware capabilities.
- Crucially, the solution generated by running this algorithm on the **Willow chip** can be quickly and efficiently checked for accuracy by a classical computer.

Key Quantum Concepts:

- **Quantum Computer:** A device that harnesses quantum-mechanical phenomena, such as **superposition** and **entanglement**, to process information in fundamentally new ways.
- **Qubit (Quantum Bit):** The basic unit of quantum information. Unlike a classical bit (0 or 1), a qubit can exist in a combination of both states simultaneously.
- **Quantum Error Correction:** A critical set of techniques required to protect fragile quantum information from noise and environmental interference (**decoherence**). Achieving robust error correction is the primary goal for building large-scale, functional quantum computers.

New "Quasi-Moon" Asteroid 2025 PN7

Discovered Near Earth

What's the News?

- Astronomers have confirmed the discovery of a small asteroid, designated **2025 PN7**, that is acting as a temporary "quasi-moon" or **quasi-satellite** of Earth.
- The object was first detected by the **Pan-STARRS observatory** in Hawaii.
- **NASA** has confirmed the object's classification, which is a co-orbital asteroid, not a true moon.
- The asteroid is estimated to be small, about 18-36 meters wide, and poses **no threat** to Earth.

About 2025 PN7's Orbit

- Analysis indicates **2025 PN7** has likely been in this co-orbital path for several decades, possibly since the 1950s or 1960s.
- It is expected to remain in Earth's vicinity until around **2083**, after which its orbit will likely cause it to drift away.
- The asteroid is extremely faint and is not visible to the naked eye or with amateur telescopes.

What is a Quasi-Moon?

- A quasi-moon is *not* a true moon. It is an asteroid that orbits the **Sun**, not the Earth.
- It is in a **1:1 orbital resonance** with Earth, meaning it takes the same amount of time to orbit the Sun as our planet does.
- From Earth's perspective, this synchronized path makes it appear to loop around our planet, but it is not gravitationally bound to Earth like our actual Moon is.

Additional Info

- **Other Quasi-Satellites:** Earth has several other known quasi-moons. The most notable include **Kamo'olewa (2016 HO3)** and **2023 FW13**. **2025 PN7** is one of about eight such objects confirmed so far.
- **Scientific Interest:** These objects are valuable for studying solar system dynamics and near-Earth asteroids.
- **Related Missions:** China's **Tianwen-2** spacecraft is planned to visit **Kamo'olewa** to collect samples.



Agriculture

Cabinet Approves MSP Hike for All Rabi Crops for 2026–27 Season

What's the News?

- The **Union Cabinet Committee on Economic Affairs (CCEA)**, chaired by Prime Minister Narendra Modi, has approved a hike in the **Minimum Support Prices (MSP)** for all six mandated **Rabi crops** for the **2026–27 marketing season**.
- The move aims to ensure **remunerative returns** to farmers and promote **crop diversification**, aligning with the government's commitment to fix MSP at **at least 1.5 times the all-India weighted average cost of production**.
- The **sharpest increase** was for **safflower** (₹600/quintal), followed by **lentil (masur)** (₹300/quintal), **rapeseed & mustard** (₹250), **gram** (₹225), **barley** (₹170), and **wheat** (₹160).

Revised MSPs and Expected Returns

- New MSPs (₹/quintal):**
 - Wheat: ₹2,585
 - Gram: ₹5,650
 - Lentil (Masur): ₹6,700
 - Rapeseed & Mustard: ₹5,950
 - Barley: ₹2,150
 - Safflower: ₹5,940
- Expected Return Over Cost of Production:**
 - Wheat: 109%
 - Rapeseed & Mustard: 93%
 - Lentil: 89%
 - Gram: 59%
 - Barley: 58%
 - Safflower: 50%

Additional Info

- Policy Framework:**
 - The MSP hike follows recommendations from the **Commission for Agricultural Costs and Prices (CACP)**.
 - It fulfills the **Union Budget 2018–19** assurance to set MSP at **≥1.5× production cost**.
- Associated Initiatives:**
 - Mission for Aatmanirbharta in Pulses:**
 - Approved with a **₹11,440 crore** outlay for **2025–26 to 2030–31**.
 - Targets **350 lakh tonnes** of pulses production by **2030–31**.
 - Will benefit **2 crore farmers** through improved seeds, post-harvest infrastructure, and assured procurement.
- Procurement & Crop Cycle:**
 - Wheat**, the primary Rabi crop, is sown in **October–November** and harvested from **March**.
 - Bulk procurement for the **2026–27 marketing year** (starting April) is expected to conclude by **June**.

- The government has set a **record wheat production target of 119 million tonnes** for **2025–26**, up from **117.5 million tonnes** in **2024–25**.

Cabinet Approves ₹11,440 Crore Mission for Aatmanirbharta in Pulses

What's the News?

- The **Union Cabinet**, chaired by Prime Minister Narendra Modi, has approved the "**Mission for Aatmanirbharta in Pulses**" with a total outlay of **₹11,440 crore** for the period **2025–26 to 2030–31**.
- The mission aims to make India **self-sufficient in pulses production** by **2031**, reducing reliance on imports and stabilizing domestic prices.
- It focuses on boosting production of **tur (pigeon pea)**, **urad (black gram)**, and **masur (lentil)** through assured procurement, seed distribution, yield enhancement, and value chain strengthening.

Mission Objectives & Implementation Strategy

- Production Targets:**
 - Increase pulses production from **242 lakh tonnes** (2023–24) to **350 lakh tonnes** by **2030–32**.
 - Expand cultivated area from **242 lakh hectares** to **310 lakh hectares**.
 - Raise average yield from **881 kg/ha** to **1,130 kg/ha**.
- Key Interventions:**
 - Assured Procurement**: 100% procurement of tur, urad, and masur under the **Price Support Scheme (PSS)** of PM-AASHA by **NAFED** and **NCCF** for registered farmers in participating states for **four years**.
 - Seed Systems**: Distribution of **126 lakh quintals of certified seeds** and **88 lakh free seed kits** to expand cultivation, especially in **rice fallow areas** and through **intercropping**.
 - Infrastructure**: Establishment of **1,000 new processing and packaging units**, with subsidies up to **₹25 lakh** per unit.
 - Technology & R&D**: Promotion of **high-yielding, pest-resistant, climate-resilient varieties** through multi-location trials supervised by **ICAR**.
- Geographic Focus**: Implemented via a **cluster-based approach** across **416 priority districts**.

Additional Info

- Policy Context:**
 - Announced in the **Union Budget 2025–26** by Finance Minister **Nirmala Sitharaman**.
 - Aligns with **National Food Security Mission (NFSM)** and **PM-AASHA**, which provides price support to farmers when market prices fall below **Minimum Support Price (MSP)**.

- Economic & Strategic Rationale:**
 - India is the **world's largest producer and consumer of pulses**, yet imports have risen **15–20%** in recent years due to demand outpacing domestic supply.
 - The mission aims to **conserve foreign exchange, boost farmer incomes, and generate rural employment**.
- Digital & Monitoring Tools:**
 - Seed production and distribution tracked via the **SATHI portal** (Seed Authentication, Traceability & Holistic Inventory).
 - A **global pulse price monitoring mechanism** will be established to ensure **price stability** and **farmer confidence**.

PM Modi Launches ₹35,440 Crore Agri Schemes: PM Dhan Dhaanya Krishi Yojana & Mission for Aatmanirbharta in Pulses

What's the News?

- Prime Minister Narendra Modi launched two major agricultural schemes: the **Pradhan Mantri Dhan Dhaanya Krishi Yojana (PMDDKY)** and the **Mission for Aatmanirbharta in Pulses**, with a combined outlay of **₹35,440 crore**.
- Both schemes were approved by the **Union Cabinet** and will be implemented from the **2025–26 rabi season until 2030–31**, targeting **100 low-productivity districts** and aiming to make India **self-reliant in pulse production**.
- The launch coincided with broader agricultural infrastructure initiatives, including projects under the **Agriculture Infrastructure Fund (AIF)** and **Pradhan Mantri Kisan Sampada Yojana**.

Scheme Objectives & Key Components

Pradhan Mantri Dhan Dhaanya Krishi Yojana (PMDDKY)

- Outlay:** ₹24,000 crore (converged from existing schemes).
- Target:** 100 districts selected based on:
 - Low agricultural productivity
 - Moderate crop intensity
 - Below-average access to credit.
- Key Focus Areas:**
 - Boosting **crop diversification** and **sustainable farming**
 - Enhancing **post-harvest storage** at panchayat and block levels
 - Improving **irrigation access and credit availability**
 - Promoting **modern technology, farmer training, and market linkages**.

Mission for Aatmanirbharta in Pulses

- Outlay:** ₹11,440 crore.
- Duration:** 6-year plan (2025–26 to 2030–31).
- Targets by 2030–31:**
 - Expand **cultivation area** to **310 lakh hectares** (increase of 35 lakh ha)
 - Raise **pulse production** to **350 lakh tonnes**
 - Improve **yield** to **1,130 kg per hectare**.

- Strategic Interventions:**
 - Develop and distribute **high-yielding, climate-resilient seed varieties**
 - Strengthen the **entire value chain** - from procurement to processing
 - Minimise **post-harvest losses** through better storage and logistics.

Constitutional Context

- The Prime Minister of India doesn't launch schemes based on a single specific article of the Constitution - but the authority comes from how the Indian government is structured under the Constitution.
- The Constitution doesn't give powers to the PM directly** - it gives powers to the **Union Council of Ministers**, headed by the Prime Minister.
- Article 74(1)** says there shall be a Council of Ministers to **aid and advise the President**, with the PM as its head. In practice, this means the PM leads the government's decisions, including launching national schemes.
- Agriculture is on the State List** (meaning states normally manage it), but **Entry 33 of the Concurrent List** allows the **Central Government** to act on matters like **food production, distribution, and agricultural research** - which covers schemes like PMDDKY and the Pulses Mission.
- The **Union Cabinet** (senior ministers led by the PM) must approve big schemes and spending. These two agri schemes were **cleared by the Union Cabinet on October 1, 2025**, before the PM launched them.
- The money for these schemes comes from the **Consolidated Fund of India**, which Parliament controls under **Article 266** - so the government can only spend after budgetary approval.
- In short: The PM launches such schemes as head of the Central Government, using powers derived from **Articles 74 and 266**, and acting on agriculture-related issues allowed under the **Concurrent List** of the Constitution.

Centre Introduces Flexibility in Per Drop More Crop Scheme to Enhance Water Efficiency and Farmer Income

What's the News?

- The **Ministry of Agriculture and Farmers Welfare** has revised the guidelines of the **Per Drop More Crop (PDMC)** scheme under the **Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)** to allow **States and Union Territories** greater flexibility in implementing **micro-level water conservation projects**.
- The move aims to improve **water-use efficiency**, expand **micro-irrigation coverage**, and boost **farmers' income** through localized, need-based interventions.

What is the Per Drop More Crop (PDMC) Scheme?

- Component of PMKSY:** Launched in 2015, PDMC focuses on promoting **micro-irrigation** (drip and sprinkler systems) to maximize "more crop per drop."

- Objective:** Reduce water wastage, enhance agricultural productivity, and ensure sustainable water management in agriculture.
- Funding Pattern:** 60:40 (Centre:State) for general states; 90:10 for Himalayan and North-Eastern states.

Key Revisions & Flexibility Measures

- Inclusion of “Other Interventions (OI):** States/UTs can now undertake **micro water storage and harvesting structures**—such as **diggis, farm ponds, and community reservoirs**—as part of PDMC.
- Farmer- and Community-Centric Design:** Projects can be tailored for **individual farms or community use**, based on local hydrological and agronomic conditions.
- Integration with Micro-Irrigation:** Water conserved through these structures will directly support drip/sprinkler systems, improving year-round irrigation access.
- Decentralized Planning:** Empowers district and block-level authorities to prioritize interventions aligned with local water scarcity and cropping patterns.

Impact & Relevance

- Water Savings:** Micro-irrigation can reduce water use by **30–60%** while increasing yields by **20–50%** for crops like vegetables, fruits, and pulses.
- Climate Resilience:** Enhances adaptive capacity in drought-prone and water-stressed regions—over **600 districts** in India face recurring water scarcity.
- Income Security:** By stabilizing irrigation and reducing input costs, the scheme supports the government’s goal of **doubling farmers’ income** by 2027.

Additional Info

- PMKSY Structure:**
 - Accelerated Irrigation Benefit Programme (AIBP):** For large irrigation projects.
 - Har Khet Ko Pani:** For water source augmentation.
 - Per Drop More Crop (PDMC):** For on-farm water efficiency.
- Performance Metrics (as of 2024):**
 - Over **110 lakh hectares** brought under micro-irrigation since 2015.
 - ₹7,000+ crore** allocated under PDMC in the last five years.
- Policy Linkages:**
 - Aligns with **National Water Policy (2012)** and **Jal Shakti Abhiyan**.
 - Supports **SDG 6** (Clean Water and Sanitation) and **SDG 2** (Zero Hunger).

Centre Launches ₹600 Crore 'Kapas Kranti Mission'

What's the News?

- The Central Government has launched the '**Kapas Kranti Mission**' with a budget allocation of **₹600 crore** to promote cultivation of **high-quality long-staple cotton** across India.
- The mission aims to enhance cotton productivity through **scientific research, technological innovation, and improved extension services** for farmers.

- The initiative focuses on replicating the successful **High-Density Plantation (HDP)** technique from Maharashtra's Akola region to suitable areas in **Telangana** and other cotton-growing states.

Understanding the Kapas Kranti Mission

- Primary objectives:**
 - Promote cultivation of **long-staple cotton** varieties with superior quality and market value.
 - Increase **cotton productivity** through adoption of modern farming techniques.
 - Bridge the gap between **research and field application** for cotton cultivation.
 - Enhance **farmers' income** through better quality produce and market linkages.
- Key implementation strategies:**
 - Organizing **study tours** for Telangana farmers to visit Akola region in Maharashtra.
 - Providing **quality seeds** and technical support for adopting HDP methodology.
 - Establishing **122 cotton procurement centers** across Telangana post-Diwali.
 - Launching '**Cotton Kisan App**' for slot booking and transparent procurement process.
- Expected outcomes:**
 - Significant **increase in yield** through HDP technique (proven in Akola region).
 - Reduction in **middlemen exploitation** through direct farmer-buyer connections.
 - Improved **price realization** for farmers through quality-based pricing.
 - Enhanced **export potential** for Indian long-staple cotton in global markets.

Institutional Framework and Implementation

- Procurement mechanism:**
 - Cotton Corporation of India (CCI)** will manage procurement through newly established centers.
 - 345 ginning centers** identified across Telangana with formal agreements with CCI.
 - Each procurement center will have a **district-level committee** led by Collector.
 - Committee composition includes officials from revenue department, police, and farmer representatives.
- Farmer support systems:**
 - Five-day awareness campaign** (October 21–24) to educate farmers about procurement process.
 - Mobile application** for transparent slot booking and timely delivery of produce.
 - Field demonstrations** of HDP technique in farmers' fields for practical learning.
 - Quality testing facilities** at procurement centers to ensure fair price based on quality.
- Strategic significance:**
 - Positions India to compete in **global premium cotton markets** currently dominated by countries like the US and Egypt.
 - Supports **textile industry** by ensuring domestic supply of high-quality raw material.

- Aligns with **Atmanirbhar Bharat** initiative in agriculture and textile sectors.
- Complements **PM-KISAN** and other agricultural welfare schemes.

Additional Information

- **Historical context:**
 - **Telangana** has emerged as **India's largest cotton producer** with approximately **24 lakh cotton farmers**.
 - Government cotton procurement increased from **173 lakh bales** (2004-2014) to **473 lakh bales** (2014-2024).
 - Procurement value surged from **₹24,825 crore** to **₹1.37 lakh crore** over the same period.
 - **Minimum Support Price (MSP)** for cotton has nearly doubled in the last decade.
- **Technical details of HDP method:**
 - Involves planting **more plants per unit area** with optimized spacing.
 - Requires **scientific irrigation** and nutrient management practices.
 - Enables **multiple pickings** of cotton bolls at optimal maturity.
 - Results in **higher yield and better quality** compared to conventional methods.

Cabinet Approves ₹37,952 Crore Subsidy for Rabi Season 2025-26

What's the News?

- The **Union Cabinet** has approved the **Nutrient Based Subsidy (NBS)** rates for **Phosphatic and Potassic (P&K) fertilizers** for the **Rabi Season 2025-26**.
- A total subsidy outlay of **₹37,952.29 crore** has been approved for the season, which runs from **October 1, 2025, to March 31, 2026**.
- The decision aims to ensure the smooth and affordable availability of **28 grades** of P&K fertilizers, including **Di-Ammonium Phosphate (DAP)**, to farmers during the winter sowing season.

Nutrient-Based Subsidy (NBS) Scheme

- **Objective:**
 - Provide **fixed per-kg subsidies** based on nutrient content (N, P, K, S) in P&K fertilizers.
 - Promote **balanced fertilizer use** aligned with soil health and crop needs.
 - Ensure **fiscal efficiency** and **market competition** among fertilizer producers.
- **Coverage:**
 - **28 grades** of P&K fertilizers, including **Di-Ammonium Phosphate (DAP)** and **NPKS blends**.
 - **Urea** is **excluded** from NBS and remains under statutory price control (MRP: ₹242 per 45-kg bag since 2018).
- **Implementation:**
 - Administered by the **Department of Fertilizers**, Ministry of Chemicals and Fertilizers.

- Fertilizer companies fix MRPs but are expected to keep them **reasonable**, with government monitoring.

Key Subsidy Revisions for Rabi 2025-26

- **Phosphate:** ₹47.96/kg (up from ₹43.60/kg in Kharif 2025)
- **Sulphur:** ₹2.87/kg (up from ₹1.77/kg)
- **Nitrogen:** ₹43.02/kg (unchanged)
- **Potash:** ₹2.38/kg (unchanged)
- **Total outlay:** ₹37,952 crore — ₹736 crore higher than Kharif 2025 and ₹14,000 crore more than Rabi 2024-25

Additional Info

- **What is the Nutrient Based Subsidy (NBS) Scheme?**
 - Launched in **April 2010**.
 - Under this scheme, the government fixes the subsidy on a **per-kilogram basis** for different nutrients (N, P, K, S).
 - This subsidy is paid to fertilizer manufacturers and importers, allowing them to sell P&K fertilizers at reasonable prices.
- **Key Exclusion:**
 - The NBS scheme **does not cover Urea**. Urea prices are separately controlled and fixed by the government.

Important Days

Ministry of Social Justice Celebrates International Day of Older Persons 2025

What's the News?

- The Ministry of Social Justice and Empowerment celebrated the International Day of Older Persons (IDOP) 2025 on October 1, 2025, at the Vigyan Bhawan, New Delhi.
- The event highlighted India's commitment to active ageing, social inclusion, and dignified care for the elderly, aligning with the 2025 global theme: "Care, Support, and Inclusion: For All Ages".
- The celebration featured policy announcements, recognition of senior citizens' contributions, and discussions on strengthening institutional and community-based support systems.

Focus on Ageing in India

Demographic Shift:

- India's elderly population (aged 60+) is projected to reach 340 million by 2050, up from 149 million in 2023 (UNFPA India Ageing Report, 2023).
- The share of older persons in the total population is expected to rise from 10.5% to 20.8% by 2050.

Key Government Initiatives:

- Indira Gandhi National Old Age Pension Scheme (IGNOAPS):
 - Provides ₹300–₹500/month to beneficiaries aged 60+ below the poverty line (BPL); ₹700–₹1,000 for those 80+.
 - Covers over 2.5 crore beneficiaries (as of 2024).
- Rashtriya Vayoshri Yojana (RVY):
 - Offers aid and assistive devices (e.g., hearing aids, wheelchairs) to BPL senior citizens with age-related disabilities.
- SACRED Portal:
 - Senior Able Citizens for Re-Employment in Dignity—a digital platform connecting elderly job-seekers with employers.
- Elder Line (14567):
 - A 24x7 toll-free helpline for elderly in distress; handled over 20 lakh calls since inception in 2021.

Additional Info

- International Day of Older Persons:
 - Established by the United Nations General Assembly in 1991.
 - Observed annually on October 1 to raise awareness about issues affecting the elderly and to appreciate their contributions.
- Legal & Policy Framework in India:
 - Maintenance and Welfare of Parents and Senior Citizens Act, 2007:

- Mandates children or relatives to provide monthly maintenance to senior citizens.
- Establishes Tribunals for speedy redressal; maintenance ceiling raised to ₹10,000/month in 2019 amendment.

- National Policy for Older Persons (NPOP), 1999:

- Revised draft (2024) emphasizes healthcare access, income security, social participation, and age-friendly infrastructure.

- Constitutional Provisions:

- Article 41: Directive Principle urging the State to provide public assistance in cases of old age.
- Article 46: Promotes educational and economic interests of weaker sections, including elderly from SC/ST communities.

Gandhi Jayanti 2025: Honoring the Legacy of Mahatma Gandhi

What's the News?

- Gandhi Jayanti was observed on October 2, 2025, marking the 156th birth anniversary of Mahatma Gandhi, the Father of the Nation.
- The day is a national gazetted holiday and was commemorated across India with tributes from the President, Prime Minister, and other dignitaries at Raj Ghat, New Delhi.
- The observance reaffirmed national commitment to Gandhi's core principles of truth (Satya), non-violence (Ahimsa), and social justice, which remain central to India's constitutional ethos and global identity.

Significance of Gandhi Jayanti

- National Observance:
 - Celebrated annually on October 2, irrespective of the day of the week.
 - Recognized globally as the International Day of Non-Violence by the United Nations General Assembly (since 2007).
- Core Values Emphasized:
 - Ahimsa (Non-violence): Cornerstone of India's freedom struggle and foreign policy.
 - Sarvodaya: Welfare of all, especially the marginalized.
 - Swachhata (Cleanliness): Integral to Gandhi's vision; linked to the Swachh Bharat Mission.
- Official Ceremonies:
 - Wreath-laying at Raj Ghat, New Delhi, by the President, Prime Minister, and service chiefs.
 - Prayer meetings, readings from Gandhi's writings, and singing of his favorite bhajan, "Raghupati Raghava Raja Ram."

Additional Info

- **Constitutional & Policy Linkages:**
 - **Article 51A** (Fundamental Duties): Mandates citizens to “renounce practices derogatory to the dignity of women” and promote harmony—values deeply rooted in Gandhian thought.
 - **Directive Principles of State Policy (Part IV):** Reflect Gandhi's vision of village self-governance (**Gram Swaraj**) and equitable development.
- **Key Government Initiatives Inspired by Gandhi:**
 - **Swachh Bharat Mission (SBM):**
 - Launched on **October 2, 2014**, to fulfill Gandhi's dream of a clean India.
 - Achieved **Open Defecation Free (ODF)** status in all rural areas by 2019.
 - **Khadi and Village Industries Commission (KVIC):**
 - Promotes **Khadi** as a symbol of self-reliance and sustainable livelihoods.
 - Employs over **35 lakh artisans** (as of 2024).
- **International Recognition:**
 - UNESCO includes Gandhi's writings in its **Memory of the World Register**.
 - Over **50 countries** observe October 2 as a day of peace or non-violence.

Swachh Bharat Diwas 2025: Reinforcing Gandhi's Vision of Cleanliness

What's the News?

- **Swachh Bharat Diwas** was observed on **October 2, 2025**, coinciding with **Gandhi Jayanti**, the birth anniversary of **Mahatma Gandhi**, who championed cleanliness as integral to personal and national dignity.
- The **Department of Drinking Water and Sanitation (DDWS)**, under the **Ministry of Jal Shakti**, led a **collective shramdaan** (voluntary service) at the CGO Complex in New Delhi, involving all senior officials.
- This event marked the culmination of the **Swachhata Hi Seva (SHS) 2025** campaign, which mobilized over **16 crore citizens** nationwide, cleaned nearly **14 lakh Cleanliness Target Units (CTUs)** and **5 lakh public spaces**, and organized over **1.50 lakh Safai Mitra Suraksha Shivirs**.

Significance of Swachh Bharat Diwas

- **Historical Linkage:**
 - October 2 is observed as **Swachh Bharat Diwas** to honor **Mahatma Gandhi's** lifelong **emphasis on sanitation and hygiene** as pillars of public health and self-respect.
 - The day also commemorates the birth anniversary of former Prime Minister **Lal Bahadur Shastri**, reinforcing national values of simplicity and service.
- **Campaign Framework:**
 - **Swachhata Hi Seva 2025** ran from **September 17 to October 2**, jointly coordinated by the **Ministry of Housing and**

Urban Affairs (MoHUA) and Ministry of Jal Shakti.

- Focused on transforming **difficult and dirty spots** into clean public spaces through **Jan Andolan** (people's movement).
- **Citizen Participation Metrics:**
 - **16 crore+ citizens** participated voluntarily.
 - **14 lakh CTUs** and **5 lakh public spaces** cleaned.
 - **1.50 lakh+ Safai Mitra Suraksha Shivirs** (safety camps for sanitation workers) conducted.

Additional Info

- **Swachh Bharat Mission (SBM):**
 - Launched on **October 2, 2014**, to fulfill Gandhi's vision of a clean India.
 - **Phase I (2014–2019):** Achieved **Open Defecation Free (ODF)** status in all rural areas.
 - **Phase II (2020–2025):** Focuses on **ODF+ and ODF++**, emphasizing **solid and liquid waste management (SLWM)** in all villages.
- **Constitutional & Policy Anchors:**
 - **Article 47** (Directive Principles): Mandates the State to raise nutrition and public health standards.
 - **Article 51A(g)** (Fundamental Duty): Obliges citizens to protect the environment and show compassion for living creatures—aligned with sanitation ethics.
- **Institutional Mechanisms:**
 - **Safai Mitra Suraksha Shivir:** Ensures safety, dignity, and health of sanitation workers; promotes mechanized cleaning.
 - **Swachhata Hi Seva Portal** (<https://swachhatahiseva.gov.in/>): Real-time monitoring of citizen participation and CTU cleaning.

World Animal Day 2025: Centenary Observance with Theme “Save Animals, Save the Planet”

What's the News?

- **World Animal Day** is observed globally on **October 4**, and **2025 marks its 100th anniversary**.
- The theme for 2025 is **“Save Animals, Save the Planet”**, highlighting the intrinsic link between **animal welfare** and **planetary health**, especially in the context of biodiversity loss, habitat degradation, and climate change.
- In India, the day is leveraged by the **Animal Welfare Board of India (AWBI)** and state authorities to **sensitize the public**, promote **compassionate coexistence**, and strengthen implementation of animal protection laws.

Significance & Global-India Linkage

- **Historical Origin:**
 - First observed in **1925** in Berlin by German writer and activist **Heinrich Zimmermann**.

- The date was shifted to **October 4 in 1929** to align with the feast day of **St. Francis of Assisi**, the patron saint of animals.
- **2025 Centenary Focus:**
 - Emphasis on **100 Acts of Kindness**—global citizens are encouraged to pledge actions like litter-picking, plastic reduction, or supporting animal shelters.
 - Special initiatives include **illustrated commemorative stamps, mug design contests, and community events** registered on a global map.
- **India's Observance:**
 - AWBI issues annual advisories for state-level celebrations, including school campaigns, veterinary camps, and awareness drives.
 - Recent examples include the launch of an **Animal Helpline Ambulance Service** in Keonjhar, Odisha, on World Animal Day 2025.
 - Aligns with India's **spiritual ethos**—many temples conduct **animal blessing ceremonies**, reflecting cultural reverence for life.

Additional Info

- **Legal & Institutional Framework in India:**
 - **Prevention of Cruelty to Animals Act, 1960:** Primary legislation governing animal welfare; administered by AWBI under the **Ministry of Fisheries, Animal Husbandry and Dairying**.
 - **Animal Welfare Board of India (AWBI):**
 - Statutory body established in **1962** under Section 4 of the PCA Act.
 - Mandate includes **advising governments, granting recognition to animal welfare organizations, and issuing guidelines** on humane treatment.
 - **Constitutional Provisions:**
 - **Article 48A** (DPSP): Directs the State to protect and improve the environment and safeguard forests and wildlife.
 - **Article 51A(g)** (Fundamental Duty): Imposes a duty on every citizen to “protect and improve the natural environment including forests, lakes, rivers and wildlife, and to have compassion for living creatures.”
- **Global Relevance:**
 - Recognized by the **United Nations Environment Programme (UNEP)** as a key platform for **One Health** and **sustainable development** advocacy.
 - Supports **SDG 14 (Life Below Water)** and **SDG 15 (Life on Land)** through conservation messaging.

World Cerebral Palsy Day 2025

What's the News?

- **World Cerebral Palsy Day** is observed globally on **October 6**, including in India, to promote inclusion, raise awareness, and celebrate the lives of people with cerebral palsy (CP).
- The theme for 2025 is **“Unique and United”**, emphasizing both individuality and collective strength within the CP community.
- The day serves as a platform to advocate for equal rights, accessibility, and improved healthcare and social support for persons with CP.

Understanding Cerebral Palsy and the 2025 Theme

- **Cerebral Palsy** is a group of permanent movement disorders appearing in early childhood, caused by abnormal brain development or damage to the developing brain. It affects body movement, muscle control, coordination, reflexes, posture, and balance.
- The **“Unique and United”** theme highlights:
 - The **diversity of experiences** among individuals living with CP.
 - The **shared understanding and solidarity** that unites the global CP community.
- In India, CP affects an estimated **3 per 1,000 live births**, and accounts for **15–20% of all physically disabled children**.

Additional Info

- **Global Observance:**
 - First observed in **2012**, World CP Day is now celebrated in over **75 countries**, reaching more than **24 million people** through awareness campaigns and community events.
 - Coordinated by a coalition of international NGOs, including **Cerebral Palsy Alliance (Australia)** and **United Cerebral Palsy (USA)**.
- **Policy and Support Framework in India:**
 - **Rights of Persons with Disabilities (RPwD) Act, 2016:**
 - Recognizes **cerebral palsy** as a specified disability under **Section 2(s)**.
 - Mandates **non-discrimination, inclusive education, accessible infrastructure, and social security benefits**.
 - **National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities:**
 - Established under the **National Trust Act, 1999**.
 - Provides support through schemes like **Ghare Ghare Naukri** (home-based employment), **Sahayata** (caregiver support), and **Niramaya** (health insurance).
 - **Accessible India Campaign (Sugamya Bharat Abhiyan):**
 - Aims to achieve universal accessibility in **built environment, transportation, and ICT** for persons with disabilities, including those with CP.

World Habitat Day 2025: Urban Crisis Response

What's the News?

- **World Habitat Day 2025** is observed globally on **October 6**, with the theme "**Urban Crisis Response**".
- The day, established by the **United Nations** in **1985**, reaffirms the **basic human right to adequate shelter** and emphasizes the collective responsibility to shape sustainable, inclusive, and resilient cities.
- The 2025 observance focuses on tackling **urban displacement, climate change, conflict-induced vulnerabilities, and housing inequality**, with special attention to scalable, community-driven solutions.

Urban Crisis Response: Theme and Relevance

The "**Urban Crisis Response**" theme addresses the growing fragility of urban systems under multiple stressors:

- **Climate shocks:** Rising temperatures, floods, and heat islands disproportionately affect informal settlements.
- **Conflict and displacement:** Urban areas host over **60% of the world's displaced populations**, straining infrastructure and services.
- **Housing deficit:** In India, states like **Bihar** reflect acute challenges—only **36.76% of households live in concrete houses with two or more rooms**, while **0.24% remain completely homeless**.
- **Inclusive planning:** The theme advocates for **participatory governance, affordable housing policies, and climate-resilient infrastructure** as core crisis-response tools.

Additional Info

- **UN-Habitat:**
 - The **United Nations Human Settlements Programme (UN-Habitat)** coordinates World Habitat Day.
 - It promotes the **New Urban Agenda (2016)** and **Sustainable Development Goal 11 ("Make cities inclusive, safe, resilient and sustainable")**.
- **India's Urban Housing Schemes:**
 - **Pradhan Mantri Awas Yojana (PMAY):**
 - Aims to provide "**Housing for All**" by **2024** (extended in phases).
 - Includes **PMAY-U (Urban)** targeting slum rehabilitation, affordable housing through credit-linked subsidies, and beneficiary-led construction.
 - **State-level Initiatives:**
 - Bihar's **Mukhyamantri Vas Sthal Kray Sahayata Yojana** provides **₹2 lakh** to landowners for home construction and supports landless families through institutional housing.
- **Global Recognition:**
 - The **UN-Habitat Scroll of Honour Award**, instituted in **1989**, honors outstanding contributions to urban development.
 - The **2025 awardees** include innovators in **housing rights monitoring, climate-smart**

urban agriculture, and participatory urban regeneration.

93rd Indian Air Force Day

What's the News?

- India commemorated the **93rd Indian Air Force Day**, celebrating the establishment of the Indian Air Force as a critical component of national defense.
- **Top military leadership**, including Chief of Defence Staff General Anil Chauhan, Army Chief General Upendra Dwivedi, Navy Chief Admiral Dinesh K Tripathi, and Air Force Chief Air Chief Marshal Amar Preet Singh, paid tributes to fallen heroes at the **National War Memorial** in New Delhi.
- The **President, Vice President, and Prime Minister** extended formal greetings acknowledging the IAF's contributions to national security and humanitarian operations.
- Senior leadership highlighted the IAF's role in critical operations including **Operation Sindoora** and disaster response missions across the country.

Evolution of India's Air Power Capabilities

- The **Indian Air Force** was formally established as an auxiliary air force of the **Royal Air Force** on **October 8, 1932**, and has since evolved into one of the world's largest and most capable air forces.
- Today, the IAF operates over **1,700 aircraft** across **60+ airbases** with a personnel strength of approximately **140,000** active personnel.
- Recent modernization efforts include integration of **indigenously developed systems** like the **Tejas Light Combat Aircraft** and acquisition of advanced platforms such as the **Rafale fighter jets**.
- The IAF has expanded its role beyond traditional defense to include **humanitarian assistance and disaster relief (HADR)** operations, **strategic airlift** capabilities, and **space-based asset protection**.

Additional Information

- **Strategic Framework:**
 - Operates under the **Ministry of Defence** as per **Article 53** of the Constitution
 - Functions guided by the **Defence Planning Committee** and **Integrated Defence Staff**
 - Key component of India's **comprehensive national security strategy**
- **Organizational Structure:**
 - Divided into **seven operational commands** and **one training command**
 - Includes specialized units for **strategic strike, defence of vital areas, transport, and training**
 - Works closely with **Defence Space Agency** and **Cyber Agency** for integrated operations
- **Historical Milestones:**
 - Achieved independent status from Royal Air Force in **1945**
 - Played decisive roles in all major conflicts including **1947-48, 1965, 1971**, and **Kargil War (1999)**

- Successfully executed **Operation Meghdoot** (Siachen), **Operation Pawan** (Sri Lanka), and recent **Balakot** airstrike
- **Modernization Initiatives:**
 - **Project TEDBF** (Twin Engine Deck Based Fighter) for naval operations
 - **Advanced Medium Combat Aircraft (AMCA)** indigenous fifth-generation fighter program
 - **UAV development** including the **Rustom** series and **Ghatak** stealth UCAV
 - Integration of **AI and data analytics** for enhanced situational awareness
- Guarantees the **right to access mental healthcare**.
- Mandates **mental health services in every district**.
- **National Tele-Mental Health Programme (NTMHP):**
 - Launched in **2022** under **Ayushman Bharat Digital Mission**.
 - Connects **23 tele-mental health centres** across the country via a toll-free helpline (14416).
 - Offers free counselling in multiple languages, especially critical during emergencies.

World Mental Health Day 2025

What's the News?

- **World Mental Health Day** is observed globally on **October 10**, with the 2025 theme officially announced as "**Mental health in humanitarian emergencies**".
- The theme underscores the urgent need to ensure **mental health and psychosocial support (MHPSS)** for populations affected by natural disasters, conflicts, and other humanitarian crises.
- In India, the day serves as a reminder of the critical link between mental well-being and overall health, with the **Prime Minister** emphasizing mental health as a **fundamental component of national well-being**.

Theme Focus: Mental Health in Emergencies

- The 2025 theme highlights that **disasters—whether natural, man-made, or public health emergencies—disproportionately impact mental health**, yet access to care remains limited in crisis settings.
- Key objectives include:
 - Ensuring **timely, equitable, and quality mental health services** during and after emergencies.
 - Integrating **MHPSS into national disaster response frameworks**.
 - Building **community resilience** through trained frontline workers and tele-counselling mechanisms.
- Globally, the **World Health Organization (WHO)** is leading advocacy to prioritize mental health in humanitarian action, noting that **less than 1% of global humanitarian aid is allocated to mental health**.

Additional Info

- **World Mental Health Day:**
 - First celebrated in **1992** by the **World Federation for Mental Health (WFMH)**.
 - Aims to **raise awareness, reduce stigma, and mobilize support** for mental health policies and services worldwide.
- **India's Mental Health Landscape:**
 - **National Mental Health Policy (2014):** Envisions accessible, affordable, and quality mental healthcare for all.
 - **Mental Healthcare Act, 2017:**
 - Decriminalized suicide.

- Guarantees the **right to access mental healthcare**.
- Mandates **mental health services in every district**.
- **National Tele-Mental Health Programme (NTMHP):**
 - Launched in **2022** under **Ayushman Bharat Digital Mission**.
 - Connects **23 tele-mental health centres** across the country via a toll-free helpline (14416).
 - Offers free counselling in multiple languages, especially critical during emergencies.

International Day for Disaster Risk Reduction 2025: "Fund Resilience, Not Disasters"

What's the News?

- The **International Day for Disaster Risk Reduction (IDDRR)** was observed globally on **October 13, 2025**, with the theme "**Fund Resilience, Not Disasters**".
- The day, established by the **United Nations General Assembly (UNGA)** in **1989**, aims to promote a global culture of **risk awareness** and **disaster preparedness**.
- The 2025 theme underscores an urgent call to **shift financial priorities** from post-disaster relief to **pre-emptive investments in resilience**, especially for **vulnerable and marginalized communities**.

Why "Fund Resilience, Not Disasters"?

- **Rising Disaster Costs:** Direct annual disaster losses are estimated at **\$202 billion**, but the **true economic cost**—including indirect impacts on health, education, and livelihoods—is nearly **\$2.3 trillion**, over **11 times higher**.
- **Risk-Blind Development:** Poorly planned infrastructure, urbanization, and climate-uninformed investments are **increasing exposure** and **deepening vulnerabilities**, especially in low-income regions.
- **Financing Gap:** Despite evidence that **every \$1 invested in disaster risk reduction (DRR)** saves **\$6-\$15 in future losses**, DRR remains underfunded in both **national budgets** and **international aid**.

Key Global & Indian Relevance

- **UNDRR Leadership:** The campaign is led by the **UN Office for Disaster Risk Reduction (UNDRR)**, with **Kamal Kishore** (India's former NDMA member) serving as **UN Secretary-General's Special Representative for DRR**.
- **Link to SDGs:** Effective DRR is critical for achieving **Sustainable Development Goals (SDGs)**, particularly **SDG 1 (No Poverty)**, **SDG 11 (Sustainable Cities)**, and **SDG 13 (Climate Action)**.
- **India's Context:**
 - India faces **multi-hazard risks**—floods, cyclones, heatwaves, earthquakes—with over **75% of districts** classified as **disaster-prone**.

- The **National Disaster Management Authority (NDMA)** and **State Disaster Response Funds (SDRF)** are key institutional mechanisms, but **local-level DRR financing** remains inadequate.

Additional Info

- **Sendai Framework for Disaster Risk Reduction (2015–2030):**
 - A global agreement adopted by **187 UN member states**, including India.
 - Contains **4 Priorities:**
 - Understanding disaster risk
 - Strengthening governance
 - Investing in DRR for resilience
 - Enhancing preparedness for response and “Build Back Better”
 - **7 Global Targets**, including **Target E: Substantially increase the number of countries with national and local DRR strategies by 2020** (achieved by 123 countries, including India).
- **Constitutional & Policy Links:**
 - **Disaster Management Act, 2005:** Established NDMA, NIDM, and institutionalized DRR in India.
 - **15th Finance Commission:** Recommended **10% of SDRF** be used for **local-level mitigation projects**.
 - **National Disaster Risk Reduction Strategy (draft):** Aims to integrate DRR into all sectoral planning.

World Standards Day 2025: Spotlight on Global Cooperation for Sustainable Development

What's the News?

- World Standards Day is observed globally on **October 14, 2025**, with the theme **“A Shared Vision for a Better World: Spotlight on SDG 17 – Partnerships for the Goals”**.
- The day honors the collaborative work of experts from international standard-setting bodies—**ISO (International Organization for Standardization)**, **IEC (International Electrotechnical Commission)**, and **ITU (International Telecommunication Union)**—in developing technical standards that underpin safety, innovation, and global trade.

Significance of Standards in Global Development

- **Standards as Enablers of SDGs:** International standards provide measurable frameworks to achieve the **United Nations Sustainable Development Goals (SDGs)**, particularly **SDG 17**, which emphasizes multi-stakeholder partnerships for technology transfer, capacity building, and systemic coherence.
- **Economic & Safety Impact:** Standards ensure product safety, interoperability, and quality, facilitating **smooth cross-border trade** and protecting public health—especially critical in sectors like healthcare, energy, and digital infrastructure.

- **Inclusive Innovation:** By harmonizing technical specifications globally, standards reduce trade barriers and enable developing countries to integrate into global value chains.

Key Institutional Framework

- **Founding Milestone:** Originated from a **1946 London conference** of 25 nations that led to the creation of ISO in 1947.
- **Standard Development Process:** Involves multi-year consensus-building—proposal, technical committee review, draft circulation, and voting by national members—ensuring transparency and technical rigor.
- **National Participation:** In India, the **Bureau of Indian Standards (BIS)** acts as the national member to ISO and IEC, aligning domestic standards with global benchmarks.

Constitutional & Policy Linkages:

- **Article 51(c):** Encourages international cooperation, including adherence to global norms and standards.
- **Make in India & PLI Schemes:** Rely on conformity to international standards to enhance export competitiveness.
- **National Standards Strategy (Draft):** Aims to increase India's participation in global standard-setting bodies to protect domestic industry interests.

World Students' Day 2025: Celebrating Dr. APJ Abdul Kalam's Legacy

What's the News?

- World Students' Day is observed annually on **October 15** to commemorate the birth anniversary of **Dr. A.P.J. Abdul Kalam**, the 11th President of India and a renowned aerospace scientist.
- The day is widely celebrated across India to honor Dr. Kalam's lifelong commitment to education, scientific temper, and youth empowerment.

Significance of the Day

- Celebrates **Dr. Kalam's belief** that students are the cornerstone of national development.
- Reinforces values of **scientific inquiry, ethical leadership, and social responsibility**.
- Encourages institutions to move beyond rote learning toward **practical innovation and critical thinking**.

Additional Info

- **Dr. A.P.J. Abdul Kalam (1931–2015):**
 - Born in **Rameswaram, Tamil Nadu**, into a modest family; supported his education by selling newspapers.
 - Played a pivotal role in India's **missile and space programs** at **DRDO** and **ISRO**; known as the **“Missile Man of India.”**
 - Served as **President of India (2002–2007)**; famously called the **“People's President.”**
 - Authored influential books like *Wings of Fire* and *India 2020*, advocating for a **developed India through education and technology**.
- **Constitutional & Policy Linkages:**

- Aligns with **Article 21-A** (Right to Education) and **National Education Policy (NEP) 2020**, which emphasizes **critical thinking, multidisciplinary learning, and student-centric pedagogy**.
- Supports **SDG 4 (Quality Education)** and **SDG 9 (Industry, Innovation, and Infrastructure)**.

World Food Day 2025: “Hand in Hand for Better Foods and a Better Future”

What's the News?

- World Food Day 2025 will be observed globally on **16 October 2025** under the theme **“Hand in Hand for Better Foods and a Better Future”**.
- This year marks the **80th anniversary** of the founding of the **Food and Agriculture Organization (FAO)**, with a series of global events, including the inauguration of the **Food and Agriculture Museum and Network** at FAO headquarters in Rome.
- **FAO's 80th Anniversary**: Commemorated through year-long **#FAO80** events, including a **virtual exhibition on “FAO and India – 80 Years of Impact”** (September–October 2025) showcasing decades of technical cooperation in agriculture, nutrition, and rural development.
- **Flagship Events**: A **World Food Week** (10–17 October) in Rome will feature policy dialogues, cultural showcases, and the **World Food Forum**, engaging global leaders including representatives from Brazil and Lesotho.
- **Food and Agriculture Museum**: A new **permanent educational space** at FAO HQ will offer immersive experiences on food systems, blending art, technology, and live workshops to foster public engagement.

Additional Info

- **World Food Day**:
 - Established in **1979** by FAO's General Conference.
 - Observed in **over 150 countries**, making it one of the most widely celebrated UN days.
 - Aims to raise awareness about **hunger, malnutrition, food security, and sustainable agriculture** despite global food sufficiency.
- **FAO-India Collaboration**:
 - Began in **1948**, focusing on crop diversification, soil health, livestock development, and climate-resilient farming.
 - Supported key Indian initiatives like the **National Food Security Mission** and **Zero Hunger Programme**.

International Day for the Eradication of Poverty 2025: Focus on Dignity and Justice

What's the News?

- The **International Day for the Eradication of Poverty** will be observed globally on **17 October 2025**

- This year's theme focuses on "**Ending Social and Institutional Maltreatment: Ensuring respect and effective support for families living in poverty**"
- The day aims to promote understanding and dialogue between people living in poverty and wider society

India's Poverty Landscape

- **Poverty Reduction Progress**: India has made significant strides in poverty reduction, lifting approximately 415 million people out of multidimensional poverty between 2005-06 and 2019-21 according to the **National Multidimensional Poverty Index (MPI)**
- **Current Status**: As per latest available data, India's poverty rate has declined to approximately 11.9% of the population living below the poverty line
- **Regional Disparities**: Significant variations exist across states, with southern and western states showing better performance than eastern and central regions

Government Initiatives for Poverty Alleviation

- **National Rural Livelihoods Mission (NRLM)**: A poverty reduction program implemented by the Ministry of Rural Development, focusing on self-employment and skill development
- **Pradhan Mantri Awas Yojana (PMAY)**: Aims to provide affordable housing for the urban and rural poor by 2024
- **Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)**: World's largest health insurance scheme providing coverage up to ₹5 lakh per family annually
- **National Food Security Act (NFSA), 2013**: Provides subsidized food grains to approximately two-thirds of India's population
- **Digital India**: Promotes digital literacy and access to government services, reducing exclusion of marginalized communities

Additional Info

- **Historical Context**:
 - Originated from a gathering of over 100,000 people at Paris's Trocadéro on 17 October 1987
 - Formally adopted by the United Nations in 1992 through General Assembly Resolution 47/196
 - Inspired by activist **Father Joseph Wresinski** and his organization **ATD Fourth World**
- **Link to Sustainable Development Goals**:
 - Directly connects to **SDG 1**: "End poverty in all its forms everywhere" by 2030
 - India's progress on SDG 1 influences achievement of other goals including **SDG 2** (Zero Hunger), **SDG 3** (Good Health), and **SDG 4** (Quality Education)

Police Commemoration Day and SMART Policing Initiatives

What's the News?

- On **Police Commemoration Day**, observed annually on **October 21**, national leaders paid tributes to police personnel who sacrificed their lives in the line of duty.

- The day specifically honours **ten Central Reserve Police Force (CRPF)** personnel killed in 1959 during a clash with Chinese troops at **Hot Springs** in Ladakh.

Why is Police Commemoration Day Observed?

- Marks the **1959 Hot Springs incident**, where Chinese forces opened fire on an Indian police patrol, killing 10 and capturing 7 others.
- Since **2012**, a **National-level Police Commemoration Day Parade** is held at the **National Police Memorial** in Chanakyapuri, New Delhi.
- A **memorial at Hot Springs** is visited annually by police contingents from across India to pay homage.

National Police Memorial

- Inaugurated in **2018** at Chanakyapuri, New Delhi.
- Comprises:
 - Central Sculpture**: 30-feet granite monolith symbolizing strength and selfless service.
 - Wall of Valour**: Engraved with names of police martyrs since Independence.
 - Museum**: Chronicles the evolution of policing in India; open to public except on Mondays.

SMART Policing Initiative

Coined by the Prime Minister in **2014**, **SMART Policing** aims to modernize police forces to meet contemporary security challenges:

- S** – Strict and Sensitive
- M** – Modern and Mobile
- A** – Alert and Accountable
- R** – Reliable and Responsive
- T** – Tech-savvy and Trained

Key components include:

- Cybercrime prevention** and digital forensics
- Drug de-addiction** programs
- Capacity building** with modern equipment
- Protection of vulnerable sections**
- Countermeasures against Left-Wing Extremism**

Related Schemes and Platforms

- Assistance to States for Modernisation of Police (ASUMP)**:
 - Replaced the earlier **Modernisation of Police Forces (MPF)** scheme.
 - Focuses on **technology infusion, weaponry upgrades, communication systems, and infrastructure development** like police stations.
 - States select a **thematic component annually** (e.g., cyber policing equipment) to achieve minimum operational standards.
- CyTrain Portal**:
 - A **Massive Open Online Courses (MOOC)** platform.
 - Offers training in **cybercrime investigation, digital forensics, and prosecution** for police and judicial officers.
- Cyber Crime Prevention against Women and Children (CCPWC)**:
 - Supports states in setting up **cyber forensic-cum-training labs**.

- Funds hiring of **junior cyber consultants** and training of **law enforcement, prosecutors, and judges**.

United Nations Day 2025

What's the News?

- United Nations Day** will be observed globally on **October 24, 2025**, commemorating the anniversary of the **UN Charter** coming into force in 1945.
- The day celebrates the UN's role in promoting **global peace, human rights, and sustainable development** worldwide.
- As of current information, the official theme for **United Nations Day 2025** has not yet been announced by the UN Secretariat.

History of United Nations Day

- Origins**: Established following the end of **World War II**, when global leaders recognized the need for an international organization to prevent future conflicts.
- Key milestones**:
 - June 26, 1945**: Representatives from 50 nations signed the **UN Charter** in San Francisco.
 - October 24, 1945**: UN Charter officially came into effect after ratification by major founding countries and the five permanent members of the Security Council.
 - 1947**: UN General Assembly declared October 24 as **United Nations Day**.
 - 1971**: UN General Assembly recommended member states observe it as a **public holiday**.

Additional Info

- Principal Organs of the UN**: The UN system is built around six principal organs:
 - General Assembly**: The main deliberative and policymaking body.
 - Security Council**: Responsible for maintaining international peace and security.
 - Economic and Social Council (ECOSOC)**: Coordinates economic and social work.
 - International Court of Justice (ICJ)**: The principal judicial organ.
 - Secretariat**: Carries out the day-to-day work of the UN.
 - Trusteeship Council**: Established to supervise 'Trust Territories', it suspended operations in 1994.
- India and the UN**:
 - India was a **founding member** of the United Nations, signing the Charter in 1945.
 - India is one of the largest contributors to **UN Peacekeeping missions**.
 - India has been a long-standing advocate for reforms within the UN, particularly the expansion of the **UN Security Council (UNSC)** to better reflect contemporary global realities.

World Polio Day 2025

What's the News?

- World Polio Day will be observed globally on **October 24, 2025**, commemorating the birth anniversary of **Dr. Jonas Salk**, who developed the first polio vaccine in 1955.
- The 2025 theme "**End Polio: Every Child, Every Vaccine, Everywhere**" emphasizes the need for universal vaccine coverage to achieve complete eradication.
- Despite India's **polio-free certification** by WHO in 2014, vigilance remains crucial as neighboring countries **Afghanistan and Pakistan** still report polio cases.
- Global polio cases have decreased by **99.9%** since 1988, with only **188 cases** reported in the first nine months of 2025, down from over 500 cases in the previous year.

India's Polio-Free Journey

- **Historical achievement:**
 - India was officially declared **polio-free** by WHO in 2014 after three consecutive years without reported cases.
 - This success resulted from **nationwide immunization programs** ensuring every child received multiple doses of the polio vaccine.
 - The country overcame significant challenges including high population density, poor sanitation, and vaccine hesitancy.
- **Continued vigilance:**
 - India maintains **surveillance systems** to detect any potential polio re-emergence.
 - The **Pulse Polio Immunization program** continues with routine immunization drives.
 - Special focus on **high-risk areas** near international borders with endemic countries.

Global Polio Eradication Status

- **Current landscape:**
 - Polio remains **endemic only in Afghanistan and Pakistan**, a dramatic reduction from 127 countries affected when GPEI launched.
 - **Wild poliovirus type 1** is the only remaining strain, with types 2 and 3 certified eradicated in 2012 and 2019 respectively.
 - **Vaccine-derived poliovirus** cases continue to emerge in under-vaccinated communities across 33 countries.
- **Recent progress:**
 - Only **12 wild poliovirus cases** reported globally in 2025 (down from 99 in 2024).
 - **Gaza** successfully conducted large-scale polio immunization reaching 603,000 children in February 2025, preventing resurgence.
 - **Global funding** remains critical, with a reported **\$1.7 billion shortfall** for 2025 eradication efforts.

Additional Info

- **About Poliomyelitis (Polio):**
 - It is a highly infectious and life-threatening disease caused by the poliovirus.

- The virus primarily affects children under five and can invade the nervous system, causing irreversible paralysis.
- Polio is preventable through vaccination.

- **Types of Polio Vaccines:**
 - **Inactivated Poliovirus Vaccine (IPV):** Developed by **Jonas Salk**, it is a "killed" virus vaccine administered via injection.
 - **Oral Poliovirus Vaccine (OPV):** Developed by **Albert Sabin**, it is a "live" weakened virus vaccine given as oral drops.

Disarmament Week 2025: Promoting Global Peace and Security

What's the News?

Disarmament Week is observed annually from **October 24 to 30**, beginning on the anniversary of the founding of the **United Nations**. The week aims to raise public awareness about the importance of **disarmament, arms control, and non-proliferation** in fostering international peace, protecting civilians, and advancing sustainable development.

Why Disarmament Matters

- **Core Objective:** Reduce the global threat posed by **weapons of mass destruction (WMDs)** and **conventional arms** through diplomatic and multilateral efforts.
- **Humanitarian Focus:** Prevent civilian casualties, especially in conflict zones where heavy conventional weapons are used in populated areas.
- **Sustainable Development Link:** Redirect resources from military spending toward **healthcare, education, and infrastructure**, aligning with the **UN Sustainable Development Goals (SDGs)**.

Key Concerns in Contemporary Disarmament

- **Nuclear Weapons:** Remain a top priority due to their catastrophic humanitarian consequences; governed by treaties like the **Non-Proliferation Treaty (NPT)** and the **Comprehensive Nuclear-Test-Ban Treaty (CTBT)**.
- **Conventional Arms:** Illicit trade and excessive accumulation destabilize regions and fuel violence; addressed through instruments like the **Arms Trade Treaty (ATT)**.
- **Emerging Technologies:** Lethal autonomous weapons systems ("killer robots") and **cyberwarfare tools** pose new ethical and security challenges, prompting calls for international regulation.

UN's Role and Guterres' Disarmament Agenda

- The **United Nations** has led global disarmament since 1945, facilitating treaties, norms, and confidence-building measures.
- **Secretary-General António Guterres' "New Agenda for Disarmament"** emphasizes three goals:
 - **Save humanity** from nuclear threats
 - **Save lives** by curbing conventional weapons' impact on civilians
 - **Secure our common future** by regulating emerging weapon technologies

Historical Context

- Disarmament Week was established by the **United Nations General Assembly (UNGA)** in 1978.
- It was part of the Final Document of the Assembly's first **Special Session on Disarmament**.

ITBP Celebrates 64th Raising Day

What's the News?

- The **Indo-Tibetan Border Police (ITBP)** celebrated its **64th Raising Day on October 24, 2025**.
- The ITBP is a specialized mountain force of India, one of the five **Central Armed Police Forces (CAPFs)** under the **Ministry of Home Affairs**.
- It was established on **October 24, 1962**, in the aftermath of the Sino-Indian War.

About the ITBP

- **Motto:** "Shaurya – Dridhata – Karm Nishtha" (Valour – Determination – Devotion to Duty).
- **"Himveers":** Personnel are popularly known as "Himveers" (Snow Warriors) as they are trained and deployed in high-altitude mountainous regions.
- **Primary Mandate:** The force's primary role is to guard the **3,488 km** long **India-China border** (Line of Actual Control).
- **Operational Area:** Its deployment spans from the **Karakoram Pass** in Ladakh to **Jachep La** in Arunachal Pradesh, at altitudes ranging from 9,000 to 18,800 feet.

Key Functions and Roles

- **Border Security:**
 - Preventing border violations, trans-border crimes, smuggling, and illegal immigration.
 - Providing a sense of security to the people living in border areas.
- **Disaster Management:**
 - ITBP is the **first responder** for natural disasters in the Himalayas.
 - It has conducted numerous high-profile search, rescue, and relief operations, notably during the **2013 Uttarakhand floods**.
- **Internal Security:**
 - Deployed for anti-Naxal operations, particularly in Chhattisgarh.
 - Provides security to sensitive installations and VIPs.
- **International Role:**
 - Personnel have been deployed on **UN peacekeeping missions** in various countries, including Bosnia and Herzegovina, Kosovo, and Congo.
 - Provides security to Indian missions abroad, such as the Embassy in Kabul.

Additional Info

- **Legal Framework:**
 - Initially raised under the **CRPF Act** in 1962.
 - It was later given a formal structure under the **Indo-Tibetan Border Police Force (ITBPF) Act, 1992**, which was enacted by Parliament. The rules for the act were framed in 1994.

"One Border, One Force":

- Following the "One Border, One Force" recommendation by the Group of Ministers (GoM), the ITBP was assigned the entire stretch of the India-China border in 2004.
- This led to it replacing the **Assam Rifles** in Sikkim and Arunachal Pradesh.

Nation Celebrates Sardar Patel's 150th Birth Anniversary as Rashtriya Ekta Diwas

What's the News?

- The nation commemorated the **150th birth anniversary of Sardar Vallabhbhai Patel**, celebrated as **Rashtriya Ekta Diwas (National Unity Day)**.
- Tributes were paid to his contributions as the "**Iron Man of India**", acknowledging his pivotal role in unifying the nation.
- The celebrations highlighted his vision for '**Ek Bharat, Shreshtha Bharat**' (One India, Foremost India).

Contribution to National Integration

- As India's first **Deputy Prime Minister and Home Minister**, Sardar Patel undertook the monumental task of integrating over **565 princely states** into the newly independent Indian Union.
- His decisive leadership and strategic diplomacy were crucial in preventing the fragmentation of the country.

Economic Philosophy

- Sardar Patel was a strong proponent of **private enterprise** and the protection of **property rights**.
- His economic vision often stood in contrast to the prevailing socialist sentiments of the era, as he expressed concerns about widespread **nationalization**.
- He championed a model of '**trusteeship**' (similar to Mahatma Gandhi's concept), where private capital and industry were viewed as instruments for public good.
- His emphasis on indigenous industrial capacity and economic self-reliance is seen by many as an early foundation for the concept of '**Aatmanirbhar Bharat**' (self-reliant India).

Additional Info

- **Key Roles in Freedom Struggle:**
 - He played a significant leadership role in major peasant movements, including the **Kheda Satyagraha** and the **Bardoli Satyagraha**.
 - He earned the title '**Sardar**' (Chief) from the women of Bardoli for his leadership during the successful tax revolt.
- **Father of All India Services:**
 - He is renowned as the "**Father of the All India Services**" for his crucial role in establishing the framework for the **Indian Administrative Service (IAS)** and the **Indian Police Service (IPS)**.
 - He believed a strong, independent, and unified civil service was essential for maintaining national integration and administrative integrity.

Uttarakhand Abolishes Madrasa Board

What's the News?

- The Governor of Uttarakhand, Lieutenant General Gurmit Singh (Retd.), has given assent to the **Uttarakhand Minority Education Bill, 2025**, effectively **abolishing the Madrasa Education Board** in the state.
- All **madrasas and minority educational institutions**—including those run by **Muslim, Sikh, Christian, Jain, Buddhist, and Parsi communities**—must now obtain recognition from the **Uttarakhand Minority Education Authority** and affiliate with the **Uttarakhand Board of School Education (UBSE)**.
- Starting **July 2026**, these institutions will be required to follow the **National Curriculum Framework (NCF)** and the **National Education Policy (NEP) 2020**, integrating core subjects like **science, mathematics, and social sciences** into their syllabi.

Key Provisions of the Minority Education Bill, 2025

- Abolition of Madrasa Board:**
 - Repeals the **Madrasa Education Board Act, 2016** and the **Non-Government Arabic and Persian Madrasa Recognition Rules, 2019**.
- Mandatory Affiliation & Curriculum:**
 - Institutions must teach **NEP-aligned subjects** alongside religious instruction.
 - Emphasis on **vocational training, digital literacy, and modern technical education**.
- Recognition Criteria:**
 - Institutions must be registered under the **Societies Registration Act, Trusts Act, or Companies Act**.
 - Land, bank accounts, and assets must be held in the **institution's name**.
 - Recognition can be **withdrawn** for financial mismanagement, lack of transparency, or activities harming **social or religious harmony**.

Additional Info

- National Education Policy (NEP) 2020:**
 - Aims for **universalization of education** from preschool to secondary level by **2030**.
 - Promotes **multidisciplinary, holistic learning** with flexibility in subject choice.
 - Encourages integration of **vocational education** from Class 6 onwards.
- Constitutional Context:**
 - Article 30(1):** Grants minorities the right to **establish and administer educational institutions**.
 - Article 29(2):** Prohibits denial of admission based on religion, race, caste, or language in state-aided institutions.
 - The Bill **does not restrict minority rights** but ensures **academic parity** and **accountability**.

Chhattisgarh Recognized as Top Performer in PM-JAY Implementation

What's the News?

- At the **National Health Authority (NHA) Conclave 2025** held in Bhopal, **Chhattisgarh** was awarded as the **best-performing state** in implementing the **Pradhan Mantri Jan Arogya Yojana (PM-JAY)**.
- The state achieved **near-zero claim pendency**, with **97% of empanelled hospitals actively delivering services** and over **32,000 audits** conducted for fraud control and quality assurance.

About PM-JAY: Key Features & Objectives

- World's largest government-funded health assurance scheme**, launched on **23 September 2018** as part of **Ayushman Bharat**.
- Provides **₹5 lakh annual health cover per family** on a **family floater basis**—with **no cap on family size, age, or gender**.
- Covers **1,929 medical procedures**, including surgery, diagnostics, ICU, implants, and medicines, along with **3 days pre- and 15 days post-hospitalisation care**.
- Cashless and paperless treatment** across public and private empanelled hospitals nationwide, with **portability across states**.
- Pre-existing conditions covered from day one**; fully funded by the government through **Centre-State cost-sharing**.

Beneficiary Coverage & Eligibility

- Targets **12 crore vulnerable families** (~55 crore people), covering the **bottom 40% of India's population**.
- Eligibility based primarily on **Socio-Economic and Caste Census (SECC) 2011** data.
- Expanded in 2023 to include **all senior citizens aged 70+ years**, regardless of income or SECC status.

Why Chhattisgarh Stands Out

- Operational Efficiency:** Near-zero claim settlement delays due to robust digital infrastructure and real-time monitoring.
- Hospital Empanelment:** **97% of empanelled hospitals** are functional—well above the national average.
- Fraud Mitigation:** Over **32,000 audits** conducted to ensure scheme integrity and prevent misuse.
- Community Outreach:** Strong last-mile awareness campaigns and support through **Ayushman Mitras** at health facilities.

Additional Info

- Constitutional & Policy Context:**
 - Entry 29, Concurrent List:** Empowers both Centre and States to legislate on “prevention of extension from one State to another of infectious or contagious diseases.”
 - National Health Policy 2017:** Aims to achieve **Universal Health Coverage (UHC)**—PM-JAY is a key instrument toward this goal.

- **Impact Metrics (National, as of 2025):**
 - Over 7.5 crore hospital admissions authorized since inception.
 - Estimated ₹1.25 lakh crore in financial protection provided to poor households.
 - **Catastrophic health expenditure (CHE)** reduced by 18–22% in high-coverage states (NITI Aayog, 2024).

MHA Resumes Dialogue with Ladakh Leaders on Statehood and Constitutional Safeguards

What's the News?

- A high-level delegation, comprising representatives of the **Leh Apex Body (LAB)** and the **Kargil Democratic Alliance (KDA)**, resumed dialogue with senior officials of the **Union Home Ministry (MHA)** in New Delhi.
- The meeting marked a resumption of engagement after months of deadlock following widespread protests and subsequent violence in Leh.
- The discussion centered on a **four-point agenda** concerning the constitutional and political future of the Union Territory (UT) of Ladakh.
- The first round of talks remained inconclusive but was held in a positive and cordial atmosphere, with both sides agreeing to continue the engagement through a follow-up meeting.

Core Demands of the Ladakh Delegation

- **Statehood for Ladakh:** A demand for full statehood with its own legislative assembly to ensure democratic representation and self-governance for the people of Ladakh.
- **Sixth Schedule Inclusion:** Seeking constitutional protection under the **Sixth Schedule** to safeguard the region's land, unique culture, fragile Himalayan ecosystem, and employment rights for the predominantly tribal population.
 - MHA officials reportedly suggested exploring safeguards under **Article 371** of the Constitution as an alternative to the Sixth Schedule.
 - The Ladakh leaders, however, reiterated that the **Sixth Schedule** status remains their primary demand.

Demands for Justice and Relief

- **Release of Detainees:** The delegation pressed for the immediate and unconditional release of all individuals arrested in connection with the September 24 violence, including climate activist **Sonam Wangchuk**.
 - **Sonam Wangchuk** was detained under the stringent **National Security Act (NSA)**.
- **Compensation and Inquiry:** Demands were made for adequate compensation for the families of the four persons killed and to those injured during the September 24 protests.
 - The resumption of talks followed the **MHA's** decision to announce a **judicial inquiry**, headed by a retired Supreme Court judge, into the September 24 clashes, which

fulfilled a key precondition set by the agitating groups.

Additional Info

- **Background on Ladakh UT:**
 - Ladakh was separated from the erstwhile State of Jammu and Kashmir and made a **Union Territory without a legislative assembly** in August 2019.
 - This change, coupled with the loss of constitutional protection under the erstwhile **Article 370**, sparked the agitation for statehood and a democratic government.
- **Sixth Schedule of the Constitution:**
 - It is provided under **Article 244** of the Constitution.
 - It grants special provisions for the administration of tribal areas in **Assam, Meghalaya, Tripura, and Mizoram**.
 - It allows for the formation of **Autonomous District Councils (ADCs)** and Regional Councils, giving them significant legislative, judicial, and administrative autonomy over tribal affairs, land, and natural resources.
- **Article 371 (Special Provisions):**
 - A set of Articles (371A to 371J) granting special provisions to various states to protect their social and economic interests.
 - These provisions often safeguard cultural identity, land transfer, and employment for local populations in states like Nagaland, Mizoram, and Maharashtra/Gujarat.

Vedanta Group Announces ₹1 Lakh Crore Additional Investment in Odisha

What's the News?

- The **Vedanta Group** has announced plans for an additional investment of approximately **₹1 lakh crore** in Odisha.
- This major investment aims to expand the company's industrial operations, particularly in the metals and mining sector.
- The new projects are expected to create over **1 lakh** direct and indirect employment opportunities within the state.

Key Project Details

- **New Ferro-Alloys Plant:**
 - A state-of-the-art **ferro-alloys plant** will be established in **Keonjhar district**.
 - This greenfield project involves an investment of **₹2,000 crore**.
 - The plant is intended to enhance Odisha's position in the global metal value chain.
- **Aluminium Parks:**
 - Vedanta will set up two new **Aluminium Parks** in the state.
 - One park will be located near its existing aluminium plant in **Jharsuguda**.
 - A second park will be developed at a site identified by the state government.
- **Strategic Focus:**

- These parks will focus on producing high-grade aluminium alloys for strategic sectors, including **aerospace, electric vehicles (EVs), and defence**.
- The initiative is expected to attract significant downstream investments and boost the **MSME sector** in Odisha.

Socio-Economic Impact

- **Employment Generation:** The total investment is projected to create over **1 lakh** jobs, providing vast opportunities for the state's youth.
- **State Economy:** The initiative supports Odisha's goal of becoming a **USD 500-billion economy** by 2036.
- **Government Support:** The **Odisha government** has assured full support for the projects, including the provision of required land and other infrastructure facilities.

Severe Cyclonic Storm Montha Nears Andhra Pradesh Coast

What's the News?

- Cyclone Montha has intensified into a **Severe Cyclonic Storm** over the Bay of Bengal and is poised to make landfall on the **Andhra Pradesh** coast.
- The **India Meteorological Department (IMD)** has issued a **red alert** for several coastal districts, warning of extremely heavy rainfall and high-velocity winds.
- The storm is expected to cross the coast between **Machilipatnam** and **Kalingapatnam**, near **Kakinada**.
- State governments in Andhra Pradesh, Odisha, and Tamil Nadu have activated disaster response measures to ensure public safety.

Landfall Details and Expected Impact

- **Intensity:** The system is forecast to make landfall as a **Severe Cyclonic Storm** with maximum sustained wind speeds of **90-100 kmph**, gusting up to **110 kmph**.
- **Storm Surge:** A storm surge of up to **one metre** above astronomical tides is predicted, which could inundate low-lying coastal areas.
- **Impact on Andhra Pradesh:**
 - Extremely heavy rainfall is expected in coastal districts, including Kakinada, Konaseema, East Godavari, West Godavari, and Krishna.
 - The state has established over 3,000 rehabilitation centres and deployed disaster management teams.
 - Evacuations are underway in vulnerable low-lying and coastal zones, with a "zero casualty" goal.
- **Impact on Odisha:**
 - A **red alert** has been issued for eight southern districts, including Malkangiri, Koraput, Rayagada, and Ganjam, which are expected to receive heavy rainfall and strong winds.
 - **National Disaster Response Force (NDRF)** and **Odisha Disaster Rapid Action Force (ODRAF)** teams have been deployed,

and evacuations have begun in hilly and low-lying areas.

Impact on Tamil Nadu:

- Northern coastal districts, including **Chennai**, Tiruvallur, and Kancheepuram, are experiencing heavy rainfall as an effect of the storm's outer bands.

Additional Info

- **Cyclone Naming:**
 - The name '**Montha**' was contributed by **Thailand**.
 - It means a "fragrant flower" in Thai.
 - Cyclones in the North Indian Ocean region are named by the **WMO/ESCAP** panel, which includes 13 member countries, including India. The **IMD** acts as the Regional Specialised Meteorological Centre (RSMC) for this region, assigning the names sequentially from the approved list.
- **IMD Cyclone Categorization:**
 - The IMD classifies low-pressure systems based on their **maximum sustained wind speed** (measured over a 3-minute average).
 - **Severe Cyclonic Storm (SCS):** 48–63 knots (89–117 kmph).
 - **Very Severe Cyclonic Storm (VSCS):** 64–89 knots (118–166 kmph).
 - **Super Cyclonic Storm:** 120 knots and above (≥ 222 kmph).

World Bank Approves ₹2,450 Crore Loan for Kerala Health System Improvement

What's the News?

- The **World Bank** has approved a **\$280 million (₹2,450 crore)** loan for the **Kerala Health System Improvement Programme**, aimed at enhancing the **life expectancy and quality of life** of **11 million** elderly and vulnerable people in the state.
- The programme will strengthen **primary healthcare delivery**, expand **digital health infrastructure**, and build **climate-resilient health systems**, with a focus on **non-communicable diseases (NCDs)** and **elderly care**.

Key Components of the Programme

- **NCD Management:**
 - Target to treat and support **over 90%** of registered patients with **hypertension and diabetes** using **individual electronic tracking**.
 - Aim for a **40% increase** in the proportion of patients with **controlled hypertension**.
- **Cancer Screening:** **60% increase** in **cervical and breast cancer screening** coverage for women.
- **Elderly & Home-Based Care:**
 - Establish a **home-based care model** for **bedridden, housebound, and vulnerable elderly**
 - Deliver **comprehensive health services** through community-level mechanisms
- **Climate Resilience:**

- Implement **climate-adaptive solutions** in primary health centres in **Wayanad, Kozhikode, Kasaragod, Palakkad, and Alappuzha**
- Address risks from **extreme heat, floods**, and other climate shocks

Digital & Institutional Strengthening

- Expand **eHealth services** and **integrated health data platforms**.
- Enhance **cybersecurity** for digital health systems.
- Engage **local self-government bodies** (grama panchayats, municipal corporations) in service delivery.
- Standardize protocols for **antibiotic use** and improve response to **zoonotic disease outbreaks** through faster lab diagnostics.

Additional Info

- **Loan Terms:**
 - Provided by the **International Bank for Reconstruction and Development (IBRD)**.
 - **25-year maturity with a 5-year grace period**.
- **Policy Alignment:**
 - Supports **National Health Policy 2017** goals on NCD control and universal health coverage.
 - Complements **Ayushman Bharat-Health and Wellness Centres (AB-HWCs)** by strengthening primary care.

- **Sustainable Development Goals (SDGs):** Contributes to **SDG 3** (Good Health and Well-being) and **SDG 13** (Climate Action).
- **State-Level Innovation:** Builds on Kerala's **high health indicators** (e.g., life expectancy of ~75 years) to pilot **elderly-centric, tech-enabled care models** for national replication.



India-UK Launch Mega Naval Exercise

Konkan 2025

What's the News?

- The Indian Navy and the Royal Navy (UK) have commenced **Exercise Konkan 2025** off India's western coast from **October 5 to 12, 2025**.
- This year's exercise features the **indigenous aircraft carrier INS Vikrant** from India and the **UK Carrier Strike Group (CSG-25)** led by **HMS Prince of Wales**, with participation from **Norway and Japan** as partner nations.
- The drill aims to strengthen **strategic maritime cooperation**, enhance **interoperability**, and reinforce a **rules-based maritime order** in the Indo-Pacific region.

Exercise Konkan 2025: Structure and Strategic Significance

- Two-Phase Format:**
 - Harbour Phase** (October 5-8): Includes professional exchanges, cross-deck visits, sports fixtures, cultural programs, and **Joint Working Group meetings**.
 - Sea Phase** (October 9-12): Focuses on **complex operational drills** such as:
 - Anti-submarine warfare
 - Anti-surface and anti-air warfare
 - Carrier-based flying operations
 - Joint command and communication protocols.
- Multinational Dimension:**
 - The UK CSG-25 includes naval and air assets from **Norway and Japan**, reflecting a broader coalition of **democratic maritime powers** committed to **freedom of navigation** and **maritime stability**.
- Post-Exercise Engagement:**
 - After concluding Konkan 2025 on **October 12**, the UK fleet will conduct a **one-day joint exercise with the Indian Air Force** on **October 14**, followed by ceremonial port calls to **Mumbai and Goa**.

Additional Info

- Historical Context:**
 - Exercise Konkan** was first held in **2004** as a basic passage exercise and has since evolved into a **high-intensity, carrier-led wargame**.
 - It is a key component of the **India-UK Defence Partnership** under the **India-UK Roadmap 2030 and Vision 2035** frameworks.
- Operational Assets Deployed:**
 - Indian Navy:** INS Vikrant (IAC-1), destroyers, frigates, submarines, and maritime patrol aircraft.
 - Royal Navy:** HMS Prince of Wales (aircraft carrier), Type 45 destroyers, Type 23 frigates, Astute-class submarines, and F-35B fighter jets (embarked).

DRDO Launches Indian Radio Software Architecture Standard for Military Communications

What's the News?

- The **Defence Research and Development Organisation (DRDO)**, in collaboration with the **Integrated Defence Staff (IDS)** and **tri-services**, has released the **Indian Radio Software Architecture (IRSA) Standard 1.0** to enhance interoperability in military communication systems.
- This landmark framework was officially launched during a **national workshop** at DRDO Bhawan in New Delhi, attended by stakeholders from the armed forces, defense industry, and research institutions.
- The release represents a significant advancement in India's pursuit of **self-reliance in defense communication technologies** and modernization of battlefield communications infrastructure.
- The **Ministry of Defence** has described this initiative as a "defining step" toward developing indigenous, interoperable, and future-ready software-defined radio solutions for military applications.

Military Communication Standardization Framework

- IRSA Standard 1.0** serves as India's first national specification defining a unified **Software Defined Radio (SDR)** software architecture across all military branches.
- The framework establishes standardized:
 - Interfaces and Application Programming Interfaces (APIs)**
 - Execution environments** for military communication applications
 - Waveform portability mechanisms** enabling seamless data exchange between diverse platforms
- Designed with adaptability to integrate emerging technologies including:
 - Advanced encryption methods** for secure communications
 - AI-driven signal processing** capabilities
 - Quantum-resistant communication protocols** for future-proofing defense networks
- The modular architecture allows for implementation of upgrades or new waveform integrations without disrupting existing systems, enhancing **joint-service communication efficiency** while reducing dependency on foreign SDR solutions.

Additional Information

- Development Timeline:**
 - 2021:** Recognition of SDRs as decisive elements for future warfare readiness prompted the need for a national software standard

- **2022:** DRDO formed a core technical team to develop the specification in collaboration with IDS and tri-services
- **2025:** Standard approved by the **High-Level Advisory Committee (HLAC)** following extensive technical reviews and stakeholder consultations
- **Technical Specifications:**
 - Enables **waveform portability** across different radio platforms
 - Ensures **interoperability, certification, and conformance** of SDRs
 - Designed for **secure battlefield networking** and **coalition interoperability**
 - Facilitates **dynamic switching** between different communication protocols during operations

Indian Army Inducts Indigenous 'Saksham' Counter-UAS Grid System

What's the News?

- **New Drone Defense System:** The Indian Army is buying and using a new, locally-made system called 'Saksham' to find, track, and stop enemy drones in real-time. This system uses **AI** to manage and protect the battlefield air space up to **3,000 meters** high.
- **Why It's Needed:** This move, developed with **BEL**, is a direct response to recent incidents, like those during **Operation Sindoora**, which showed the army needed a better defense against dangerous drone attacks.

Saksham: Integrated C-UAS Grid System

- **Full Form:** *Situational Awareness for Kinetic Soft and Hard Kill Assets Management.*
- **Core Functionality:**
 - Fuses inputs from **radars, electro-optical sensors, RF detectors**, and **AI-enabled predictive analysis** to generate a unified **Recognised UAS Picture (RUASP)**.
 - Integrates **soft-kill** (jamming, spoofing) and **hard-kill** (kinetic interception) capabilities under a single networked command backbone.
- **Operational Scope:**
 - Secures the **Air Littoral** - the critical low-altitude airspace directly above ground troops.
 - Enables **3D battlefield visualisation, automated decision support, and seamless interoperability** with other systems like **Akashtee** for comprehensive airspace management.
- **Deployment Strategy:**
 - Approved under the **Fast Track Procurement (FTP)** route for rapid fielding.
 - Planned rollout to **all field formations within one year**.

Recent indigenous defence developments by the Indian Army

- The Army has started using **three new fully Indian-made air defence systems** that work together to

- protect against all kinds of aerial threats - from low-flying drones to high-altitude aircraft.
- It has **inducted the indigenous Medium-Range Surface-to-Air Missile (MRSAM) system**, which can detect and destroy enemy aircraft or missiles at medium distances, strengthening its overall air defence.
- The **Akashtee system**, an Indian-made automated air defence control system, is now being widely used. It brings together data from radars and other sensors to give a clear, real-time picture of the sky above the battlefield.
- The Army is preparing to buy the **indigenous Quick Reaction Surface-to-Air Missile (QR-SAM)** system, designed to respond within seconds to sudden aerial threats like fighter jets or cruise missiles.

India–Australia Joint Military Exercise AUSTRAHIND 2025 Begins in Perth

What's the News?

- The fourth edition of the **India–Australia Joint Military Exercise AUSTRAHIND 2025** commenced on **October 13, 2025**, at Irwin Barracks, Perth, Australia.
- The **two-week exercise** (October 13–26) focuses on **joint company-level operations in urban and semi-urban terrain**, aimed at enhancing **interoperability, tactical coordination, and combat readiness** between the Indian and Australian armies.
- The exercise follows **Defence Minister Rajnath Singh's recent visit to Australia**, underscoring the deepening defence partnership and shared vision for a **secure Indo-Pacific**.

Key Features of AUSTRAHIND 2025

- **Operational Focus:**
 - Conducting **counter-terrorism drills, raids on hostile targets, and combat casualty care**.
 - Practicing **joint command structures** and **real-time decision-making** in complex urban environments.
- **Strategic Significance:**
 - Reflects growing **military-to-military ties** under the **Comprehensive Strategic Partnership** (elevated in 2020).
 - Supports **Quad-aligned security cooperation**, with both nations committed to a **free, open, and rules-based Indo-Pacific**.
- **Cultural & Institutional Engagement:**
 - Includes **social interactions** and visits to historic sites (e.g., **Sinhagad Fort** in past editions).
 - Australian contingent previously visited India's **National Defence Academy (NDA)** during AUSTRAHIND 2024.

Evolution of India–Australia Defence Ties

- **AUSTRAHIND Timeline:**
 - **2022:** First edition held in **Rajasthan**, India.
 - **2023:** Conducted in **Australia**.
 - **2024:** Held in **Pune**, Maharashtra.

- **2025:** Fourth edition in **Perth**—now an **annual, alternating bilateral exercise**.
- **Broader Defence Framework:**
 - **Mutual Logistics Support Agreement (MLSA):** Signed in **2020**, enables reciprocal access to military bases and supplies.
 - **2+2 Ministerial Dialogue:** Regular consultations between foreign and defence ministers.
 - **Joint Maritime Drills:** Participation in **Malabar Exercise** (with U.S. and Japan) and **trilateral engagements** with Indonesia and France.

DRDO's Indigenous Military Combat Parachute System Successfully Tested at 32,000 Feet

What's the News?

- The **Defence Research and Development Organisation (DRDO)** has successfully tested the indigenously developed **Military Combat Parachute System (MCPS)** in a combat free-fall jump from an altitude of **32,000 feet**.
- Conducted by **Indian Air Force (IAF) test jumpers**, the trial marks a major milestone in India's push for **self-reliance in critical defence technologies**. The system is now the **only parachute in operational use by Indian Armed Forces** capable of deployment above 25,000 feet.

Key Features of MCPS

- **High-Altitude Capability:** Enables safe jumps from up to **32,000 feet**, with parachute deployment at **30,000 feet**—critical for stealth and strategic airborne operations.
- **Enhanced Tactical Performance:**
 - **Lower rate of descent** for improved safety.
 - **Superior steering control** for precise navigation and landing in designated zones.
- **NavIC Integration:** Fully compatible with India's **Navigation with Indian Constellation (NavIC)** satellite system, ensuring **resilience against GPS denial or jamming** by adversaries.
- **Indigenous Design & Maintenance:** Developed to reduce turnaround time for repairs and eliminate dependency on foreign suppliers during conflicts.

Development & Strategic Significance

- **Developed by:**
 - **Aerial Delivery Research and Development Establishment (ADRDE), Agra**
 - **Defence Bioengineering and Electromedical Laboratory (DEBEL), Bengaluru**
- **Operational Impact:**
 - Enables **high-altitude, low-opening (HALO)** and **high-altitude, high-opening (HAHO)** paratroop missions—essential for special forces insertion behind enemy lines.
 - Reduces reliance on imported systems, aligning with **Atmanirbhar Bharat** in defence.
- **NavIC (Navigation with Indian Constellation):**

- India's regional satellite navigation system, operational since 2018.
- Provides positioning accuracy of **<20 meters** over India and **<10 meters** in restricted military mode.

India and South Korea Conduct First-Ever Bilateral Naval Exercise in Busan

What's the News?

India and the **Republic of Korea (RoK)** conducted their **first-ever bilateral naval exercise** in **October 2025** at **Busan Naval Base**, marking a strategic milestone in Indo-Pacific maritime cooperation. The exercise involved the **Indian Navy's stealth frigate INS Sahyadri** and the **ROKS Gyeongnam** of the **Republic of Korea Navy (RoKN)**. This inaugural drill underscores deepening defence ties and shared commitment to a **free, open, and secure Indo-Pacific**.

Key Features of the Exercise

- **Phases:**
 - **Harbour phase:** Cross-deck visits, professional exchanges, joint training sessions, and sports events.
 - **Sea phase:** Focused on **tactical maneuvers, communication drills, and coordinated operations** to enhance interoperability.
- **Participating assets:**
 - **INS Sahyadri:** Indigenous **Shivalik-class stealth frigate**, commissioned in 2012, part of the **Eastern Fleet** (Visakhapatnam).
 - **ROKS Gyeongnam:** Advanced **Daegu-class frigate** of the RoKN.
- **Strategic context:**
 - Conducted during INS Sahyadri's **operational deployment to the South China Sea and Indo-Pacific**.
 - Reflects years of planning and growing alignment on **maritime security, freedom of navigation, and rules-based order**.

Strategic Significance

- **Indo-Pacific alignment:**
 - Both nations are key partners in the **Indo-Pacific Oceans Initiative (IPOI)** and support **ASEAN centrality**.
 - Exercise reinforces **India's Act East Policy** and **South Korea's Indo-Pacific Strategy (2022)**.
- **Defence industrial synergy:**
 - Complements ongoing talks on **defence technology collaboration**, including potential co-development under **India's iCET (India-US initiative with RoK interest)**.
- **Regional stability:**
 - Signals coordinated response to **maritime challenges**, including **unregulated fishing, piracy, and strategic assertiveness** in critical sea lanes.

Additional Info

- **India-RoK Defence Relations:**

- **Defence Dialogue** institutionalized in 2005; elevated to **Joint Defence Committee** level.
- **Mutual Logistics Support Arrangement** (MLSA) under discussion to enable port calls and refueling.
- **Naval Modernization:**
 - **INS Sahyadri**: Built under **Indian Navy's indigenous warship program**, symbolizing **Aatmanirbhar Bharat** in defence.
 - **RoKN**: Rapidly modernizing with **KDX-III destroyers and submarine capabilities**, aligning with regional security needs.
- **Broader Framework:**
 - Exercise aligns with **India's SAGAR** (Security and Growth for All in the Region) doctrine.
 - South Korea is a **Major Defence Partner** for India, with bilateral trade exceeding **\$25 billion** (2024), including in **electronics, shipbuilding, and green tech**.

Defence Procurement Manual 2025: Reforming India's Defence Acquisition Framework

What's the News?

- Defence Minister Rajnath Singh released the **Defence Procurement Manual (DPM) 2025**, set to replace the decade-old **DPM 2009**.
- The new manual will govern **revenue procurement** worth approximately **₹1 lakh crore** by the three Services and other establishments under the **Ministry of Defence**.
- It aims to **expedite procurement processes, boost private sector participation, and support indigenisation** in defence manufacturing.
- The manual will come into effect from **November 1, 2025**, with all new Request for Proposals (RFPs) issued after this date governed by the revised framework.

Key Reforms in DPM 2025

- **Removal of restrictive requirements:**
 - Elimination of '**No Objection Certificate (NOC)**' requirement from **Defence Public Sector Undertakings (DPSUs)** or erstwhile **Ordnance Factory Board** before procurement from other sources.
 - Shift away from **nomination-based system** in defence contracting toward competitive bidding.
- **Streamlined procurement procedures:**
 - **Limited Tender Enquiry** permitted for procurements up to **₹50 lakh**, with exceptions for higher values.
 - Simplified procedures to **expedite decision-making** and promote **ease of doing business**.
 - **Two-volume structure**: Volume I contains main procurement procedures across **fourteen chapters**, while Volume II contains forms and appendices.
- **Indigenisation incentives:**

- **Relaxed penalty rates** for delayed delivery of indigenously developed items (reduced from **0.5%** to **0.1%** per week).
- **Assured orders** for up to **five years or beyond** for items developed under indigenisation.
- New chapter dedicated to "**Promoting Self-reliance through Innovation and Indigenisation**".

Strategic Impact on Defence Ecosystem

- **Private sector opportunities:**
 - Creates **level playing field** for private players in defence manufacturing.
 - Expected to generate **sustained business opportunities** for domestic industry.
 - **MSMEs and start-ups** to benefit from reduced entry barriers and simplified procedures.
- **Operational readiness enhancement:**
 - **15% upfront growth provision** for ship repair/refits and aviation equipment overhaul to reduce downtime.
 - Focus on timely availability of goods and services essential for **operational preparedness**.
- **Structural improvements:**
 - New chapters for **Information and Communication Technology Procurement and Consultancy Services**.
 - Redefined rules for **Proprietary Article Certificate (PAC)** basis procurement with **two-year validity**.
 - Integration of **fairness, transparency, and accountability** in all procurement processes.

Implementation timeline:

- All RFPs issued up to **October 31, 2025** will continue under **DPM 2009**.
- Retracted RFPs reissued after **November 1, 2025** will follow **DPM 2025**.
- **Capital procurements** (approximately **₹1.8 lakh crore**) will continue to be governed by **Defence Acquisition Procedure (DAP)**.

ICG Strengthens Fleet with Launch of FPVs ICGS Ajit and ICGS Aparajit

What's the News?

- The **Indian Coast Guard (ICG)** launched two advanced **Fast Patrol Vessels (FPVs)** named **ICGS Ajit** and **ICGS Aparajit**.
- The vessels were indigenously designed and built by **Goa Shipyard Limited (GSL)**, a **Defence Public Sector Undertaking (DPSU)**.
- The ships were launched by Smt. Mridula Singh, wife of **DG Rakesh Pal**, the Director General of the Indian Coast Guard, at the GSL facility.
- These FPVs will enhance the ICG's operational capabilities for coastal security and surveillance.

- **ICGS Ajit** and **ICGS Aparajit**

Key Details of the Vessels

- **ICGS Ajit** and **ICGS Aparajit** are the second and third vessels in this particular series of FPVs being built by GSL.
- They are equipped with advanced technology and navigation and communication systems.
- The vessels are designed for high-speed patrolling, interception, and surveillance in India's maritime zones.
- Their primary roles will include:
 - Patrolling the **Exclusive Economic Zone (EEZ)**
 - Anti-smuggling and anti-piracy operations
 - **Search and Rescue (SAR)** missions

Additional Info

- **Indian Coast Guard (ICG):**
 - The ICG is the primary maritime agency responsible for law enforcement and SAR in India's territorial waters, including its **Exclusive Economic Zone (EEZ)**.
 - It operates under the **Ministry of Defence**.
- **Goa Shipyard Limited (GSL):**
 - GSL is a key DPSU under the **Ministry of Defence** that specializes in the design and construction of vessels for the Indian Navy and Indian Coast Guard.

ISRO to Launch GSAT-7R (CMS-03)

Satellite for Indian Navy

What's the News?

- The **Indian Space Research Organisation (ISRO)** is set to launch the advanced military communication satellite **GSAT-7R**, also designated as **CMS-03**.
- The launch is scheduled for **November 2** from the Satish Dhawan Space Centre in Sriharikota.
- The satellite will be launched by ISRO's heavy-lift **LVM-3 (Launch Vehicle Mark-III)** rocket.
- The fully assembled rocket has been moved to the launchpad for final pre-launch operations.

Key Satellite Details

- **Purpose:** GSAT-7R is a state-of-the-art, multi-band military communication satellite developed exclusively for the **Indian Navy**.
- **Replacement:** It is a replacement for the existing **GSAT-7 (Rukmini)**, India's first dedicated military satellite, which was launched in 2013.
- **Orbit:** The satellite will be placed into a **Geosynchronous Transfer Orbit (GTO)**.
- **Specifications:** Weighing approximately **4,400 kg**, CMS-03 will be the heaviest communication satellite launched from Indian soil.

GSAT-7 Series:

- **GSAT-7 (Rukmini):** Launched in 2013 for the **Indian Navy**.
- **GSAT-7A:** Launched in 2018 for the **Indian Air Force**.
- **GSAT-7R:** Unified platform for **tri-service use**.

Global Firepower Index 2025: India Ranks

4th Strongest Military

What's the News?

- The **Global Firepower Index (GFP) 2025** has been released, ranking the military strength of **145 countries**.
- **India** has secured the **4th position** globally, maintaining its status as one of the world's foremost military powers.
- The **United States** (1st), **Russia** (2nd), and **China** (3rd) retained the top three spots.
- India achieved a **PowerIndex (PwrIndx)** score of **0.1184**, where a score of 0.0000 is considered 'perfect'.

Key Rankings 2025

- **Top 10 Militaries:** The ranking is based on a **PwrIndx** score, where a lower score indicates greater military strength.
 1. **United States** (PwrIndx: 0.0744)
 2. **Russia** (PwrIndx: 0.0788)
 3. **China** (PwrIndx: 0.0788)
 4. **India** (PwrIndx: 0.1184)
 5. **South Korea** (PwrIndx: 0.1656)
 6. **United Kingdom** (PwrIndx: 0.1785)
 7. **Japan** (PwrIndx: 0.1839)
 8. **France** (PwrIndx: 0.1878)
 9. **Turkey** (PwrIndx: 0.1902)
 10. **Italy** (PwrIndx: 0.2164)
- **India's Neighbours:**
 - **Pakistan** was ranked **12th** in the index.

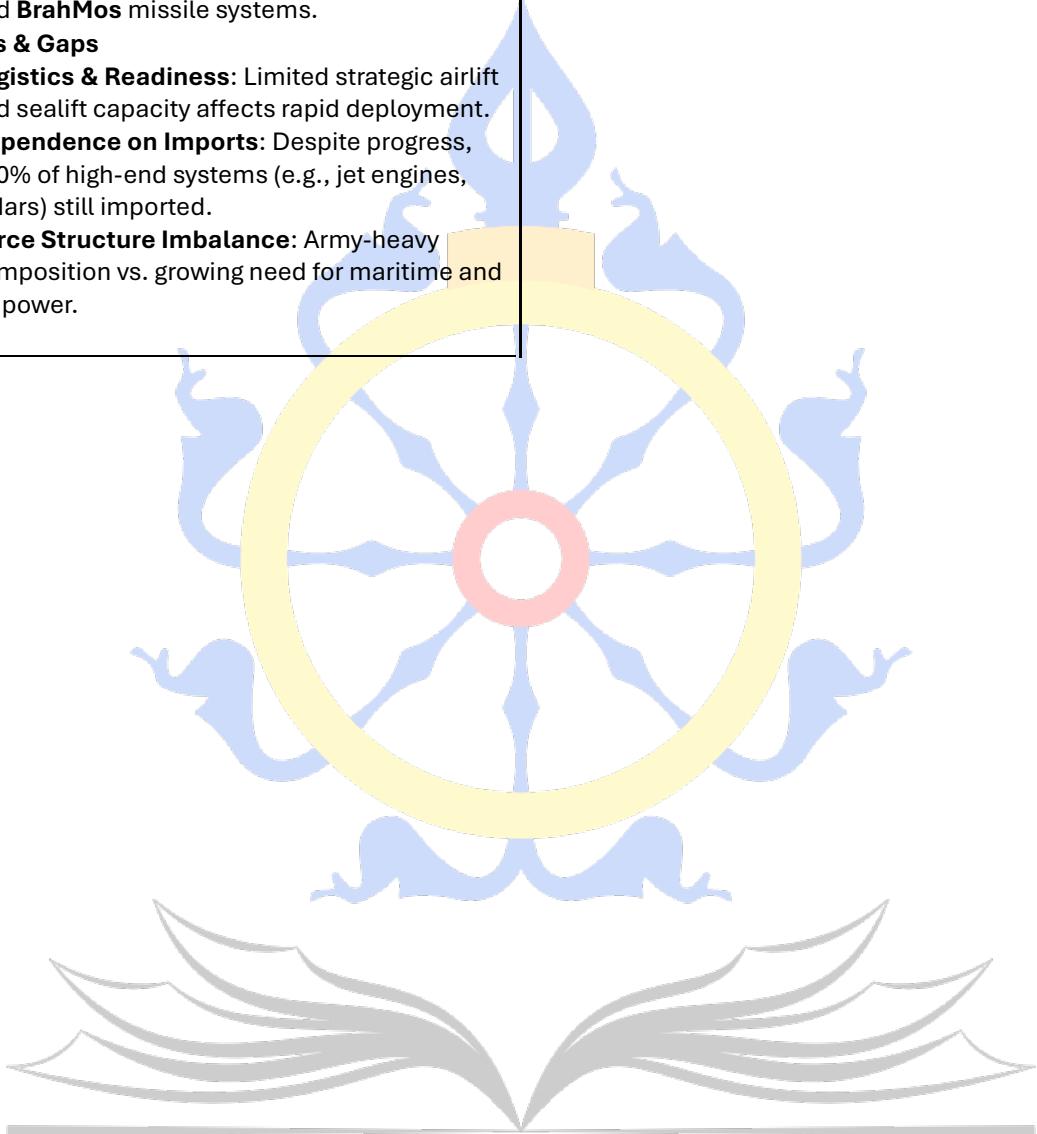
About the Global Firepower Index

- **Purpose:** It is an annual assessment of the **conventional war-making capabilities** of 145 nations across land, sea, and air.
- **Methodology:**
 - The ranking uses a formula based on over **60 individual factors**.
 - Key categories include military manpower, equipment (air, land, and naval strength), financial resources, logistical capabilities, and geography.
 - The formula allows smaller, more technologically-advanced nations to compete with larger, less-developed ones.
- **Stance on Nuclear Weapons:**
 - The index focuses primarily on **conventional military strength**.
 - **Nuclear arsenals are not directly included** in the final score calculation, though they are considered a "factor" in the overall assessment.

India's Military Context

- **Key Strengths:** India's high rank is supported by its large military force, including:
 - Approximately **1.45 million active personnel**.
 - Over **1.15 million reserve personnel**.
 - A diverse and large arsenal, including over 2,200 aircraft, 4,200 tanks, and 2 aircraft carriers.
 - **Nuclear-capable triad:** Land (Agni), Air (Rafale/Mirage), Sea (Arihant-class SSBNs).

- **Indigenous platforms:** Tejas Mk1A fighter, Arjun MkII tank, BrahMos supersonic cruise missile, Akash air defence system.
- **Defence exports:** Crossed ₹25,000 crore (\$3 billion) in FY2024–25, with drones, missiles, and naval systems in demand.
- **Modernisation & Self-Reliance:**
 - The ranking reflects India's significant investments in military modernization and its growing emphasis on **Atmanirbhar Bharat** (self-reliance) in defence.
 - Key indigenous projects bolstering this strength include the **Tejas Mk1A** fighter jets, **Arihant-class** nuclear submarines, and **BrahMos** missile systems.
- **Challenges & Gaps**
 - **Logistics & Readiness:** Limited strategic airlift and sealift capacity affects rapid deployment.
 - **Dependence on Imports:** Despite progress, ~40% of high-end systems (e.g., jet engines, radars) still imported.
 - **Force Structure Imbalance:** Army-heavy composition vs. growing need for maritime and air power.



International Relations

India and China to Resume Direct Air Services by Late October 2025

What's the News?

- India and China have agreed to **resume direct air services** between designated cities by **late October 2025**, marking a significant step in the **gradual normalization** of bilateral relations following years of strained ties after the **Galwan Valley clash in 2020**.
- The decision follows **technical-level talks** between civil aviation authorities of both countries and aligns with the **winter flight schedule**. Services are subject to **commercial decisions** by designated airlines and fulfillment of **operational criteria**.
- IndiGo has confirmed it will restart **daily non-stop flights** from **Kolkata to Guangzhou** starting **October 26, 2025**, with **Delhi-Guangzhou** flights to follow shortly. Air India is also expected to resume services to China by year-end.

Significance of Resumed Air Connectivity

- Diplomatic Context:**
 - Part of broader confidence-building measures, including **disengagement at Depsang and Demchok** (late 2024) and high-level military-diplomatic dialogues.
 - Follows **Chinese Foreign Minister Wang Yi's visit** to New Delhi in September 2025, which paved the way for restoring people-to-people ties.
- Operational & Economic Impact:**
 - Expected to **boost tourism, business travel, and cross-border trade**.
 - Facilitates easier movement for students, professionals, and diaspora communities.
 - Supports India's "**Neighbourhood First**" and "**Act East**" policy objectives by re-engaging key regional partners.

Additional Info

- Historical Timeline:**
 - Direct flights were **suspended after the Doklam standoff (2017)** and **fully halted during the pandemic (2020)**.
 - Pre-suspension, Air India operated flights to **Beijing, Shanghai, and Guangzhou**; IndiGo had launched Kolkata-Guangzhou in 2019.
- Air Services Agreement (ASA):**
 - India and China are also negotiating a **revised ASA** to increase flight frequencies and destination options beyond the current limited scope.
- Strategic Implications:**
 - Resumption reflects **de-escalation along the Line of Actual Control (LAC)** and mutual interest in stabilizing economic and cultural ties.

- Does **not signify full normalization**—border talks and trade restrictions on certain Chinese goods remain ongoing issues.

UNSC Grants Travel Ban Exemption for Afghan FM Muttaqi's India Visit

What's the News?

- The **United Nations Security Council (UNSC)** has granted a **travel ban exemption** to **Amir Khan Muttaqi**, the acting Foreign Minister of Afghanistan's Taliban government, for an official visit to India from **October 9 to 16, 2025**.
- This marks the **first high-level visit by a Taliban leader** to India since the group returned to power in August 2021, and the **highest-level public engagement** between India and the Taliban since **December 1999**.
- The visit follows diplomatic coordination between **India and Russia** at the UN to secure the exemption, as Muttaqi remains listed under UNSC sanctions related to the Taliban.

Strategic and Diplomatic Context

- Historical Significance:**
 - The last India-Taliban ministerial meeting occurred in **Kandahar (1999)** during the IC-814 hijack crisis, when then External Affairs Minister **Jaswant Singh** met Taliban FM **Wakil Ahmed Muttawakil**.
- Current Engagement:**
 - India has **not formally recognized** the Taliban regime but maintains a **technical team** at its Kabul embassy to manage humanitarian aid and limited diplomatic functions.
 - Recent interactions include a **Dubai meeting (early 2025)** between Muttaqi and Indian Foreign Secretary **Vikram Misri**, and a **November 2024 meeting** with Afghanistan's acting Defence Minister **Mullah Yaqoob**.
- Geopolitical Drivers:**
 - India seeks to **counterbalance China-Pakistan influence** in Afghanistan, especially amid talks to extend the **China-Pakistan Economic Corridor (CPEC)** into Afghan territory—a move India opposes due to sovereignty concerns over Pakistan-occupied Jammu & Kashmir.
 - The Taliban's recent **condemnation of terrorism in J&K** and outreach to India signal a potential recalibration in regional dynamics.

Additional Info

- UNSC Sanctions Framework:**
 - The Taliban is subject to sanctions under **UNSC Resolution 1988 (2011)**, which imposes **asset freezes, travel bans, and arms embargoes**.
 - However, **Paragraph 10** of the resolution allows the **1988 Sanctions Committee** to grant

exemptions for **official duties**, humanitarian reasons, or national interest.

- **India's Afghanistan Policy:**
 - **Humanitarian Assistance:** India has delivered over **50,000 metric tonnes** of food grains and life-saving medicines since 2021.
 - **Development Projects:** India completed key infrastructure projects pre-2021, including the **Afghan Parliament building**, **Salma Dam**, and **Zaranj-Delaram Highway**.
 - **Engagement Principles:** India adheres to a **“five-point framework”**—inclusive government, counter-terrorism, human rights (especially women's rights), regional connectivity, and non-interference.
- **Regional Implications:**
 - **China's Role:** Beijing hosted a **trilateral meeting (May 2025)** with Pakistan and Afghanistan to promote BRI-linked connectivity, raising strategic concerns for India.
 - **Pakistan-Taliban Tensions:** Relations have soured over the Taliban's alleged support for **Tehreek-e-Taliban Pakistan (TTP)**, creating space for India to deepen discreet ties.

Lok Sabha Speaker Om Birla to Lead Indian Delegation at 68th Commonwealth Parliamentary Conference

What's the News?

- Lok Sabha Speaker Om Birla will lead the Indian Parliamentary delegation to the **68th Commonwealth Parliamentary Conference (CPC)**, scheduled in **Bridgetown, Barbados**, from **October 5 to 12, 2025**.
- The delegation aims to strengthen **democratic cooperation, parliamentary diplomacy, and digital governance practices** with fellow Commonwealth nations.
- This high-level participation underscores India's continued engagement with the **Commonwealth Parliamentary Association (CPA)** and its commitment to multilateral parliamentary dialogue.

About the Commonwealth Parliamentary Conference

- The **Commonwealth Parliamentary Conference (CPC)** is the **premier annual gathering** of parliamentarians from across the **56 Commonwealth countries**.
- The **68th CPC** in Barbados will focus on themes such as:
 - **Strengthening democratic institutions**
 - **Climate resilience in Small Island Developing States (SIDS)**
 - **Digital transformation in governance**
 - **Youth and gender inclusion in policymaking.**
- India has been an active participant in the CPA since **1949**, contributing to discussions on **rule of law, sustainable development, and parliamentary best practices**.

Additional Info

- **Commonwealth Parliamentary Association (CPA):**
 - Founded in **1911** as the **Empire Parliamentary Association**, renamed CPA in **1948**.
 - Promotes **good governance, human rights, and democratic values** among member parliaments.
 - Organizes **regional and global conferences**, capacity-building workshops, and election observer missions.
- **India's Role in the CPA:**
 - Hosted the **46th CPC in New Delhi in 2001**.
 - The **India Branch of CPA** includes members from both Houses of Parliament and is chaired by the **Lok Sabha Speaker**.
 - Actively participates in CPA's **Executive Committee, Standing Committees, and Special Interest Groups** (e.g., on climate change, gender equality).
- **Recent Indian Engagement:**
 - In **2023**, India hosted the **CPA Executive Committee Meeting** in New Delhi.
 - Indian delegations have consistently advocated for **reform of global governance institutions** and **South-South cooperation** within CPA forums.

India Condemns Pakistan at UN Security Council

What's the News?

- During the **UN Security Council Open Debate on Women, Peace and Security**, India's Permanent Representative to the UN, **Ambassador Parvathaneni Harish**, launched a sharp condemnation of Pakistan, accusing it of **“bombing its own people”** and perpetrating a **“systematic genocide”** during the 1971 Bangladesh Liberation War.
- India specifically cited **Operation Searchlight**, under which the Pakistani military allegedly carried out a **state-sanctioned campaign of genocidal mass rape against 400,000 women**.
- The remarks were made in response to Pakistan's repeated allegations on Jammu and Kashmir, which India dismissed as **“delusional tirades”** and **“propaganda”** aimed at diverting global attention from its own human rights record.

Context of India's Statement at UNSC

- **Event:** UNSC Open Debate marking **25 years of UN Security Council Resolution 1325 (2000) on Women, Peace and Security**.
- **India's Position:**
 - Highlighted its **“unblemished and unscathed”** record on women's participation in peacekeeping and conflict resolution.
 - Referred to Indian women peacekeepers as **“messengers of peace”**, quoting External Affairs Minister **Dr. S. Jaishankar**.
 - Accused Pakistan of **military dominance, economic collapse, persecution of**

- minorities, and harboring UN-proscribed terrorists.
- Diplomatic Strategy:**
 - Countered Pakistan's narrative on Kashmir by shifting focus to **Pakistan's historical and ongoing human rights violations**.
 - Emphasized that “**the world sees through Pakistan's propaganda**.”

Additional Info

- UNSCR 1325 (2000):**
 - Landmark resolution recognizing the **disproportionate impact of armed conflict on women**.
 - Calls for **increased participation of women in peace processes**, protection from gender-based violence, and integration of gender perspectives in peacekeeping.
 - India has contributed over **1,500 women peacekeepers** to UN missions since 2007, including the first all-female Formed Police Unit (FPU) in Liberia.
- Operation Searchlight (1971):**
 - Military crackdown launched by the Pakistan Army on **March 25, 1971**, in then-East Pakistan (now Bangladesh).
 - Aimed to suppress the Bengali nationalist movement; led to **widespread atrocities**, including mass killings, arson, and sexual violence.
 - Estimated **3 million deaths and 200,000–400,000 cases of rape**, as documented by international historians and the **Hamoodur Rahman Commission** (Pakistan's own inquiry, though suppressed for decades).

India Welcomes First Phase of Gaza Peace Agreement

What's the News?

- India has officially welcomed the **first phase of the Gaza peace agreement**, brokered by former U.S. President **Donald Trump**, which includes the **release of hostages** and enhanced humanitarian assistance to Gaza.
- Prime Minister **Narendra Modi** expressed strong support for the deal, calling it a “moment of profound relief” and reaffirming India's consistent stance that **terrorism in any form is unacceptable**.
- The Prime Minister held calls with both **President Trump** and **Israeli Prime Minister Benjamin Netanyahu**, congratulating them on the progress and emphasizing India's support for **peace through dialogue and diplomacy**.

India's Stance on Gaza & Middle East Peace

- Core Principles:**
 - Support for a **two-state solution**.
 - Emphasis on **humanitarian aid** to civilians in conflict zones.
 - Rejection of **terrorism and violence against civilians**.
- Diplomatic Engagement:**

- India maintains balanced relations with both **Israel** and **Palestine**, having supported Palestine's statehood at international forums while deepening strategic and defense ties with Israel.
- The government has consistently voted in favor of **UN resolutions** calling for humanitarian pauses and aid access in Gaza.
- Recent Actions:**
 - India provided **\$1 million in humanitarian aid** to Gaza in early 2025 through UN agencies.
 - The Ministry of External Affairs has repeatedly urged all parties to **protect civilian lives** and **ensure safe passage for aid**.

Additional Info

- India–Israel Relations:**
 - Established full diplomatic relations in **1992**.
 - Israel is one of India's top **defense partners**, with bilateral defense trade exceeding **\$2 billion annually**.
 - Cooperation spans **agriculture (Centres of Excellence)**, water technology, cybersecurity, and space.
- India–Palestine Relations:**
 - India recognized the **State of Palestine** in **1988**.
 - India has extended over **\$70 million** in development and humanitarian assistance to Palestine since 2008.
 - India supports **Palestinian membership** in UNESCO and other UN bodies.
- Constitutional & Policy Framework:**
 - India's foreign policy is guided by **Article 51** of the Constitution, which promotes **international peace and security** and just and honorable relations between nations.
 - The **Neighborhood First** and **Vishwa Mitra** (friend of the world) doctrines underpin India's balanced, non-aligned approach in conflict zones.

Russia Moves to Withdraw from U.S. Plutonium Disposal Pact

What's the News?

- On **October 8, 2025**, Russia's State Duma (lower house of parliament) approved the country's formal **withdrawal from the Plutonium Management and Disposition Agreement (PMDA)** with the United States.
- The PMDA, originally signed in **2000** and enforced in **2011**, obligated both nations to **irreversibly dispose of 34 metric tonnes each** of surplus weapons-grade plutonium - enough to produce nearly **17,000 nuclear warheads**.
- Russia had **suspended implementation in 2016**, citing U.S. sanctions, NATO expansion, and alleged non-compliance by the U.S. in plutonium disposal methods.

Key Aspects of the Withdrawal

- Reasons Cited by Russia:**

- The U.S. allegedly stored plutonium in **liquid form**, which Moscow claims remains **reusable for weapons**, deviating from the agreed method of converting it into **mixed oxide (MOX) fuel** for civilian reactors.
- Broader geopolitical tensions, including **U.S. support for Ukraine** and **NATO's eastward expansion**, were highlighted as making the agreement "unworkable".
- **Legal Process:**
 - The withdrawal requires ratification by the **Federation Council** (upper house) and final approval by **President Vladimir Putin** before becoming law.
- **Strategic Implications:**
 - The move signals further **erosion of U.S.–Russia nuclear arms control frameworks**, following the collapse of treaties like **INF** and **Open Skies**.
 - Despite the withdrawal, both nations still possess an estimated **8,000 nuclear warheads combined**, down from Cold War peaks but still posing global strategic risks.

Additional Info

- **Plutonium Management and Disposition Agreement (PMDA):**
 - Signed in **2000** under Presidents **Bill Clinton** and **Vladimir Putin**.
 - Revised in **2010** to address implementation challenges; entered into force in **2011**.
 - Required both parties to render plutonium "**unusable in nuclear weapons**" through **MOX fuel fabrication** or **immobilization**.
- **Current Nuclear Landscape:**
 - The U.S. abandoned its MOX facility in South Carolina in **2018** due to cost overruns, opting instead for **dilution and disposal** - a method Russia contested as non-compliant.
 - No active bilateral nuclear arms control treaty remains in force between the U.S. and Russia since the **New START Treaty** lapsed without renewal discussions.
- **Global Security Context:**
 - The withdrawal undermines **non-proliferation norms** and may encourage other nuclear-armed states to resist disarmament commitments.
 - Contrasts with India's consistent adherence to **voluntary moratorium on nuclear testing** and support for **Fissile Material Cut-off Treaty (FMCT)** negotiations.

Armenia Joins IUCN as Newest State Member Ahead of CBD COP17

What's the News?

- Armenia has officially become the newest **State Member** of the **International Union for Conservation of Nature (IUCN)**, with the announcement made during

- the **IUCN World Conservation Congress 2025** in **Abu Dhabi**.
- The **Ministry of Environment of Armenia** will serve as the national liaison to the **IUCN Secretariat**, reinforcing the country's commitment to **biodiversity conservation, green transition, and sustainable development**.
- This move aligns with Armenia's preparations to host the **17th Conference of the Parties (COP17)** to the **Convention on Biological Diversity (CBD)** in **2026**, positioning it as a regional leader in environmental governance.

Strategic Significance of IUCN Membership

- Armenia's IUCN membership grants access to key science-based tools like the **IUCN Red List**, **Green List**, and **Nature-based Solutions Standard**, enhancing its conservation planning and implementation.
- The country aims to restore forests on **12.9% of its land by 2030**, protect **Critically Endangered species** (e.g., Caucasian leopard, Sevan trout), and safeguard vital ecosystems like **Lake Sevan**.
- Membership enables Armenia to tap into international funding (e.g., **GEF**, **GBFF**) and address challenges like weak biodiversity monitoring, legal gaps, and financing shortages.
- Located in the biodiverse **South Caucasus** (avg. elevation: **1,800 m**), Armenia already has national frameworks like the **NBSAP** and **Red Book**, but needs stronger enforcement and institutional capacity.

Additional Info

- **About IUCN:**
 - Founded in **1948**, headquartered in **Gland, Switzerland**.
 - Unique **membership union of over 1,400 government and civil society organisations** and **17,000+ experts**.
 - Global authority on **species conservation status**, **protected area management**, and **nature-based solutions**.
- **CBD COP17 (2026):**
 - First CBD COP to be hosted in the **South Caucasus**.
 - Will focus on **implementation of the Kunming–Montreal Global Biodiversity Framework (GBF)**, including **30x30 target** (protect 30% of land and sea by 2030).
- **India's IUCN Engagement:**
 - India has been an **IUCN State Member since 1969**.
 - Hosts **IUCN India Country Office** in New Delhi; actively participates in **Asian Elephant Specialist Group**, **Snow Leopard Network**, and **Protected Area Management** initiatives.

Gaza Ceasefire Deal 2025: Hostage Release and Regional Peace Declaration

What's the News?

- On **October 13, 2025**, a major breakthrough in the **Israel–Hamas conflict** was achieved as **Hamas**

released the last 20 living Israeli hostages, and Israel freed 1,968 Palestinian prisoners and detainees in return .

- The exchange marked the successful implementation of **Phase 1** of a U.S.-brokered ceasefire plan, culminating in a **Gaza Peace Declaration** signed by **U.S. President Donald Trump**, along with leaders of **Egypt, Qatar, and Turkey** at a summit in **Sharm el-Sheikh** .

Key Elements of the Agreement

• Hostage Release:

- **20 surviving hostages** returned to Israel; among them were civilians and soldiers abducted during the **October 7, 2023** Hamas-led attack.
- **Remains of only 4 out of 28 deceased hostages** were handed over, drawing criticism from Israeli families and officials who called it a **partial breach** of the agreement .

• Prisoner Exchange:

- **~250 long-term Palestinian security prisoners** (including those convicted of killing Israelis).
- **~1,700 detainees** held without charge since the war began in Gaza .

• Ceasefire Enforcement:

- Israeli military completed withdrawal to pre-agreed lines inside Gaza.
- Humanitarian aid resumed flow into Gaza, with the **UN allocating an additional \$11 million** for winter preparedness .

Regional and Global Response

- **U.S. Leadership:** President Trump hailed the deal as the “**historic dawn of a new Middle East**” and emphasized **rebuilding Gaza** over immediate statehood debates .
- **International Endorsement:**
 - **Former U.S. Presidents Biden and Clinton**, along with **Vice President Kamala Harris**, publicly commended Trump’s diplomatic efforts.
 - Over **25 nations**, including **India**, attended the Sharm el-Sheikh summit, signaling broad geopolitical support .
- **Egypt’s Role:** Egyptian President **Abdel Fattah el-Sisi** awarded Trump the **Order of the Nile**, Egypt’s highest civilian honor, for his “pivotal role” in halting the war .

Unresolved Challenges

- **Governance of Gaza:** No consensus yet on post-war administration; Trump’s plan proposes a “**Board of Peace**” and a **demilitarized Gaza** with a new civilian police force .
- **Hamas Disarmament:** Israel insists on dismantling Hamas, which the group rejects.
- **Palestinian Statehood:** Trump declined to endorse a **two-state solution**, stating focus is on “**rebuilding, not borders**” .

Additional Info

- **Human Cost:**

- **251 hostages** taken on October 7, 2023; **204 released or rescued earlier, 20 freed now**, and **27 confirmed dead** (with 24 bodies still unrecovered) .
- Over **75% of Gaza’s districts** classified as disaster-prone even before the war; **World Bank estimates \$53 billion** needed for reconstruction.

• Legal & Diplomatic Framework:

- The ceasefire is **not a formal treaty** but a **politically binding declaration** backed by U.S. guarantees.
- **UN Security Council Resolution 2728 (2024)** had earlier demanded an immediate ceasefire—this deal operationalizes that call.

- **India’s Position:** India participated in the summit, reaffirming its support for **peaceful resolution, humanitarian access**, and a **two-state solution** as part of its longstanding Middle East policy.

India–Mongolia Ties Elevated to Strategic Partnership with 10 New Agreements

What’s the News?

- During the state visit of Mongolian President **Khurelsukh Ukhnaa** to India on **October 15, 2025**, the two nations elevated their bilateral relationship to a **Strategic Partnership** and signed **10 Memoranda of Understanding (MoUs)** across diverse sectors including **energy, defence, culture, immigration, and critical minerals**.

Key Agreements and Initiatives

- **Energy & Infrastructure:**
 - India will fund Mongolia’s **Oil Refinery Project** using a **\$1.7 billion Line of Credit**—India’s **largest development partnership project globally**.
 - Over **2,500 Indian professionals** are already engaged in the project alongside Mongolian counterparts.
- **Defence & Security:**
 - Launch of a **capacity-building programme** for Mongolia’s **border security forces**.
 - Appointment of a **Defence Attaché** at the Indian Embassy in Ulaanbaatar.
 - Enhanced **training programmes** for Mongolian armed forces in India.
- **Critical Minerals & Trade:**
 - Collaboration on **coking coal, rare earths, and critical minerals**, with Mongolia identified as a potential supplier.
 - Exploration of logistics via **Vladivostok (Russia)** or **Tianjin (China)** due to Mongolia’s landlocked geography.
- **Culture & Education:**
 - **Ladakh Autonomous Hill Development Council** linked with Mongolia’s **Arkhangai Province** for cultural exchange.
 - **Sanskrit teacher** to be sent to **Gandan Monastery** to support Buddhist textual studies.

- Joint project to **digitize one million ancient manuscripts**.
- Strengthened academic ties between **Nalanda University** and Gandan Monastery.
- **People-to-People Ties:**
 - **Free e-visas** for Mongolian citizens visiting India.
 - **Atal Bihari Vajpayee Centre of Excellence for IT and India-Mongolia Friendship School** to expand skill development opportunities.

Additional Info

- **Historical Context:**
 - India established diplomatic ties with Mongolia in **1955**.
 - Mongolia was among the first countries to recognize **Bangladesh** in 1971, with India's support.
- **Constitutional & Policy Links:**
 - The **International Solar Alliance (ISA)**, co-founded by India, was highlighted by Mongolia as a model for clean energy cooperation.
 - The **Act East Policy and Neighbourhood First** principles extend to Mongolia as a "spiritual sibling" beyond South Asia.
- **Economic Metrics:**
 - Mongolia holds vast reserves of **coking coal** and **rare earth elements**—critical for India's steel and electronics sectors.
 - India's \$1.7 billion LoC for the refinery is part of a broader **\$3 billion+ development portfolio** in Mongolia over the past decade.

India Elected Unopposed to UN Human Rights Council for 2026–2028 Term

What's the News?

- India has been elected **unopposed** to the **United Nations Human Rights Council (UNHRC)** for the **2026–2028 term**, marking its **seventh tenure** on the 47-member body.
- The election, held by the **UN General Assembly**, reflects broad international support for India's role in advancing human rights through dialogue, development, and multilateral cooperation.

About the UN Human Rights Council

- **Established:** 2006 by **UNGA Resolution 60/251**, replacing the UN Commission on Human Rights.
- **Headquarters:** Geneva, Switzerland.
- **Membership:**
 - **47 member states** elected for **three-year terms**.
 - **Regional distribution:** Asia-Pacific (13 seats), Africa (13), Latin America & Caribbean (8), Western Europe (7), Eastern Europe (6).
 - **Term limit:** Maximum of **two consecutive terms**; India's current term follows a gap after 2024, allowing re-election.
- **Key Functions:**
 - Conducts **Universal Periodic Review (UPR)** of all UN member states' human rights records.

- Appoints **Special Rapporteurs** and **Commissions of Inquiry** to investigate violations.
- Adopts **resolutions** on thematic issues (e.g., gender equality, freedom of expression, digital rights).
- Serves as a **global forum** for dialogue among governments, civil society, and NGOs.

India's Role and Contributions

- **Tenure History:** Served in **2006–07, 2011–14, 2014–17, 2017–20, 2022–24**, and now **2026–28**—the most frequent re-election among Asian states.
- **Core Principles:**
 - Emphasizes **sovereignty, non-interference, and development as integral to human rights**.
 - Advocates for **inclusive, non-politicized approaches** to rights protection.
- **Key Focus Areas:**
 - Digital rights and AI governance
 - Climate justice and human rights
 - Gender equality and women's empowerment
 - Capacity-building in Global South

India Slips to 85th Rank in 2025 Henley Passport Index

What's the News?

India has dropped to **85th position** in the **2025 Henley Passport Index**, a decline of five places from its 2024 rank. Indian passport holders now enjoy **visa-free or visa-on-arrival access to 57 destinations**, down from 62 in the previous year. This reflects a narrowing of global travel freedom despite India's growing diplomatic and economic influence.

What is the Henley Passport Index?

- **Global Mobility Benchmark:** Ranks 199 passports based on the number of destinations accessible without a prior visa.
- **Data Source:** Uses exclusive data from the **International Air Transport Association (IATA)** covering 227 travel destinations.
- **Updated Monthly:** Published by global residence and citizenship advisory firm **Henley & Partners**.
- **Key Metric:** Measures **travel freedom**, often correlated with a country's bilateral agreements, security protocols, and international trust.

India's Passport Performance: Key Trends

- **Current Rank (2025):** 85th (57 visa-free/visa-on-arrival destinations).
- **Previous Year (2024):** 80th (62 destinations).
- **Historical Peak:** 71st in 2006.
- **Regional Comparison:**
 - **Singapore:** 1st (193 destinations)
 - **Japan:** 3rd (189)
 - **Pakistan:** 102nd (34 destinations)
 - **Bangladesh:** 97th (42 destinations)

Implications for Global Mobility

- **Limited Access to Key Regions:** Indian citizens still require pre-approved visas for most of **Europe, North America, East Asia, and Oceania**.

- **Diplomatic Gap:** Despite strong trade and strategic partnerships, India lags in securing **reciprocal visa-waiver agreements** with high-income nations.
- **Travel & Business Impact:** Increased procedural delays and costs for students, professionals, and tourists, potentially affecting diaspora engagement and soft power outreach.

Additional Info

- **Visa-Free Destinations Include:**
 - **Asia:** Nepal, Bhutan, Indonesia, Thailand, Cambodia, Laos, Maldives, Sri Lanka
 - **Africa:** Kenya, Mauritius, Seychelles, Rwanda, Uganda, Zimbabwe
 - **Caribbean & Pacific:** Fiji, Dominica, Saint Vincent and the Grenadines, Haiti
- **Policy Context:**
 - **e-Visa Expansion:** India offers e-visas to over 160 countries but has not secured equivalent concessions.
 - **Bilateral Negotiations:** Ongoing talks with the **EU** and **UK** on mobility partnerships remain inconclusive.
 - **Global Indices Correlation:** Low passport strength often aligns with constraints in **NRI investment facilitation, academic exchange, and tourism promotion.**

China Lodges WTO Complaint Against India Over EV Subsidies

What's the News?

- China has initiated a dispute settlement process at the **World Trade Organization (WTO)** against India.
- The complaint alleges that India's subsidy programs for **electric vehicles (EVs)** and **advanced chemistry cell (ACC) batteries** unfairly favor domestic producers, violating international trade rules.
- This move escalates trade tensions between the two Asian economic giants, focusing on a strategically important and rapidly growing sector.

The Core of China's Complaint

- China argues that India's policies violate the WTO's core principle of "**national treatment**," which mandates that member countries must treat imported and locally-produced goods equally once they enter the domestic market.
- The complaint specifically targets two of India's flagship initiatives:
 - **Production-Linked Incentive (PLI) Scheme for ACC Batteries:** This scheme provides financial incentives to manufacturers, but China claims the eligibility criteria are discriminatory. To receive subsidies, companies must meet mandated levels of **domestic value addition**, which requires them to source a certain percentage of components and raw materials locally.
 - **FAME-II (Faster Adoption and Manufacturing of Electric Vehicles) Scheme:** This program, aimed at boosting EV adoption, is also accused

of imposing similar localization requirements that disadvantage foreign manufacturers.

- According to China, these conditions create an unfair competitive landscape, effectively penalizing foreign companies that cannot meet the domestic sourcing requirements.

India's Aatmanirbhar Bharat Policy

- India's subsidy schemes are a cornerstone of its **Aatmanirbhar Bharat (Self-Reliant India)** initiative.
- The government's stated objectives for these policies are to:
 - Build a robust domestic manufacturing ecosystem for EVs and batteries.
 - Reduce heavy reliance on imports, particularly from China, which currently dominates the global battery supply chain.
 - Promote local value addition, create jobs, and enhance India's technological capabilities in a critical sector.

What Happens Next: The WTO Process

- The dispute settlement process begins with a **60-day consultation period**. During this time, India and China are expected to engage in discussions to find a mutually agreeable solution.
- If these consultations fail to resolve the issue, China can request the establishment of a formal **WTO dispute settlement panel** to adjudicate the matter and issue a ruling.
- This case is significant as it challenges a key aspect of India's industrial policy aimed at boosting domestic manufacturing.

India and Brazil Agree to Expand India–Mercosur Trade Pact

What's the News?

- India and Brazil have agreed to **substantially expand** the scope of the existing **India–Mercosur Preferential Trade Agreement (PTA)**, aiming to transform it into a **comprehensive trade and economic partnership**.
- The decision was taken during a meeting between **Commerce and Industry Minister Piyush Goyal** and **Brazilian Vice President Geraldo Alckmin** in October 2025.
- Both sides target **\$20 billion in bilateral merchandise trade by 2030**, up from **\$12.19 billion in 2024–25**.

Key Features of the Agreement

- **Current PTA limitations:**
 - In force since **June 1, 2009**.
 - Covers only **450 tariff lines**, offering limited market access.
- **Expansion roadmap:**
 - Establish a **technical dialogue** and convene the **Joint Administration Committee** at the earliest.
 - Negotiations to be concluded **within one year** of launch.

- Scope to include **both tariff and non-tariff measures**, covering goods, services, and economic cooperation.
- **Private sector role:**
 - Active involvement of **industry stakeholders** encouraged to shape negotiations

Strategic and Economic Significance

- **Brazil's role:**
 - Largest trading partner of India in **Latin America and the Caribbean (LAC)**.
 - Key supplier of **soybeans, crude oil, gold, and fertilizers**; major market for Indian **pharmaceuticals, auto parts, and IT services**.
- **Mercosur bloc:**
 - Comprises **Brazil, Argentina, Paraguay, and Uruguay**—a combined market of **295 million people** and **\$430 billion GDP**.
 - Offers India a strategic gateway to **South American markets** under a unified framework.
- **Broader cooperation:**
 - Both nations plan a **digital partnership in artificial intelligence (AI)** and **high-performance computing**.
 - **Double Taxation Avoidance Agreement (DTAA)** to enhance investment predictability.

Additional Info

- **India's LAC Engagement:**
 - Part of India's **"Look West" policy** to diversify trade beyond traditional partners.
 - LAC region accounted for **~2.5% of India's total trade** in 2024; expansion aims to raise this share significantly.
- **Trade Composition (2024–25):**
 - **Indian exports:** Pharmaceuticals (\$1.8B), vehicles (\$1.2B), machinery, textiles.
 - **Imports from Brazil:** Crude oil (\$3.1B), soybeans (\$2.4B), gold (\$1.7B), iron ore.

US-Australia Forge \$8.5 Billion Rare Earths Partnership to Counter China's Dominance

What's the News?

- The **United States and Australia** have signed a landmark **\$8.5 billion critical minerals agreement** aimed at building resilient Western supply chains for **rare earth elements (REEs)** and reducing dependence on **China**, which currently dominates global production and processing.
- The deal was finalized during Australian Prime Minister **Anthony Albanese's** summit with US President **Donald Trump** and includes joint investments, price stabilization mechanisms, and strategic safeguards against foreign acquisition of critical assets.

Key Components of the Agreement

- **Joint Investment:**

- Both nations will commit **\$1 billion each within six months** to accelerate mining and processing projects.
- The **US Export-Import Bank (EXIM)** has already issued letters of interest worth **\$2.2 billion** to seven Australian rare earth firms, including **Lynas Rare Earths** and **Arafura Resources**.

Price Floor Mechanism:

- Introduces a **minimum price** for critical minerals to protect producers from market dumping and price volatility.

Strategic Safeguards:

- Includes **screening protocols** to block acquisitions of mining assets by "adversarial actors," explicitly targeting Chinese state-linked entities.
- Plans for a **gallium refinery in Western Australia**, following China's export ban on gallium—a key semiconductor material.

Regulatory Reforms:

- Streamlined permitting for mines and processing facilities in both countries to fast-track project execution.

Global and Strategic Context

China's Current Dominance:

- Controls **~60-70% of global rare earth mining** and **over 85% of refining capacity**.
- Recently expanded export restrictions to include **12 rare earths**, requiring foreign buyers to disclose end-use and obtain special permits.

Western Vulnerability:

- Rare earths are essential for **defense systems (radar, missiles), electric vehicles, wind turbines, and semiconductors**.
- The US has **only 12 active rare earth projects**, compared to **89 in Australia**.

Australia's Strategic Role:

- Holds the **world's fourth-largest rare earth reserves**.
- Attracted **45% of global rare earth exploration funding in 2024** (\$64 million).
- **Lynas** became the first non-Chinese company to produce **dysprosium oxide**—a heavy rare earth vital for high-performance magnets.

India Re-Elected Vice-Chair of UNESCO Anti-Doping Convention Bureau

What's the News?

- India has been re-elected as the **Vice-Chairperson of the Bureau of the 10th Conference of Parties (COP10)** to the **International Convention against Doping in Sport**.
- The re-election took place at the COP10 meeting held at the **UNESCO Headquarters** in Paris.
- This development is a significant recognition of India's growing leadership and unwavering commitment to promoting **clean and fair sport** on the global stage.

Key Components of the Agreement

- **Joint Investment:**

Role and Significance

- As a member of the **COP Bureau**, India, representing the **Asia-Pacific region**, will play a crucial role in the administration and governance of the convention.
- The position allows India to contribute actively to the global fight against doping, influencing international anti-doping policies and strategies.
- This re-election underscores the international community's trust in India's robust anti-doping framework and its efforts to ensure a level playing field for all athletes.

The International Convention against Doping in Sport

- This convention is a legally binding international treaty adopted by **UNESCO** in 2005.
- Its primary objective is to help governments align their domestic policies with the **World Anti-Doping Code**, ensuring a harmonized and effective global fight against doping in sports.
- Key Bodies:**
 - The **Conference of Parties (COP)** is the sovereign governing body of the Convention, meeting biennially to oversee its implementation.
 - The **COP Bureau** serves as the executive committee, responsible for steering the work of the conference between its sessions.

India's Anti-Doping Framework:

- India ratified the **UNESCO Anti-Doping Convention** in 2007.
- The country has a well-established anti-doping program managed by key institutions:
 - National Anti-Doping Agency (NADA)**: The central body responsible for implementing the anti-doping code across all sports in India.
 - National Dope Testing Laboratory (NDTL)**: A state-of-the-art, WADA-accredited laboratory that provides scientific expertise and testing services.
- India recently increased its contribution to the **UNESCO Fund for the Elimination of Doping in Sport**, reinforcing its financial commitment to the cause.

Timor-Leste Joins ASEAN as 11th Member, Marking First Expansion Since 1999

What's the News?

- Timor-Leste** (East Timor) has officially become the **11th member of the Association of Southeast Asian Nations (ASEAN)**, following formal admission at the **47th ASEAN Summit in Kuala Lumpur on October 26, 2025**.
- This marks ASEAN's first expansion in **26 years**, since Cambodia joined in 1999, and fulfills Timor-Leste's long-standing aspiration for regional integration.

Key Details of the Accession

Application Timeline:

- Applied for membership in **2011**.
- Received **in-principle approval** in **2022**.

- Completed institutional and administrative reforms to meet ASEAN standards.

Formal Induction:

- Prime Minister **Xanana Gusmão** signed accession documents alongside ASEAN leaders.
- National flag hoisted alongside other member states at the summit.

Geopolitical Significance:

- Timor-Leste is a **strategically located island nation** with a population of **1.3 million**, sharing maritime borders with Indonesia and Australia.
- Its inclusion completes ASEAN's vision of a **geographically and politically inclusive Southeast Asia**.

Strategic and Institutional Implications

- ASEAN Unity:**
 - Leaders emphasized **"unity in diversity"** and **regional solidarity** amid global uncertainties.
 - Admission seen as a reaffirmation of ASEAN's **openness and cohesion**.
- Support for Integration:**
 - Singapore, Malaysia, and other members pledged technical and institutional support to ease Timor-Leste's transition.
 - Focus on capacity-building in **trade, governance, and disaster resilience**.
- Broader Regional Agenda:**
 - ASEAN aims to deepen intra-regional trade, advance the **Digital Economy Framework Agreement (DEFA)**, and expand the **ASEAN Power Grid**.
 - Enhanced cooperation on **transnational crime, cybersecurity, and public health** (e.g., vaping regulation).

Additional Info

- Historical Context:**
 - Timor-Leste gained independence in **2002** after decades of occupation and conflict.
 - ASEAN was founded in **1967** by Indonesia, Malaysia, Philippines, Singapore, and Thailand.
- ASEAN Membership Criteria:**
 - Requires adherence to the **ASEAN Charter**, commitment to **peaceful dispute resolution**, and alignment with **economic and political integration goals**.
- India's ASEAN Engagement:**
 - India is a **Dialogue Partner** since 1992 and part of the **ASEAN Plus Three and East Asia Summit** frameworks.
 - Supports ASEAN centrality under its **Act East Policy** and **Indo-Pacific Oceans Initiative (IPOI)**.

ASEAN-India Summit: Strengthening Comprehensive Strategic Partnership

What's the News?

- The 22nd ASEAN-India Summit was held, with India's Prime Minister participating virtually. The summit was hosted by **Malaysia**, the ASEAN Chair for 2025.
- Discussions focused on the theme “**Inclusivity and Sustainability**” and reviewed the progress of the **ASEAN-India Comprehensive Strategic Partnership (CSP)**.
- A major development was the formal induction of **Timor-Leste** as the **11th member of ASEAN**, its first expansion in 26 years.

Key Announcements & Cooperation

- Year of Maritime Cooperation: 2026** was designated as the “**Year of ASEAN-India Maritime Cooperation**”.
 - This will focus on collaboration in maritime security, the blue economy, and **Humanitarian Assistance and Disaster Relief (HADR)**.
- Education & Culture:** India proposed the establishment of a **Centre for Southeast Asian Studies at Nalanda University**.
- Maritime Heritage:** A proposal was made to hold the **East Asia Summit Maritime Heritage Festival** at the historic site of Lothal, Gujarat.
- Shared Vision:** Leaders highlighted the alignment between the **ASEAN Community Vision 2045** and India's goal of **Viksit Bharat 2047**.

Economic Focus: AITIGA Review

- Accelerated Review:** Leaders called for an accelerated review of the **ASEAN-India Trade in Goods Agreement (AITIGA)**.
- Trade Imbalance:** The review is a key priority for India to address its significant trade deficit with the bloc, which reportedly grew to **\$43.57 billion in 2022-23**.
- Modernising the Pact:** The goal is to make the agreement more balanced, modern, and trade-facilitative by addressing issues with rules of origin and other non-tariff barriers.
- Trade Volume:** ASEAN is India's fourth-largest trading partner, with bilateral trade standing at approximately **\$122.6 billion**.

About ASEAN

- Full Form:** Association of Southeast Asian Nations.
- Members:** The bloc now comprises 11 member states following the formal induction of **Timor-Leste**.
- India-ASEAN Relations Timeline:**
 - 1992: Sectoral Dialogue Partner.
 - 2012: Elevated to Strategic Partnership.
 - 2022: Elevated to **Comprehensive Strategic Partnership (CSP)**.

20th East Asia Summit Adopts Kuala Lumpur Declaration on Peace and Stability

What's the News?

- The 20th East Asia Summit (EAS), held in **Kuala Lumpur**, adopted the **Kuala Lumpur Declaration** to mark its **20th anniversary**.

- The declaration reaffirms the EAS's commitment to **regional peace, stability, and strategic trust**, and calls for **transparent, predictable, and responsible conduct** by all participating countries in regional and global affairs. It also emphasizes **cooperation in security, disaster management, and regional architecture**.

East Asia Summit (EAS): Key Overview

- Establishment:** Launched in **2005** in **Kuala Lumpur, Malaysia**.
- Membership:** **18 countries**, including:
 - ASEAN 10:** Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam.
 - Plus 8:** Australia, China, India, Japan, New Zealand, South Korea, Russia, and the United States.
- India's Role:** Joined at inception; views EAS as a **key pillar of its Indo-Pacific strategy and Act East Policy**.
- Focus Areas:**
 - Political-security dialogue
 - Economic cooperation
 - Sustainable development
 - Non-traditional security challenges (e.g., pandemics, climate, maritime security)

Key Provisions of the Kuala Lumpur Declaration (2025)

- Reaffirms adherence to **international law**, including the **UN Charter** and **UNCLOS**.
- Promotes **strategic trust** through regular **dialogue** and **confidence-building measures**.
- Encourages **information exchange** on:
 - Regional development cooperation
 - National security policies
 - Disaster risk reduction and response
- Supports **ASEAN centrality** in shaping the **evolving regional architecture**.
- Calls for **inclusive, open, and rules-based Indo-Pacific order**.

72 Nations Sign Landmark Hanoi Convention on Cybercrime

What's the News?

- Seventy-two nations have signed the **United Nations Convention against Cybercrime**, also known as the **Hanoi Convention**, in a high-level ceremony hosted in Hanoi, Vietnam.
- This treaty is the **first-ever universal legal instrument** adopted under the auspices of the **United Nations** to specifically address and combat cybercrime.
- The convention aims to create a **unified international legal framework** to strengthen global cooperation in preventing and fighting cybercrime.

Key Objectives & Framework

- Global Legal Standards:** The convention establishes a global framework for:
 - Criminalisation:** Defining a wide range of cyber-dependent and cyber-enabled offences.

- This includes online fraud, hacking, data interference, and online child sexual abuse.
- **International Cooperation:** Facilitating mutual legal assistance, extradition, and cross-border investigations.
- **Electronic Evidence:** Providing the first global standards for the collection, sharing, and use of electronic evidence in serious criminal offences.
- **Capacity Building:** It emphasizes providing **technical assistance** and training to strengthen the capabilities of developing countries to tackle cyber threats.
- **24/7 Network:** The treaty creates a global **24/7 cooperation network** to allow for rapid, real-time coordination among law enforcement agencies.

Balancing Security and Rights

- **Human Rights Safeguards:** The convention includes provisions aimed at balancing the need for effective law enforcement with the protection of **human rights** and fundamental freedoms.
- **State Sovereignty:** It also upholds the principles of **state sovereignty** and non-interference in the internal affairs of other nations.
- **Novel Protections:** Notably, it is the first international treaty to recognise the **non-consensual dissemination of intimate images** as a criminal offence.

Additional Info

- **UN Adoption:** The convention's text was formally adopted by the **UN General Assembly** after years of negotiations involving an **Ad Hoc Committee (AHC)**.
- **Depository:** The **UN Office on Drugs and Crime (UNODC)** will serve as the secretariat and depository for the convention.
- **Entry into Force:** The treaty will legally enter into force **90 days** after the **40th signatory country** deposits its instrument of ratification.
- **Vietnam's Role:** Vietnam hosted the historic signing ceremony and was an active participant in the drafting and negotiation process.

India Granted Six-Month US Sanctions Waiver for Chabahar Port Operations

What's the News?

- The **United States** has granted India a **six-month sanctions waiver** for the operation and development of the **Chabahar Port** in Iran, confirmed by the **Ministry of External Affairs (MEA)**.
- The exemption allows **India Ports Global Limited (IPGL)**—the joint venture between Jawaharlal Nehru Port Trust and Kandla Port Trust—to resume port operations without facing penalties under the **Iran Freedom and Counter-Proliferation Act (IFCA)**.
- The waiver follows the **revocation of a prior exemption** in September 2025 and comes amid US pressure on India to reduce oil imports from **Russia**.

About Chabahar Port

- **Location & Structure:**
 - Situated in **southeastern Iran**, on the **Gulf of Oman**, in **Sistan and Baluchistan Province**.

- Comprises two terminals: **Shahid Beheshti** (operated by India since December 2018) and **Shahid Kalantari**.
- Iran's only oceanic port with **direct access to the Indian Ocean**, located ~170 km west of Pakistan's **Gwadar Port**.

Strategic Objectives:

- Provides India **bypass access to Afghanistan and Central Asia**, circumventing Pakistan.
- Serves as a critical node in the **International North-South Transport Corridor (INSTC)**, linking India to **Russia, Europe, and Central Asia** via Iran.
- Counters China's **China-Pakistan Economic Corridor (CPEC)** influence in the region.

Historical Milestones:

- Initial agreement between India and Iran signed in **2003**; delayed due to international sanctions.
- **Trilateral Transit Agreement** signed with **Afghanistan in 2016**.
- India formally assumed operations of two berths at Shahid Beheshti Terminal in **December 2018**.

Significance of the Waiver

- **Trade & Connectivity:** Enables uninterrupted movement of **humanitarian aid and commercial goods** to Afghanistan and beyond.
- **Geopolitical Balancing:** Reflects India's delicate diplomacy between **US expectations** (on Russian oil) and **strategic autonomy** in engaging Iran and Russia.
- **Economic Relief:** May lead to a **25% reduction in US tariffs** on Indian goods, previously elevated due to India's Russian oil imports.

Additional Info

- **US Sanctions Context:**
 - Waivers have been periodically issued since the **Obama administration**, typically lasting **6-9 months**, but never a permanent exemption.
 - Current waiver seen as **tactical**, possibly linked to US domestic politics and India's gradual reduction of Russian oil imports.
- **India-Afghanistan Linkage:**
 - Chabahar is vital for India's **development partnership** with Afghanistan, including projects like the **Salma Dam (India-Afghanistan Friendship Dam)**.
 - India recently upgraded its **Kabul mission to a full embassy** and pledged support for Afghanistan's **Kunar River hydroelectric projects**.

International Shipping Decarbonization Plan Delayed Under US Pressure

What's the News?

- Member countries of the **International Maritime Organization (IMO)** have voted to **delay implementation** of a strategic plan to transition the shipping industry to carbon-neutral operations by 2050.

- The vote resulted in **57 countries supporting the delay**, 49 opposing it, and 21 abstaining during the October meeting in London.
- This decision reverses earlier momentum when, in April, **63 countries** (including EU nations, China, India, Japan, and Canada) had approved the framework while only 16 (including the US) voted against it.

Understanding the IMO's Net-Zero Framework

- Framework objectives:**
 - Establish **emissions intensity limits** that become progressively stricter each year.
 - Create a **three-tier compliance system**:
 - High emitters**: Fail to meet standards, pay highest fees.
 - Medium emitters**: Meet lower standard, pay reduced fees.
 - Low emitters**: Meet both standards, receive carbon allowances.
 - Increase adoption of **zero or near-zero GHG emission technologies** to 5-10% of shipping energy by 2030.
- Technical implementation:**
 - Would cover vessels exceeding **5,000 gross tonnes** (accounting for 85% of shipping emissions).
 - Projected to increase annual fuel costs by **approximately 20%** for conventional fuel users by 2035.
 - Expected to generate **\$11-13 billion annually** for climate finance through compliance fees.
- Strategic significance:**
 - Represented the **first industry-wide global climate mandate** for any economic sector.
 - Aimed to reduce shipping's **carbon intensity by 40% by 2030**.
 - Critical component of global efforts to achieve **net-zero emissions by 2050**.

US Opposition and Diplomatic Pressure

- US position:**
 - Characterized the framework as a "**Global Green New Scam Tax on Shipping**".
 - Argued it would **increase costs for American consumers** and pose risks to global economy.
 - Issued **explicit threats** including potential tariffs, port fees, and visa restrictions against supporting nations.
- Diplomatic tactics:**
 - US President publicly opposed the measure on social media platforms.
 - US delegation employed **procedural delays** and challenged acceptance mechanisms.
 - Conducted **behind-the-scenes pressure** on other delegations to withdraw support.
- Alliance of opposition:**
 - Formed coalition with **oil-exporting nations** including Saudi Arabia, UAE, and Russia.
 - Successfully pushed Singapore's proposal to **delay decision for one year**.

- Saudi Arabia initiated the procedural vote that resulted in the delay.

Additional Information

- Environmental context:**
 - Shipping accounts for **approximately 1.7% of global anthropogenic CO2 emissions**.
 - Sector emissions remained **stable at 2.3% of total anthropogenic CO2** during 2016-2023.
 - Delay jeopardizes IMO's **2023 GHG Strategy** targets for reducing shipping emissions.
- Technical considerations:**
 - Implementation requires resolving complex issues:
 - Measuring **full life cycle emissions** of alternative fuels.
 - Defining which fuels qualify as "**zero or near-zero**".
 - Establishing **monitoring, reporting, and verification** systems.
 - Distributing climate finance to support **Global South transition**.

New Sevilla Forum Launched to Address Global Debt Crisis in Developing Nations

What's the News?

- The **Sevilla Forum on Debt** was launched as a new global platform to address the escalating crisis of **sovereign debt** faced by developing countries.
- The launch took place during the **16th United Nations Conference on Trade and Development (UNCTAD16)** in Geneva.
- It is a **Spanish-led initiative**, supported by the **United Nations Conference on Trade and Development (UNCTAD)** and the **UN Department of Economic and Social Affairs (UN DESA)**.
- UN Secretary-General António Guterres** inaugurated the Forum, emphasizing that no country should have to choose between servicing its debt or serving its people.
- The Forum serves as a direct, concrete outcome of the earlier **Fourth International Conference on Financing for Development (FfD4)** held in Sevilla, Spain.

Sevilla Forum on Debt: Objectives and Scope

- The Forum's core aim is to serve as a "vital bridge between borrowers and creditors" and a hub for dialogue.
- It is designed as an open and inclusive space for dialogue among all stakeholders, including governments, finance ministers, creditors, borrowers, international financial institutions, civil society, and academia.
- Primary Objectives:**
 - Sustain **political momentum** on debt reform.
 - Promote shared **principles for responsible sovereign borrowing and lending**.
 - Advance long-overdue reform of the **global debt architecture**, seeking a more equitable and predictable system.

- Monitor and track the implementation of debt initiatives agreed upon under the **Sevilla Commitment**.

The Debt Crisis: Key Metrics & Context

The forum's launch is a response to the unprecedented levels of global debt, which are directly undermining progress toward the **Sustainable Development Goals (SDGs)**.

- **Global Debt Figures (2024):**
 - Global public debt reached a record **\$102 trillion**.
 - Developing countries account for **\$31 trillion** of this total.
- **Debt Service Burden:**
 - Developing countries spend **\$1.4 trillion** on annual debt service.
 - A staggering **3.4 billion people** (over 40% of the global population) live in countries that spend more on **debt servicing** than on **health or education**.
 - **61 developing countries** spent **10% or more** of their government revenues on interest payments last year.

Contextual Frameworks

- **Fourth International Conference on Financing for Development (FfD4):**
 - Held in Sevilla, Spain, leading to the **Sevilla Commitment**.
 - The **Sevilla Commitment** set an ambitious and integrated roadmap to lower borrowing costs, enable fair and timely debt restructuring, and prevent future debt crises.
- **Key Initiatives:**
 - **Borrowers' Platform:** A key component of the Sevilla Commitment, launched separately to help debt-distressed countries coordinate efforts, share expertise, and amplify their voice in negotiations, addressing the issue of countries like Zambia being excluded from their own debt restructuring talks.
 - **Sevilla Platform for Action:** Included 130 specific initiatives to help developing countries channel public and private finance to areas of greatest need.

Afghanistan Rejects Durand Line as Official Border with Pakistan



What's the News?

- Tensions between **Pakistan** and **Afghanistan** have escalated following the **Taliban administration's** public refusal to recognize the **Durand Line** as the official international border.
- This rejection reignites a long-standing historical dispute, leading to increased border skirmishes and challenging Pakistan's efforts to fence the boundary.
- The core of the conflict remains Pakistan's insistence on the line's validity and Afghanistan's historical claim that the border artificially divides the **Pashtun** ethnic population.

The Durand Line

- The **Durand Line** is the **2,670-kilometre** (approx. 1,660-mile) boundary between Afghanistan and Pakistan.
- It was established in **1893** through an agreement between **Sir Mortimer Durand** (Foreign Secretary of British India) and **Amir Abdur Rahman Khan** (the Afghan ruler).
- The primary British objective at the time was to create a **buffer zone** to limit perceived Russian expansion during the "Great Game".

Conflicting Positions

- **Afghanistan's Stance:**
 - Afghan governments, including the current Taliban administration, have **never formally recognized** the Durand Line.
 - They argue the 1893 agreement was signed under **duress** with **British India**, not the independent state of Pakistan.
 - A key argument is that the treaty is invalid as it was signed with a non-existent entity (British India) and that Pakistan cannot inherit the treaty's terms.
- **Pakistan's Stance:**
 - Pakistan maintains that it inherited the border from British India based on the international legal principle of **uti possidetis juris** (newly formed sovereign states inherit their pre-independence boundaries).
 - It considers the Durand Line a settled, internationally recognized border.
 - Since 2017, Pakistan has been actively **fencing** the border to control cross-border movement and militancy, an action the Taliban opposes and has actively obstructed.

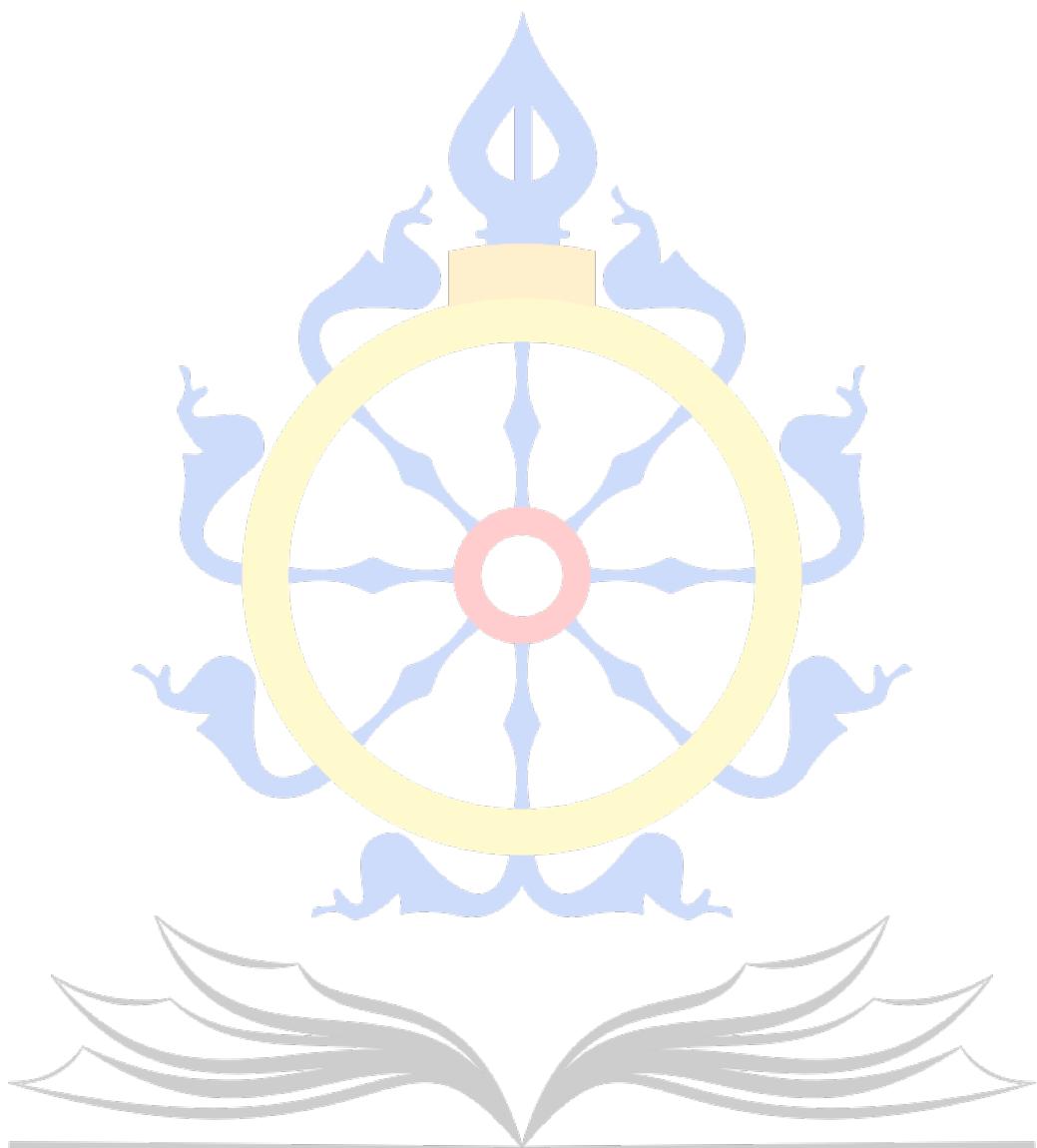
Additional Info

- **Ethnic Division:**
 - The line controversially bisects the homeland of the **Pashtun people**, the dominant ethnic group in Afghanistan and a major ethnic group in Pakistan (primarily in the **Khyber Pakhtunkhwa** province).
 - This division has historically fueled the "**Pashtunistan**" movement, a nationalist call for an independent state or autonomous region for Pashtuns.
- **Historical Context:**
 - Following Pakistan's independence in 1947, Afghanistan was the **only country** to vote

against Pakistan's admission to the **United Nations**, citing the border dispute.

- **Security Implications:**

- The porous and disputed nature of the border has historically allowed it to serve as a safe haven for militant groups.
- This complicates regional security, particularly concerning groups like the **Tehrik-i-Taliban Pakistan (TTP)**, which operates on both sides of the border and strains bilateral relations.



Miscellaneous

Venezuelan Leader María Corina Machado Wins Nobel Peace Prize 2025

What's the News?

- The **Norwegian Nobel Committee** has awarded the **2025 Nobel Peace Prize** to **María Corina Machado**, a Venezuelan opposition leader.
- She has been recognized for her "tireless work promoting democratic rights" and her non-violent struggle for a peaceful transition from dictatorship to democracy in **Venezuela**.
- The committee highlighted her role as a unifying figure in a divided opposition and a symbol of civilian courage against an authoritarian regime.

A Non-Violent Struggle for Democracy

- **María Corina Machado** has been a prominent figure in Venezuelan politics for over two decades, consistently advocating for free and fair elections and defending human rights.
- She co-founded **Súmate**, a civil society group focused on electoral transparency, embodying her principle of choosing "ballots over bullets."
- Despite facing political persecution, including being barred from running for president, she successfully unified the opposition and mobilized hundreds of thousands of volunteers to monitor the 2024 elections, documenting results to counter official narratives.

Indian Nobel Peace Laureates:

- **Mother Teresa (1979)**: Awarded for her humanitarian work with the poor and destitute in India through the **Missionaries of Charity**.
- **Kailash Satyarthi (2014)**: Honored (jointly with Malala Yousafzai) for his struggle against the suppression of children and for the right of all children to education.
- **The 14th Dalai Lama (1989)**: Though a Tibetan leader, he has resided in India since 1959 and received the prize for his non-violent struggle for the liberation of Tibet.

India's Best-Ever Performance at 11th Asian Aquatics Championships 2025

What's the News?

- India recorded its **most successful outing** at the **11th Asian Aquatics Championships**, held from **September 28 to October 11, 2025**, in **Ahmedabad, Gujarat**.
- Hosting the event for the first time—and only the second time in South Asia—India secured **13 medals (4 silver, 9 bronze)** across swimming and diving, finishing **11th overall** in a competition featuring **1,100 athletes from 29 countries**.

Key Highlights of India's Performance

- **Srihari Nataraj** emerged as India's top performer with **7 medals**—the highest by any Indian in a single edition—including:

- **Silver**: 200m freestyle, 50m backstroke
- **Bronze**: 100m freestyle, 100m backstroke, 4x100m medley relay, 4x100m freestyle relay

- **National Record**: Men's **4x200m freestyle relay team** (Aneesh Gowda, Sajan Prakash, Shoan Ganguly, Srihari Nataraj) clocked **7:23.38**, winning **silver**—India's first-ever medal in this event.
- **Women's Milestone**: **Bhavya Sachdeva** won **bronze** in **400m freestyle**, becoming the **first Indian woman to medal** at the championships.
- **Other Medalists**:
 - **Benediction R. Beniston**: Silver in 50m butterfly
 - **Kushagra Rawat**: Bronze in 1500m freestyle
 - **Rishabh Das**: Bronze in 200m backstroke
 - **Sajan Prakash**: Bronze in 200m butterfly

Event Overview

- **Organised by**: **Swimming Federation of India (SFI)** in collaboration with **Government of Gujarat**.
- **Disciplines**: 65 medal events across **swimming (42)**, **artistic swimming (11)**, **diving (10)**, and **water polo (2)**.
- **Qualification**: Served as a **qualifier for the 2026 Asian Games** in Nagoya, Japan.
- **Top Performers**:
 - **China**: Dominated with **54 medals** (40 gold)
 - **Kazakhstan**: Strong in artistic swimming (23 medals)
 - **Japan**: 21 medals, mostly in swimming

Additional Info

- **Swimming Federation of India (SFI)**:
 - **Established**: 1948
 - **Headquarters**: Ahmedabad, Gujarat
 - **President**: R.N. Jayprakash
- **Historical Context**:
 - Previous best Indian performance: **6 medals** (2012 edition).
 - India had never won a medal in men's 4x200m freestyle relay before 2025.