Monthly Current Affairs

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Governance and Policy

Government Launches Employees' Enrolment Campaign 2025

What's the News?

- The **Ministry of Labour and Employment** has launched the **Employees' Enrolment Campaign (EEC) 2025**.
- This initiative provides a special, one-time window for employers to **voluntarily declare and enroll** eligible employees who were previously left out of the **Employees' Provident Fund Organisation (EPFO)** social security net.
- The campaign aims to promote **voluntary compliance**, formalize the workforce, and extend social security coverage to all eligible employees.
- The campaign is operational for six months.

Campaign Eligibility and Duration

- **Campaign Window**: The scheme is active from **November 1, 2025, to April 30, 2026**.
- **Eligible Employees**: It covers all employees who joined an establishment between **July 1, 2017, and October 31, 2025**, but were not enrolled in the EPF scheme for any reason.
- **Condition**: To be eligible, employees must be **alive and currently employed** by the establishment as of the date of declaration.
- **Eligible Employers**: All establishments, regardless of whether they are already covered by the **EPF & MP Act, 1952**, can participate. This includes establishments currently facing inquiries under Section 7A of the Act.

Key Provisions and Benefits

- **Waiver of Employee Contribution**:
    - The **employee's share** of the PF contribution for the past period (July 2017 to October 2025) will be **waived entirely**.
    - This is conditional on the employer **not having deducted** this share from the employee's wages previously.
- **Employer's Liability**:
    - Employers are only required to pay their **own share** of PF contributions for the past period.
    - They must also pay the applicable **interest** (under Section 7Q) on their share.
- **Nominal Penalty**:
    - Employers will only be charged a **nominal lump-sum penalty of ₹100 per establishment** for the past non-compliance. This replaces the standard, much higher damages.
- **Declaration Process**:
    - Employers must submit a single declaration for all eligible employees online via the EPFO portal.
    - They must create a **Face Authentication-based Universal Account Number (UAN)** for each employee through the UMANG app.
- **Linked Benefits**: Employers who register under EEC 2025 may also be eligible for benefits under the **Pradhan Mantri-Viksit Bharat Rojgar Yojana (PMVBRY)**, subject to its conditions.

Swachh Survekshan 2025: Madurai Ranked Dirtiest City, Indore Cleanest for 8th Time

What's the News?

- The **Ministry of Housing and Urban Affairs (MoHUA)** has released the **Swachh Survekshan 2025** report, the 9th edition of the annual urban cleanliness survey.
- **Madurai**, Tamil Nadu, was ranked as the dirtiest city among those with a population of over 10 lakh (one million).
- **Indore**, Madhya Pradesh, retained its title as India's cleanest city for the eighth consecutive time, followed by **Surat** (Gujarat) and **Navi Mumbai** (Maharashtra) in the "Million Plus" category.

Key Rankings (Population > 10 Lakh)

- **Top 3 Cleanest Cities**:
    1. Indore (Madhya Pradesh)
    2. Surat (Gujarat)
    3. Navi Mumbai (Maharashtra)
- **Bottom 10 Dirtiest Cities (Ranked from worst)**:
    1. Madurai (Tamil Nadu)
    2. Ludhiana (Punjab)
    3. Chennai (Tamil Nadu)
    4. Ranchi (Jharkhand)
    5. Bengaluru (Karnataka)
    6. Dhanbad (Jharkhand)
    7. Faridabad (Haryana)
    8. Greater Mumbai (Maharashtra)
    9. Srinagar (Jammu & Kashmir)
    10. Delhi

Analysis of Low-Ranked Cities

- The report highlights that several major metropolitan areas, including **Bengaluru**, **Chennai**, and **Delhi**, performed poorly, indicating significant challenges in urban sanitation despite their economic status.
- **Madurai's** low score (4,823 out of 12,500) was attributed to extremely poor performance in key parameters:
    - **Waste generation vs. processing** (4% score)
    - **Cleanliness of public toilets** (3% score)
    - **Source segregation** (26% score)
    - **Remediation of dumpsites** (25% score)
- Common challenges for underperforming cities include unplanned urban expansion, weak enforcement of sanitation bylaws, and inadequate waste segregation at the source.

Additional Info

- **About Swachh Survekshan**:
    - It is an annual assessment conducted as part of the **Swachh Bharat Mission (Urban)**.
    - It is considered the world's largest urban sanitation and cleanliness survey.

- It evaluates cities on parameters like **solid waste management**, citizen feedback, hygiene levels, and innovation in sanitation.
- **New Developments in 2025 Survey**:
  - Introduction of a new category called the **'Super Swachh League'** to recognize cities with exceptional performance.
  - Cities are now categorized by population size (e.g., <1 lakh, 1-10 lakh, >10 lakh) to ensure a fair and level playing field.
  - A new **school-level assessment** was launched to promote cleanliness values among the youth.
- **Related Government Initiatives**:
  - The government has launched a **"Swachh City Partnership"**, where top-performing cities will mentor underperforming ones.
  - An **"Accelerated Dumpsite Remediation"** program was also announced to help cities clear legacy waste and reclaim urban land.

ECI Launches International Election Visitors' Program 2025 in New Delhi

What's the News?
- The **Election Commission of India (ECI)** has launched the **International Election Visitors' Program 2025** at the India International Institute for Democracy and Election Management in New Delhi.
- The program aims to foster international cooperation and engagement with election management bodies and international organizations.
- A total of **14 participants** from **seven countries**—France, South Africa, Belgium, Indonesia, the Philippines, Thailand, and Colombia—will witness polling in the first phase of the **Bihar Assembly Elections** scheduled for November 6, 2025.

IEVP 2025 Key Details
- **Objective**: The IEVP is a flagship program for international cooperation, designed to showcase the strengths of India's electoral system and share best practices with other EMBs.
- **Participating Nations**: The 7 countries participating are **France, South Africa, Belgium, Indonesia, the Philippines, Thailand, and Colombia**.
- **Delegate Activities**:
  - Participants will undertake a two-day tour of **Bihar** to observe the **first phase** of the **Bihar Assembly Elections**.
  - They will witness polling preparations, visit **Electronic Voting Machine (EVM) dispatch centres**, and observe the polling process on election day.
  - During the inauguration, delegates received a demonstration of **EVMs** and presentations on the preparation of **electoral rolls** and the overall conduct of elections in India.

Additional Info
- **Election Commission of India (ECI)**:
  - An autonomous constitutional authority responsible for administering Union and State election processes in India.
  - The ECI operates under the authority of **Article 324** of the Constitution of India.
- **India International Institute for Democracy and Election Management (IIIDEM)**:
  - An advanced training and resource centre of the ECI.
  - It was established to promote democratic values and share India's electoral experiences and best practices with the world.

Supreme Court Orders Removal of Stray Animals from Public Spaces

What's the News?
- The **Supreme Court of India** has issued directives for the **removal of stray animals**, including dogs and cattle, from public spaces.
- The court ordered **strict compliance** with a previous 2015 directive concerning the same issue, noting its implementation has been lacking.
- The order specifically targets high-traffic public areas such as **bus stands, railway stations, and airports**, citing public safety concerns.

Key Observations and Context
- A bench comprising **Justice Surya Kant** and **Justice KV Viswanathan** stated that the "unfettered" movement of stray animals in key public places is unacceptable.
- The Supreme Court is hearing a series of petitions that highlight the **conflict between different High Court orders** across the country regarding the management of stray dogs.
- The proceedings also acknowledged the practical difficulties and challenges faced by authorities in implementing the **Animal Birth Control (ABC) Rules, 2023**.

Additional Info
- **Past Judicial References**:
  - *Animal Welfare Board of India v. A. Nagaraja (2014)*: Affirmed the need for humane treatment of animals while upholding public safety.
  - *People for Elimination of Stray Troubles v. State of Goa (2021)*: Reiterated that **human safety takes precedence** in managing stray populations.
- **Prevention of Cruelty to Animals (PCA) Act, 1960**:
  - This is the principal central legislation enacted to prevent cruelty to animals.
  - It provides the legal foundation for animal welfare rules, including population control measures.
- **Animal Birth Control (ABC) Rules, 2023**:
  - Notified under the PCA Act, these rules mandate **sterilisation and vaccination** as the preferred scientific method for managing the stray dog population, as opposed to culling.

- They outline the responsibilities of local bodies in carrying out the ABC program.
- **Code of Criminal Procedure (CrPC), 1973**:
  - **Section 133** of the CrPC empowers District Magistrates to issue orders for the removal of "public nuisances," which has, in some cases, been interpreted to include dangerous stray animals.
- **Constitutional Context**:
  - **Article 21 (Right to Life)**: This fundamental right is often cited in petitions, arguing that citizens have a right to a safe environment, free from the threat of animal attacks.
  - **Article 51A(g)**: This Fundamental Duty states that it is the duty of every citizen "to protect and improve the natural environment... and to have compassion for living creatures." The court's task is to balance these competing rights and duties.

CAG of India to Create Two New Specialized Audit Cadres

What's the News?
- The **Comptroller and Auditor General (CAG) of India**, **Girish Chandra Murmu**, has announced a significant restructuring of the **Indian Audit and Accounts Service (IA&AS)**.
- The plan involves the creation of two new, specialized cadres:
  - **Defence Audit Officer Cadre**
  - **Digital Audit Officer Cadre**
- This move is aimed at enhancing specialization and centralization within the nation's top audit body.

Key Cadre Details
- **Defence Audit Officer Cadre**:
  - **Objective**: To create a dedicated pool of experts for auditing India's complex and substantial defence expenditure.
  - **Rationale**: This addresses the need for specialized knowledge in defence procurement and operations, which differs significantly from general civil audits.
  - **Context**: This follows the earlier merger of the Railway Audit Department with the Defence Audit Department.
- **Digital Audit Officer Cadre**:
  - **Objective**: To build specialized capacity for auditing in an increasingly digitized governance landscape.
  - **Focus Areas**: This cadre will handle audits of IT systems, cybersecurity, and large-scale data platforms, such as the **Goods and Services Tax Network (GSTN)**.

Additional Info
- **Constitutional Provisions for CAG**:
  - The CAG is a constitutional body established under **Article 148** of the Indian Constitution.
  - **Article 149**: Details the duties and powers of the CAG, which are defined by Parliament.
  - **CAG's (Duties, Powers and Conditions of Service) Act, 1971**: This Act, passed under Article 149, governs the CAG's functions.
  - **Article 150**: The CAG advises the President on the form in which the accounts of the Union and the States are to be maintained.
  - **Article 151**: The CAG submits audit reports on Union accounts to the President (for Parliament) and on State accounts to the Governor (for the State Legislature).

President to Confer Inaugural Jal Sanchay Jan Bhagidari Awards 2025

What's the News?
- President **Droupadi Murmu** is set to confer the first-ever **Jal Sanchay Jan Bhagidari (JSJB) Awards 2025** in New Delhi to honour excellence in community-led water conservation.
- The awards celebrate the success of the **Jal Sanchay Jan Bhagidari** initiative, which achieved a historic milestone by constructing over **2.76 million (27.6 lakh) water recharge structures**, significantly overshooting the initial target of **1 million (10 lakh)**.
- The event highlights the government's push to transform water conservation into a mass movement (**Jan Andolan**) through the "Whole-of-Society" approach.

JSJB Initiative: Objectives & Framework
- Anchored under the **Ministry of Jal Shakti**, JSJB is a community-driven program with the core objective to *"conserve every drop of water through collective efforts"*.
- Guided by the **3Cs mantra**:
  - **Community** (mobilisation of panchayats, citizens, and local institutions),
  - **CSR** (engagement with industries and philanthropists),
  - **Cost** (ensuring low-cost, scalable interventions).
- Targets include:
  - **10,000 recharge structures per district** (3,000 for hilly/North-Eastern districts),
  - Focus on **borewell recharge systems**, **rooftop rainwater harvesting**, and **aquifer rejuvenation**.

Top Performers & Key Highlights
State Rankings
- **Telangana** secured the **1st rank**, constructing over **5.2 lakh structures**.
- **Chhattisgarh** and **Rajasthan** followed in the second and third positions respectively.

Award Categories & Incentives
- **Scope**: A total of **100 awards** will be presented across categories including **States, Districts, Municipal Corporations**, and **NGOs**.
- **Financial Incentives**:
  - **Category 1 Districts**: Top performers will receive **₹2 crore** each.
  - **Category 2 & 3 Districts**: Winners will receive **₹1 crore** and **₹25 lakh** respectively.

- **Odisha's Achievement**: Five districts from **Odisha** (Ganjam, Kalahandi, Rayagada, Cuttack, Mayurbhanj) have been selected for awards in Category 3.

Additional Info
- **Jal Shakti Abhiyan (JSA)**:
  - Launched in **2019** by the **Ministry of Jal Shakti**.
  - **Catch the Rain** tagline: *"Catch the rain, where it falls, when it falls"*.
  - Focuses on **rainwater harvesting**, **renovation of traditional water bodies**, and **reusing water**.
- **Constitutional Context**:
  - **State List (Entry 17)**: Water (irrigation, canals, drainage, storage) is primarily a State subject.
  - **Union List (Entry 56)**: Regulation of inter-state rivers and valleys.
  - **Article 51A(g)**: Fundamental Duty of every citizen to protect and improve the natural environment, including lakes, rivers, and wildlife.

UIDAI Partners with NITI Aayog to Boost Biometric Updates for Children

What's the News?
- The **Unique Identification Authority of India (UIDAI)** has announced a collaboration with the **Behavioural Insights Unit of NITI Aayog (NITI-BIU)** to drive the adoption of **Mandatory Biometric Update (MBU)** among children.
- This initiative aims to use **behavioral science** and **"nudge" strategies** to encourage parents and guardians to update the biometric details of children aged **5 and 15 years**.
- The partnership seeks to address the gap in biometric updates, ensuring that children continue to access **welfare benefits**, **scholarships**, and other essential services without disruption.

Mandatory Biometric Update (MBU): Rules & Rationale
- Children enrolled in Aadhaar must **update biometrics (fingerprints, iris, photograph)**:
  - **First MBU**: on attaining **age 5** (ideally between 5 - 7 years),
  - **Second MBU**: on attaining **age 15** (ideally between 15 - 17 years).
- Failure to update reduces authentication success, impacting access to services like **scholarships, mid-day meals, and public health schemes**.
- Previously, updates outside the 5 - 7 and 15 - 17 windows attracted a **₹125 fee**; UIDAI has now waived this for the entire 7 - 15 cohort for one year.

Behavioural Insights Intervention
- UIDAI - BIT MoU signed in November 2025 to design and test **evidence-based behavioural nudges** addressing:
  - **Awareness gaps** (e.g., caregivers unaware of MBU timelines),
  - **Logistical barriers** (e.g., distance to enrolment centres),

- **Procrastination and perceived low urgency**.
- Interventions may include SMS reminders, simplified visual guides, community mobilisation, and default opt-in prompts in service delivery workflows.
- Aims to convert MBU from a *compliance burden* to a *trusted, seamless civic action* - aligning with UIDAI's vision of "digital identity as empowerment".

Additional Info
- **Baal Aadhaar**:
  - A blue-colored Aadhaar card for children **below 5 years**.
  - Requires **mandatory conversion** to a standard Aadhaar with biometric updates once the child turns 5.
- **NITI Aayog Behavioural Insights Unit (BIU)**:
  - Established to apply behavioral economics to policy implementation.
  - Helps improve policy outcomes in areas like health, nutrition, and financial inclusion by understanding human behavior.
- **Legal Framework**:
  - **Aadhaar Act, 2016**: Provides the statutory backing for UIDAI and the unique identification numbers.
  - **Supreme Court Ruling (2018)**: Upheld the constitutional validity of Aadhaar but struck down its mandatory use for bank accounts and mobile connections (later modified by amendments).

Government Notifies Digital Personal Data Protection (DPDP) Rules, 2025

What's the News?
- The **Government of India** has notified the **Digital Personal Data Protection (DPDP) Rules, 2025**.
- These rules have been released by the **Ministry of Electronics and Information Technology (MeitY)**.
- The rules aim to operationalize the provisions of the **Digital Personal Data Protection (DPDP) Act, 2023**, by specifying the procedures for implementation and compliance.

Key Regulatory Framework & Obligations
- **Consent Architecture**:
  - Consent must be **explicit**, **purpose-specific**, and **revocable**.
  - Managed via licensed **Consent Managers**, restricted to **Indian-registered entities**.
- **Rights of Data Principals (Individuals)**:
  - Right to **access**, **correct**, **update**, **erase**, **nominate a representative**, and **withdraw consent**.
  - Data Fiduciaries must respond to such requests within **90 days**.
- **Special Safeguards**:
  - **Verifiable parental consent** for children;
  - **Guardian consent** for persons with severe disabilities (exemptions only for essential services like health & education).
- **Obligations for Significant Data Fiduciaries (SDFs)**:

- o Appoint independent **Data Protection Officers (DPOs)**;
- o Conduct **Data Protection Impact Assessments (DPIAs)** and **regular audits**;
- o Implement technology due-diligence and stricter security protocols.

Enforcement & Governance Mechanism

- **Data Protection Board of India (DPBI)**:
  - o Fully digital adjudicatory and enforcement body;
  - o Empowered to impose penalties up to **₹250 crore** for violations (e.g., data breaches, unlawful processing).
- **Exemptions**:
  - o Granted for **national security**, **public order**, **judicial functions**, **law enforcement**, and **academic/research purposes** - subject to government notification.

e-Jagriti Revolutionizes Consumer Justice in 2025: Delivering Swifter Redressal and Outperforming 2024 Benchmarks

What's the News?

- In a major boost to consumer rights, the e-Jagriti platform of the Department of Consumer Affairs has emerged as a transformative digital grievance redressal system, registering over two lakh users since its launch on January 1, 2025.
- The platform streamlines procedures for citizens by reducing paperwork, minimizing travel, and cutting down physical documentation, thereby promoting environmental sustainability.
- It also strengthens access for NRIs by removing geographical barriers and enabling them to assert their consumer rights from abroad.
- It operates under the motto **"One Consumer, One Platform"**, aiming to create a single, seamless ecosystem for consumers.

Key Features of the e-Jagriti Platform

- **Unified Integration**: The platform integrates several key consumer grievance portals into one interface:
  - o The **National Consumer Helpline (NCH)**.
  - o The **e-Daakhil** portal, which facilitates **Online Dispute Resolution (ODR)** by allowing consumers to e-file cases in the **Consumer Commissions**.
  - o The **Advertising Standards Council of India (ASCI)** portal for handling complaints related to misleading advertisements.
- **Technology-Driven**: 'e-Jagriti' leverages **Artificial Intelligence (AI)** and **Machine Learning (ML)** to enhance its services.
- **AI/ML Applications**: This technology will be used for:
  - o Smart analysis and classification of consumer complaints.
  - o Providing automated responses for common queries.
  - o Identifying emerging trends and patterns in consumer issues and product defects.

Performance & Impact

- **Disposal Efficiency**:
  - o **July–Aug 2025**: 27,545 cases disposed vs. 27,080 filed
  - o **Sept–Oct 2025**: 24,504 disposed vs. 21,592 filed
  - o **10 states + NCDRC** achieved >100% disposal rates (backlog reduction)
- **High-Adoption States**:
  - o Gujarat (14,758), Uttar Pradesh (14,050), Maharashtra (12,484)
- **Landmark Outcomes**:
  - o ₹3.05 lakh awarded in **25 days** for ed-tech scam (Assam)
  - o ₹1.67 lakh + interest for defective fridge used since 2017 (Tripura)

Supreme Court Strikes Down Key Provisions of Tribunal Reforms Act, 2021

What's the News?

- The **Supreme Court of India** has declared several provisions of the **Tribunal Reforms Act, 2021** as unconstitutional, reinforcing the independence of the judiciary.
- The Court struck down sections related to the **tenure** and **minimum age requirements** for tribunal members, stating that these provisions violated the principles of **separation of powers** and judicial independence.
- The Bench criticized the government for re-enacting provisions that had previously been struck down by the Court in the **Madras Bar Association cases**, terming the move as an encroachment on judicial directions.

Provisions Struck Down & Restored

- **Tenure of Members**:
  - o The Court struck down the provision fixing the tenure of tribunal members at **4 years**.
  - o It restored the tenure to **5 years**, ruling that a shorter tenure compromises the independence and security of tenure essential for judicial functioning.
- **Minimum Age Limit**:
  - o The Court invalidated the requirement of a **minimum age of 50 years** for appointment as a tribunal member.
  - o It noted that this restriction arbitrarily excluded young, competent advocates (with 10 years of practice) and violated **Article 14** (Right to Equality).
- **Search-cum-Selection Committee (SCSC)**:
  - o The Court ruled that the SCSC should be dominated by judicial members rather than bureaucrats to ensure impartial appointments.
  - o It mandated that the **Chief Justice of India (CJI)** or their nominee must have a casting vote in the committee.

Directive for National Tribunals Commission (NTC)

- **Establishment Ordered**: The Supreme Court directed the Centre to immediately establish an independent **National Tribunals Commission (NTC)**.
- **Purpose**: To handle the **administrative, infrastructural, and funding requirements** of tribunals, which are currently managed by various parent ministries.
- **Significance**:
  - This moves the control of tribunals away from the **Executive**, which is often a litigant in cases before these very tribunals.
  - It ensures that tribunals can function without fear or favor, upholding the spirit of **Article 50**.

Additional Info

- **Tribunals in India**:
  - Quasi-judicial bodies established to reduce the burden on courts and provide specialized justice.
  - **Constitutional Status**: Added by the **42nd Amendment Act, 1976** (Swaran Singh Committee recommendations).
    - **Article 323A**: Administrative Tribunals (for public service matters).
    - **Article 323B**: Tribunals for other matters (taxation, land reforms, etc.).
- **Key Judicial Precedents**:
  - **Madras Bar Association v. Union of India (2020)**: The SC directed the constitution of the NTC to ensure functional autonomy.
  - **L. Chandra Kumar v. Union of India (1997)**: Ruled that decisions of tribunals are subject to **Judicial Review** by High Courts, which is part of the **Basic Structure** of the Constitution.
- **Separation of Powers**:
  - **Article 50**: Directive Principle of State Policy (DPSP) that mandates the State to separate the **Judiciary from the Executive** in public services.

Supreme Court Clarifies Governor's Powers on Assent to State Bills

What's the News?

- A **Constitution Bench of the Supreme Court** has delivered a significant verdict clarifying the powers of **Governors** regarding **Article 200** of the Constitution.
- The Court ruled that while Governors have **discretion** in choosing their course of action on Bills, they cannot keep a Bill pending **indefinitely** without a decision.
- However, the Bench **refused to set a rigid timeline** for Governors to grant assent, stating that the constitutional phrase **"as soon as possible"** is elastic and cannot be replaced by a judicial deadline.
- The judgment came in response to a **Presidential Reference** seeking clarity on the scope of gubernatorial powers and judicial interference.

Key Aspects of the Verdict

No "Deemed Assent" or Rigid Timelines

- **Rejection of Fixed Deadlines**: The Court overruled a previous smaller bench judgment that had set specific timelines (e.g., 3 months) for Governors. It held that the Judiciary cannot rewrite the Constitution to insert deadlines where the text says **"as soon as possible."**
- **No Automatic Passing**: The Court rejected the concept of **"deemed assent,"** meaning a Bill cannot be considered "passed" simply because the Governor failed to act on it for a long time.

The "Indefinite Delay" Check

- **Inaction is Justiciable**: While courts cannot dictate the *merit* of a Governor's decision, **"prolonged, unexplained, and indefinite inaction"** is subject to **judicial review**.
- **Mandatory Return**: If a Governor decides to **withhold assent** (for non-Money Bills), they **must return the Bill** to the State Legislature for reconsideration. They cannot simply "sit" on the Bill (Pocket Veto) to kill it.
- **Article 361 Immunity**: The Court clarified that the **personal immunity** granted to Governors under Article 361 does not shield their **official acts (or inactions)** from judicial scrutiny regarding constitutional duties.

Constitutional Framework & Implications

Understanding Article 200

- **The Options**: When a Bill passed by the State Legislature is presented to the Governor, they have **four options**:
  1. **Give Assent**: The Bill becomes an Act.
  2. **Withhold Assent**: Must return the Bill (if not a Money Bill) to the Legislature.
  3. **Return the Bill**: If the Legislature re-passes the Bill (with or without amendments), the Governor **must give assent**.
  4. **Reserve for President**: If the Bill endangers the position of the **High Court** or conflicts with Central laws (Article 201).

Impact on Federalism

- **Elected vs. Unelected**: The judgment reinforces that the **Governor (an appointee)** cannot thwart the law-making power of the **Elected Legislature**.
- **Dialogue Process**: The Court described the assent process as a "dialogue" between the Governor and the House, not an adversarial contest.

Additional Info

- **Constitutional Articles**:
  - **Article 200**: Assent to Bills (State Legislature).
  - **Article 201**: Bills reserved for consideration of the President.
  - **Article 163**: Governor to act on aid and advice of the Council of Ministers (except where discretion is allowed).
  - **Article 361**: Protection of President and Governors (Personal Immunity).
- **Commission Recommendations**:
  - **Sarkaria Commission (1987)**: Observed that Governors should not belong to the ruling party at the Centre to ensure impartiality; mandated that assent should not be withheld arbitrarily.

- o **Punchhi Commission (2010)**: Specifically recommended that the Governor should decide on Bills within a **six-month timeframe** (though this was never made into law).
- **Key Precedents**:
  - o **Shamsher Singh Case (1974)**: Established that the Governor is a formal head and must generally act on the aid and advice of the Cabinet.
  - o **State of Punjab Case (2023)**: Earlier clarified that a Governor cannot withhold assent without sending the Bill back to the House.

Bharat NCAP 2.0: Stricter Safety Norms and New "5-Pillar" Rating System Proposed

What's the News?

- The **Ministry of Road Transport and Highways (MoRTH)** has released the draft notification for **Bharat NCAP 2.0**, a significantly upgraded vehicle safety assessment programme scheduled to be implemented from **October 2027**.
- This new regime aims to align Indian safety standards with global benchmarks like **Euro NCAP** by introducing stricter crash tests and a holistic "Safe Systems" approach.
- For the first time, vehicle ratings will heavily factor in **pedestrian safety** and **accident avoidance technologies**, moving beyond just occupant protection.

Key Features of Bharat NCAP 2.0

The "5-Pillar" Assessment Framework

Unlike the current system which focuses mainly on adult and child occupants, the new 2.0 protocol will evaluate vehicles on five distinct pillars with specific weightages:

- **Crash Protection (55%)**: Remains the core component but with expanded test scenarios.
- **Vulnerable Road User (VRU) Protection (20%)**: A major new addition designed to reduce fatalities among pedestrians and cyclists.
- **Safe Driving (10%)**: Evaluates features like seatbelt reminders and driver monitoring.
- **Accident Avoidance (10%)**: Focuses on active safety tech like **Electronic Stability Control (ESC)** and braking systems.
- **Post-Crash Safety (5%)**: Assesses rescue ease, fire risks, and door opening forces after a collision.

Key Upgrades & Mandatory Requirements

- **Mandatory safety features** for *any* star rating eligibility:
  - o **Electronic Stability Control (ESC)**
  - o **Curtain airbags** (side head protection).
- **Expanded crash testing**:
  - o Total tests increased from **3 to 5**:
    - ▪ 64 km/h offset frontal
    - ▪ 50 km/h full-width frontal
    - ▪ 50 km/h lateral mobile barrier
    - ▪ 32 km/h oblique pole side
    - ▪ 50 km/h mobile rigid rear impact.
- **VRU Protection tests**:
  - o Mandatory **pedestrian legform** and **adult/child headform impact tests** on bumpers, bonnet, and windshield.

- o Optional scoring for **Autonomous Emergency Braking (AEB)** for pedestrians and motorcyclists.

Revised Star Rating Criteria

- **100-point scale**, with dynamic thresholds:
  - o **2027–2029**: ≥70 points for 5-star
  - o **2029–2031**: ≥80 points for 5-star.
- **Strict qualifying conditions**:
  - o **Adult Occupant Protection (AOP)** score must be ≥55% of Crash Protection vertical score for 3+ star rating; else, **1-star penalty applied**.
  - o Zero score in *any* pillar caps rating at **4 stars**.
  - o **Red-zone injury values** (pre-modifier) disqualify 5-star certification.

Additional Info

- **Bharat NCAP (Current Version)**:
  - o Launched in **October 2023**; voluntary for manufacturers.
  - o Applies to **M1 category vehicles** (passenger cars up to 8 seats, gross weight < 3,500 kg).
  - o Current tests: Frontal Offset (64 kmph), Side Impact (50 kmph), and Pole Side Impact (29 kmph).
- **Comparison: 1.0 vs 2.0**:
  - o **Scope**: 1.0 focuses on **Crashworthiness** (survival); 2.0 focuses on **Crash Avoidance + Survival + Post-Crash Care**.
  - o **Tests**: 1.0 has **3 tests**; 2.0 has **5 tests** (adding Full Frontal & Rear Impact).
  - o **Dummies**: 2.0 will use advanced **THOR dummies** for more precise injury data compared to the current H-III dummies.

CJI Surya Kant Proposes National Judicial Policy to Unify Legal Interpretations

What's the News?

- **Chief Justice of India (CJI) Surya Kant** has proposed the formulation of a **Uniform National Judicial Policy** during the **Constitution Day** celebrations.
- The policy aims to address the issue of **divergent legal interpretations** across different benches of the Supreme Court and High Courts, ensuring **predictability and consistency** in the law.
- The event also highlighted concerns raised by **President Droupadi Murmu** regarding the "culture of adjournments" and the high stress faced by litigants, which she termed **"Black Coat Syndrome."**

Why a National Judicial Policy?

- **Current Challenge**:
  - o Inconsistent rulings on seminal legal questions due to jurisdictional fragmentation.
  - o Over 25 High Courts and multiple Supreme Court benches often produce conflicting interpretations on similar facts or laws.
- **Proposed Solution**:
  - o A **national judicial policy** as an institutional framework to guide courts toward coherence, clarity, and consistency.

- o Not a binding code, but a guiding "constitutional score" for harmonizing judicial reasoning.

Access to Justice: The Core Concern

The CJI identified four systemic barriers limiting justice access:

- **Cost**: Exorbitant litigation expenses
- **Language**: Non-availability of vernacular legal support
- **Distance**: Physical remoteness of courts
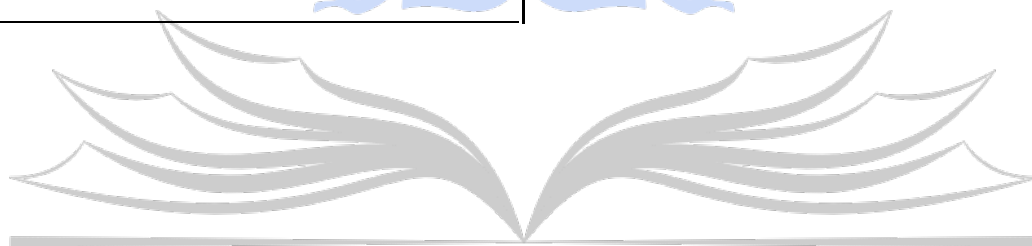- **Delay**: Pendency and procedural inefficiencies

He stressed that these barriers disproportionately affect marginalized communities and *"magnify existing inequalities"*.

Key Enablers Highlighted

- **Judicial Infrastructure**:
  - o Includes not only courtrooms but also **technological**, **administrative**, and **human resource** systems.
- **Mediation & ADR**:
  - o Described as *"cost-effective, participatory, and deeply humane"*.
  - o CJI cited the **"Mediation for the Nation"** drive and a **40+ hour online training module** to scale capacity.
  - o Emphasis on **well-designed centres**, **trained professionals**, and **digital platforms** to democratize dispute resolution.
- **Technology**:
  - o **e-Filing**, **virtual hearings**, **multilingual platforms**, and **case-management tools** are already improving access — but must be deployed with equity to avoid digital exclusion.

Constitutional Anchors

- **Article 32**: Right to constitutional remedies as a pillar of justice access.
- **Article 39A**: Directive Principle mandating *"equal justice and free legal aid"*.
- CJI noted: *"A Constitution which proclaims rights without avenues to enforce them may not be a true testament of Justice"*.

Social Issues

G20 Report Warns of 'Inequality Emergency,' Cites Sharp Rise in India

What's the News?

- A landmark report commissioned by the **South African Presidency of the G20** has warned that global inequality has reached "emergency levels".
- The study was led by the **G20 Extraordinary Committee of Independent Experts on Global Inequality**, chaired by Nobel laureate **Joseph Stiglitz** and including economist **Jayati Ghosh**.
- The report highlights that extreme wealth concentration threatens democratic stability, economic progress, and climate action.

Key Global Findings

- **Wealth Concentration**: The world's richest **1%** captured **41%** of all new wealth created between 2000 and 2024.
- **Bottom 50%**: In stark contrast, the bottom **50%** of humanity received just **1%** of this new wealth.
- **Democratic Risk**: Countries with high inequality are **seven times more likely** to experience democratic decline.
- **Global Poverty**: Progress on reducing global poverty has stalled or reversed since 2020.
  - An estimated **2.3 billion people** face moderate or severe food insecurity, an increase of 335 million since 2019.
  - **1.3 billion people** are impoverished by out-of-pocket health spending.

India-Specific Data

- **Wealth Growth**: In India, the richest **1%** grew their share of wealth by **62%** between 2000 and 2023.
- **Comparative Growth**: This growth in wealth concentration among India's top 1% was faster than in China, which saw a **54%** increase in the same period.
- **Internal vs. External Inequality**: The report notes that while inequality *between* countries (inter-country) has broadly reduced—largely due to income growth in populous nations like India and China—inequality *within* most countries has widened significantly.

Key Recommendation: International Panel on Inequality (IPI)

- **Proposal**: The committee's primary recommendation is the creation of a new **International Panel on Inequality (IPI)**.
- **Model**: This body would be modeled on the **Intergovernmental Panel on Climate Change (IPCC)**.
- **Function**: Its purpose would be to:
  - Monitor global trends in inequality.
  - Assess its drivers and consequences.
  - Provide governments and policymakers with authoritative, evidence-based data and policy analysis.

- **Stance**: The report emphasizes that "extreme inequality is a choice... not inevitable and can be reversed with political will".

Persistent Gender Gap in UPSC Civil Services

What's the News?

- An analysis of **Union Public Service Commission (UPSC)** annual reports over the last decade (2014-2023) reveals a persistent gender gap in the **Civil Services Examination (CSE)**.
- Despite a gradual increase in participation, women's representation among finally recommended candidates has consistently remained below **40%**.
- Data indicates a "leaky pipeline," where the proportion of women, while rising, decreases at successive stages of the examination, though this trend is improving.
- In 2023, women constituted **30.4%** of applicants, **30.1%** of candidates qualifying for Mains, **33.8%** of those qualifying for the Interview, and **34.5%** of finally recommended candidates.

Key Trends (2014–2023)

- **Application Stage:** The share of women applicants saw a minor increase from **28.4%** in 2014 to **30.4%** in 2023.
- **Mains Qualification:** The percentage of women qualifying the Prelims to appear for the Mains exam rose from **24.5%** in 2014 to **30.1%** in 2023.
- **Interview Qualification:** The share of women reaching the Interview stage grew from **23.1%** in 2014 to **33.8%** in 2023.
- **Final Recommendation:** Women's share in the final merit list showed the most significant growth, increasing from **20.5%** in 2014 to **34.5%** in 2023. The peak was in 2022, with **35.1%**.

Barriers to Gender Parity

- **Societal and Familial Pressure:** Deep-rooted patriarchal norms, pressure for early marriage, and the expectation for women to prioritize domestic responsibilities often discourage them from undertaking the long and demanding CSE preparation.
- **Economic Factors:** Families, particularly in rural areas, may be more hesitant to make significant financial investments in coaching and relocation for daughters compared to sons.
- **Safety and Mobility:** Concerns about safety and mobility, especially for postings in remote cadres, can act as a deterrent for both aspirants and their families.
- **Work-Life Balance:** The challenge of balancing a demanding bureaucratic career with family and childcare responsibilities remains a significant hurdle.

The Indian Constitution guarantees equality of opportunity in public employment under Article 16.

Deep Digital Divide Persists Across Caste and Class in India: MoSPI Study

What's the News?

- A new study based on the **Ministry of Statistics and Programme Implementation's (MoSPI) Multiple Indicator Survey (MIS) 79th Round** highlights a severe **digital divide** in India, deeply entrenched along **caste, class, gender, and rural-urban lines**.
- The data reveals that despite high smartphone penetration, **actual digital capability** (ICT skills) remains low, particularly among marginalized communities like **Scheduled Tribes (STs)** and **Scheduled Castes (SCs)**, excluding them from the benefits of the digital economy.
- The report underscores that **"ownership does not equal capability,"** meaning that possessing a device does not automatically translate into the skills needed for employment or education.

Key Findings & Statistics

1. The Caste Divide

- **Lack of ICT Skills**: A staggering **89.49% of STs** and **86.62% of SCs** lack basic Information and Communication Technology (ICT) skills, compared to **73.71%** of the "Others" (General) category.
- **Computer Ownership**: Computer ownership is critically low among **SCs and STs (~6%),** whereas it is significantly higher (**over 20%**) among upper-caste households.
- **Internet Access**: Only **14.1% of ST households** have internet access, compared to **41.1%** of upper-caste households.

2. The Class & Income Divide

- **Access Gap**: There is a **ten-fold gap** in access to computers with internet between the rich and the poor. Only **6.8% of the poorest 20%** have access, compared to **66.3% of the richest 20%**.
- **Employment Link**: ICT skills are strongly correlated with **regular salaried jobs**. The lack of these skills traps marginalized groups in low-wage, informal work.

3. The Gender & Rural-Urban Divide

- **Gender Gap**: Nationally, **22.78% of men** possess ICT skills compared to just **13.91% of women**. In states like **Uttar Pradesh**, this gap is even wider (14.62% men vs 6.93% women).
- **Rural Infrastructure**: Rural areas suffer from poor infrastructure (electricity, broadband) and a lack of digital exposure in schools compared to urban centers.

Additional Info

- **Understanding "Digital Divide"**:
  - It is the gap between demographics and regions that have access to modern information and communications technology (ICT), and those that don't.
  - **Three Levels**:
    - **First Level**: Access (ownership of devices/internet).
    - **Second Level**: Skills (ability to use the technology).
    - **Third Level**: Outcomes (benefits gained from use).
- **Government Initiatives**:
  - **Digital India**: Aims to transform India into a digitally empowered society.
  - **Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)**: Focuses on making rural households digitally literate.
  - **BharatNet**: Project to provide high-speed broadband to all Gram Panchayats.
- **Constitutional Context**:
  - **Article 16**: Equality of opportunity in matters of public employment (relevant to the skilling gap).
  - **Article 21A**: Right to Education (increasingly dependent on digital access).

UN Report: A Woman or Girl Killed Every 10 Minutes by Partner or Family in 2024

What's the News?

- A new report by the **United Nations Office on Drugs and Crime (UNODC)** and **UN Women** reveals that approximately **50,000 women and girls** worldwide were killed by intimate partners or family members in 2024.
- This statistic equates to **one woman or girl being killed every 10 minutes**, or an average of **137 victims every day**, solely within their own homes or families.
- The report, titled **"Femicides in 2024: Global estimates of intimate partner/family member femicides,"** was released to mark the **International Day for the Elimination of Violence against Women** (November 25).

Key Findings of the Report

The "Private" Sphere is the Most Dangerous

- **Disproportionate Risk**: While **83,000** women and girls were intentionally killed globally in 2024, nearly **60% (50,**000) of these killings were committed by intimate partners or family members.
- **Gender Contrast**: In stark contrast, only **11%** of male homicides were perpetrated by partners or family members, highlighting that the home is a uniquely dangerous place for women.
- **Intimate Partners**: Current and former intimate partners are the most likely perpetrators, accounting for an average of **60%** of all family-related killings.

Regional Data

- **Africa**: Recorded the highest absolute number of victims (**22,600**) and the highest rate of femicide relative to population (**3 per 100,000 women**).
- **Americas & Oceania**: Followed with rates of **1.5** and **1.4** per 100,000 respectively.
- **Asia & Europe**: Reported lower rates at **0.7** and **0.5** per 100,000 respectively, though Asia recorded at least **17,400** victims in absolute numbers.
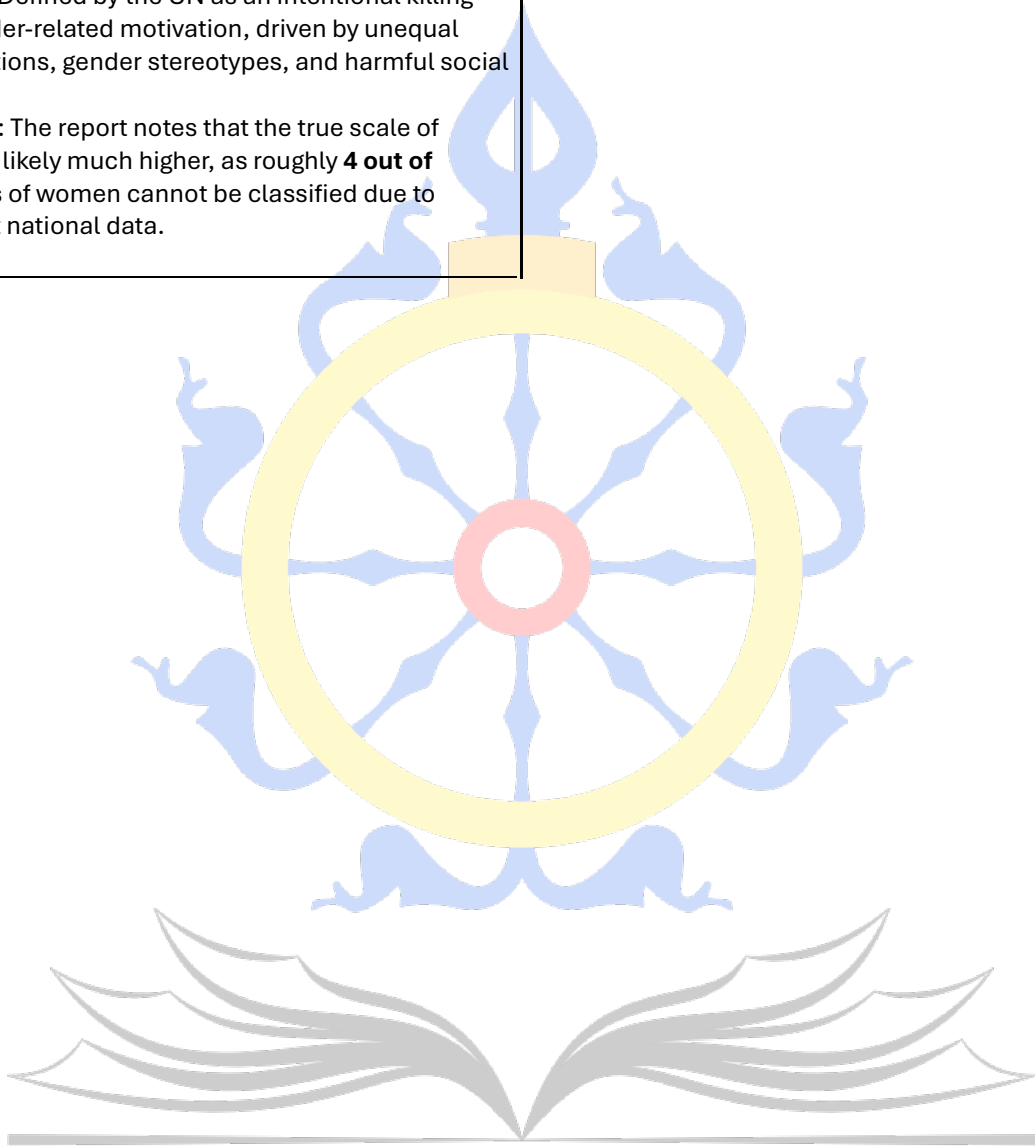
Growing Threat: Digital Violence

- The report and the accompanying **16 Days of Activism** campaign (Nov 25 – Dec 10) highlight **digital violence** as a rapidly evolving threat.
- **Forms of Abuse**: Includes cyberstalking, non-consensual sharing of intimate images, deepfakes, and doxxing.

- **Link to Femicide**: The UN warned that online violence often does not stay online; it can escalate into offline physical violence and lethal harm.

Additional Info

- **International Day for the Elimination of Violence against Women (Nov 25)**:
  - **History**: Designated by the **UN General Assembly** in **1999** to honor the **Mirabal sisters**, political activists from the Dominican Republic murdered in 1960.
  - **2025 Theme**: The campaign theme for the 16 Days of Activism is **"UNiTE to End Digital Violence against All Women and Girls"**.
- **Femicide**: Defined by the UN as an intentional killing with a gender-related motivation, driven by unequal power relations, gender stereotypes, and harmful social norms.
- **Data Gaps**: The report notes that the true scale of femicide is likely much higher, as roughly **4 out of 10** murders of women cannot be classified due to insufficient national data.

Empowerment

Government Highlights Welfare Measures for Transgender Persons: SMILE Scheme & National Portal

What's the News?

- On the occasion of **Transgender Day of Remembrance (November 20)**, the **Ministry of Social Justice and Empowerment** released a comprehensive review of the welfare measures and legal protections for transgender persons in India.
- The Ministry highlighted the progress of the **SMILE (Support for Marginalized Individuals for Livelihood and Enterprise)** scheme and the **National Portal for Transgender Persons**, emphasizing the government's commitment to mainstreaming the community.
- The review underscored the success of digital interventions in issuing **Identity Certificates** and the expansion of shelter homes (**Garima Grehs**) across the country.

Ayushman Bharat TG Plus

- Provides **₹5 lakh per annum** health insurance cover per transgender beneficiary for secondary & tertiary care.
- Explicitly covers **gender-affirming surgeries** and comprehensive transition-related care.
- Beneficiaries receive a dedicated **AB-TG Plus card**, linking them to empanelled hospitals.
- Funded by the **Ministry of Social Justice and Empowerment (MoSJE)**, not MoHFW.

Garima Greh Shelter Homes

- Part of the **SMILE Scheme (2022)**, an umbrella initiative for marginalized individuals, including transgender persons and persons engaged in begging.
- **12 pilot shelters** operational nationwide, with expansion underway to 20+ states.
- Offers integrated support:
  - o Safe shelter & nutritious food.
  - o Primary medical care, yoga, and mental wellness services.
  - o Skill training linkage & recreational facilities.

Constitutional & Legal Context

- **Transgender Persons (Protection of Rights) Act, 2019**:
  - o Defines a transgender person and prohibits discrimination in education, employment, and healthcare.
  - o Recognizes the **right to self-perceived gender identity**.
- **NALSA v. Union of India (2014)**:
  - o The Supreme Court recognized transgender persons as the **"Third Gender"**.
  - o Upheld their fundamental rights under **Article 14** (Equality), **Article 19** (Freedom of Expression), and **Article 21** (Right to Dignity).
  - o Directed the government to extend reservation in education and public appointments (treating them as socially and educationally backward classes).

- **Article 15**: The prohibition of discrimination on grounds of "sex" includes "gender identity."

GeM and UN Women Sign MoU to Empower Women Entrepreneurs

What's the News?

- The **Government e-Marketplace (GeM)** has signed a Memorandum of Understanding (MoU) with **UN Women India** to promote **gender-responsive public procurement** across the country.
- The partnership aims to empower **women-owned businesses** and **women-led Micro and Small Enterprises (MSEs)** by providing them with better access to government contracts.
- A key highlight of this collaboration is the launch of **'Womaniya 2.0'**, an upgraded initiative designed to accelerate the inclusion of women entrepreneurs in the public procurement ecosystem.

Key Objectives & Collaboration Details

- **Capacity Building**: The partnership will focus on **training and upskilling** women entrepreneurs to navigate the GeM portal effectively, ensuring they can participate in government tenders.
- **Policy Advocacy**: UN Women and GeM will work together to advocate for policies that support **gender-inclusive supply chains** and encourage government buyers to source from women-led units.
- **Mentorship & Support**: The initiative will provide **mentoring** and technical support to women-led MSEs, helping them scale their businesses and meet quality standards required for public procurement.

Significance: 'Womaniya' Initiative

- **Original Launch**: The **'Womaniya'** initiative was originally launched by GeM in **2019**.
- **Goal**: It seeks to encourage women entrepreneurs and **Self-Help Groups (SHGs)** to sell varied products—such as **handicrafts, handloom, jute products, and home décor**—directly to various government ministries and departments.
- **Womaniya 2.0**: The new phase aims to leverage **UN Women's global expertise** to further bridge the gender gap in economic participation and create a more equitable marketplace.
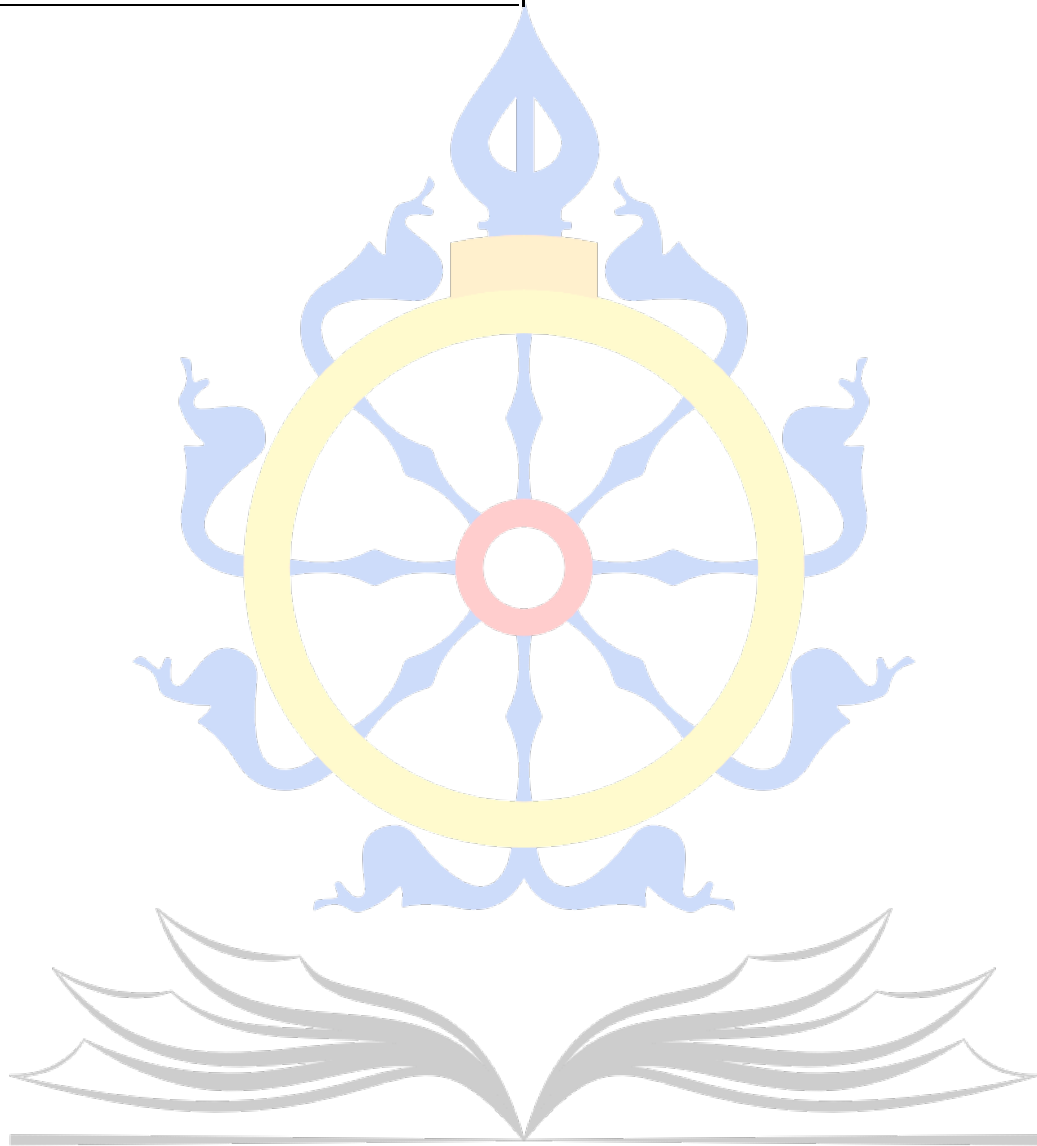
Additional Info

- **Government e-Marketplace (GeM)**:
  - o Launched in **2016** under the **Ministry of Commerce and Industry**.
  - o Replaced the old Directorate General of Supplies and Disposals (DGS&D).
  - o It is a **100% government-owned**, completely paperless, cashless, and e-market place for the procurement of goods and services by government organizations.
- **Public Procurement Policy for MSEs**:
  - o The **Public Procurement Policy for Micro and Small Enterprises (MSEs) Order,**

2012 mandates that Central Ministries/Departments/PSUs must procure a minimum of **25%** of their total annual purchases from MSEs.
  - o Within this 25%, a sub-target of **3%** is earmarked specifically for procurement from **women-owned MSEs**.
- **UN Women**:
  - o The **United Nations entity** dedicated to gender equality and the empowerment of women.
  - o Works towards achieving **Sustainable Development Goal 5 (SDG 5)**: Achieve gender equality and empower all women and girls.

Culture and Arts

Lucknow Designated as UNESCO "Creative City of Gastronomy"

What's the News?

- **UNESCO** has designated **Lucknow**, the capital of Uttar Pradesh, as a **"Creative City of Gastronomy"**.
- The announcement was made by UNESCO Director-General **Audrey Azoulay** on **World Cities Day** (October 31).
- Lucknow is the **second Indian city** to receive this honour for gastronomy, following **Hyderabad** (which was designated in 2019).
- The inclusion is part of **58 new cities** added to the UNESCO Creative Cities Network (UCCN).

Basis for Recognition

- **Rich Culinary Heritage**: The designation is a global recognition of Lucknow's centuries-old and distinguished culinary heritage, particularly its **Awadhi cuisine**.
- **Awadhi Cuisine**:
  - This cuisine, influenced by Mughal, Persian, and Central Asian cooking, was nurtured by the Nawabs of Awadh.
  - It is renowned for its sophisticated and subtle use of spices and signature slow-cooking techniques like **"dum pukht"** (art of cooking over a slow fire in a sealed pot).
  - Iconic dishes highlighted in the city's nomination dossier include **Galouti Kebabs**, **Awadhi Biryani**, **Nihari**, **Sheermal**, and **Makhan Malai.**
- **Cultural Significance**: The city's nomination dossier presented its food as an instrument of cultural diplomacy and social harmony, reflecting the **"Ganga-Jamuni tehzeeb"** (a syncretic culture) that defines the city.

Additional Info

- **UNESCO Creative Cities Network (UCCN)**:
  - Launched in **2004**, the UCCN aims to promote cooperation among cities that have recognized culture and creativity as strategic drivers for **sustainable urban development**.
  - The network covers **eight creative fields**: Crafts and Folk Art, Design, Film, Gastronomy, Literature, Media Arts, Music, and (newly added) Architecture.
  - With the 2025 additions, the UCCN now includes **408 cities** in over 100 countries.
- Indian cities in UCCN include:
  - Jaipur – Crafts and Folk Art
  - Varanasi – Music
  - Chennai – Music
  - Hyderabad – Gastronomy
  - Mumbai – Film
  - Srinagar – Crafts and Folk Art
  - Lucknow – Gastronomy (2025)

Nation Commemorates 150th Birth Anniversary of Bhagwan Birsa Munda

What's the News?

- The nation observed the **150th birth anniversary** of Bhagwan Birsa Munda, a revered tribal icon and freedom fighter.
- His birth anniversary is celebrated as **Janjatiya Gaurav Divas** (Tribal Pride Day) to honor the contributions of tribal communities to India's history and freedom struggle.

Who Was Birsa Munda?

- Born on **November 15, 1875**, in **Ulihatu (present-day Khunti, Jharkhand)**, Birsa Munda emerged as a tribal leader, social reformer, and spiritual figure - revered as **"Dharti Aaba" (Father of the Earth)**.
- Led the **Ulgulan ("Great Tumult")** movement (1899–1900) against British land alienation, forced labour, exploitative intermediaries (*thikadars*), and missionary interference.
- Advocated for restoration of the **Khuntkatti land system,** promoted anti-alcoholism, cultural revival, and self-rule - encapsulated in his slogan: *"Abua Raj setar jana, Maharani Raj tundu jana"* (End the Queen's rule, establish our own rule).
- Died in custody at age **25** in 1900; his movement directly contributed to the enactment of the **Chhotanagpur Tenancy Act, 1908**, safeguarding tribal land rights.
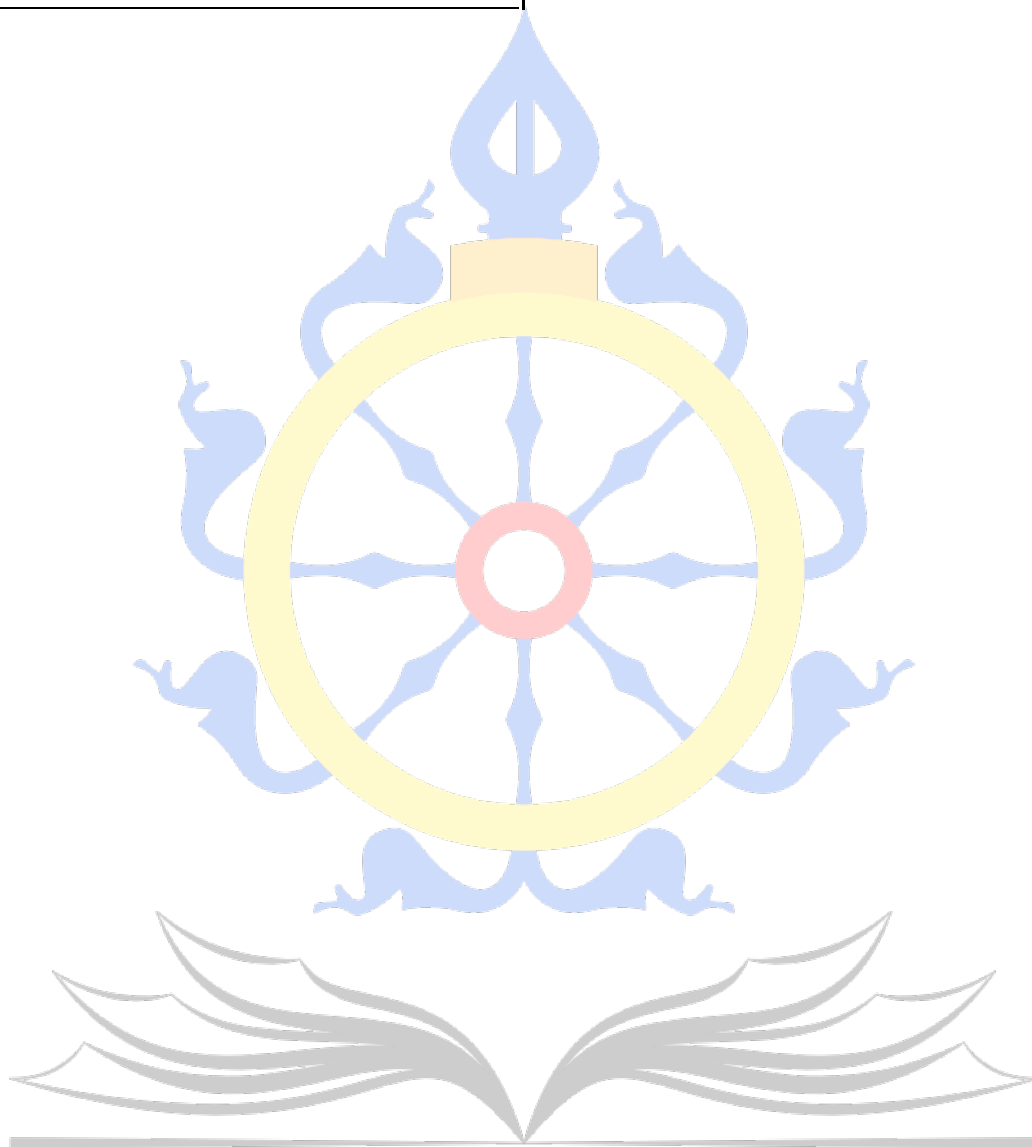
Janjatiya Gaurav Diwas

- Declared by the Union Cabinet on **November 10, 2021**, and first observed on **November 15, 2021**, to institutionalise recognition of tribal freedom fighters often excluded from mainstream narratives.
- Aims to promote **cultural visibility**, **political recognition**, and inclusive **socio-economic development** of tribal communities.
- Aligns with national efforts to mainstream tribal history - e.g., setting up **tribal museums** (e.g., Ranchi Prison Museum, Rajpipla Tribal Museum), establishing **Shri Govind Guru Chair** for tribal language preservation, and integrating tribal narratives into school curricula.

Key Development Initiatives Launched/Expanded

- **Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM-JANMAN)**:
  - Targets **Particularly Vulnerable Tribal Groups (PVTGs)** across 18 states.
  - Key components include:
    - **4.90 lakh pucca houses** by 2026.
    - **8,000 km roads**, **1,000 mobile medical units**, **2,500 Anganwadi centres**, and **1 lakh solar-powered households**.
    - Focus on safe housing, clean drinking water, sanitation, healthcare, education, and livelihoods.

- **Eklavya Model Residential Schools (EMRS)**:
  - **42 new EMRS** inaugurated, bringing the total to over 700 nationwide.
  - Objective: Provide **quality education (Classes VI–XII)** to Scheduled Tribe students in remote areas, with comprehensive physical, mental, and social development.
  - Facilities include hostels, labs, libraries, sports infrastructure, and digital classrooms.
  - Enrollment prioritises ST children from rural/remote habitations.

Environment

22 of Earth's 34 Planetary "Vital-Signs" Hit Record Highs - New Climate Report

What's the News?

- A global climate assessment finds that **22 out of 34 key indicators** of the Earth system are at record high or extreme levels.
- The study shows that many of these indicators broke records by **extraordinary margins** in 2024, and the trend is continuing into 2025.
- Indicators include global surface temperature, greenhouse-gas concentrations, ocean heat content, ice-sheet mass loss, and wildfire tree-cover loss.

Alarming Climate Indicators

- **Global Temperature**:
    - 2024 was the **hottest year in at least 125,000 years**.
    - Global average temperature **1.54°C above pre-industrial levels** over 12 months—first time crossing this threshold sustainably.
- **Greenhouse Gases**:
    - Atmospheric CO_2 **exceeded 430 ppm** (Mauna Loa, May 2025)—likely highest in **millions of years**.
    - Record levels also recorded for **methane** and **nitrous oxide**.
- **Cryosphere Collapse**:
    - **Arctic sea ice** minimum: **4.28 million km^2**—among lowest on record.
    - **Greenland lost 5,540 gigatonnes** of ice; **Antarctica lost 2,660 gigatonnes** in 2024.
- **Extreme Events**:
    - **Global fire-related tree loss** hit an all-time high; tropical primary forest fires surged **370% over 2023**.
    - **84% of global coral reefs** affected by the **largest bleaching event ever recorded** (Jan 2023–May 2025).

Systemic Risks and Tipping Points

- **Four Critical Threats Identified**:
    - **Hothouse Earth trajectory:** Self-reinforcing feedback loops could lock in irreversible warming.
    - **Biodiversity collapse:** Especially in marine and forest ecosystems.
    - **Freshwater scarcity:** Driven by glacial retreat and altered precipitation.
    - **Weakening Atlantic Meridional Overturning Circulation (AMOC)**—risking disruption to global climate patterns.
- **Emissions Gap**:
    - Despite **16.4% growth in solar/wind energy (2024)**, fossil fuel use hit **record highs**.
    - Fossil consumption **31 times greater** than renewable output.
    - **Top 5 emitters** (China, US, India, EU, Russia) account for **~63%** of global CO_2 emissions.

Pathways for Mitigation

- **Urgent Actions Recommended**:
    - **Rapid phase-out of fossil fuels**
    - **Scale-up of renewables** to supply **70% of global electricity by 2050**
    - **Protect and restore natural carbon sinks** (forests, wetlands, mangroves)
- **Policy Wins Highlighted**:
    - **EU, UK, Norway** eliminated coal from electricity.
    - **Amazon deforestation rates dropped sharply** under new governance.
    - **Methane leak reductions** in EU and Nigeria.
- **Window for Action**: Scientists stress that while impacts are accelerating, **"it's not too late"**—but **every 0.1°C of avoided warming matters** for human and ecological survival.

Heavy-metal contamination in Cauvery River fish raises health and ecosystem concerns

What's the News?

- Recent scientific studies show that fish from the Cauvery River in southern India carry elevated levels of heavy metals such as cadmium (Cd), chromium (Cr), lead (Pb) and cobalt (Co).
- The research finds that consuming fish from this river may pose non-carcinogenic and carcinogenic risks for humans, especially in muscle, gill and liver tissues of fish species such as Oreochromis mossambicus (Tilapia).
- The contamination stems from industrial, agricultural and urban discharges affecting the river basin.

Contamination Profile

Overview

- The Cauvery River flows through key states like Karnataka and Tamil Nadu and supports agriculture, fisheries and drinking water for millions.
- Heavy-metal entry points include industrial effluent (tanneries, dyeing units), agricultural runoff (fertilisers, pesticides), untreated sewage and urban waste.

Key details & metrics

- In Tilapia fish from Cauvery: liver mean Fe ~ 1,554.4 mg/kg; muscle ~ 130.8 mg/kg.
- The "Target Hazard Quotient" (THQ) for Cd, Co, Pb and Cr in fish organs exceeded 1 (indicating potential health risk) for adult consumers.
- Earlier sediment studies show concentrations like Fe ~ 11,144 µg/g, Cr ~ 389 µg/g, Zn ~ 93 µg/g in river sediments.

Pollution Indices:

- Used indices like **Igeo (geoaccumulation index)**, **contamination factor**, **contamination degree**, **pollution load index**, and **potential ecological risk** to evaluate pollution levels.

Environmental and Health Impacts

- **Bioaccumulation**: The study highlights **bioaccumulation**, a process where toxins like heavy metals build up in an organism (like a fish) over time, as the organism absorbs them faster than it can excrete them.
- **Biomagnification**: This leads to **biomagnification**, where the concentration of these toxins increases at successively higher levels of the food chain—posing a direct threat to humans and other predators who consume the contaminated fish.
- **Human Health Risks**: Chronic consumption of heavy metals can lead to severe health issues, including damage to the liver, kidneys, and nervous system, and may increase the risk of cancer.

About the Cauvery (Kaveri) River:

- **Origin**: It rises at **Talakaveri** on the **Brahmagiri hills** in the Western Ghats, located in the Kodagu (Coorg) district of **Karnataka**.
- **River Basin**: The basin is spread across the states of **Tamil Nadu, Karnataka, Kerala,** and the Union Territory of **Puducherry**.
- **Key Tributaries**:
  - **Left Bank**: **Harangi, Hemavati, Shimsha,** and **Arkavati**.
  - **Right Bank**: **Lakshmanatirtha, Kabini, Suvarnavathy, Bhavani, Noyyal,** and **Amaravati**.
- **Major Dams**: **Krishna Raja Sagara (KRS)** in Karnataka, **Mettur Dam** in Tamil Nadu, and the ancient **Grand Anicut (Kallanai)** in Tamil Nadu.

Nauradehi Sanctuary to be Third Cheetah Home in Madhya Pradesh

What's the News?

- The Madhya Pradesh Chief Minister, **Mohan Yadav**, has announced that the **Nauradehi Wildlife Sanctuary** will be developed as the third habitat for cheetahs in the state.
- This decision expands **Project Cheetah**, India's ambitious initiative to re-establish a cheetah population in the country.
- Nauradehi will follow **Kuno National Park (KNP)** and **Gandhi Sagar Wildlife Sanctuary** as cheetah homes in Madhya Pradesh.
- The **National Tiger Conservation Authority (NTCA)** has approved the construction of cheetah enclosures, including quarantine and soft-release bomas, at the sanctuary.

Why Nauradehi Wildlife Sanctuary?

- **Habitat Suitability**: The sanctuary's landscape, featuring a mix of dry deciduous forests, grasslands, and scrub, is considered an ideal habitat for cheetahs, similar to their native African environments.
- **Vast Area**: Nauradehi is the largest wildlife sanctuary in Madhya Pradesh, spanning approximately **1,197 to 1,200 sq km** across the districts of Sagar, Damoh, and Narsinghpur.

- **Prey Base**: The sanctuary already supports a good prey base for cheetahs, including species like **chital, blackbuck, nilgai,** and wild boar.
- **Strategic Location**: It is located on the upper Vindhyan plateau and forms part of two major river basins: the **Ganga (Yamuna)** and the **Narmada**.
- **Wildlife Corridor**: Nauradehi serves as a crucial wildlife corridor, connecting **Panna Tiger Reserve** and **Satpura Tiger Reserve**. It also indirectly links to **Bandhavgarh Tiger Reserve** via the Veerangana Durgawati Sanctuary.

Expansion of Project Cheetah

- **Project Goal**: Project Cheetah aims to reintroduce the cheetah, which was declared extinct in India in 1952. It is the world's first intercontinental large wild carnivore translocation project.
- **First Home**: The project began with the reintroduction of African cheetahs from Namibia and South Africa at **Kuno National Park (KNP)**.
- **Second Home**: **Gandhi Sagar Wildlife Sanctuary** was developed as the second site to expand the habitat and reduce population pressure on KNP.
- **Metapopulation Strategy**: The inclusion of Nauradehi aims to create a **metapopulation**—multiple, geographically dispersed populations—to diversify habitats, reduce risks, and enhance the long-term genetic viability of the cheetahs in India.

Additional Info

- **Nauradehi Wildlife Sanctuary**:
  - It is also known as the **Veerangana Durgawati Tiger Reserve**, following a recent notification.
  - It is the largest wildlife sanctuary in Madhya Pradesh.
  - Besides a potential cheetah population, it also hosts tigers, leopards, wild dogs (dholes), and the Indian wolf.
- **Cheetah Conservation Status**:
  - **IUCN Red List**: Vulnerable.
  - **CITES**: Appendix I.
  - **Wild Life (Protection) Act, 1972**: Schedule II.

Vultures Missing from 72% of Historical Nesting Sites, WII Study Reveals

What's the News?

- A recent assessment by the **Wildlife Institute of India (WII)** revealed that vultures have disappeared from **72%** of their historical nesting sites in **Central India**.
- The study compared the current status of nesting colonies with records from the **1990s**, highlighting a drastic decline.
- The assessment focused on two **'Critically Endangered'** species: the **White-rumped vulture** (*Gyps bengalensis*) and the **Indian vulture** (*Gyps indicus*).

Key Findings

- **Decline in Nesting Sites**:
  - 72% of historical nesting sites no longer have active vulture populations.

- o The study covered 1,200 known nesting sites across 14 states.
- **Species Affected**:
  - o **White-rumped vultures** and **Indian vultures** are the most affected species.
  - o **Slender-billed vultures** also show significant declines.
- **Factors Contributing to Decline**:
  - o **Poisoning**: Consumption of carcasses containing diclofenac, a veterinary drug toxic to vultures.
  - o **Habitat Loss**: Deforestation and urbanization leading to the destruction of nesting and roosting sites.
  - o **Food Scarcity**: Reduced availability of animal carcasses due to changes in livestock management practices.

Conservation Efforts
- **Vulture Safe Zones (VSZs)**:
  - o Establishment of VSZs where the use of diclofenac and other harmful drugs is banned.
  - o Regular monitoring and conservation activities in these zones.
- **Breeding Programs**:
  - o Captive breeding programs to increase vulture populations.
  - o Release of captive-bred vultures into the wild in safe areas.
- **Awareness Campaigns**:
  - o Educational campaigns to inform veterinarians, farmers, and the public about the dangers of diclofenac.
  - o Promotion of alternative, safer drugs for livestock.

Additional Info
- **Historical Context**:
  - o Vultures played a crucial role in the ecosystem by cleaning up carcasses, preventing the spread of diseases.
  - o In the 1980s, vulture populations in India were estimated to be in the millions.
- **Policy Initiatives**:
  - o **Ban on Diclofenac**: In 2006, the Indian government banned the veterinary use of diclofenac.
  - o **National Vulture Conservation Programme**: Launched by the **Ministry of Environment, Forest and Climate Change (MoEFCC)** to protect vultures.
- **International Cooperation**:
  - o Collaboration with international organizations like the **International Union for Conservation of Nature (IUCN)** and **BirdLife International** to enhance conservation efforts.

UNEP Emissions Gap Report 2025: World "Off Target" to Meet Paris Goals
What's the News?
- The **UN Environment Programme (UNEP)** has released the **Emissions Gap Report 2025**, titled **"Off Target"**.

- The report warns that the world is far from meeting the **Paris Agreement** goals, with current pledges and policies being insufficient.
- Based on current policies, the world is on track for **2.8°C** of warming this century.
- Even with the full implementation of all current **Nationally Determined Contributions (NDCs)**, global temperature rise is projected to be between **2.3°C and 2.5°C**.

Key Findings
- **Projected Warming**:
  - o Full implementation of NDCs: 2.3-2.5°C
  - o Current policies: 2.8°C
- **Required Emission Cuts**:
  - o To align with the 2°C pathway: 35% reduction by 2035 compared to 2019 levels.
  - o To align with the 1.5°C pathway: 55% reduction by 2035 compared to 2019 levels.
- **Challenges**:
  - o Short time frame and challenging political climate.
  - o Limited progress in NDCs despite methodological improvements and the upcoming withdrawal of the US from the Paris Agreement.

Implications and Recommendations
- **Overshoot of 1.5°C**:
  - o An overshoot of 1.5°C is likely within the next decade.
  - o Limiting this overshoot is crucial to minimize climate risks and damages.
- **Technological Readiness**:
  - o Low-carbon technologies such as wind and solar energy are available and cost-effective.
  - o Accelerating climate action is feasible with the right political will and international cooperation.
- **Support for Developing Countries**:
  - o Massive increases in financial and technical support are needed to help developing countries reduce emissions.
  - o Redesigning the international financial architecture to facilitate climate action is essential.

National Pledges & G20 Performance
- Only **60 Parties** to the Paris Agreement (about one-third) submitted new or updated **NDCs** by the September 2025 deadline.
- These new pledges cover **63%** of global emissions.
- **G20 nations**, which account for **77%** of global emissions, are collectively **not on track** to meet their own 2030 NDC targets.
- G20 emissions rose by **0.7%** in 2024.

Additional Info
- **India's Status**:
  - o The report noted that India recorded the highest absolute increase in GHG emissions during 2023-24.
  - o However, India's **per capita emissions** remain among the lowest of the major economies.

- o India was among the countries that did not submit an updated NDC by the September 2025 deadline.
- **About the Emissions Gap Report**:
  - o It is an annual science-based assessment from **UNEP**.
  - o It tracks the "gap" between the emissions reductions countries have pledged and the cuts required to limit global warming as per the **Paris Agreement**.

2025 Set to be Among Top Three Warmest Years: WMO

What's the News?

- The **World Meteorological Organization (WMO)** has reported that **2025** is set to be the **second or third warmest year** on record.
- This continues an unprecedented warming trend, with the past 11 years (2015–2025) now being the **11 warmest years** in the 176-year observational record.
- The findings were published in the WMO's **State of the Global Climate Update**, released ahead of the **UN Climate Change Conference (COP30)** in Belém, Brazil.

Key Report Findings

- **Global Temperature Anomaly**:
  - o The mean near-surface temperature from January to August 2025 was **1.42°C** above the pre-industrial average.
  - o This follows **2024**, which remains the warmest year on record (at 1.55°C above pre-industrial levels).
- **Other Climate Indicators**:
  - o **Greenhouse gas concentrations** and **ocean heat content** continued to rise in 2025, building on record levels set in 2024.
  - o **Arctic sea ice** extent, following the winter freeze, was the lowest on record.

Significance & Global Response

- **1.5°C Target**:
  - o WMO Secretary-General **Celeste Saulo** stated it is now "virtually impossible" to limit global warming to **1.5°C** in the near term without a temporary overshoot.
- **UN Call to Action**:
  - o **UN Secretary-General António Guterres** responded to the report, warning that every year above 1.5°C will "hammer economies, deepen inequalities and inflict irreversible damage."
  - o He urged rapid, large-scale action to make any temperature overshoot "as small, as short, and as safe as possible."

Additional Info

- **World Meteorological Organization (WMO)**:
  - o A specialized agency of the **United Nations (UN)**.
  - o It is the UN's authoritative voice on weather, climate, and water.
- **Paris Agreement**:
  - o A legally binding international treaty adopted in 2015.
  - o Its central goal is to limit global warming to well below 2°C, and preferably to **1.5°C**, compared to pre-industrial levels.
  - o The WMO's data is crucial for tracking progress and guiding action under this agreement.

Gogabeel Lake in Bihar Designated as India's 94th Ramsar Site

What's the News?

- **Gogabeel Lake**, located in the Katihar district of **Bihar**, has been designated as India's **94th Ramsar Site**.
- This recognition brings the total number of 'Wetlands of International Importance' in India to 94.
- With this addition, Bihar now has **six Ramsar sites**.
- India continues to have the highest number of Ramsar sites in Asia and ranks third globally, after the UK and Mexico.

About Gogabeel Lake

- **Type of Wetland**: Gogabeel is an **oxbow lake**, which is a U-shaped water body formed by a river's meander.
- **Location**: It is situated between the **Ganga** and **Mahananda** rivers and connects to both during floods.
- **Unique Status**: It is Bihar's **first community reserve**, highlighting its management and conservation by the local community.
- **Ecological Importance**: The lake is a significant habitat for migratory birds and supports rich aquatic biodiversity.

Additional Info

- **Ramsar Convention on Wetlands**:
  - o An intergovernmental treaty adopted in **1971** in the Iranian city of **Ramsar**.
  - o It provides a framework for the national action and international cooperation for the **conservation and wise use** of wetlands and their resources.
  - o The convention currently has 172 member countries.

COP30: UN Climate Summit Convenes in Belém, Brazil

What's the News?

- The **30th Conference of the Parties (COP30)** to the **UN Framework Convention on Climate Change (UNFCCC)** is taking place in **Belém, Brazil**.
- This summit marks the 10-year anniversary of the **Paris Agreement** and is widely seen as a crucial "Implementation COP," focused on translating climate pledges into concrete, measurable actions.
- The conference aims to address the significant gaps identified in the first **Global Stocktake (GST),** which concluded at COP28 and confirmed the world is not on track to limit warming to **1.5°C**.

Key Agenda & Expectations

- **New Climate Pledges (NDCs 3.0):**
  - Countries are required to submit new and more ambitious **Nationally Determined Contributions (NDCs)** with climate targets for 2035.
  - This is a core part of the Paris Agreement's "ratchet mechanism" to progressively increase global ambition.
- **New Collective Quantified Goal (NCQG) on Finance:**
  - A central negotiation is to set a new global climate finance goal to replace the previous **$100 billion** per year pledge.
  - The **"Baku to Belém Roadmap"** has been proposed as a reference, suggesting a target of **$1.3 trillion** annually by 2035 to support developing countries.
- **Global Goal on Adaptation (GGA):**
  - A key priority is to finalize a framework with quantifiable indicators for the **Global Goal on Adaptation (GGA)**.
  - This aims to measure progress in enhancing adaptive capacity and building resilience against climate impacts in vulnerable nations.
- **Just Transition:**
  - There is a strong emphasis on ensuring the global shift to low-carbon economies is fair, equitable, and inclusive.
  - The proposed **Belém Action Mechanism for Just Transition** is expected to be a key topic of discussion.

Why Belém, Brazil?

- **Symbolic Location:** The host city, **Belém**, is situated at the gateway to the **Amazon rainforest**, symbolically underscoring the critical role of forests, biodiversity, and **nature-based solutions** in the climate fight.
- **Global South Priorities:** As a host from the **Global South**, Brazil is focusing the summit on issues of equity, including climate finance, adaptation, and the principle of **Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC)**.
- **Forest-Focused Initiatives:** Brazil is championing new mechanisms like the **Tropical Forests Forever Facility (TFFF),** a blended-finance fund designed to reward nations for conserving tropical forests.

Additional Info

- **UNFCCC:** The **United Nations Framework Convention on Climate Change** is the 1992 international treaty that established the foundational framework and principles for global climate negotiations.
- **Paris Agreement:** Adopted at **COP21** in 2015, this is a legally binding international treaty under the UNFCCC. Its central aim is to limit global warming to well below 2°C, and preferably to **1.5°C**, compared to pre-industrial levels.
- **Global Stocktake (GST):** A process under the Paris Agreement to assess the world's collective progress toward its climate goals. The first GST concluded at **COP28** (Dubai), finding that current efforts are insufficient. COP30 is the first major summit where countries' new NDCs are expected to respond to these findings.

NTCA Issues New Framework for Relocation and Co-existence in Tiger Reserves

What's the News?

- The **National Tiger Conservation Authority (NTCA) has** released a comprehensive policy framework addressing human settlements within **Critical Tiger Habitats (CTHs)**.
- The new guidelines reiterate that the relocation of communities from these core tiger areas must be **voluntary**.
- Significantly, the framework also introduces a formal mechanism for **"active co-existence"** in areas where relocation is not feasible, aiming to balance wildlife conservation with the rights of forest-dwelling communities.

Voluntary Relocation Mechanism

- **Legal Basis:** The process is guided by the **Wildlife (Protection) Act, 1972 (WLPA)**, which mandates creating "inviolate spaces" (free from human disturbance) in CTHs for tiger breeding.
- **Compensation:** The framework increases the compensation package for families agreeing to voluntarily relocate to **₹20 lakh**, up from the previous ₹15 lakh.
- **Process:** Relocation can only be initiated after a formal resolution is passed by the local **Gram Sabha**, explicitly stating the community's willingness to move.

Framework for "Active Co-existence"

- **New Approach:** This is the first time the NTCA has provided a clear policy for managing areas where communities choose to stay within CTHs.
- **Objective:** To implement "active management" strategies that reduce human-wildlife conflict and foster a "win-win" situation for both people and tigers.
- **Key Components:**
  - Providing basic amenities and infrastructure (like roads, healthcare, education) to forest-dwelling communities, which was often restricted in CTHs.
  - Developing sustainable livelihood options that align with conservation goals.
  - Implementing robust measures for mitigating human-wildlife conflict.

Balancing WLPA and the Forest Rights Act

- **Addressing Conflict:** The new framework aims to resolve long-standing conflicts between the **Wildlife (Protection) Act, 1972** (focused on creating inviolate zones) and the **Forest Rights Act, 2006 (FRA)** (focused on securing rights of forest dwellers).
- **Primacy of FRA:** The guidelines mandate that the process of recognizing and vesting rights under the **FRA** must be completed *before* any relocation process is initiated.
- **Informed Consent:** This ensures that relocation is genuinely voluntary and that communities are making

decisions after their legal rights to the land have been formally settled.

Additional Info
- **National Tiger Conservation Authority (NTCA):**
  - A **statutory body** under the Ministry of Environment, Forest and Climate Change.
  - Constituted under the **Wildlife (Protection) Act, 1972**, for the management of **Project Tiger** and India's tiger reserves
- **Critical Tiger Habitat (CTH):**
  - The core areas of tiger reserves, identified under the **WLPA**.
  - These areas are legally required to be kept "inviolate" (free of human settlement) to ensure a secure breeding ground for tigers.
- **Forest Rights Act (FRA), 2006:**
  - A landmark law that recognizes the rights of **Scheduled Tribes and Other Traditional Forest Dwellers** to forest lands they have traditionally occupied.
  - It grants **individual rights** (to cultivate) and **community rights** (to manage and use forest resources).

GRI Launches UN-Endorsed Tool for Corporate Climate Accountability

What's the News?
- The **Global Reporting Initiative (GRI)** has launched a new tool, the **"Integrity Matters Checklist"**, to enhance corporate accountability in climate action.
- This initiative, which is endorsed by the **United Nations**, aims to improve the transparency and credibility of climate-related disclosures made by companies.
- The tool is designed to help organizations assess and improve their reporting on climate impacts, targets, and strategies.

What Is the Integrity Matters Checklist?
- A **UN-endorsed reporting framework** enabling transparent disclosure on:
  - Net-zero targets (typically for **2025, 2030, 2035, and 2050**)
  - Transition plans and implementation progress
  - Greenhouse gas (GHG) reduction efforts (Scope 1, 2, and 3)
  - Phase-out of fossil fuel investments
- Designed as a **practical, checklist-based tool** to move from pledges to accountable delivery .
- Fully mapped to the **GRI 102 Standard**, ensuring consistency with global sustainability reporting practices .

Key Features & Alignment with UN Guidance
- **Double materiality approach**: Covers both *impact of climate on business* and *impact of business on climate & society* .
- **Just transition integration**: Mandates reporting on impacts on workers, local communities, and Indigenous peoples .
- **Science-based alignment**: Requires transition plans consistent with limiting warming to **1.5°C**.

- **Anti-greenwashing safeguards**: Explicitly discourages over-reliance on carbon offsets and calls for **complete fossil fuel phase-out** .
- Reporting linkages:
  - Net-zero targets: **GRI 102-1-f-iii**
  - GHG reduction targets: **GRI 102-4-a** .

Relevance to India & Global Governance
- Supports implementation of India's **Panchamrit climate commitments** (e.g., 500 GW non-fossil capacity by 2030, net-zero by 2070).
- Aligns with **SEBI's Business Responsibility and Sustainability Reporting (BRSR)** framework, especially the **BRSR Core** metrics for large listed entities.
- Complements **National Action Plan on Climate Change (NAPCC)** and **State Action Plans (SAPCCs)** by enabling private-sector accountability.
- Builds on global architecture:
  - **Paris Agreement** (Article 4, enhanced transparency framework)
  - **Sustainable Development Goal 13 (Climate Action)**
  - **G20 Roadmap for Strengthening Sustainable Finance (India Presidency, 2023)**.

Additional Info
- **HLEG's 10 Key Recommendations** (summarised) :
  - Publish time-bound net-zero pledges with interim targets
  - Set Scope 1, 2, and *material* Scope 3 targets
  - Phase out unabated coal, oil, and gas
  - Exclude carbon credits for meeting net-zero targets (use only for beyond-value-chain mitigation)
  - Disclose lobbying activities and policy alignment
  - Ensure just transition plans with worker engagement
- **GRI 102: Climate Change 2025 Standard**:
  - Approved by the **Global Sustainability Standards Board (GSSB)** in March 2025
  - Covers climate adaptation, resilience, nature linkage, and finance flows
  - Requires disclosure of climate-related financial risks *and* real-economy impacts .

GRAP Stage III Imposed in Delhi-NCR as Air Quality Enters 'Severe' Category

What's the News?
- The **Commission for Air Quality Management (CAQM)** has invoked **Stage III** measures of the **Graded Response Action Plan (GRAP)** across the entire **National Capital Region (NCR)**.
- This emergency measure was triggered after Delhi's **Air Quality Index (AQI)** breached the **400-mark**, entering the **"Severe" category**.
- Forecasts indicate that the air quality is likely to remain in the "Severe" category due to unfavorable meteorological conditions.

Key Restrictions Under GRAP Stage III
- **Construction and Demolition (C&D) Ban:**

- o A strict ban on all **non-essential C&D activities** is in place.
  - o Exemptions are permitted for essential projects, including those related to national security, defence, healthcare, railways, metro rail, and airports.
- **Vehicle Restrictions**:
  - o A ban has been imposed on the plying of **BS-III petrol** and **BS-IV diesel Light Motor Vehicles (LMVs)** in Delhi and adjoining NCR districts.
- **Industrial and Other Bans**:
  - o Operations of **stone crushers** and **batching plants** are suspended.
  - o All **mining** and associated activities are banned.
- **Other Measures**:
  - o State governments in the NCR may decide on discontinuing physical classes in schools and encouraging **work-from-home (WFH)** policies for offices.

Additional Info

- **About GRAP**:
  - o The **Graded Response Action Plan (GRAP)** is an **emergency response mechanism** to tackle air pollution in the NCR.
  - o It is a set of anti-pollution measures that are activated progressively based on the AQI level.
  - o The stages are:
    - ▪ **Stage I**: 'Poor' (AQI 201-300)
    - ▪ **Stage II**: 'Very Poor' (AQI 301-400)
    - ▪ **Stage III**: 'Severe' (AQI 401-450)
    - ▪ **Stage IV**: 'Severe Plus' (AQI >450)
- **About CAQM**:
  - o The **Commission for Air Quality Management (CAQM)** is a **statutory body**.
  - o It is responsible for air quality management, monitoring, and improvement in the National Capital Region and adjoining areas.
  - o The CAQM formulates and implements GRAP.

Global Cooling Watch 2025 Warns of Tripling Cooling Demand by 2050

What's the News?

- The **Global Cooling Watch 2025** report has been released, co-led by the **UN Environment Programme (UNEP)** and the **Cool Coalition**.
- The report warns that global cooling demand is projected to **triple by 2050**, driven by rising temperatures, population growth, and urbanization.
- It calls for an urgent and equitable transition to **sustainable cooling** to mitigate severe climate impacts and protect vulnerable populations.

What is the Sustainable Cooling Pathway?

A three-pronged strategy to cut emissions and expand equitable access:

- **Passive cooling**: Shading, ventilation, reflective surfaces, green roofs - can reduce indoor temperatures by **up to 8°C** and energy use by **15–55%**.

- **Low-energy hybrid systems**: Fans paired with high-efficiency ACs - reduce household energy use by **≥30%**.
- **Refrigerant transition**: Accelerated phase-down of **HFCs** under the **Kigali Amendment** - could avoid **0.4°C of global warming** by 2100.

Key Metrics & Projections

- **Energy demand**: Could surge from **5,000 TWh (2022) to 18,000 TWh (2050)** - straining grids, especially in tropical regions.
- **Access gap**: Over **1 billion people** currently lack safe cooling; without action, **2 billion** could remain vulnerable by 2050 - mostly in **Africa and South Asia**.
- **Emission reduction potential**:
  - o **64% cut** via the Sustainable Cooling Pathway alone
  - o **97% cut** if combined with rapid **power-sector decarbonization**
  - o Estimated **$43 trillion savings** in avoided electricity/grid investments by 2050.

Global Response & Initiatives

- **Global Cooling Pledge**:
  - o **72 countries** and **80 organizations** endorsed - committing to **68% emissions reduction** in cooling by 2050.
  - o Only **54 countries** have aligned policies with the Sustainable Cooling Pathway.
- **'Beat the Heat' Initiative**: Launched at COP30 - a coalition of **187 cities** (e.g., Rio, Jakarta, Nairobi) to localize cooling resilience via urban greening, retrofitting, and heat action plans.
- **India's Relevance**:
  - o Among top-5 cooling-growth nations; peak summer demand already stresses grid.
  - o **ECBC (Energy Conservation Building Code)** and **Star Labelling Programme** can be scaled up for passive and appliance efficiency.
  - o Potential to integrate cooling into **National Action Plan on Climate Change (NAPCC)** and **State Action Plans (SAPCCs)**.

Additional Info

- **Constitutional & Policy Anchors**:
  - o **Article 21 (Right to Life)** includes protection from life-threatening heat stress (*Chameli Singh v. State of UP*, 1996).
  - o **Article 253** empowers Parliament to enact laws for implementing international agreements (e.g., **Montreal Protocol/Kigali Amendment**).
- **Kigali Amendment (2016)**:
  - o India committed to **phasing down HFCs by 85% by 2047**, with baseline year 2024–26.
  - o **National Cooling Action Plan (NCAP, 2019)** aims for:
    - ▪ 20–25% reduction in cooling energy demand by 2037–38
    - ▪ 30–40% reduction in refrigerant demand
    - ▪ Skill development for **100,000 technicians** in sustainable cooling.
- **Challenges in India**:
  - o Only **~15% of urban households** use ACs - but demand is rising fast.

- o Low awareness of passive design in affordable housing.
- o Inadequate integration of cooling in **Smart Cities Mission** and **AMRUT 2.0**.

COP30 Launches Forum to Navigate Climate and Trade Tensions

What's the News?

- A new high-level platform, the **Integrated Forum on Climate Change and Trade (IFCCT)**, was launched at the **30th Conference of the Parties (COP30)** in Belém, Brazil.
- The initiative is a joint effort by the **World Trade Organization (WTO)** and the **UN Framework Convention on Climate Change (UNFCCC)**.
- Its primary goal is to address the growing conflicts and policy misalignment between international trade rules and global climate change objectives.

Key Features of IFCCT

- **Non-negotiating & Consultative**:
  - o No formal treaty-making or binding decisions
  - o Focus on open dialogue, knowledge-sharing, and consensus-building
- **Open-Ended Consultation (2025–26)**:
  - o First round: **Geneva, December 15–19, 2025**, co-located with WTO
  - o Invites all countries to co-shape agenda, scope, and priorities
- **High-Level Political Backing**:
  - o Launched under **COP30 Presidency**, with participation from WTO, Climate Club, ICC, EU civil society, and others
- **Core Focus Areas**:
  - o Border carbon adjustments (e.g., EU CBAM)
  - o Green industrial policy & subsidy transparency
  - o Critical mineral supply chains
  - o Climate-resilient trade infrastructure
  - o Differential impacts on developing economies

Why is This Forum Needed?

- **Rise of Unilateral Measures**: There is a rapid increase in **unilateral climate-related trade measures**, such as carbon border taxes.
  - o A prominent example is the **European Union's Carbon Border Adjustment Mechanism (CBAM)**.
- **Fears of "Green Protectionism"**: Many **developing countries** are concerned that these measures could act as disguised trade barriers, unfairly penalising their economies and hindering their development.
- **Policy Gaps**: Currently, there is no single international body dedicated to resolving the tensions between trade law (under the WTO) and climate action (under the UNFCCC), creating a significant gap in global governance. The IFCCT aims to fill this role.

India to Host Global Big Cats Summit in 2026; Links Wildlife Conservation to Climate Action

What's the News?

- **India** announced that it will host the **Global Big Cats Summit** in **New Delhi** in **2026**.
- The announcement was made by Union Environment Minister **Bhupender Yadav** at the **High-Level Ministerial Segment** of the **International Big Cat Alliance (IBCA)** during the **UN Climate Conference (COP30)** in **Belem, Brazil**.
- India urged nations to view **wildlife conservation** as a "natural form" of **climate action**, emphasizing that protecting apex predators directly strengthens **carbon sequestration** and **ecosystem resilience**.

Summit Focus & Objectives

- **Core Species**: Tiger, Lion, Leopard, Snow Leopard, Cheetah, Jaguar, and Puma.
- **Key Themes**:
  - o Scaling up **transboundary conservation** and anti-poaching efforts.
  - o Sharing **scientific models** (e.g., India's tiger doubling, cheetah reintroduction, lion population growth).
  - o Integrating big cat habitats into **climate resilience and carbon sequestration strategies**.
  - o Promoting **community-based conservation** and sustainable livelihoods.

International Big Cat Alliance (IBCA)

- **Launched**: **2023** by India, headquartered in New Delhi.
- **Membership**: **95 countries** (range and non-range), conservation NGOs, scientific institutions, and corporates.
- **Functions**:
  - o Acts as a **global knowledge & resource hub** for best practices, data, and technology.
  - o Facilitates **capacity building, training, and funding access** for range countries.
  - o Addresses cross-cutting threats:
    - ▪ Habitat fragmentation & prey depletion.
    - ▪ Illegal wildlife trade and poaching.
    - ▪ Human–wildlife conflict.

India's Conservation Leadership

- **Tigers**: Population doubled to **3,682** in 2022 (from 1,411 in 2006), achieving **TX2 goal** four years ahead of schedule.
- **Asiatic Lions**: Increased to **674** (2020 census), confined to Gujarat but expanding to new habitats.
- **Cheetah Reintroduction**: **20 African cheetahs** translocated to **Kuno National Park (MP)** since 2022; first successful births in 70 years (2023).
- **Climate Co-benefits**: Big cat landscapes (e.g., Western Ghats, Sundarbans, Himalayas) support:
  - o **Watershed security** for 400+ million people.
  - o **Carbon sinks** covering ~15% of India's forest area.

UNEP Releases Global Methane Status Report 2025

What's the News?

- The **United Nations Environment Programme (UNEP)** and the **Climate and Clean Air Coalition (CCAC)** jointly released the **Global Methane Status Report 2025**.
- The report, titled **"Moving from Pledge to Action,"** highlights that despite global commitments, **methane emissions remain at record highs**, threatening the goal of limiting global warming to **1.5°C**.
- It underscores that current national policies and reduction measures are insufficient to meet the **Global Methane Pledge (GMP)** target of cutting emissions by **30% by 2030**.

Key Findings & Projections

- **Current Trajectory**:
  - Global methane emissions stood at **~352 Mt (million tonnes)** in 2020 and are projected to reach **369 Mt by 2030** under existing policies—**a 5% increase**, not reduction.
  - Agriculture (42%), energy (38%), and waste (20%) remain the dominant sources, with emissions in agriculture and waste set to grow by **8%** and **13%**, respectively, by 2030.
- **Conditional Progress**:
  - If all declared **Nationally Determined Contributions (NDCs)** and **Methane Action Plans (MAPs)** are fully implemented, emissions could peak this decade and fall **8% below 2020 levels by 2030**—still far from the 30% goal.
- **Feasible Pathway**:
  - Full deployment of **technically feasible measures** across all sectors could cut emissions by **32% by 2030**, exceeding the GMP target.
  - This would avoid **0.2°C of warming by 2050** and prevent **~180,000 premature deaths annually** from ozone and PM2.5 pollution by 2030.

Sectoral Mitigation Potential & Cost-Benefit

- **Energy (72% of potential)**:
  - Largest, lowest-cost opportunities: leak detection/repair (LDAR), flaring/venting bans, coal mine methane capture.
  - Estimated annual cost: **$98 billion** (~2–4% of 2023 fossil fuel sector revenue), with **$330 billion/year in climate, health, and crop benefits** by 2030.
- **Waste (10% of potential)**:
  - Key interventions: landfill gas capture, organic waste diversion to composting/anaerobic digestion, municipal source separation.
  - Could cut **13 Mt/year by 2030**, rising to **21 Mt/year by 2040** as legacy waste emissions decline.
- **Agriculture (18% of potential)**:
  - Feed additives, improved rice water management, manure treatment, and bans on open field burning.
  - Despite being the **largest single source**, policy action remains weak—especially on enteric fermentation (livestock digestion).

Policy & Governance Gaps

- **Implementation Lag**: Only **6 countries** (Canada, Japan, Moldova, Norway, USA, Vietnam) have **quantified, time-bound national methane targets** aligned with the GMP.
- **Data & Transparency**: ~90% of detected methane leaks remain unaddressed; fossil fuel sector reporting is still incomplete.
- **Finance Gap**: Annual methane mitigation needs **$127 billion by 2030**, but current funding stands at **$13.7 billion** (2021–22). Repurposing a fraction of the >$635 billion/year in harmful agricultural subsidies** could help close this gap.

Recommendations for Accelerated Action

- Adopt **measurement-based regulations** (e.g., EU Methane Regulation, OGMP 2.0).
- Scale "no-regret" policies:
  - *Energy*: Enforce LDAR, phase out routine flaring.
  - *Waste*: Mandate organic waste segregation and landfill gas recovery.
  - *Agriculture*: Incentivize feed additives and alternate wetting-drying in rice.
- Integrate methane into **NDC updates** with **specific, numerical targets** and align with longer-term **53% reduction by 2050** for 1.5°C consistency.

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17 Nations Join Blue NDC Challenge to Boost Ocean-Based Climate Action

What's the News?

- A coalition of **17 nations** has formally joined the **Blue NDC Challenge**, a major initiative led by **France and Brazil**, to integrate ocean-based solutions into their national climate pledges (Nationally Determined Contributions or NDCs).
- The announcement was made at the **30th UN Climate Change Conference (COP30)** in Belém, Brazil, signaling a global shift to recognize the ocean as a critical ally in fighting climate change.
- This move coincides with the launch of the **"Blue Package,"** a global plan designed to accelerate marine climate action through the **Ocean Breakthroughs** framework.

The Blue NDC Challenge

- **Objective**: The initiative urges countries to embed specific **ocean-based climate actions**—such as restoring mangroves, decarbonizing shipping, and expanding offshore energy—into their updated NDCs for the 2025 cycle.
- **Key Participants**:
  - The challenge is co-chaired by **France** and **Brazil**.

- New signatories include **Belgium, Cambodia, Canada, Indonesia, Portugal, and Singapore**, joining early adopters like **Australia, Fiji, Kenya, Mexico, and the UK**.
- **Significance**:
  - Ocean-based solutions can deliver up to **35% of the global emission reductions** needed by 2050 to keep temperatures within the 1.5°C limit.
  - It addresses the "ocean opportunity gap," ensuring the ocean is central to climate policy rather than an afterthought.

Ocean Breakthroughs: The Global Plan

- **Context**: To support the Blue NDCs, the **Ocean Breakthroughs** framework was unveiled, outlining five specific sectors for transformative action.
- **The 5 Key Sectors**:
  - **Marine Conservation**: Protecting and restoring at least **30% of the ocean** by 2030 (aligning with the 30x30 goal).
  - **Ocean Renewable Energy**: Scaling up **offshore wind** and tidal energy to replace fossil fuels.
  - **Shipping**: Decarbonizing the maritime transport sector (e.g., **Marshall Islands** committed to cutting domestic shipping emissions by 40%).
  - **Aquatic Food**: Promoting sustainable fisheries and low-carbon aquaculture to ensure food security.
  - **Coastal Tourism**: Making the tourism sector more resilient and less polluting.
- **Blue Package**: A coordinated plan launched at COP30 to mobilize finance and technical support for these breakthroughs, including a new **Ocean Taskforce**.

Blue NDC Implementation Taskforce

- Co-anchored by **France and Brazil**, targeting political leadership, technical assistance, and **public–private finance mobilisation**.
- Supports countries in strengthening:
  - **Blue carbon pathways** (mangroves, seagrasses, salt marshes)
  - Nature-based coastal resilience
  - Clean maritime industry transition
- Equity remains a challenge: only **13% of ocean actions** reference equity concerns.

India's Position & Relevance

- India has **not yet formally joined** the Blue NDC Challenge as of COP30.
- However, India's updated NDC includes **coastal and marine ecosystem protection** under its carbon sink target (2.5–3 billion tonnes CO_2e by 2030).
- **Mangrove cover increased by 54 sq km (1.10%)** between 2021 and 2023 (ISFR 2023), but **seagrass & salt marsh data remain sparse**—limiting blue carbon accounting.
- Potential alignment areas:
  - **Sagarmala & Green Ports Initiative** (decarbonising port logistics).
  - **Pradhan Mantri Matsya Sampada Yojana (PMMSY)** for climate-resilient fisheries.

- **National Blue Economy Policy (draft)** under MoES.

Additional Info

- **Nationally Determined Contributions (NDCs)**:
  - These are the **climate action plans** submitted by countries under the **Paris Agreement** (Article 4).
  - Countries must update them every **5 years**, with the next round due in **2025** (for the period up to 2035).
- **Ocean's Role in Climate**:
  - The ocean acts as the planet's largest **carbon sink**, absorbing about **25-30% of CO2 emissions** and **90% of excess heat**.
  - **Blue Carbon Ecosystems**: Mangroves, seagrasses, and salt marshes capture carbon up to **10 times faster** than terrestrial forests.
- **Related Initiatives**:
  - **High Ambition Coalition (HAC)**: A group of nations (including India) pushing for the **30x30 target** (protecting 30% of land and ocean by 2030).
  - **SDG 14**: The challenge directly supports Sustainable Development Goal 14 (**Life Below Water**).

Ethiopia's Hayli Gubbi Volcano Erupts After 12,000 Years: Ash Plume Disrupts Flights in India

What's the News?

- **Hayli Gubbi**, a dormant volcano in **Ethiopia**, erupted on November 23, 2025, for the first time in over **12,000 years**, releasing a massive ash plume that drifted across the Red Sea and Arabian Peninsula.
- The high-altitude ash cloud entered **Indian airspace** (over Gujarat, Rajasthan, and Delhi), prompting the **Directorate General of Civil Aviation (DGCA)** to issue urgent safety advisories and forcing airlines to cancel or divert flights.

About Hayli Gubbi Volcano

- **Type: Shield volcano**, formed by low-viscosity **basaltic lava flows**
- **Location**:
  - **Afar Depression**, Ethiopia
  - Southern end of the **Erta Ale volcanic range**
  - Part of the **East African Rift System (EARS)**
- **Geotectonic setting**:
  - Lies at the **divergent boundary** between the **Nubian** and **Somali plates**
  - Influenced by the **Afar mantle plume**, causing crustal thinning and magma upwelling
- **Eruption style: Sub-plinian**, with vertical ash column and widespread dispersal

Composition & Atmospheric Transport

- **Plume components**:
  - **Volcanic ash** (silicate particles, rock fragments)
  - **Glass shards** (engine hazard for aircraft)
  - **Sulphur dioxide (SO_2)**

- o   Fine aerosols
- **Transport mechanism**:
  - o   Carried by **upper-level westerly winds/jet streams**
  - o   Remained primarily in **15,000–45,000 ft altitude band**
  - o   Minimal mixing with lower troposphere → limited ground-level impact in India

Impact on India
- **Aviation**:
  - o   IndiGo, SpiceJet, Air India, and Akasa Air reported **diversions/cancellations**
  - o   **DGCA advisory** issued:
    - ▪ Avoid ash-affected routes/flight levels
    - ▪ Inspect runways/taxiways
    - ▪ Report engine anomalies immediately
- **Environmental & Health**:
  - o   Skies reported **hazy/darker** in parts of western India
  - o   **No significant AQI deterioration** expected at surface level
  - o   Potential for **regional acid rain** (limited SO_2 concentration over India)
  - o   Minor reduction in **solar radiation & visibility**

UN ESCAP Report 2025: Asia's Megacities Face Deadly Heat & Economic Risks
What's the News?
- The **UN Economic and Social Commission for Asia and the Pacific (ESCAP)** released the **Asia-Pacific Disaster Report 2025**, titled **"Rising Heat, Rising Risk"**
- The report identifies **extreme heat** as the "fastest-growing climate threat" in the region, surpassing traditional disasters like cyclones and floods in frequency and impact.
- It warns that without urgent intervention, heatwaves will become a **"chronic humanitarian crisis"**, severely impacting public health, agriculture, and labor productivity.

Urban Heat Island (UHI) Amplification
- UHI occurs when concrete, reduced green cover, and anthropogenic heat trap warmth in cities, raising local temperatures significantly above surrounding rural areas.
- Key cities at high risk include:
  - o   **Delhi, Dhaka, Karachi**: projected +4 to +7°C
  - o   **Manila, Jakarta, Kathmandu, Lahore**: +3 to +6°C
  - o   Even temperate cities like **Seoul and Tokyo** face +2 to +4°C spikes.
- In Pakistan, heat is shifting from *episodic* to *chronic*, with Karachi identified as a hotspot.

Socio-Economic & Health Impacts
- **Labour productivity**:
  - o   Heat-related working-hour losses in Asia projected to rise from **75 billion hours in 2020** to over **115 billion hours by 2050**.
  - o   Under high-heat scenarios, productivity loss could reach **up to 27%** in vulnerable sectors like agriculture and construction.
- **Health systems**:
  - o   Rising heatstroke, cardiovascular stress, and kidney disease burdens, especially among outdoor workers, elderly, and informal settlements.
  - o   Mortality risks spike during prolonged heatwaves, particularly where cooling infrastructure is absent.
- **Economic costs**:
  - o   Regional disaster losses could surge from **US$418 billion (current)** to over **US$1 trillion annually by 2100** without adaptation.
  - o   Crop failures (e.g., China's drought-induced losses), infrastructure damage, and healthcare strain contribute significantly.

Vulnerability & Equity Dimensions
- Informal settlements, lacking ventilation, greenery, or electricity for cooling, experience heat exposure **2–3 times higher** than planned urban zones.
- Outdoor workers, women, elderly, and low-income communities bear disproportionate risk — deepening existing inequalities.

Additional Info
- **Urban Heat Island (UHI) Effect**: A phenomenon where urban areas become significantly warmer than their rural surroundings due to human activities and infrastructure (concrete/asphalt) that trap heat.
- **Heat Index**: A measure that combines **air temperature** and **relative humidity** to determine the "feels-like" temperature. High humidity reduces the body's ability to cool down via sweating.
- **Constitutional & Legal Context**:
  - o   **Article 21**: The Supreme Court has interpreted the **Right to Life** to include the right to a healthy environment and protection from climate change adverse effects (*M.K. Ranjitsinh vs Union of India, 2024*).
  - o   **Disaster Management Act, 2005**: Provides the statutory framework for the **National Disaster Management Authority (NDMA)** to issue guidelines on heatwave management.

Dual Cyclonic Systems 'Ditwah' and 'Senyar' Trigger Alerts in Southern India
What's the News?
- The **India Meteorological Department (IMD)** has been monitoring two simultaneous weather systems—**Cyclone Ditwah** and **Cyclone Senyar**—in the Indian Ocean region, which have triggered severe weather alerts across **Tamil Nadu**, **Andhra Pradesh**, and **Puducherry**.
- While **Cyclone Senyar** weakened into a depression and moved towards the Malacca Strait (sparing the Indian coast of a direct hit), **Cyclone Ditwah** intensified into a cyclonic storm over the southwest Bay of Bengal, moving towards the **Tamil Nadu-Andhra Pradesh** coasts.

Cyclone Ditwah

- **Origin**: Formed over southwest Bay of Bengal; intensified from depression to cyclonic storm in <24 hours.
- **Name Source**: Recommended by **Yemen**.
- **Track & Impact**:
    - Moving **north–northwest** at 7–10 kmph.
    - Landfall expected near **Tamil Nadu–south Andhra Pradesh coast** on **November 30**.
    - **Red alert** in 4 districts (Kanyakumari, Nagapattinam, etc.); **orange alert** in 5 others.
    - Expected to bring:
        - Wind speeds up to **75–85 kmph**.
        - Storm surge up to **1.0–1.5 m** above astronomical tide.
        - Heavy to very heavy rain over Tamil Nadu, Puducherry, south Andhra, and Kerala till Dec 1.

Cyclone Senyar

- **Origin**: Low-pressure system near Malaysia/Strait of Malacca → intensified over South Andaman Sea.
- **Name Source**: Recommended by **UAE**.
- **Track & Impact**:
    - Causing **very heavy rainfall** over **Andaman & Nicobar Islands** and parts of south peninsular India.
    - Enhanced moisture feed contributing to rainfall in Kerala & Tamil Nadu.
    - No landfall expected over mainland India.

Concept in News: The Fujiwhara Effect

- **Context**: The simultaneous existence of two cyclonic systems (Ditwah and Senyar) in the same ocean basin often leads meteorologists to monitor for the **Fujiwhara Effect**.
- **Definition**: It is a phenomenon where two nearby cyclonic vortices orbit each other and potentially merge.
    - If the distance between two cyclones is less than **1,400 km**, they can start rotating around a common center.
- **Outcome**: The interaction can cause the storms to **merge**, **change path**, or one may absorb the other. In this specific case, the systems remained distinct enough to follow separate paths, though their proximity required close monitoring.

Additional Info

- **Cyclone Naming Mechanism**:
    - Tropical cyclones in the North Indian Ocean are named by a panel of **13 countries** (including India, Yemen, UAE, etc.) under the **WMO/ESCAP** framework.
    - Names are chosen to be gender-neutral, non-offensive, and easy to pronounce.
- **IMD Color Codes**:
    - **Yellow**: Be Updated (Bad weather expected).
    - **Orange**: Be Prepared (Heavy rain/disruption likely).
    - **Red**: Take Action (Extremely bad weather/threat to life).

Ayushman Bharat Becomes World's Largest Public Healthcare Scheme

What's the News?

- The **Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)** has become the **world's largest public healthcare scheme**.
- The scheme provides a health insurance cover of up to **₹5 lakh** per family per year.
- Over **42 crore Ayushman cards** have been issued to beneficiaries.
- It has reportedly saved beneficiaries more than **₹1.52 lakh crore** in out-of-pocket healthcare expenses.

About Pradhan Mantri Jan Arogya Yojana (PM-JAY)

- **Objective**: To provide health coverage for **secondary and tertiary care hospitalization** to poor and vulnerable families.
- **Coverage**: Provides **₹5 lakh** per family per year on a **family floater basis**, meaning it can be used by one or all members of the family.
- **Beneficiaries**: The scheme targets over **12 crore** vulnerable families, corresponding to approximately 55 crore beneficiaries.
- **Eligibility**: Beneficiary families are identified based on deprivation and occupational criteria from the **Socio-Economic Caste Census (SECC) 2011**.
- **Recent Expansions**:
  - The scheme's coverage has been extended to all **senior citizens aged 70 years and above**, irrespective of their socio-economic status.
  - It also now includes **ASHA workers**, **Anganwadi Workers (AWWs)**, and **Anganwadi Helpers (AWHs)**.
- **Key Features**:
  - Provides **cashless and paperless** access to services at empaneled hospitals.
  - Covers **pre-existing diseases** from day one.
  - Includes costs for up to **3 days of pre-hospitalization** and **15 days of post-hospitalization** expenses, such as diagnostics and medicines.
  - Benefits are **portable** across the country, allowing a beneficiary to visit any empaneled public or private hospital in India.

The Pillars of Ayushman Bharat

- **Ayushman Bharat** is a comprehensive initiative with two main components:
  - **1. Ayushman Arogya Mandirs (AAMs)**:
    - These are the rebranded **Ayushman Bharat Health and Wellness Centres (AB-HWCs)**.
    - The new tagline for these centers is **'Arogyam Parmam Dhanam'**.
    - They serve as the foundation of the health system, delivering **Comprehensive Primary Health Care (CPHC)**, including maternal and child health services, non-communicable disease screening, and free essential drugs and diagnostics.
  - **2. Pradhan Mantri Jan Arogya Yojana (PM-JAY)**:
    - This is the health insurance component detailed above, focusing on **secondary and tertiary care** for hospitalization.

India Saw 1.7 Million PM2.5-Related Deaths in 2022: Lancet Report

What's the News?

- According to the **2025 Lancet Countdown on Health and Climate Change**, **1.72 million people died in India in 2022** due to exposure to **anthropogenic PM2.5 air pollution**—a 38% increase since 2010.
- The report identifies **fossil fuel combustion** as the primary driver, responsible for **44% (752,000)** of these deaths, with **coal alone accounting for 394,000 fatalities**. The economic cost of outdoor air pollution was estimated at **USD 339.4 billion (₹30 lakh crore)**, equivalent to **9.5% of India's GDP**.

Key Findings from the Lancet Report

- **PM2.5 pollution sources**:
  - **Coal-fired power plants**: ~298,000 deaths
  - **Petrol-based road transport**: ~269,000 deaths
- **Household air pollution**:
  - Caused **113 deaths per 100,000 people** nationally in 2022
  - Higher in rural areas (**125 per 100,000**) due to reliance on **wood, dung, and crop residue** for cooking (58% of rural energy use)
- **Climate-linked health risks**:
  - **19.8 heatwave days per person** in 2024; **6.6 days attributable to climate change**
  - **247 billion potential labour hours lost**, mostly in **agriculture (66%)** and **construction (20%)**
  - **Dengue transmission potential nearly doubled** since the 1950s
  - **18 million Indians** live within **1 metre of sea level**, facing rising flood risks

Policy and Governance Implications

- **Energy sector dominance**:
  - **Coal supplies 72% of electricity** and nearly **half of total energy**
  - **Fossil fuels power 96% of road transport**; electric vehicles contribute only **0.3%**
- **Subsidy imbalance**: India spent **USD 48.5 billion on fossil fuel subsidies in 2023**, exceeding carbon revenue
- **Declining climate readiness**: India's preparedness for a **low-carbon transition slipped by 2% in 2024**
- **Urban environmental degradation**:
  - **124 of 189 major cities** have **low or very low greenness**

- o **3.6% decline in urban vegetation** since 2015

Additional Info
- **PM2.5**: Refers to **Particulate Matter** 2.5, fine inhalable particles with diameters generally 2.5 micrometres and smaller. They can penetrate deep into the lungs and enter the bloodstream, causing cardiovascular and respiratory diseases.
- **The Lancet Countdown**: An international, multidisciplinary collaboration that monitors the evolving health profile of climate change and provides an independent assessment of health and climate change indicators.
- **Related Indian Initiatives**:
  - o **National Clean Air Programme (NCAP)**: A long-term, time-bound national strategy to tackle air pollution, aiming for a 20%-30% reduction in PM2.5 and PM10 concentrations by 2024 (baseline 2017).
  - o **Panchamrit Goals**: India's climate action commitments, including achieving 500 GW of non-fossil fuel energy capacity and 50% of energy requirements from renewables by 2030.

AIIMS Study Reveals Major Imbalance in Ophthalmologist Distribution in India
What's the News?
- A recent study by the **Dr. R.P. Centre for Ophthalmic Sciences** at **AIIMS, New Delhi**, has highlighted a "major imbalance" and shortage of ophthalmologists (eye specialists) in India.
- The research, published in the **Indian Journal of Ophthalmology (IJO)**, found that India has approximately **15.2 ophthalmologists per million** people, which translates to roughly **one eye specialist for every 65,000** individuals.
- This ratio reveals significant maldistribution across private vs. public sectors, urban vs. rural settings, and different states.

Key Findings of the Study
- **Overall Numbers**: The cross-sectional database analysis identified a total of **21,688 ophthalmologists** practicing across the country.
- **Data Source**: The study utilized data from the **All India Ophthalmological Society (AIOS)** member directory.

Dimensions of the Imbalance
- **Public vs. Private Sector**:
  - o A vast majority, approximately **80%**, of ophthalmologists work in the **private sector**.
  - o Only **20%** are employed in the **public sector**, which includes government hospitals and medical colleges, where they serve a larger population.
- **Urban-Rural Divide**:
  - o More than **90%** of eye specialists are concentrated in **urban areas**, leading to a severe scarcity in rural India.
- **Inter-State Disparities**:
  - o The distribution varies widely among states and union territories.

- o **High-Density Areas**: Chandigarh reported the highest ratio (81.1 per million), followed by Delhi, Goa, Kerala, and Karnataka.
- o **Low-Density Areas**: Bihar had the lowest density (6.6 per million), with other states like Odisha, West Bengal, Uttar Pradesh, and Jharkhand also showing low numbers.

Government Eases Corneal Transplantation Rules to Boost Donations
What's the News?
- The **National Eye Bank (NEB)** at **AIIMS, New Delhi**, has introduced significant simplifications to the "Rules for Eye Banking and Corneal Transplantation."
- Key changes include the **removal of the upper age limit** for donors and the **six-hour time limit** for cornea retrieval after death.
- The objective of these revisions is to **widen the donor pool,** clear public misconceptions, and address the shortage of donor corneas in the country.

Key Revisions in the Guidelines
- **Removal of Age Limit**:
  - o Previously, the upper age limit for cornea donation was **70 years**.
  - o The revised rules **remove this age cap**, allowing corneas to be collected from donors of **all age groups**.
- **Removal of Time Limit**:
  - o The earlier guideline advised against retrieving corneas more than **six hours** after a donor's death.
  - o This time constraint has been **removed**, provided the body is placed in cold storage (around 4°C) soon after death.
- **Clarification on Eligibility**:
  - o The new rules explicitly state that individuals with conditions like **diabetes**, **hypertension**, and **asthma** are **eligible** to donate.
  - o Those who have undergone **cataract surgery** (with an intraocular lens) are also not contraindicated and can donate.
  - o Standard contraindications, such as communicable diseases (HIV, Hepatitis B/C, rabies) and certain cancers, remain in place.

Corneal Blindness Burden & Service Gaps
- Estimated **1.1 million people** in India are affected by corneal blindness — the **second leading cause** of blindness nationally .
- **20,000–25,000 new cases** added annually, with disproportionate impact in rural areas .
- Corneal opacities account for **~8% of total blindness** in India — significantly higher than the global average of 3.2% .
- Critical system gaps (per AIIMS study):
  - o Only **5.7%** of 7,901 eye institutes have functional **eye banks with tissue processing** .
  - o **74 beds/million population** — with stark inequity between states (e.g., Ladakh: 2

ophthalmologists/million vs. Puducherry: 127/million) .

WHO Global TB Report 2025: India Shows Progress but Lags on Elimination Target

What's the News?
- The **World Health Organization (WHO)** has released the **Global TB Report 2025**.
- The report shows that while **India** has made significant progress in reducing **Tuberculosis (TB)** incidence and mortality at a rate nearly double the global average, it still accounts for the largest share of the global TB burden.
- Globally, TB claimed 1.23 million lives in 2024.
- Despite progress, the report indicates India is far from its ambitious national target of eliminating TB by 2025.

Key Findings: Global
- **Global Incidence:** The global TB incidence rate (new cases) fell by 12% between 2015 and 2024.
- **Global Deaths:** An estimated 1.23 million people died from TB in 2024.
- **High-Burden Countries:** Eight countries accounted for 67% (two-thirds) of all global TB cases: **India (25%)**, followed by Indonesia (10%), the Philippines (6.8%), China (6.5%), Pakistan (6.3%), Nigeria (4.8%), DR Congo (3.9%), and Bangladesh (3.6%).

Key Findings: India's Performance
- **Incidence Reduction:** India's TB incidence fell by 21% between 2015 and 2024, dropping from 237 to 187 cases per lakh population.
- **Mortality Reduction:** The TB mortality rate in India decreased from 28 per lakh population in 2015 to 21 per lakh in 2024.
- **Treatment Coverage:** Treatment coverage has surged from 53% in 2015 to over 92% in 2024.
- **Case Detection:** India has significantly reduced the number of "missing cases" (unreported) from an estimated 15 lakh in 2015 to less than one lakh in 2024.
  - In 2024, 26.18 lakh TB patients were diagnosed out of an estimated 27 lakh total cases.
- **Treatment Success:** India's treatment success rate has reached 90%, which is higher than the global average of 88%.
- **Drug-Resistant TB:** India accounts for 32% of the global burden of multidrug-resistant (MDR) and rifampicin-resistant TB cases. The Health Ministry, however, noted no significant increase in MDR-TB patients.

Strategic Interventions Driving Progress
- **Ni-kshay 2.0** & **TB-Mukt Bharat Abhiyan**:
  - Expanded active case-finding via outreach camps and community workers
  - Nutrition support under **Ni-kshay Poshan Yojana** (₹500/month for 6–12 months)
- **Diagnostic Scale-Up**:
  - Nationwide deployment of **CBNAAT** and **Truenat** molecular tests
  - AI-enabled **handheld X-ray devices** for asymptomatic case screening

- **Mass Screening Campaign (2024–25)**:
  - Screened **19 crore high-risk individuals**, detecting **24.5 lakh TB cases**, including **8.61 lakh asymptomatic cases**.

Funding & Global Context
- **Global TB Funding Gap**: Stands at **US$5.1 billion annually**; India receives support from the **Global Fund** (2025 allocation: **US$277 million**).
- **WHO End TB Strategy Goals (2035)**:
  - **95% reduction in deaths**
  - **90% reduction in incidence**
  - **Zero TB-affected families facing catastrophic costs**
- **2025 Milestones (Unmet Globally)**:
  - 50% reduction in incidence & 75% in deaths (vs 2015 baseline) - achieved only partially by high-burden nations like South Africa, but not India.

Centre Launches National Action Plan on Antimicrobial Resistance 2.0 (NAP-AMR 2.0)

What's the News?
- Union Minister of Health and Family Welfare, **J.P. Nadda**, launched the **National Action Plan on Antimicrobial Resistance 2.0 (NAP-AMR 2.0)** in New Delhi.
- The plan, operational from **2025 to 2029**, aims to combat the rising threat of Antimicrobial Resistance (AMR) through a **"One Health"** approach, which recognizes the interconnectedness of human, animal, and environmental health.
- The launch coincided with **World AMR Awareness Week**, emphasizing the urgency of tackling what is often called the "silent pandemic."

Key Features & Strategic Focus
- **One Health Approach**: Integrates action across **human health**, **animal husbandry**, **agriculture**, and **environmental sectors**.
- **Governance & Coordination**:
  - Increases institutional **ownership** of AMR efforts across ministries and departments.
  - Establishes well-defined mechanisms for **inter-sectoral coordination**.
- **Surveillance & Capacity Building**:
  - Enhances **laboratory capacity** for AMR surveillance and diagnostics.
  - Strengthens **infection prevention and control (IPC)** in healthcare facilities.
- **Awareness, Education & Training**:
  - Addresses gaps in standardized **Knowledge, Attitude and Practices (KAP)** studies identified in NAP-AMR 1.0.
  - Aims to consolidate existing data and build an **integrated digital platform** for stakeholder communication.
- **Private Sector Engagement**: Prioritizes collaboration with private healthcare providers to scale responsible antibiotic use.

Why AMR Matters
- AMR jeopardizes outcomes in **surgical procedures**, **cancer chemotherapy**, and **organ transplants**.
- Overuse/misuse of antibiotics has become widespread, leading to:
    - Delayed or failed treatments
    - Escalating healthcare costs
    - Increased risk of resistant pathogen transmission
- Economically, AMR imposes a heavy burden on families and public health systems due to prolonged hospitalization and expensive second-line drugs.

Additional Info
- **Policy Evolution**:
    - **2010**: Constituted **National Task Force on AMR Containment**.
    - **2011**: Released **National Policy on AMR Containment**.
    - **2017**: Launched first **NAP-AMR (2017–21)** aligned with WHO's **Global Action Plan (GAP)**.
    - **2022–24**: Drafted NAP-AMR 2.0 through consultations with **20+ ministries/departments** and experts.
- **Institutional Anchors**:
    - Led by the **Ministry of Health & Family Welfare**, with technical support from **NCDC** and guidance from the **Principal Scientific Adviser**.
    - Supported by **National AMR Surveillance Network (NARS-Net)** and proposed expansion of **AMR Surveillance & Research Partnership (AMRSP)**.

India Re-elected to Codex Executive Committee (CCEXEC)

What's the News?
- **India** has been unanimously re-elected as the member representing the **Asian region** in the **Executive Committee (CCEXEC)** of the **Codex Alimentarius Commission (CAC)**.
- The decision was taken during the **48th session of the Codex Alimentarius Commission (CAC48)** held in **Rome**, Italy.
- This re-election grants India a critical leadership role in global food standard-setting until the conclusion of the **50th session (CAC50)** in **2027**.
- The Indian delegation was led by **Rajit Punhani**, CEO of the **Food Safety and Standards Authority of India (FSSAI)**.

Key Outcomes & India's Contributions
- **Leadership in Standards Development**:
    - Chaired the **Codex Committee on Fresh Fruits and Vegetables (CCFFV)**: Secured adoption of the **Standard for Fresh Dates** (Step 8) and advanced **Standard for Fresh Curry Leaves**.

- Revived the **Standard for Cashew Kernels**, pushing for global harmonization of quality benchmarks.
- **Technical & Scientific Interventions**:
    - Promoted adoption of **nitrogen-to-protein conversion factors** as an annex to analytical methods—critical for accurate food composition assessment.
    - Contributed to revised **Code of Practice for reducing aflatoxin contamination in peanuts**, aligning with **GSFA (General Standard for Food Additives)**.
    - Supported new **guidelines on pesticide residue monitoring**, particularly on stability of reference materials during storage—essential for reliable MRL (Maximum Residue Limit) setting.
- **Digital & Institutional Modernization**:
    - Advocated for **AI integration** in Codex processes to improve document translation and data handling efficiency.
    - Emphasized updating global databases on **food additives, contaminants, veterinary drugs**, and **methods of analysis**—to bridge data gaps in developing countries.

Delegation Leadership:
Led by **Rajit Punhani**, CEO of **FSSAI**, with officials from:
- Ministry of Health & Family Welfare
- Ministry of Commerce & Industry
- **Spices Board**, **MPEDA** (Marine Products Export Development Authority)
- **ICMR-National Institute of Nutrition**, ICAR, and **FICCI**.

Additional Info
- **Codex Alimentarius Commission (CAC)**:
    - Established in **1963** by the **FAO** (Food and Agriculture Organization) and **WHO** (World Health Organization).
    - **Objective**: To protect consumer health and ensure fair practices in the international food trade.
    - **Membership**: 189 members (188 countries + EU); India has been a member since **1964**.
    - **Significance**: Its standards are recognized by the **World Trade Organization (WTO)** under the **SPS Agreement** (Sanitary and Phytosanitary Measures) as the reference for international trade disputes.
- **Executive Committee (CCEXEC)**:
    - Acts as the executive organ of the Commission, managing the standards development programme and strategic planning between sessions.
    - Comprises a Chairperson, 3 Vice-Chairs, Regional Coordinators, and **7 elected regional representatives** (India holds the Asian seat).
- **Constitutional & Legal Context**:
    - **Article 47**: Directive Principle commanding the State to raise the level of nutrition and standard of living and to improve **public health**
    - **Article 51(c)**: Promotes respect for **international law and treaty obligations**,

- aligning with India's adherence to Codex standards.
  - **FSSAI Act, 2006**: Empowers FSSAI to coordinate with international bodies like Codex to align Indian standards with global benchmarks.

India Launches 'Birsa-101': First Indigenous CRISPR Gene Therapy for Sickle Cell Disease

What's the News?

- Union Minister of State for Science and Technology, **Dr. Jitendra Singh**, launched **Birsa-101**, India's first indigenously developed **CRISPR-based gene therapy** for **Sickle Cell Disease (SCD)**.
- The therapy is named in honor of the tribal freedom fighter **Bhagwan Birsa Munda**, whose 150th birth anniversary was recently observed, highlighting the government's focus on tribal healthcare.
- The launch marks a critical step towards the **"Sickle Cell-Free India"** goal by **2047**, offering a curative solution at a fraction of the global cost.

Key Highlights of Birsa-101

- **Indigenous Development**: The therapy was developed by the **CSIR-Institute of Genomics and Integrative Biology (IGIB)** using an indigenous CRISPR platform called **enFnCas9**.
- **Strategic Partnership**: A technology transfer agreement was signed with the **Serum Institute of India (SII)** to scale up production and ensure the therapy is affordable and accessible.
- **Cost-Effectiveness**: While global gene therapies for SCD cost between **₹20–25 crore**, Birsa-101 is designed to be a low-cost alternative for the "poorest of the poor," potentially bringing costs down significantly (estimates suggest around **₹50 lakh**).
- **Mechanism**: It functions as a "precise genetic surgery," correcting the specific genetic mutation in the patient's stem cells to restore normal hemoglobin production.

Why is this Critical?

- **Tribal Vulnerability**: Sickle Cell Disease disproportionately affects India's **tribal communities** (e.g., Gond, Bhil, Munda) in central and eastern India.
- **One-Time Cure**: Unlike current treatments that manage symptoms (like blood transfusions or hydroxyurea), gene therapy offers a potential **one-time, lifelong cure**.
- **Self-Reliance**: It reduces dependency on expensive foreign therapeutics, aligning with the **Atmanirbhar Bharat** mission in the biotechnology sector.

Additional Info

- **Sickle Cell Disease (SCD)**:
  - An inherited blood disorder where red blood cells become rigid and "sickle-shaped," blocking blood flow and causing severe pain, anemia, and organ damage.
  - It is caused by a mutation in the **HBB gene**.
- **National Sickle Cell Anemia Elimination Mission**:
  - Launched in **2023** with the target to eliminate SCD as a public health problem by **2047**.
  - Focuses on screening **7 crore people** (aged 0–40 years) in affected tribal districts.
- **CRISPR Technology**:
  - Stands for **Clustered Regularly Interspaced Short Palindromic Repeats**.
  - A gene-editing tool often described as "molecular scissors" that allows scientists to easily alter DNA sequences and modify gene function.
  - Pioneers **Jennifer Doudna** and **Emmanuelle Charpentier** were awarded the **Nobel Prize in Chemistry (2020)** for this technology.

Study Detects Uranium in Breast Milk in Bihar: Concerns and Expert Validity

What's the News?

- A joint study by **Mahavir Cancer Sansthan (Patna), AIIMS (New Delhi)**, and **Lovely Professional University** has detected **Uranium contamination** in the breast milk of lactating mothers in **Bihar**.
- The study, published in the journal *Scientific Reports*, analyzed samples from **40 mothers** across **6 districts** (Bhojpur, Samastipur, Begusarai, Khagaria, Katihar, and Nalanda) and found traces of uranium in **100% of the samples**.
- While the findings have raised alarm about **groundwater contamination** entering the food chain, experts have cautioned against panic, questioning the study's **validity regarding immediate health risks** and urging mothers to **continue breastfeeding**.

Key Findings & Health Risks

- **Concentration Levels**:
  - Uranium concentrations in the samples ranged up to **5.25 micrograms per liter (µg/L)**.
  - **Katihar** district recorded the highest individual concentration, while **Khagaria** had the highest average contamination.
- **Infant Risk**:
  - The researchers concluded that **70% of infants** in the study were at risk of **non-carcinogenic health effects**.
  - **Primary Health Risks:** The study highlighted potential **nephrotoxicity** (kidney damage) and **neurodevelopmental delays** (affecting IQ and cognitive function) due to uranium's chemical toxicity.
- **Source**: The contamination is attributed to the mother's ingestion of **uranium-contaminated groundwater** and food, a known issue in Bihar's Gangetic plains.

Expert Analysis: Validity & "Alarmism"

- **Comparison to Safe Limits**:
  - Experts like Dr. Dinesh K. Aswal (ex-BARC) noted that the detected levels (max 5.25 µg/L) are well below the **WHO permissible limit for drinking water (30 µg/L)**.
  - **Critique**: Since there is no specific global standard for uranium in breast milk, comparing

it to water limits suggests the immediate toxicity risk may be overstated.

- **Sample Size Limitations**:
  - Critics point out that the sample size of **40 women** is too small to draw state-wide generalizations or definitive public health conclusions without a larger control group.
- **Breastfeeding Consensus**:
  - Despite the findings, medical bodies (including the **Breastfeeding Promotion Network of India**) and the study authors themselves assert that the **nutritional and immunological benefits of breastfeeding** far outweigh the theoretical risks of these trace uranium levels.

Additional Info
- **Uranium Toxicity**:
  - Uranium is a **heavy metal** and a naturally occurring radioactive element.
  - Its **chemical toxicity** (damaging kidneys) is generally considered a greater risk than its **radiological toxicity** (cancer) in natural consumption scenarios.
- **Government Initiatives**:
  - **Jal Jeevan Mission**: Aims to provide safe and adequate drinking water through tap connections, treating contaminants like Arsenic and Uranium in affected regions.
  - **Bureau of Indian Standards (BIS)**: Sets the acceptable limit for Uranium in drinking water at **30 ppb (parts per billion)** or µg/L (IS 10500:2012).
- **Constitutional Context**:
  - **Article 47**: Directive Principle of State Policy that directs the State to raise the level of nutrition and the standard of living and to improve **public health**.
  - **Article 21**: Right to Life includes the right to **pollution-free water** and a healthy environment.

ICMR Flags "Hidden Epidemic" of Antibiotic Resistance in Indian Hospitals
What's the News?
- The **Indian Council of Medical Research (ICMR)** released its annual **Antimicrobial Resistance Research & Surveillance Network (AMRSN)** report, revealing a critical rise in **superbugs** that are resistant to key everyday antibiotics.
- The report highlights that **Gram-negative bacteria** are responsible for the majority of infections in Indian hospitals, with some pathogens showing resistance rates as high as **91%** to last-resort drugs.
- This comes alongside a separate **Lancet study** (conducted by AIG Hospitals) which found that a staggering **83% of healthy Indians** carry drug-resistant bacteria in their gut.

What Are Superbugs?
- **Definition**: Microbes (bacteria/fungi) resistant to ≥2 classes of antimicrobials, rendering standard treatments ineffective.
- **Key Pathogens**:
  - **Bacterial**:
    - *E. coli* & *K. pneumoniae* (UTIs, sepsis).
    - *A. baumannii* & *P. aeruginosa* (hospital-acquired pneumonia, ICU infections).
    - **MRSA**, **CRE** (Carbapenem-Resistant Enterobacteriaceae).
  - **Fungal**:
    - *Candida auris* (bloodstream infections, high mortality).
    - *Aspergillus fumigatus* (resistant to azoles).

How Resistance Develops
- **Antibiotic misuse**: Over-the-counter availability, self-medication, incomplete courses.
- **Healthcare settings**: Overuse of broad-spectrum antibiotics in hospitals.
- **Environmental factors**: Poor sanitation, contaminated water, agricultural overuse.
- **Horizontal gene transfer**: Rapid spread of resistance genes (e.g., *NDM-1*, *KPC*).

Implications & Challenges
- **Clinical Impact**:
  - ↑ Treatment failure, mortality, and hospital stays.
  - ↑ Use of toxic alternatives (e.g., colistin), leading to kidney damage.
  - Infections in elderly (≥70 years) show **80% higher AMR mortality** (per *The Lancet*).
- **Systemic Gaps**:
  - Fragmented **AMR surveillance** despite India's participation in WHO's **GLASS**.
  - Weak enforcement of **Schedule H1** (antibiotic sales regulation).
  - Limited diagnostics → empirical prescribing → resistance amplification.
- **Economic Burden**:
  - Estimated **US$ 1.5–2 billion/year** loss due to prolonged illness and productivity loss.

Education

India Skills Report 2026: Employability Rises to 56.35%, Women Surpass Men

What's the News?

- The **India Skills Report 2026** has been released, revealing that India's overall employability has increased to **56.35%**.
- The report is published by **Educational Testing Service (ETS)** and **Wheebox**, in collaboration with the **Confederation of Indian Industry (CII)**, **All India Council for Technical Education (AICTE)**, and the **Association of Indian Universities (AIU)**.
- For the first time, the employability of **women (54%)** has surpassed that of **men (51.5%)**, a shift attributed to hybrid work models and digital skilling initiatives.
- The report's theme is "**The Future of Work: Gig Workforce, Freelancing, AI-Supplemented Workforce, Remote Work & Entrepreneurship**".

Key Trends & Sectoral Insights

- **Tech & AI Dominate Employability**:
  - **Computer Science** graduates: **80%** employable.
  - **IT engineers**: **78%** employable.
  - Demand driven by roles in **AI, data analytics**, **automation**, **cloud**, and **cybersecurity**.
- **Fresher Hiring on the Rise**:
  - **IT sector** leads fresher hiring at **35%**, up from 14% cross-industry average in 2025.
  - Overall corporate hiring intent rose to **40%**, up from 29% last year.
- **Graduate Stream Performance**:
  - **Commerce: 62.81%** (up from 55%), boosted by BFSI & fintech.
  - **Science: 61%**.
  - **Arts: 55.55%**, aided by digital and interdisciplinary roles.
  - **ITI graduates: 45.95%** (up from 41%).
  - **Polytechnic diploma holders: 32.92%**.
- **Internships & Practical Exposure**:
  - **92.8%** of students seek internships, highest in **Karnataka**, **Madhya Pradesh**, and **Tamil Nadu**.

Gig Economy Expansion

- Gig hiring grew by **~38%**, forming **~16%** of all jobs.
- Gig workforce projected to reach **23.5 million by 2030**.
- Over **40%** of IT & gig workers now use **AI tools** for daily tasks.

Emerging Shifts in Hiring & Learning

- **Skills-first hiring** replacing degree-centric models.
- Rise of **micro-credentials**, **stackable certifications**, and **experiential learning**.
- **AI-assisted recruitment platforms** enabling personalised upskilling pathways.

Challenges Highlighted

- **Access & equity gaps**: AI/digital skills remain concentrated in metros and elite institutions.
- **Soft skills deficit**: Shortfall in **communication**, **critical thinking**, and **teamwork**, especially among first-gen learners.
- **Curriculum lag**: Mismatch between academic content and real-time industry demand.
- **Digital divide**: High cost of new tech limits rural/Tier-3 access.
- **Gig precarity**: **Income volatility**, **lack of social security**, and **low bargaining power**.
- **Over-reliance on foreign AI platforms**, risking IP and value capture loss.

Additional Info

- **About the Report**:
  - The **13th edition** of the India Skills Report draws insights from assessments of over **100,000 candidates** and 1,000 employers across key industries.
  - It positions India as a "**preferred global source of skilled talent**" and highlights a shift toward a **"skill-first" economy**.
- **Educational Domain Insights**:
  - Graduates with **MBA** and **B.Tech / B.E.** degrees remain the most employable.
  - Employability for **Commerce graduates** saw a sharp rise.
  - Vocational courses also showed improvement, with **ITI graduates**' employability improving significantly.

QS World University Sustainability Rankings 2026

What's the News?

- The **QS World University Sustainability Rankings 2026** have been released, featuring **103 Indian universities**, making India the **fourth-most represented nation** globally.
- **Lund University (Sweden)** secured the global **top spot**, overtaking the University of Toronto.
- **IIT Delhi** emerged as the **top-ranked Indian institution** at **205th** globally, though it slipped from its previous rank of 171.
- No Indian university made it to the **global top 200**, highlighting a gap in global sustainability competitiveness despite increased representation.

Global & Indian Rankings Overview

Top Global Universities

- **1st**: Lund University (Sweden)
- **2nd**: University of Toronto (Canada)
- **3rd**: University College London (UK)

Top Indian Universities

- **1st (Global 205)**: IIT Delhi
- **2nd (Global 235)**: IIT Bombay
- **3rd (Global 236)**: IIT Kharagpur
- **4th (Global 305)**: IIT Madras

Key Highlights for India

- **Rising Representation**: India contributed **103 institutions** (including **26 new entries**), placing it behind only the **USA (240)**, **China (163)**, and the **UK (109)**.
- **Strong Employability**: Indian institutions performed exceptionally well in the **"Employability and Outcomes"** indicator:
  - **IIT Delhi** ranked **93rd** globally.
  - **IIT Kharagpur** ranked **96th** globally.
- **Environmental Impact**:
  - **IIT Bombay** secured the **100th** spot globally in the **Environmental Impact** category.
  - **IIT Kharagpur** ranked **49th** in the **Environmental Sustainability** sub-indicator.
- **Knowledge Exchange**: The **University of Delhi** climbed 27 places to rank **94th** globally in the **Knowledge Exchange** indicator.

Methodology

The rankings evaluate universities based on **three main performance categories** (Total: 100%):

- **Environmental Impact (45%)**: Measures the institution's commitment to sustainability through research, education, and operational sustainability.
- **Social Impact (45%)**: Assesses efforts in equality, knowledge exchange, educational impact, employability, and health & well-being.
- **Governance (10%)**: Evaluates ethics, hiring practices, transparency, and decision-making effectiveness.

Govt to Introduce HECI Bill 2025: Single Regulator to Replace UGC, AICTE & NCTE

What's the News?

- The **Union Government** is set to introduce the **Higher Education Commission of India (HECI) Bill, 2025** in the upcoming Winter Session of Parliament.
- The Bill seeks to establish a single, overarching regulatory body—the **Higher Education Commission of India (HECI)**—replacing the **University Grants Commission (UGC)**, the **All India Council for Technical Education (AICTE)**, and the **National Council for Teacher Education (NCTE)**.
- This move aims to overhaul the higher education sector by ending regulatory fragmentation and aligning governance with the **National Education Policy (NEP) 2020**.

Key Features & Proposed Structure

The HECI will not be a monolithic body but will function through **four independent verticals** to ensure a separation of functions.

- **National Higher Education Regulatory Council (NHERC)**: The primary regulator for all higher education institutions, focusing on compliance and governance (excluding medical and legal education).
- **National Accreditation Council (NAC)**: Responsible for accreditation, moving away from an inspection-based model to a technology-driven, transparent disclosure system.
- **Higher Education Grants Council (HEGC)**: Tasked with **funding and financing** higher education institutions, though final funding approval may still rest with the administrative ministry to separate financial grants from regulatory powers.
- **General Education Council (GEC)**: Mandated to set **academic standards** and frame expected learning outcomes for higher education programs.

Why the Change?

- **Ending "Inspector Raj"**: The current system is criticized for being "mechanistic and heavy-handed." HECI aims for a **"light but tight"** regulatory framework, promoting autonomy and transparency.
- **Unified Vision**: Currently, distinct bodies (UGC for universities, AICTE for technical, NCTE for teachers) often have overlapping or conflicting mandates. HECI unifies them to foster **multidisciplinary education**.
- **Focus on Quality**: By separating regulation (NHERC) from academic standard-setting (GEC), the Bill aims to improve the quality of education and research without bureaucratic interference.

Additional Info

- **Exclusions**: The HECI will regulate all higher education streams **except Medical and Legal education**, which will continue to be governed by the **National Medical Commission (NMC)** and **Bar Council of India (BCI)** respectively.
- **Historical Context**:
  - A draft HECI Bill was first put in the public domain in **2018**, seeking to repeal the UGC Act.
  - The **NEP 2020** formally recommended the creation of HECI to resolve the regulatory "clutter".
- **Constitutional Context**: Education is in the **Concurrent List (Entry 25)** of the Seventh Schedule, giving both Centre and States the power to legislate, though Central laws prevail in case of conflict.

India's Retirement Index Score Rises to 48 Amid Growth in Early Planning

What's the News?

- India's retirement readiness has improved, with the **India Retirement Index Score (IRIS)** rising to **48** (on a 100-point scale), up from 44 in 2022.
- The findings are from the **fifth edition of the India Retirement Index Study (IRIS 5.0)**, conducted by **Max Life Insurance** in partnership with **Kantar**.
- The study assesses retirement preparedness based on **financial, health, and emotional** readiness.
- A significant shift in mindset is visible, as **50% of urban Indians** now believe retirement planning should begin as soon as one starts earning.

Key Findings from IRIS 5.

- **Improved Financial and Health Preparedness**:
  - **Financial Confidence**: While financial confidence remains stable, awareness about the required retirement corpus is still low. **70% of respondents** believe ₹1 crore would be sufficient for a comfortable retirement.
  - **Health Readiness**: Health preparedness has seen the sharpest gain, improving from 41 in 2022 to 46 in 2025. This is driven by increased physical activity, more frequent preventive health checks, and a rise in health insurance ownership (now at 50%, up from 43%).
- **Emotional Preparedness**:
  - **Concerns**: Emotional preparedness remains a priority, with **71%** of respondents fearing loneliness and **72%** expecting financial dependence on family.
  - **Women and Gig Workers**: Women have a slightly higher retirement preparedness score (49) compared to men (48). Gig workers show growing financial independence but weaker health engagement.
- **Regional Variations**:
  - **East Zone**: Leads in overall preparedness, balanced across finance, health, and emotion.
  - **North Zone**: Shows the highest health recovery post-COVID, with an 11-point increase in the Health Index.
  - **West Zone**: Demonstrates strong financial momentum, driven by increased investments in stocks and real estate.
  - **South Zone**: Reflects a balanced wellbeing profile with improvements in health sentiment and emotional resilience.

Segment Spotlight

- **Gig Workers**:
  - **IRIS Index Score**: 47
  - **Financial Independence**: Growing financial independence but weaker health engagement.
  - **Concerns**: 74% worry about meeting family's basic needs, and many lack access to structured retirement or health benefits.
- **Return Migrants**:
  - **IRIS Index Score**: 48
  - **Financial Confidence**: Higher due to earlier urban exposure.
  - **Health Neglect**: 52% haven't had preventive health checks in three years.
- **Women**:
  - **IRIS Index Score**: 49
  - **Health Optimism**: Stronger health optimism and rising fitness focus.
  - **Financial Instruments**: 8% less likely to invest in risk-based financial instruments.
  - **Loneliness**: Report higher levels of loneliness (74%).

Awareness vs. Preparedness Gap

- **Product Awareness**: The average number of known financial products has risen to 11.6 in 2025 from 8.7 in 2022.
- **Preparedness Gap**: Only **37%** of respondents have achieved at least 25% of their target corpus, indicating a significant gap between awareness and actual preparedness.

NPS & Workplace Benefits

- **National Pension System (NPS)**:
  - **Awareness**: Increased to 66% (up from 59%).
  - **Ownership**: Stable at approximately 17% due to complexity and the need for guidance.
- **Employee Provident Fund (EPF)**:
  - **Common Benefit**: Cited by 69% of respondents.
  - **Preferred Add-Ons**: Regular health check-ups (55%) and medical or hospitalization coverage (49%).

Health & Prevention

- **Physical Activity**: 81% of respondents engage in regular physical activity, up 5 points since 2022.
- **Preventive Check-Ups**: Remain at 55%.
- **Health Insurance Ownership**: At 50%, up 7 points, signaling a growing focus on wellness and proactive health management.

Additional Info

- **Background on IRIS**:
  - **Annual Study**: Conducted by Axis Max Life Insurance in partnership with Kantar.
  - **Assessment**: Evaluates India's readiness for a healthy, peaceful, and financially secure retirement across three indices: Financial, Health, and Emotional Preparedness.
  - **Survey Details**: The fifth edition surveyed 2,242 respondents across 28 cities, including new segments such as gig workers.

FATF Expands Asset Recovery Scope, Cites India's ED as Best Practice

What's the News?

- The **Financial Action Task Force (FATF)**, the global anti-money laundering watchdog, has released new guidance that expands the scope of global asset recovery beyond corruption to include a wider range of financial crimes.
- The new framework, detailed in a 340-page report titled **"Asset Recovery Guidance and Best Practices,"** now also targets proceeds from crimes like **fraud, cybercrime, and investment scams**.
- The guidance extensively cites India's **Enforcement Directorate (ED)**, highlighting its methods and legal framework as effective models for other countries to follow in tracing, seizing, and restoring criminal assets.

Key Changes in the FATF Guidance

- **Non-Conviction-Based Confiscation**: For the first time, the FATF has mandated that countries must have mechanisms to confiscate criminal assets even **without a criminal conviction**. This is crucial in cases where a prosecution is not possible (e.g., the accused has fled or is deceased).
- **Expanded Scope**: The focus has moved beyond bribery and corruption to cover all major financial crimes, reflecting the changing nature of illicit finance.
- **Victim Compensation**: The guidance promotes a victim-centric approach, encouraging the restitution of stolen assets to those who were defrauded.

India's Framework as a "Best Practice"

- The FATF report features multiple Indian cases investigated by the **ED** as examples of a robust and effective asset recovery system.
- **Key Cases Cited**:
  - **Agri Gold Case**: Praised for the coordination between the ED and state police to attach and restore assets worth **₹6,000 crore** to victims of a large-scale investment fraud.
  - **IREO Group Case**: Highlighted India's use of **value-based confiscation**, where the ED attached properties of equivalent value (₹1,777 crore) in India to compensate for criminal proceeds transferred abroad.
  - **BitConnect Ponzi Scheme**: Noted as an example of swift action in seizing emerging assets, where the ED seized cryptocurrencies valued at **₹1,646 crore**.
  - **Rose Valley Scheme**: Cited as a model for victim compensation, where attached assets were used to reimburse defrauded investors.

Steel Ministry Grants In-Principle Approval for AM/NS Slurry Pipeline

What's the News?

- The **Union Ministry of Steel** has granted an **"in-principle" approval** for the construction of a **slurry pipeline** to support a new steel plant.

- The pipeline is for the planned integrated steel plant by **ArcelorMittal Nippon Steel (AM/NS) India**.
- The approval is a significant step forward for the project, which is reportedly planned at **Nakkapali**, Andhra Pradesh.

Key Developments

- **Environmental Clearance**: The MoEF recommended environmental clearance for the AMNS plant, which will have an initial capacity of 8.2 million tonnes per annum (MTPA) and is expected to expand to 24 MTPA.
- **Slurry Pipeline Approval**: The Steel Ministry has invoked the Petroleum and Minerals Pipeline (Acquisition of Right of User in Land) Act, 1962, to provide the right of way for the pipeline.
- **Project Investment**: The plant, with an overall investment of ₹1.5 lakh crore, is India's largest greenfield steel project.
- **Economic Impact**: The plant is expected to boost the local economy by generating jobs, promoting downstream industries, and enhancing logistics networks in north coastal Andhra Pradesh.

Context and Significance

- **Industrial Corridor**: The AMNS plant will serve as a key anchor industry for the Andhra Pradesh Industrial Corridor, facilitating the growth of steel-based downstream units and machinery production clusters.
- **Sustainability**: The plant will employ advanced, energy-efficient, and low-emission technologies, aligning with global standards for sustainability and carbon management.
- **Infrastructure Development**: The slurry pipeline will provide an environmentally friendly method of transporting iron ore, reducing reliance on road and rail transportation.

Project Details

- **Capacity and Phases**: The first phase will target an 8.2 MTPA integrated steel capacity, with plans to eventually expand to 24 MTPA.
- **Location and Timeline**: The plant is located in Anakapalli district, Andhra Pradesh. The foundation stone will be laid during the CII Partnership Summit (14–15 November 2025) in Visakhapatnam.
- **Land Allocation**: The Andhra Pradesh government allocated the required land within three months and provided single-window facilitation to expedite statutory and environmental clearances.

Additional Info

- **ArcelorMittal Nippon Steel (AM/NS) India**:
  - A joint venture between two of the world's leading steel companies, **ArcelorMittal** and **Nippon Steel**.
  - It is a major integrated flat carbon steel manufacturer in India.
- **National Steel Policy 2017**:
  - This project aligns with the broader goals of the **National Steel Policy 2017**.
  - The policy aims to enhance domestic steel production capacity and improve the sector's efficiency and global competitiveness. Efficient raw material logistics, like slurry pipelines, are crucial to this goal.

State Bank of India Surpasses $100 Billion Market Capitalisation

What's the News?

- The **State Bank of India (SBI)**, the nation's largest public sector lender, has achieved two major financial milestones.
- The bank's **market capitalisation (m-cap)** crossed the **$100 billion** threshold for the first time, driven by a record high in its share price.
- This surge followed the announcement of strong **second-quarter (Q2) financial results**, which exceeded market expectations.
- Simultaneously, the bank's total business also crossed the ₹**100 trillion** (₹100 lakh crore) mark.

Key Financial Milestones

- **$100 Billion M-Cap Club**:
  - SBI is the first **Public Sector Bank (PSB)** in India to achieve this valuation.
  - It joins an elite group of Indian companies with a market cap over $100 billion, which includes firms like **Reliance Industries**, **Tata Consultancy Services (TCS)**, and **HDFC Bank**.
- ₹**100 Trillion Total Business**:
  - The bank's total business, which is the sum of its total deposits and total advances (loans), surpassed the ₹100 trillion milestone.
  - As of the end of the quarter, this comprised approximately ₹**55.9 lakh crore in deposits** and ₹**44.2 lakh crore in advances**.
- **Strong Q2 Performance**:
  - The bank reported a robust 10% year-on-year rise in net profit, reaching ₹**20,160 crore** for the quarter.
  - This profit was supported by healthy loan growth and a one-off gain from the sale of its stake in **Yes Bank**.
  - Asset quality improved, with the **Net Non-Performing Assets (NPA)** ratio falling to **0.42%**.

Significance

- **Market Confidence**: The milestone reflects strong investor confidence in SBI's financial health, robust growth, and improving asset quality.
- **PSU Benchmark**: As the first public sector bank to reach this size, it highlights the significant turnaround and strength of the public sector banking space.
- **Economic Indicator**: SBI's massive scale in both business and valuation underscores its systemic importance as the backbone of the Indian banking sector.

Additional Info

- **About SBI**:
  - **Headquarters**: Mumbai, Maharashtra.
  - **Status**: It is classified as a **Domestic Systemically Important Bank (D-SIB)** by the RBI, meaning its failure would have a significant impact on the national economy.
- **What is Market Capitalisation?**:
  - Market capitalisation (m-cap) is the total market value of a company's outstanding shares.
  - It is calculated by multiplying the total number of a company's shares by the current market price of one share.

DFS Launches Start-up Common Application on Jan Samarth Portal

What's the News?

- The **Department of Financial Services (DFS)**, Ministry of Finance, has launched the **"Start-up Common Application Journey"**.
- This new feature has been integrated into the **Jan Samarth Portal** to simplify the process of accessing credit for start-ups and entrepreneurs.

Startup Common Application

- **Single-Window Access**: Startups can submit one application to explore multiple credit options - including term loans, working capital, and equipment financing - without re-entering details across platforms.
- **Eligible Lenders**: Includes **SIDBI, NABARD, NHB, EXIM Bank, NSIC, NIIF, NEDFi, RLFCL**, and select public sector banks.
- **Integrated Schemes**: Links to flagship programs such as:
  - **CGTMSE** (Credit Guarantee Fund Trust for Micro and Small Enterprises)
  - **PSB Loans in 59 Minutes**
  - **Startup India Seed Fund Scheme (SISFS)** tie-ups
  - **Stand-Up India** loans for SC/ST and women entrepreneurs.
- **End-to-End Tracking**: Real-time status updates, document upload, and communication with lenders via dashboard.

Strategic Impact & Metrics

- **Credit Gap Reduction**: Only ~15% of Indian startups access formal credit; SCA targets to raise this to ≥**50% by 2030**.
- **Scale of Jan Samarth Portal**:
  - Launched in **2023**, now processes **over 1.5 crore applications**
  - Facilitated disbursal of ₹**4.2 lakh crore** across MSME, education, housing, and startup verticals.
- **Loan Range**:
  - ₹**10 lakh to ₹20 crore**, covering seed-stage capex to scale-up expansion
  - Collateral-free loans up to ₹**5 crore** under CGTMSE for eligible startups.

India Signs Historic First Major LPG Import Deal with US

What's the News?

- **Indian Public Sector Oil Companies** (IOCL, BPCL, and HPCL) have finalized a **historic first structured**

contract to import **Liquefied Petroleum Gas (LPG)** from the United States.

- The deal involves importing approximately **2.2 million tonnes per annum (MTPA)** of LPG for the **contract year 2026**, which constitutes nearly **10% of India's annual LPG imports**.
- This move is seen as a strategic shift to **diversify energy sources** and reduce reliance on traditional suppliers in the **Middle East** while strengthening the **Indo-US energy partnership**.

Key Highlights of the Deal

- **Contract Details**: The one-year agreement was signed with global energy majors **Chevron, Phillips 66, and TotalEnergies Trading SA**.
- **Pricing Benchmark**: The purchase is benchmarked to **Mont Belvieu**, the primary pricing hub for LPG in the US, rather than the traditional Saudi Contract Price (CP) used for Middle Eastern supplies.
- **Logistics**: The LPG will be sourced from the **US Gulf Coast**, utilizing **Very Large Gas Carriers (VLGCs)** for transport.
- **Strategic Objective**:
  - **De-risking Supply**: Reducing over-dependence on nations like **Qatar, UAE, and Saudi Arabia**, which currently account for over **80%** of India's LPG imports.
  - **Price Stability**: Mitigating the impact of geopolitical volatility in West Asia (e.g., Red Sea disruptions).
  - **Trade Balance**: Addressing the **trade surplus** India enjoys with the US, a point of contention raised by the US administration during trade talks.

Energy Import Profile (2024):

- Total LPG consumption: ~35 MTPA
- Imports: ~21 MTPA (**60% of demand**)
  - West Asia: ~19 MTPA (90%)
  - Others (including this new US deal): ~2 MTPA (projected to rise)

Centre Hikes Print Media Advertisement Rates by 26% to Strengthen Industry

What's the News?

- The **Ministry of Information and Broadcasting (I&B)** has approved a **26% increase** in the advertisement rates for print media to support the industry amidst rising operational costs.
- The revised rates will be applicable to advertisements released by the **Central Bureau of Communication (CBC)**, the nodal agency for government advertising.
- This decision is based on the recommendations of the **9th Rate Structure Committee (RSC)**, aimed at ensuring the financial viability of small, medium, and large newspapers.

Key Changes in Rate Structure

- **Base Rate (B&W, 1-lakh circulation)**:
  - ₹47.40 → ₹59.68 per sq. cm (+26%).
- **New Inclusions**:
  - **Premium for colour advertisements**.

  - **Preferential placement charges** (e.g., front page, inside covers).
- **Applicability**: Applies to all newspapers across circulation tiers, with proportional adjustments for smaller/larger circulations.

Rationale & Objectives

- **Revenue Support**: Addresses sharp spikes in **newsprint prices** (WPI up over 45% since 2021) and wage inflation.
- **Sustain Quality Journalism**: Enables investment in local reporting, investigative content, and rural coverage.
- **Balance Media Ecosystem**: Counters revenue erosion due to digital platforms' dominance (digital ad share rose from 24% in 2019 to ~42% in 2025).

Implementation & Governance

- **Nodal Agency**: **Central Bureau of Communication (CBC)** administers government advertising.
- **Review Process**: Rates revised on recommendations of the **9th Rate Structure Committee** (constituted Nov 2021, submitted report Sept 2023).
  - Consulted key stakeholders: **Indian Newspaper Society (INS)**, **All India Small Newspapers Association (AISNA)**, **SMBNS**.
  - Benchmarked against: Newsprint cost trends, WPI, wage index, and production overheads.

Additional Info

- **Policy Context**:
  - Aligns with **National Media Policy (Draft 2023)** emphasis on media viability and pluralism.
  - Supports **SDG 16 (Peace, Justice & Strong Institutions)**: independent press as pillar of democratic accountability.
- **Historical Timeline**:
  - Last revision: Jan 2019 (8th Committee, rates valid for 3 years).
  - Gap: ~6 years without adjustment (2019–2025), despite persistent inflation.
- **Constitutional Link**:
  - Falls under **Article 53 + Article 77**: Executive power of Union exercised via ministries.
  - Promotes **Article 19(1)(a)** (freedom of speech/expression) through institutional support to press.

MoSPI Launches National Industrial Classification (NIC) 2025

What's the News?

- The **Ministry of Statistics and Programme Implementation (MoSPI)** has released the **National Industrial Classification (NIC) 2025** to replace the existing **NIC 2008**.
- This new classification system was launched during the culmination ceremony of the **75th Anniversary of the National Sample Survey (NSS)** and **World Statistics Day 2025** in Udaipur.
- NIC 2025 introduces a **six-digit coding structure** (up from five digits) to provide a more detailed and

contemporary framework for categorizing economic activities in India, aligning with global standards.

Key Features of NIC 2025

- **Enhanced Granularity**:
  - Upgraded from **five-digit** (NIC-2008) to **six-digit** structure, allowing finer classification of economic activities.
  - Expanded to **87 divisions** (from 88) and **1,887 sub-classes** (up from ~1,200), improving data precision.
- **Inclusion of Emerging Sectors**: Explicitly covers high-growth and future-oriented domains:
  - **Digital Economy**: *Cloud services*, *blockchain*, *platform-based services*, *web search portals*
  - **Green Economy**: *Carbon capture*, *waste management*, *environmental remediation*
  - **Services & Intermediation**: *Logistics*, *real estate intermediation*, *food service platforms*, *health and education intermediaries*
  - **AYUSH** sector now formally integrated.
- **Technology-Agnostic Design**: Activities are classified by *function*, not by production method—ensuring future-proofing against tech disruption.

Comparison: NIC 2008 vs. NIC 2025

Feature	NIC 2008	NIC 2025
Structure	5-Digit Code	**6-Digit Code**
Sections	21 (A to U)	**22 (A to V)**
Divisions (2-Digit)	88	**87**
Sub-Classes	1,304	**1,887**
Global Alignment	UN ISIC Rev. 4	**UN ISIC Rev. 5**

Additional Info

- **Historical Evolution**:
  - First NIC introduced in **1962**; revised in **1970, 1987, 1990, 1998, 2004, 2008**, and now **2025**.
- **Governance**: Revised under the **Expert Committee for Revision of Economic Classifications (ECREC)**, comprising domain experts and industry representatives.
- **MoSPI**:
  - The nodal ministry for statistical standards in India.
  - Conducts key surveys like the **Annual Survey of Industries (ASI)** and **Periodic Labour Force Survey (PLFS)**, which will now use NIC 2025.
- **Institutional Anchor**:
  - **National Sample Survey Office (NSSO)** — MoSPI's flagship survey body — will adopt NIC-2025 across its four divisions:
    - Survey Design & Research Division (Kolkata)
    - Field Operations Division (nationwide data collection)
    - Data Processing Division
    - Survey Coordination Division.
- **UN ISIC Revision 5**:
  - Developed by the **United Nations Statistics Division (UNSD)**.

- Accepted as the international standard to ensure data consistency across borders.
- **Constitutional Context**:
  - **Entry 94** of the **Union List** (List I) covers "Inquiries, surveys and statistics for the purpose of any of the matters in this List."
  - **Entry 45** of the **Concurrent List** (List III) covers "Inquiries and statistics for the purposes of any of the matters specified in List II or List III."

India Implements Four Historic Labour Codes to Reform Employment Laws

What's the News?

- The **Central Government** has officially notified the implementation of **four new Labour Codes**, marking a significant overhaul of India's employment landscape.
- These codes consolidate **29 outdated labour laws** into four comprehensive legislations to simplify compliance, modernize labour regulations, and extend social security.
- The reform aims to benefit over **50 crore workers** - both in the organized and unorganized sectors - while improving the **Ease of Doing Business** for industries by reducing regulatory complexity.

Key Reforms & Provisions

1. Code on Wages, 2019

- **Universal Minimum Wage**: Ensures a **statutory right to minimum wages** for all workers across all sectors, protecting them from unduly low pay.
- **Floor Wage**: The Central Government will fix a **"Floor Wage"** based on living standards. State governments cannot set minimum wages below this floor.
- **Gender Equality**: Explicitly prohibits discrimination based on gender in matters of wages and recruitment for similar work.

2. Code on Social Security, 2020

- **Gig & Platform Workers**: For the first time, **gig and platform workers** (e.g., delivery partners, freelancers) are legally recognized and entitled to social security benefits.
- **Gratuity Reform**: The eligibility period for gratuity for **Fixed-Term Employees (FTE)** has been reduced from **5 years to 1 year**, offering them parity with permanent staff.
- **Aggregator Contribution**: Digital aggregators must contribute **1-2% of their annual turnover** (capped at 5% of worker payouts) towards a social security fund.

3. Industrial Relations Code, 2020

- **Hiring & Firing Flexibility**: Establishments with up to **300 workers** (previously 100) can now retrench staff or close units without prior government permission, granting more flexibility to employers.
- **Fixed-Term Employment**: Formally recognizes fixed-term employment, ensuring these workers receive the same service conditions, wages, and benefits as permanent employees.
- **Dispute Resolution**: Introduces a **two-member Industrial Tribunal** to speed up the disposal of labour disputes.

4. Occupational Safety, Health (OSH) & Working Conditions Code, 2020

- **One Nation, One License**: Replaces multiple registrations with a single license for staffing firms and industries.
- **Women in Night Shifts**: Permits women to work in night shifts (7 PM – 6 AM) across all sectors, subject to strict safety measures and their consent.
- **Migrant Workers**: Expands the definition of "inter-state migrant worker" to include those who move on their own (not just via contractors), allowing them access to **One Nation One Ration Card** benefits.

Additional Info

- **Constitutional Context**:
  - **Concurrent List**: Labour is a subject in the **Concurrent List** of the Constitution (specifically **Entries 22, 23, and 24**), allowing both Centre and States to frame laws.
  - **Article 43**: Mandates the State to secure a **living wage** and decent standard of life for all workers.
  - **Article 39(d)**: Enshrines the principle of **"Equal Pay for Equal Work"**.
  - **Article 42**: Provisions for just and humane conditions of work and **maternity relief**.
- **Historical Background**:
  - The reforms stem from the recommendations of the **2nd National Commission on Labour (2002)**, which suggested grouping existing laws to remove multiplicity of definitions and authorities.
- **Key Statistics**:
  - **90%** of India's workforce is in the **unorganized sector**, which these codes aim to bring under the formal social security net.
  - Replaces archaic laws like the **Minimum Wages Act (1948)** and **Contract Labour Act (1970)**.

44th India International Trade Fair (IITF) 2025 Begins at Bharat Mandapam

What's the News?

- The **44th edition** of the **India International Trade Fair (IITF)** has commenced at **Bharat Mandapam**, New Delhi, running from **November 14 to 27, 2025**.
- Organized by the **India Trade Promotion Organisation (ITPO)**, this year's fair is centered on the theme **"Ek Bharat Shreshtha Bharat"**, celebrating India's unity in diversity and its journey towards becoming a developed nation by 2047.
- The event was inaugurated by the Minister of State for Commerce and Industry, emphasizing India's emergence as a global economic power and a hub for trade and investment.

Key Highlights of IITF 2025

Themes and Participants

- **Theme**: "Ek Bharat Shreshtha Bharat", aligning with the Prime Minister's vision of **"Viksit Bharat @2047"**.

- **Partner States**: **Bihar, Maharashtra, Rajasthan, and Uttar Pradesh** are the official partner states for this edition.
- **Focus State**: **Jharkhand** is designated as the Focus State, showcasing its unique culture, handlooms, and industrial potential.
- **International Participation**: **12 countries** are participating, including **China, UAE, South Korea, Iran, Egypt, Thailand, and Turkey**, highlighting the fair's global appeal.

Special Pavilions & Initiatives

- **Defence Pavilion Returns**: After a decade-long hiatus, the **Defence Pavilion** has returned, showcasing India's indigenous defence capabilities and the **Aatmanirbhar Bharat** initiative.
- **Digital India & AI**: The **Ministry of Electronics & IT (MeitY)** pavilion features zones for **Digital India**, **IndiaAI**, and **MyGov**, aimed at demonstrating India's digital public infrastructure and responsible AI progress ahead of the **India-AI Impact Summit 2026**.
- **GST & Customs Pavilion**: Themed **"Next-Gen GST: सरल कर, खुशहाल राष्ट्र"**, this pavilion focuses on simplified, technology-driven tax compliance.

Additional Info

- **Event Details**:
  - **Venue**: Bharat Mandapam Complex, Pragati Maidan, New Delhi.
  - **Business Days**: November 14–18, 2025 (restricted entry for business visitors).
  - **Public Days**: November 19–27, 2025 (open to the general public).
- **Organizer Context**:
  - **ITPO**: The India Trade Promotion Organisation is the premier trade promotion agency of the **Ministry of Commerce & Industry**, Government of India.
- **Significance**:
  - The fair serves as a crucial platform for **MSMEs**, **artisans**, and **Self-Help Groups (SHGs)** to access global markets, supporting initiatives like **"Vocal for Local"** and **"Local to Global"**.
  - It integrates cultural exchange with business, featuring diverse cuisines at the food court and cultural performances from across Indian states.

Electricity (Amendment) Bill, 2025 Introduced to Transform Power Sector

What's the News?

- The **Union Government** has introduced the **Electricity (Amendment) Bill, 2025**, aimed at dismantling the long-standing monopoly in power distribution and enhancing financial viability in the sector.
- The Bill introduces **competition** by allowing multiple distribution companies (DISCOMs) to operate in the same area and enables **direct power procurement** for industries to boost competitiveness.

- It aligns with the vision of **Viksit Bharat @2047**, aiming to create a future-ready, financially sustainable, and consumer-centric electricity ecosystem.

Key Pillars of the Bill
1. Competition and Consumer Choice
- **Multiple Licensees**: The Bill shifts from a monopoly model to a competitive one, allowing **multiple distribution licensees** (public and private) to operate in the same geographical area using **shared infrastructure**.
- **Network Access**: It adopts a model similar to the **Inter-State Transmission System (ISTS)**, where the network is shared, and users pay regulated **"wheeling charges"** fixed by State Commissions.
- **Universal Service Obligation (USO)**: While USO ensures non-discriminatory supply to all, regulators can exempt licensees from this obligation for **large open-access consumers** (over 1 MW) to foster efficiency.

2. Tariff and Subsidy Rationalisation
- **Cost-Reflective Tariffs**: The Bill mandates tariffs that reflect the actual cost of supply to ensure the financial health of the sector.
- **Direct Subsidies**: **Cross-subsidies** (where industries pay more to subsidize others) for Manufacturing, Railways, and Metros are to be **eliminated within 5 years**. Instead, subsidies for farmers and the poor will be provided directly and transparently under **Section 65** of the Act.

3. Regulatory and Structural Strengthening
- **Electricity Council**: A new **Electricity Council** will be established to facilitate **Centre-State coordination** and policy consensus.
- **Suo Moto Powers**: State Electricity Regulatory Commissions (SERCs) are empowered to determine tariffs *suo moto* (on their own) if utilities delay filing petitions, ensuring timely updates.
- **Sustainability**: The Bill defines **Energy Storage Systems (ESS)** and strengthens **Renewable Purchase Obligations (RPO)** with stricter penalties for non-compliance.

Additional Info
- **Constitutional Status**: Electricity is a subject in the **Concurrent List** (Entry 38) of the Seventh Schedule, enabling both Centre and States to legislate
- **Electricity Act, 2003**: The 2025 Bill amends the 2003 Act, which originally replaced three older laws (1910, 1948, 1998) to consolidate laws relating to generation, transmission, and distribution.
- **Electric Line Authority**: The Bill aligns the powers of the **Electric Line Authority** with the **Telegraph Authority** under the **Indian Telegraph Act, 1885**, to streamline compensation and dispute resolution for infrastructure works.

IMF Reclassifies India's Forex Regime as 'Crawl-like Arrangement'
What's the News?
- The **International Monetary Fund (IMF)** has reclassified India's de facto exchange-rate regime from a **"stabilised arrangement"** to a **"crawl-like arrangement"** in its **2025 Article IV** country report.
- This change reflects the **Indian Rupee's (INR)** increased flexibility and **two-way movement** against the US Dollar over the past year, particularly under the tenure of RBI Governor **Sanjay Malhotra**.
- The reclassification comes as the rupee has witnessed a depreciation of approximately **4%** in 2025, influenced by global factors including **US trade tariffs**.

Understanding the Reclassification
From "Stabilised" to "Crawl-like"
- **Previous Status**: In 2023, the IMF classified India as a "stabilised arrangement," implying that the **Reserve Bank of India (RBI)** intervened heavily to keep the currency within a very narrow band, effectively treating it as a peg.
- **New Status**: The "crawl-like" tag indicates that the exchange rate now adjusts in **small, gradual steps** (like a crawl) rather than being fixed. These adjustments often reflect the **inflation differentials** between India and its trading partners.
- **Trigger**: The shift was driven by a statistical review showing the rupee stayed within a **2% margin** relative to a trend for six months or more, but with enough flexibility to no longer be considered "stabilised".

Exchange Rate Classifications: Key Concepts
The IMF uses a tiered classification based on *actual market behavior*, not official declarations:
- **Crawling peg**:
  - Involves **small, periodic adjustments** to a central parity.
  - Often guided by **inflation differentials** with trading partners.
  - Balances flexibility with some monetary policy constrain.
- **Stabilized arrangement**:
  - Currency is managed through active intervention to reduce volatility, without a formal peg.
- **Managed float**:
  - Central bank intervenes *discretionarily* to smooth short-term swings, with no preannounced path.
    India's *de jure* (official) classification remains **"free floating"**, but *de facto* behavior has shifted toward crawl-like operations.

RBI's Stance & Market Implications
- **RBI's Position**: The central bank has consistently maintained that it **does not target a specific exchange rate level**. Its stated objective remains to intervene only to curb **"excessive volatility"** and ensure orderly market conditions.
- **Policy Shift**: Reports suggest a higher tolerance for volatility under the current RBI leadership, allowing the currency to act as a **shock absorber** against external economic shifts.
- **Benefits**: The IMF noted that greater flexibility would help India **absorb external shocks**, reduce the need for **costly reserve accumulation**, and support the development of the forex market.

Additional Info

- **IMF Article IV Consultation**:
  - A mandatory annual review where IMF economists visit member countries to assess economic health.
  - The classification is based on **"de facto"** (actual) behavior of the currency, not the **"de jure"** (official) policy stated by the country (which for India is "floating").
- **Exchange Rate Regimes**:
  - **Floating**: Value determined solely by market supply and demand (e.g., USD, Euro).
  - **Stabilised**: Spot market exchange rate remains within a margin of 2% for six months or more (heavily managed).
  - **Crawl-like**: Exchange rate appreciates or depreciates in small increments (crawling peg) in response to market fundamentals like inflation.
- **Current Economic Outlook**: Despite the currency adjustments, the IMF projects India's growth at **6.6% for FY26**, citing resilience in the face of global trade fragmentation.

Cabinet Approves ₹7,280 Crore Scheme to Boost Rare Earth Permanent Magnet Manufacturing

What's the News?

- The **Union Cabinet** has approved the **"Scheme to Promote Manufacturing of Sintered Rare Earth Permanent Magnets (REPM)"** with a total financial outlay of **₹7,280 crore**.
- The initiative aims to establish a domestic production capacity of **6,000 Metric Tonnes Per Annum (MTPA)** of these critical magnets to reduce India's heavy reliance on imports, particularly from **China**.
- This is a first-of-its-kind scheme designed to build an integrated ecosystem—from converting rare earth oxides to metals, then to alloys, and finally to finished magnets.

Why REPMs Matter

- REPMs (e.g., Neodymium-Iron-Boron magnets) are the **strongest class of permanent magnets**, essential for high-efficiency applications:
  - **Electric vehicles (EVs)**: traction motors
  - **Renewable energy**: wind turbine generators
  - **Defence & aerospace**: guidance systems, actuators
  - **Electronics & medical devices**: MRI machines, sensors
- India holds the **5th-largest global reserves** of rare earth elements but imports **~900 tonnes annually** of finished REPMs — nearly 100% of domestic demand.

Scheme Design & Financial Architecture

- **Target capacity**: 6,000 metric tonnes per annum (MTPA)
- **Beneficiaries**: 5 selected via **global competitive bidding**; each allotted up to **1,200 MTPA**
- **Incentive structure**:

  - ₹6,450 crore as **sales-linked incentives (SLI)** over 5 years
  - ₹750 crore as **capital subsidy** for facility setup
- **Duration**: 7 years (2-year gestation + 5-year incentive period).

Government Approves ₹305 Crore 'Tex-RAMPS' Scheme to Boost Textile Innovation

What's the News?

- The **Union Government** has approved the **Textiles Focused Research, Assessment, Monitoring, Planning and Start-up (Tex-RAMPS)** scheme to strengthen the innovation and competitiveness of the Indian textile sector.
- With a total financial outlay of **₹305 crore**, the scheme will be implemented from **FY 2025-26 to FY 2030-31**, aligning with the next Finance Commission cycle.
- The initiative aims to **future-proof** India's textile and apparel ecosystem by addressing critical gaps in **research infrastructure, data systems, and startup support**.

What is Tex-RAMPS?

- Launched to address critical gaps in:
  - Research infrastructure
  - Data systems
  - Innovation support mechanisms
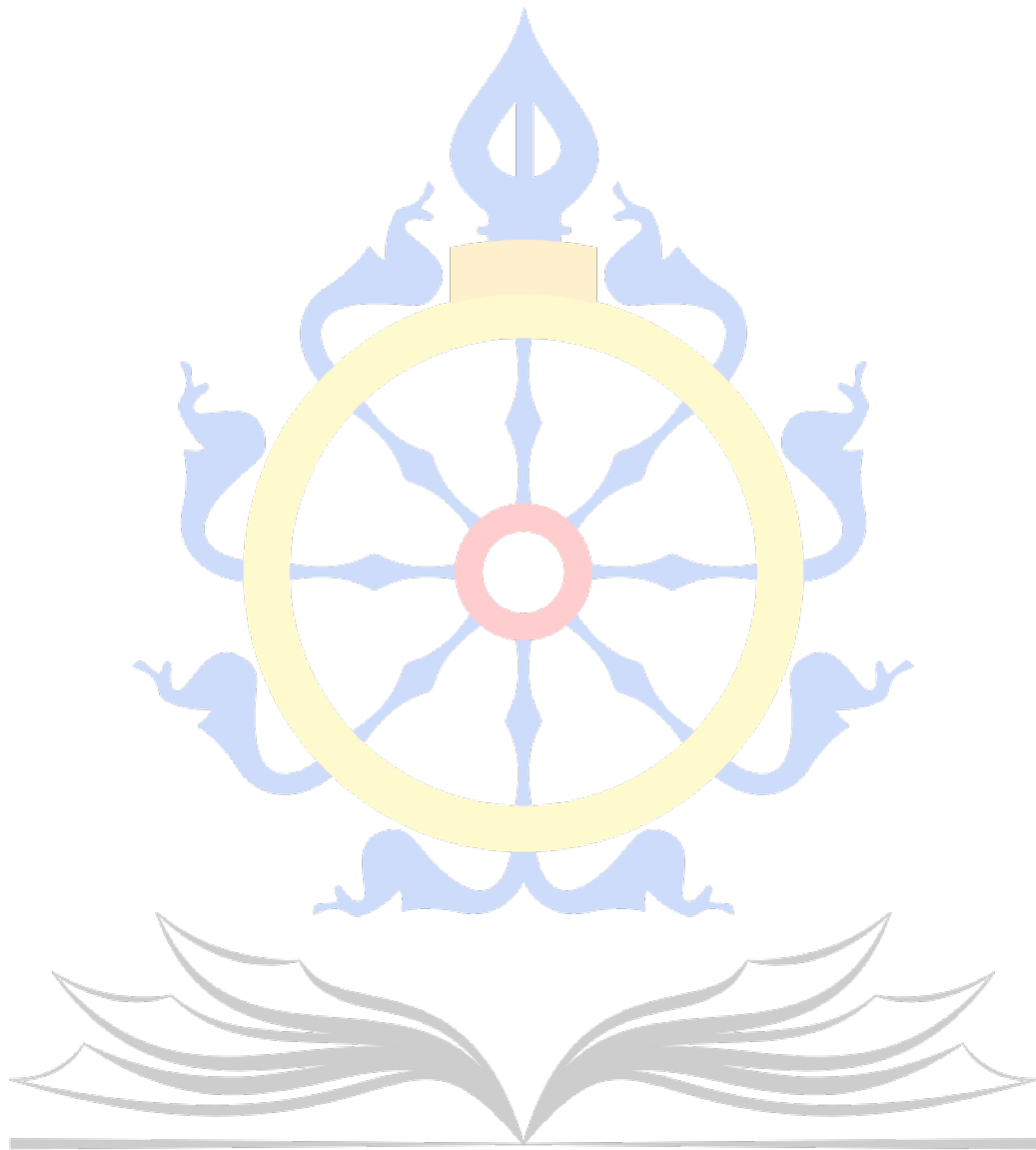 - State- and institutional-level capacity

Core Components

- **Advanced Research Promotion**: Focus on **smart textiles**, **sustainability**, and **process efficiency**.
- **Integrated Textiles Statistical System (ITSS)**: For real-time monitoring and evidence-based policy.
- **Data & Analytics Framework**: Strengthening evidence-based decision-making across value chains.
- **State Capacity Building**: Enhancing coordination between Centre and States for sectoral planning.
- **Start-up & Innovation Ecosystem Support**:
  - Incubation grants and mentorship.
  - Academia–industry collaboration models.
  - Pilot testing and scale-up funding.

Additional Info

- **Ministry of Textiles**: Currently headed by **Giriraj Singh**.
- **Related Initiatives**:
  - **PM MITRA Parks**: For setting up world-class textile infrastructure.
  - **PLI Scheme**: To boost production of MMF (Man-Made Fibre) apparel and technical textiles.
  - **National Technical Textiles Mission (NTTM)**: Focused specifically on the technical textiles segment.
  - **Kasturi Cotton Bharat**: A branding initiative for Indian cotton.
- **Constitutional Context**:
  - While **Industries** generally fall under the **State List (Entry 24)**, the **Union Parliament** has the power to regulate industries declared to be expedient in the public interest under the **Union List (Entry 52)**.

- o The **Tex-RAMPS** scheme utilizes this central authority to drive uniform research and data standards across the country.

Science & Technology

NFR Implements AI-Based System to Prevent Elephant-Train Collisions

What's the News?

- The **Northeast Frontier Railway (NFR)** has successfully implemented an **Intrusion Detection System (IDS)** to prevent elephant deaths from train collisions.
- This advanced **AI- and sensor-based** surveillance mechanism detects the presence of elephants on railway tracks in real-time.
- The system sends instant alerts to loco pilots (train drivers) and railway control rooms, allowing them to take preventive action.

The Intrusion Detection System (IDS)

- **Core Technology**: The system uses **Optical Fibre Cables (OFC)**, which are already laid along railway tracks for communication and signaling, as sensors.
- **Working Principle**:
  - The OFC detects **vibrations** caused by the movement of elephants on or near the tracks.
  - These vibrations create a unique "signature" in the optical signals.
- **Role of AI**:
  - An **Artificial Intelligence** component analyzes these vibration signatures.
  - The AI is trained to **accurately differentiate** the movement of elephants from other disturbances (like humans or other animals), thus preventing false alarms.
- **Alert Mechanism**:
  - When an elephant is detected, the system generates an immediate **audio-visual alert**.
  - Alerts are sent to the **loco pilot's tablet device**, the section **station master**, and the central **control room**.
  - This enables the train driver to slow down or stop the train in time to avoid a collision.

Key Implementation Details

- **Pilot sections completed**:
  - Madarihat–Nagrakata (Alipurduar Division)
  - Habaipur–Lamsakhang–Patharkhola–Lumding (Lumding Division)
  - Kamakhya–Azara–Mirza (Rangiya Division)
  - Titabar–Mariani–Nakachari (Tinsukia Division)
- **Current coverage: 64.03 km** of elephant corridors within **141 km** of block sections.
- **Next phase**: Expansion to cover an additional **146.4 km**, bringing total protected corridor length to **210 km** by **April 2026**.

India's Flagship Science & Innovation Forum Emerging Science, Technology and Innovation Conclave (ESTIC-2025)

What's the News?

- The Emerging Science, Technology and Innovation Conclave (ESTIC-2025) (ESTIC-2025) is scheduled for 3–5 November 2025 at Bharat Mandapam, New Delhi.
- It is positioned as India's premier annual platform bringing together ministries, innovators, industry, research institutions and future leaders in the science, technology and innovation (STI) domain.
- The event aligns with India's long-term vision of **Viksit Bharat @ 2047**.

ESTIC 2025: India's Premier STI Platform

- Organized by the **Department of Science & Technology (DST)** in collaboration with **11+ S&T ministries**, including **MoES**, **DBT**, **DRDO**, **ISRO**, and **MeitY**, under the guidance of the **Office of the Principal Scientific Adviser (PSA)**.
- Focuses on **11 thematic areas**:
  - Artificial Intelligence
  - Quantum Science & Technology
  - Bio-Manufacturing
  - Semiconductor Manufacturing
  - Blue Economy
  - Space Technologies
  - Advanced Materials & Manufacturing
  - Health & Medical Technologies
  - Energy, Environment & Climate
  - Digital Communications
  - Emerging Agriculture Technologies

Key Announcements & Strategic Initiatives

- **₹1 Lakh Crore RDI Fund**: First-of-its-kind blended capital pool to support **high-risk, high-impact** R&D projects in the private sector, with an emphasis on **lab-to-market translation**.
- **25,000 New Atal Tinkering Labs**: Expansion of the existing network (currently ~10,000 labs) to engage **1 crore+ students** in hands-on STEM innovation.
- **10,000 PM Research Fellowships**: To be awarded over the next five years to strengthen the talent pipeline in scientific research.
- **India AI Mission**: Over **₹10,000 crore** allocated; plans to host the **Global AI Summit in February 2026** and release an **AI Governance Framework** promoting **ethical, human-centric AI**.

Socio-Economic & Policy Impact

- **R&D Growth Metrics**:
  - India's R&D expenditure **doubled** in the last decade.
  - Patent filings by women surged from **<100 (2014)** to **>5,000 annually**.
  - **43%** of STEM enrolments are now by women—above the global average.
- **Startup & Tech Ecosystem**:

- India now hosts the **world's third-largest startup ecosystem**, with **6,000+ deep-tech startups** in clean energy, semiconductors, and advanced materials.
- **Bio-economy** expanded from **$10 billion (2014)** to **$140 billion (2025)**.

- The NQM aims to foster research, development, and innovation in quantum technologies.
- It supports startups and research institutions to develop cutting-edge solutions in quantum computing, communication, and cryptography.

India Demonstrates First 500 km Quantum Key Distribution (QKD) Network

What's the News?
- An Indian startup, **QNu Labs**, has successfully demonstrated India's first long-distance **Quantum Key Distribution (QKD)** network, spanning over **500 kilometers**.
- The project was supported by the **Department of Science and Technology (DST)** under the **National Quantum Mission (NQM)**.
- This demonstration was a collaborative effort involving the **Indian Army** (specifically the Southern Command) and the **Defence Cyber Agency (DCyA)**.
- The network was deployed over existing optical fibre infrastructure, linking multiple military and research nodes in the Rajasthan sector.

What is Quantum Key Distribution (QKD)?
- QKD is a highly secure communication method that uses the principles of quantum physics to generate and distribute encryption keys.
- It transmits information using single particles of light (photons).
- **Core Principle**: The security of QKD is based on a fundamental law of quantum physics: the act of observing a quantum state inherently disturbs it.
- **Security Feature**: If an eavesdropper attempts to intercept the key, their observation will create detectable errors, instantly alerting the sender and receiver to the breach.
- This makes the communication "quantum-safe," as it is theoretically immune to hacking even by powerful, future **quantum computers**.

Additional Info
- **QNu Labs**:
  - QNu Labs is one of the startups supported by the Department of Science and Technology (DST) under the National Quantum Mission (NQM).
  - The company showcased its Quantum Suraksha Kavach (QSK) rack, housing the advanced QKD system, during the Emerging Science, Technology and Innovation Conclave (ESTIC 2025).
  - They also presented the Quantum Random Number Generator System in Package (QSIP), a technology providing quantum-certified randomness crucial for cryptographic algorithms that defend against current and future cyber threats.
- **National Quantum Mission (NQM)**:

MeitY Unveils India AI Governance Guidelines

What's the News?
- The **Ministry of Electronics and Information Technology (MeitY)** has released the **India AI Governance Guidelines**.
- These guidelines were launched under the flagship **IndiaAI Mission**.
- The framework aims to provide a clear path for the safe, inclusive, and responsible adoption of Artificial Intelligence (AI) across all sectors.
- The core principle of the guidelines is **"Do No Harm,"** emphasizing a human-centric and innovation-first approach to AI development.

Guiding Principles: The "Seven Sutras"
The guidelines are built upon seven core principles for ethical and responsible AI:
- **Trust**: Ensuring AI systems are reliable and secure.
- **People First**: Prioritizing human well-being, oversight, and empowerment.
- **Innovation over Restraint**: Fostering responsible innovation rather than imposing excessive restrictions.
- **Fairness & Equity:** Designing AI systems to be inclusive and to prevent algorithmic bias or discrimination.
- **Accountability:** Establishing clear responsibility for the outcomes of AI systems.
- **Understandable by Design**: Making AI systems transparent and explainable to users and regulators.
- **Safety, Resilience & Sustainability**: Building robust, secure, and environmentally responsible AI.

Framework and Key Recommendations
The guidelines propose a "techno-legal" approach, which focuses on using existing laws rather than creating a new, separate AI law at this stage. The framework is structured around six key pillars:
- **Infrastructure**: Expanding access to data, computing resources, and **Digital Public Infrastructure (DPI)**.
- **Capacity Building**: Strengthening education, skilling, and public awareness programs.
- **Policy & Regulation**: Adopting agile and flexible frameworks, reviewing existing laws, and addressing regulatory gaps.
- **Risk Mitigation**: Developing an India-specific risk assessment framework and encouraging voluntary safeguards.
- **Accountability**: Implementing a graded liability system based on the AI's function and risk level.
- **Institutions**: Establishing new bodies to coordinate national AI policy and safety.

New Institutional Structure
To implement the guidelines, the framework proposes the creation of several key bodies:

- **AI Governance Group (AIGG)**: A high-level body to coordinate between ministries, sectoral regulators, and other public bodies.
- **Technology and Policy Expert Committee (TPEC)**: A group to provide expert advice to the AIGG.
- **AI Safety Institute (AISI)**: An institute to provide technical expertise on AI trust and safety, risk assessment, and technical standards.

Additional Info
- **IndiaAI Mission**: The guidelines are a part of the broader **IndiaAI Mission**, which is built on seven pillars to create a comprehensive AI ecosystem:
    1. **IndiaAI Compute**
    2. **IndiaAI Application Development Initiative**
    3. **AIKosh (Dataset Platform)**
    4. **IndiaAI Foundation Models**
    5. **IndiaAI FutureSkills**
    6. **IndiaAI Startup Financing**
    7. **Safe and Trusted AI**
- **Regulatory Stance**: The government's approach avoids immediate, heavy-handed legislation. Instead, it aims to use existing legal frameworks, such as the **Information Technology (IT) Act** and the **Digital Personal Data Protection (DPDP) Act**, to manage AI-related risks like deepfakes and data misuse.

UNESCO Adopts First Global Ethical Framework for Neurotechnology

What's the News?
- The member states of the **United Nations Educational, Scientific and Cultural Organization (UNESCO)** have adopted the first-ever global standard on the **ethics of neurotechnology**.
- This new framework provides a set of guidelines to governments and companies to address the human rights challenges posed by the rapidly advancing field.
- The recommendations aim to "enshrine the inviolability of the human mind" and ensure that technological progress does not come at the cost of human dignity, mental privacy, and cognitive liberty.

What is Neurotechnology?
- **Neurotechnology** includes any device or system that can measure, interpret, or influence activity in the human brain and nervous system.
- This ranges from advanced medical applications like **deep brain stimulation** (used to treat Parkinson's disease) and **Brain-Computer Interfaces (BCIs)** (which help paralyzed individuals control prosthetics) to consumer-grade devices.
- Consumer products, such as smart headbands that monitor sleep or earbuds that claim to read brain activity, are a major focus of the new guidelines, as this sector is largely unregulated.

Key Risks and Ethical Principles
The framework was created to address significant ethical risks, particularly as **Artificial Intelligence (AI)** becomes more powerful at decoding brain data. The primary goals are to protect.

- **Mental Privacy**: Preventing the unauthorized collection, use, or "reading" of an individual's thoughts and emotions.
- **Cognitive Liberty**: Upholding the right of individuals to control their own mental processes and make decisions free from external manipulation.
- **Personal Identity & Free Will**: Guarding against technologies that could alter a person's sense of self or influence their decision-making.
- **Equity**: Ensuring fair access to the medical benefits of neurotechnology and preventing the creation of a "neuro-enhanced" class of individuals.

Core Recommendations
- **Defining "Neural Data"**: The framework introduces **"neural data"** as a new, distinct category of sensitive personal data that requires specific and robust protection protocols.
- **Safeguards for Citizens**: It calls on governments to regulate the technology to protect citizens, especially **children**, whose brains are still developing.
- **Banning Misuse**: The guidelines warn against the use of neurotechnology for non-therapeutic purposes, such as in the workplace to monitor employee productivity or for neuromarketing that could manipulate consumer behaviour.
- **Informed Consent**: It reinforces the necessity of explicit and informed consent for any procedure involving neurotechnology or the collection of neural data.

Additional Info
- **A "Wild West" Sector**: UNESCO has referred to the consumer neurotech market as a "wild west" due to the lack of regulation, making global standards necessary.
- **Investment Growth**: The neurotechnology sector has seen a massive surge in private investment, highlighting the urgency for governance.
- **Link to AI Ethics**: This framework builds on UNESCO's previous work, notably the **Recommendation on the Ethics of Artificial Intelligence** adopted in 2021.
- **Implementation**: While not legally binding, the framework serves as a global benchmark to help UNESCO's 194 member states design and implement their own national legislation.

India Unveils First MWh-Scale Vanadium Flow Battery at NTPC NETRA

What's the News?
- Union Minister of Power **Manohar Lal** inaugurated India's first **MWh-scale Vanadium Redox Flow Battery (VRFB)** system at **NTPC NETRA** in Greater Noida.
- The facility, with a capacity of **3 MWh**, marks a significant milestone in the development of **Long-Duration Energy Storage (LDES)** solutions, which are critical for integrating renewable energy into the national grid.
- The project highlights a shift towards **indigenous technology** development to reduce dependence on conventional battery imports.

Vanadium Redox Flow Battery (VRFB): Technology & Advantages

- **Working Principle**: Uses liquid **vanadium-based electrolyte** stored externally; energy is stored chemically and released via redox reactions - distinct from solid-state lithium-ion batteries.
- **Key Features**:
  - **Scalability**: Power (kW) and energy (kWh) can be decoupled - ideal for grid applications.
  - **Safety**: Non-flammable electrolyte; negligible fire/explosion risk.
  - **Lifespan**: >20,000 cycles with >20 years of operational life (vs ~5,000 - 7,000 for Li-ion).
  - **Sustainability**: **100% recyclable electrolyte**; no degradation during charge - discharge.
- **Capacity: 3 MWh** (megawatt-hour) - sufficient to power ~1,500 households for 2 hours during peak demand.

Additional Info

- **NTPC's Broader R&D Portfolio at NETRA**:
  - Green Hydrogen Mobility Plant,
  - Solid oxide high-temperature steam electrolyser,
  - MSW-RDF (Municipal Solid Waste - Refuse Derived Fuel) gasification plant,
  - Hybrid AC microgrid (4 MWp solar + 1 MWh Li-NMC battery).
- **Long-Duration Energy Storage (LDES)**:
  - Refers to systems capable of storing energy for prolonged periods (typically **6+ hours**).
  - VRFBs are particularly suited for this (often 4 - 12 hours duration), filling the gap where Li-ion batteries (typically 1 - 4 hours) are less cost-effective.
- **Vanadium in India**:
  - Recently, significant **Vanadium deposits** were discovered in the **Gulf of Khambhat (Gujarat)** and **Arunachal Pradesh**, potentially boosting domestic manufacturing of VRFBs.

IIT Bombay Develops India's First Indigenous Quantum Diamond Microscope

What's the News?

- Researchers at the **Indian Institute of Technology (IIT) Bombay** have developed India's first indigenous **Quantum Diamond Microscope (QDM)**.
- This development marks a significant breakthrough for India in the advanced field of **quantum sensing**.
- The QDM is a non-invasive, high-sensitivity tool designed for **3D magnetic imaging** at the microscopic level, enabling the visualization of weak magnetic fields.

Quantum Diamond Microscope

- Based on **nitrogen-vacancy (NV) centers** in diamond - atomic defects where a nitrogen atom sits next to a missing carbon atom.

- Operates via **Optically Detected Magnetic Resonance (ODMR)**: NV centers fluoresce in response to magnetic fields, allowing real-time, non-invasive sensing.
- Maintains **quantum coherence at room temperature**, eliminating need for cryogenic support.
- Delivers **widefield, layer-by-layer magnetic mapping** without dismantling samples.

Applications

- **Neuroscience**: Non-invasive, real-time magnetic mapping of neuronal activity for brain disorder research.
- **Semiconductor Diagnostics**:
  - Visualizes 3D current flow in encapsulated chips - critical for **3D chip architectures**, cryogenic processors, autonomous systems.
  - Supports quality assurance in next-gen microelectronics where conventional tools fail.
- **Materials & Battery Research**: Tracks ionic movement, phase transitions, and magnetic anomalies in layered or sealed battery cells.
- **Geological & Environmental Studies**: Enables remanent magnetization imaging for paleomagnetic analysis.

Government Allocates ₹100 Crore for Biomass-to-Hydrogen Pilot Projects

What's the News?

- The **Ministry of New and Renewable Energy (MNRE)** has announced a scheme with a budgetary outlay of **₹100 crore** to support pilot projects for producing **hydrogen** from **biomass**.
- This initiative is a key component of India's **National Green Hydrogen Mission (NGHM)**.
- The scheme aims to fund projects that can demonstrate the technical feasibility and economic viability of converting biomass, such as agricultural waste, into hydrogen.

Biomass-to-Hydrogen Pilot Scheme

- **Objective**: Demonstrate viable, scalable pathways to produce green hydrogen using **biomass, agri-residue, and organic waste** - diversifying feedstock beyond electrolysis.
- **Implementation Agency: Biotechnology Industry Research Assistance Council (BIRAC)**, enabling participation from **start-ups, research institutions, and industry players**.
- **Complementary Funding**: Adds to an earlier **₹100 crore for NGHM start-up projects**, reinforcing innovation support.
- **Pilot Requirements**:
  - Minimum operational life of **10 years**
  - Asset ownership must remain with the implementing entity
  - Must use **renewable-powered conversion technologies**.

Strategic Targets & Economic Impact

- **Production Goal**: Achieve **5 MMT green hydrogen/year by 2030**, supported by **125 GW new renewable capacity**.
- **SIGHT Programme Progress**:

- o **3,000 MW/year electrolyser manufacturing** capacity incentivised
- o **8.62 lakh MTPA** green hydrogen production capacity awarded under pilot/production streams.
- **Investment & Employment**:
  - o Expected to mobilise **₹8 lakh crore investment**
  - o Generate **6 lakh green jobs**
  - o Save **₹1 lakh crore annually** in fossil fuel imports.
- **Global Benchmark**: India now has the **world's lowest green ammonia price** at **₹49.75/kg**.

National Green Hydrogen Mission (NGHM):
- This pilot scheme falls under the umbrella of the NGHM, which aims to make India a global hub for the production, use, and export of green hydrogen.
- The broader objectives of the NGHM include attracting over **₹8 lakh crore** in investments and creating more than **6 lakh jobs** in the green hydrogen sector.

Additional Info
- **Policy & Standards Framework**:
  - o **Green Hydrogen Standard (2023)** and **Certification Scheme (2025)** notified
  - o **128 national safety & interoperability standards** published
  - o **43 skill qualifications** approved; **6,300+ trainees certified**.
- **Infrastructure & Incentives**:
  - o **Hydrogen Valley Innovation Clusters** in Jodhpur, Pune, Bhubaneswar, Kerala
  - o **Exemption from environmental clearance** for green H_2/ammonia plants
  - o **Waiver of ISTS charges** for projects commissioned before **December 2030**
  - o Dedicated hubs at **Kandla, Paradip, and Tuticorin** ports.
- **Constitutional & Institutional Anchors**:
  - o MNRE operates under **Article 77** (executive action) and **Entry 33, Concurrent List** (energy policy, R&D).
  - o BIRAC functions under **Department of Biotechnology**, aligning biotech innovation with energy transition.
- **Global Export Vision**:
  - o Target: **10% of global hydrogen demand by 2050**
  - o Focus markets: **EU, Japan, South Korea** - leveraging India's low-cost advantage.

Indian Railways Deploys AI-System 'DRISHTI' for Freight Wagon Safety
What's the News?
- **Indian Railways** has implemented an **AI-based Locking Monitoring System** known as **DRISHTI** (Distributed Railway Information System for Train Identification).

- The system is designed to enhance the **security and safety** of freight trains by automatically monitoring the door locks of wagons.
- It was developed by the **South Central Railway (SCR)** in collaboration with the **Centre for Railway Information Systems (CRIS)**.
- The primary goal is to provide real-time alerts to prevent theft, pilferage, and unauthorised access to valuable cargo during transit.

Key Features & Functionality
- **Real-Time Surveillance**:
  - o Uses **AI-enabled cameras** and **sensors** mounted at strategic points to monitor door position and locking integrity.
  - o Operates non-intrusively at full train speed, eliminating need for halts or manual checks.
- **Anomaly Detection & Alerts**:
  - o Flags loose locks, tampering, or seal breaches via **computer vision** and **machine learning algorithms**.
  - o Triggers **automated, data-driven alerts** to control rooms for immediate response.
- **Integration & Scalability**:
  - o Compatible with freight management platforms for **audit trails**, **analytics**, and **tracking transparency**.
  - o Designed for phased nationwide rollout after successful field validation.

Operational & Strategic Impact
- **Pilferage Reduction**: Minimises theft and cargo loss due to seal failures or human error.
- **Operational Efficiency**: Cuts inspection time, labour dependency, and transit delays.
- **Safety Enhancement**: Prevents accidents caused by unsecured doors during transit.
- **Indigenous Innovation**: Fully developed in India, aligning with **Atmanirbhar Bharat** goals in transport-tech.

Current Status
- Prototype has undergone **~10 months of successful field trials** on select freight rakes.
- Preliminary results show **high detection accuracy**; system is now being refined for wider deployment across NFR and eventually pan-India.

India Unveils First Indigenous High Precision Diode Laser for Quantum Technology
What's the News?
- India has launched its first indigenously developed **High Precision Diode Laser**, a critical component for advancing quantum technology.
- The laser was developed by **Q-DEGA**, a start-up incubated at **T-Hub** (Hyderabad).
- This development is a significant step towards self-reliance (**Aatmanirbhar Bharat**) in quantum technology, aligning with the objectives of the **National Quantum Mission (NQM)**.

- The fabrication of the laser chip was conducted at the **Centre for Materials for Electronics Technology (C-MET)** in Pune, an institution under the **Ministry of Electronics and Information Technology (MeitY)**.

Quantum-Grade Diode Laser: Key Features & Significance

- **Technical Capabilities**:
  - Ultra-narrow linewidth and high beam quality.
  - Long-term frequency & power stability.
  - Rugged, temperature-controlled design with compact, low-power footprint.
  - Plug-and-play integration; supports both free-space and fiber-coupled output.
- **Strategic Applications**:
  - **Quantum Key Distribution (QKD)** backbone for quantum-secure communication.
  - Enabling **photonic quantum computing** for complex simulations (e.g., drug discovery, chemical process modeling).
  - High-precision spectroscopy, atomic clocks, and metrology.
- **Economic & Security Impact**:
  - Facilitates **quantum-safe transactions** for banking and finance sectors.
  - Reduces import dependence in critical quantum hardware.
  - Low cost of ownership, minimal maintenance, and assured domestic supply chain.

National Quantum Mission (NQM) Context

- Launched in **2023–24**, with a total outlay of **₹6,003.65 crore** for the period up to **2030–31**.
- Led by the **Department of Science and Technology (DST)**.
- Four thematic hubs:
  - Quantum Computing & Simulations
  - Quantum Communication
  - Quantum Sensing & Metrology
  - Quantum Materials & Devices
- Prenishq is one of **eight startups selected** under NQM to lead hardware development, specifically building **precision diode-laser systems** essential for quantum technologies.

Quantum Key Distribution (QKD) in India:

- ISRO has demonstrated free-space QKD over **300 meters**.
- DRDO and IIT Delhi successfully tested **entanglement-based QKD**, offering enhanced security over traditional methods.
- Operational QKD pilots are underway in financial and government networks.

India Becomes World's 6th Largest Patent Filer

What's the News?

- India has emerged as the **world's 6th largest patent filer,** with over **64,000 patent applications** filed in the latest reporting cycle - of which **more than 55% (≈35,200)** were filed by **resident Indian innovators**.

- This marks a historic shift from dependence on foreign institutions to self-driven R&D, announced by Union Minister of State for Science & Technology, **Dr. Jitendra Singh**, at a tech fest in New Delhi.

Key Metrics and Trends

- **Global Innovation Index (GII) Rank**: Improved from **81st (2015)** to **38th (2025)**.
- **Resident vs. Non-Resident Filings**: Majority now from domestic stakeholders—reversing earlier trend of foreign-led IP creation.
- **Annual Growth**: Consistent year-on-year rise in filings, driven by academia, startups, MSMEs, and public research labs.

Drivers of Growth

- **Policy Enablers**:
  - **National IPR Policy (2016)**: Simplified procedures, reduced filing fees for startups/individuals.
  - **Patent Facilitation Programme** under DST/NITI Aayog: Fast-track examination, pro bono assistance.
  - Integration with **Atmanirbhar Bharat, Make in India,** and **Startup India** missions.
- **Institutional Support**:
  - **Technology Innovation Hubs (TIHs)** and **Centres of Excellence** under NM-ICPS.
  - IP Cells in 200+ universities (e.g., IITs, NITs, Central Universities).
- **Sectoral Momentum**:
  - Startups in health tech, agritech, clean energy, and AI/ML.
  - Indigenous breakthroughs: **world's first DNA vaccine (ZyCoV-D), Chandrayaan-3 tech**, novel antibiotics.

Challenges Ahead:

- Low patent-to-population ratio (~46 filings per million vs. 650 in South Korea)
- High abandonment rate (~70% of filed applications not pursued to grant)

Constitutional & Policy Linkages:

- **Article 51-A(h)**: Fundamental Duty to develop scientific temper
- **Article 253**: Empowers Parliament to legislate on IP treaties (e.g., Paris Convention, TRIPS)
- **Science, Technology & Innovation Policy (STIP) 2020**: Aims for 3x increase in GERD (Gross Expenditure on R&D) by 2030

NASA & SpaceX Launch Sentinel-6B Satellite to Monitor Global Sea Levels

What's the News?

- **NASA** and **SpaceX** successfully launched the **Sentinel-6B** satellite, a joint **US-European mission** designed to monitor Earth's oceans with unprecedented precision.
- The satellite aims to extend the nearly **30-year record** of global sea-level measurements, providing critical data on how climate change is reshaping the planet's coastlines.

- Sentinel-6B is the twin of the **Sentinel-6 Michael Freilich** (launched in 2020) and completes the constellation required for continuous ocean monitoring.

Key Capabilities & Applications
- **High-Precision Altimetry**:
  - Measures sea level across **~90% of Earth's oceans** with centimetre-level accuracy using radar altimetry and GNSS-RO (Radio Occultation).
  - Tracks **ocean currents**, **wind speeds**, **wave heights**, and **atmospheric temperature/humidity**—critical for hurricane forecasting and marine navigation.
- **Climate & Coastal Resilience**:
  - Extends a **30+ year sea-level record**, enabling trend analysis of climate-driven ocean expansion.
  - Supports **flood prediction models**, coastal infrastructure protection, and emergency response planning.
- **Operational Synergy**:
  - Will fly in **tandem (30-second lag)** with Sentinel-6 Michael Freilich for cross-calibration before assuming the reference role.
  - Data feeds into **Copernicus Marine Service**, improving ~60% of its ocean models.

Additional Info
- **The Sentinel-6 Mission**:
  - Comprises two identical satellites: **Sentinel-6 Michael Freilich** (launched 2020) and **Sentinel-6B** (launched 2025).
  - Named after **Dr. Michael Freilich**, a former NASA Earth Science Division director who championed oceanography from space.
- **Copernicus Program**:
  - The **European Union's** Earth observation programme, often called "Europe's eyes on Earth."
  - Provides free and open data for environmental management and security.

- **Validity Duration**: Configurable from **1 month to 5 years**.
- **Transaction Control**:
  - Primary user retains full visibility and control over all transactions.
  - No real-time approvals needed (unlike *Partial Delegation*, introduced in 2024, which required per-transaction consent).
- **Onboarding**:
  - Secondary user identified via mobile number + UPI ID/QR.
  - Identity verified using **Aadhaar** or other KYC-compliant documents.
  - Activation requires primary user's UPI PIN authentication.

Target Beneficiaries & Use Cases
- **Senior citizens**: Enable independent payments (e.g., groceries, medicines) via trusted family help.
- **Students/young adults**: Manage daily or education-related expenses under parental oversight.
- **Small enterprises**: Staff can pay for tolls, fuel, or supplies without cash handling.
- **Persons with limited digital literacy**: Dependents can transact safely within guardrails.

Additional Info
- **BHIM (Bharat Interface for Money)**:
  - Launched in **2016**, it is an Indian mobile payment app developed by **NPCI** based on the **Unified Payments Interface (UPI)**.
  - It was named after **B. R. Ambedkar**.
- **National Payments Corporation of India (NPCI)**:
  - An initiative of the **Reserve Bank of India (RBI)** and **Indian Banks' Association (IBA)**.
  - It serves as the umbrella organization for operating retail payments and settlement systems in India (e.g., **RuPay, FASTag, IMPS**).
- **UPI Context**:
  - UPI is an instant real-time payment system allowing inter-bank peer-to-peer (P2P) and person-to-merchant (P2M) transactions.

BHIM Launches "UPI Circle": Digital Payments for Dependents Without Bank Accounts

What's the News?
- **Bharat Interface for Money (BHIM),** operated by the **National Payments Corporation of India (NPCI)**, has launched a new feature called **"UPI Circle"** offering **"Full Delegation"** capabilities.
- This feature allows a **primary user** to authorize a **secondary user** (such as senior citizens, spouses, or children) to make UPI transactions independently using the primary user's bank account.
- The initiative aims to enhance **digital financial inclusion** by enabling individuals who may not have their own bank accounts or are not tech-savvy to use digital payments.

Key Features & Safeguards
- **Spending Limit**: Up to ₹15,000/month per delegate.

India Internet Governance Forum (IIGF) 2025 Concludes: Roadmap for a Secure & Inclusive Digital Future

What's the News?
- The **5th edition** of the **India Internet Governance Forum (IIGF) 2025** concluded in **New Delhi**, setting a roadmap for India's digital journey under the theme **"Advancing Internet Governance for an Inclusive and Sustainable Viksit Bharat"**.
- Organized by the **Ministry of Electronics and Information Technology (MeitY)** and the **National Internet Exchange of India (NIXI)**, the forum brought together policymakers, industry leaders, and civil society to discuss the future of the internet in India.
- The discussions emphasized the need for a **multi-stakeholder approach** to build an internet ecosystem that is **open, safe, trusted, and accountable**.

What is IIGF?
- National chapter of the **United Nations Internet Governance Forum (UN IGF)**.
- Established in **2021**; follows a **multi-stakeholder model** (equal participation by govt, industry, civil society, technical community, academia).
- Guided by a **14-member Steering Committee** representing diverse sectors.
- Aims to foster **open, trusted, inclusive**, and **resilient** internet ecosystem in India.

Core Sub-themes of IIGF-2025
- **Inclusive Digital Future**.
- **Digital Infrastructure for Resilient and Sustainable Growth**.
- **AI for People, Planet and Progress**.

Outcomes & Focus Areas
1. Digital Public Infrastructure (DPI)
- Recognition of **India Stack** (Aadhaar, UPI, DigiLocker) as a **global model for population-scale DPI**.
- Emphasis on **interoperability**, **privacy-by-design**, and **consent-based data sharing**.
- Call to expand DPI to sectors like health (**ABDM**), education (**DIKSHA**), and agriculture (**e-NAM**).

2. Cybersecurity & Trust Frameworks
- Prioritisation of **DNS and domain name security**, **content moderation standards**, and **cyberattack preparedness**.
- Need for **coordinated response mechanisms** across CERT-In, industry CERTs, and global CERT networks.
- Integration of **AI-powered threat detection** and **real-time incident reporting**.

3. AI Governance & Ethics
- Push for **ethical, transparent, and accountable AI deployment**.
- Discussion on aligning India's AI strategy with **Global Digital Compact** and **G20 AI Principles**.
- Proposed **AI Safety Sandbox** for testing high-risk applications (e.g., deepfakes, autonomous systems).

4. Rural & Meaningful Connectivity
- Focus on last-mile access via **5G expansion**, **BharatNet Phase-III**, and **community networks**.
- Addressing **digital literacy gaps**, affordability, and device access for marginalised groups.

5. Youth Engagement & Capacity Building
- **NIXI Internet Intern Scheme**: Trained **>10,000 students** in FY25; several placed in global internet policy roles.
- Launch of **Special Interest Groups (SIGs)** on:
  - Future Internet Protocols.
  - Domain Name & IP Number Management.
  - Internet Standards & Resilience.

India Unveils New Seismic Map & Revised Earthquake Code 2025
What's the News?
- The **Bureau of Indian Standards (BIS)** has released a revised **National Seismic Hazard Map** under the updated **Earthquake Design Code (IS 1893:2025)**.

- For the first time, a new **highest-risk Zone VI** has been introduced, placing the entire **Himalayan arc** (from Jammu & Kashmir to Arunachal Pradesh) in this category due to extreme tectonic vulnerability.
- The update reveals that **61% of India's landmass** now falls under moderate to high seismic hazard zones, necessitating stricter building norms and urban planning.
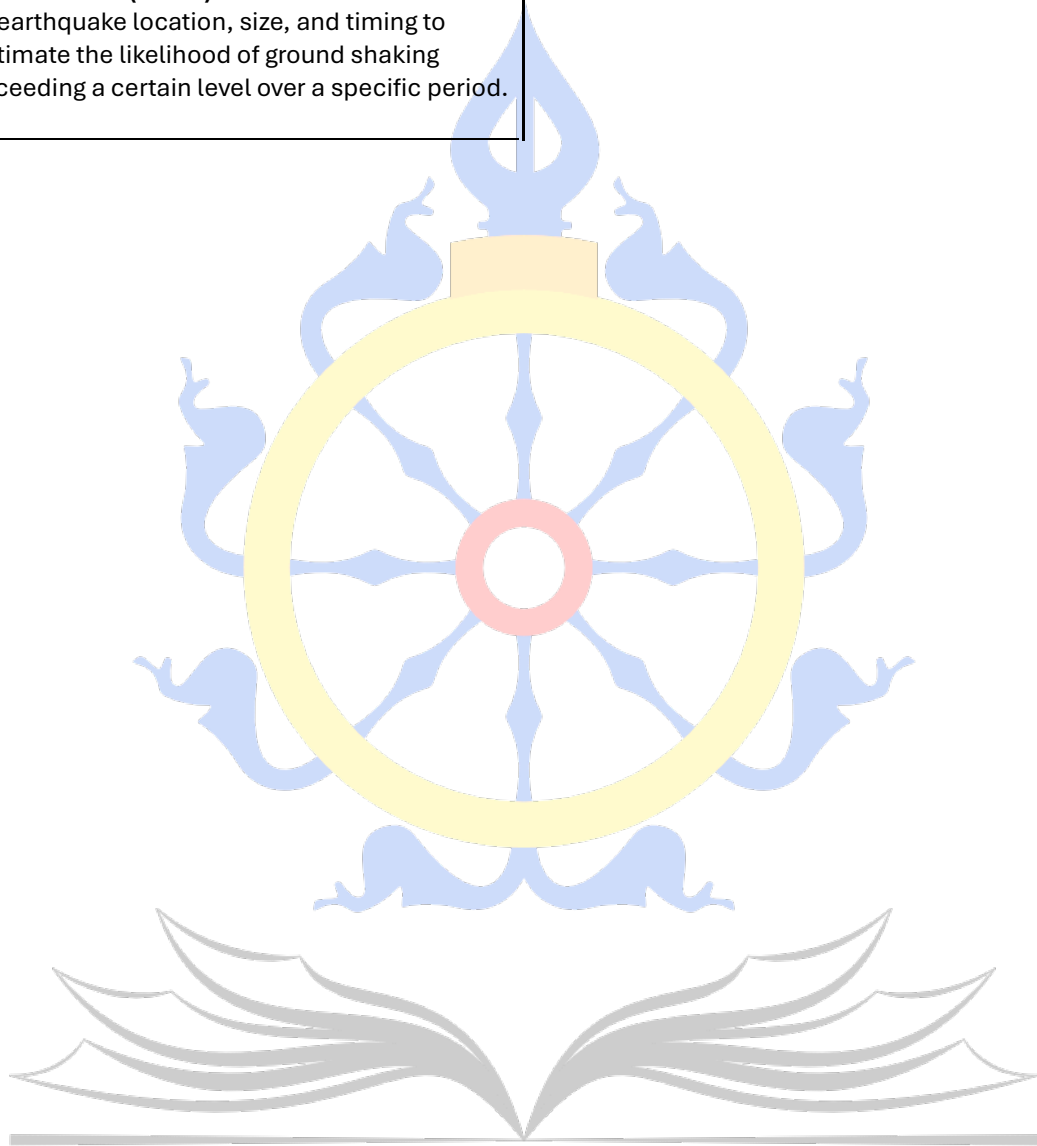
Changes in the 2025 Code
- **Seismic Zonation Overhaul**:
  - **Zone VI** introduced exclusively for the Himalayan belt, superseding earlier split between Zones IV and V.
  - Revision based on **probabilistic seismic hazard assessment (PSHA)** - factoring in active fault geometry, maximum credible earthquakes, attenuation models, and local site conditions-replacing older reliance on historical epicentres and damage reports.
- **Non-Structural Component Safety**:
  - First-ever **mandatory design and anchoring requirements** for heavy non-structural elements (e.g., overhead tanks, façades, ceilings, lifts) exceeding **1% of a building's total weight** to prevent collapse and injuries during moderate quakes.
  - Seismic forces and relative displacement criteria prescribed for such elements.
- **Critical Infrastructure Resilience**:
  - **Hospitals, schools, bridges, and emergency facilities** must now be designed for **"immediate occupancy"** performance level-ensuring post-earthquake functionality to support disaster response.

Implications & Governance Linkages
- **Urban Planning & Construction Norms**:
  - Engineers and local bodies urged to adopt the **2025 map over the 2016 version** to ensure compliance with current hazard levels.
  - ~75% of India's population lives in seismically active zones, necessitating strict enforcement in rapidly urbanising hill towns and peri-Himalayan regions.
- **Policy & Institutional Anchors**:
  - Aligns with **National Disaster Management Authority (NDMA)**'s emphasis on **"Build Back Better"** and **Sendai Framework Target 'e'** (local DRR strategy adoption).
  - Supports **15th Finance Commission's directive** to allocate **10% of SDRF** for local mitigation—now applicable to seismic retrofitting and code-compliant construction.

Additional Info
- **Seismic Zones in India**:
  - **Zone II**: Low Damage Risk (Least active).
  - **Zone III**: Moderate Damage Risk.
  - **Zone IV**: High Damage Risk.
  - **Zone V**: Very High Damage Risk.
  - **Zone VI (New)**: Extreme Damage Risk (Entire Himalayan Arc). *Note: Zone I was merged into Zone II in previous revisions*.

- **Why the Himalayas?**:
    - The region sits on the collision zone where the **Indian Plate** pushes into the **Eurasian Plate** at ~5 cm/year, building massive tectonic stress.
- **IS 1893 Series**:
    - The primary code governing earthquake-resistant design in India.
    - **IS 1893 (Part 1): 2025** covers general provisions and buildings, replacing the 2016 version.
- **Probabilistic vs. Deterministic**:
    - **Deterministic**: Based on the worst credible earthquake from a known fault (often static).
    - **Probabilistic (PSHA)**: Considers uncertainties in earthquake location, size, and timing to estimate the likelihood of ground shaking exceeding a certain level over a specific period.

Agriculture

India Launches First Fully Digitised National Marine Fisheries Census 2025

What's the News?

- The **Union Minister of State for Fisheries, Animal Husbandry and Dairying, George Kurian**, has launched the **National Marine Fisheries Census (MFC) 2025**, marking India's first **fully digitised fisheries census**.
- The 45-day nationwide enumeration—running from **November 3 to December 18, 2025**—will cover **over 1.2 million fisher households** across **4,000 marine fishing villages** in **nine coastal states and four Union Territories**.
- The census is a prerequisite for accessing benefits under the **Pradhan Mantri Matsya Kisan Samridhi Sah-Yojana (PM-MKSSY)**, with registration on the **National Fisheries Digital Platform (NFDP)** made mandatory for all beneficiaries.

What is the National Marine Fisheries Census 2025?

- A **comprehensive digital enumeration** of marine fisher households, workers, and vessels to create a **centralised, verified database** for policy and welfare delivery.
- Conducted by the **ICAR–Central Marine Fisheries Research Institute (CMFRI)** under the **Ministry of Fisheries, Animal Husbandry and Dairying**.
- Uses two custom-built mobile applications—**VyAS Bharat** and **VyAS Sutra**—for **real-time data capture**, **geo-referencing**, and **instant verification**.
- Data collected includes household demographics, livelihood sources, vessel types, gear used, and socio-economic indicators.

Key Features and Innovations

- **First fully digital census** in Indian fisheries history, replacing paper-based methods.
- **Real-time monitoring**: Live data feeds from field enumerators (e.g., from Maharashtra and Kerala) displayed during launch for transparency.
- **Integration with welfare schemes**: Only NFDP-registered fishers will be eligible for **PM-MKSSY financial assistance**.
- **Accessibility**: Registration facilitated through **Common Service Centres (CSCs)** in remote coastal areas.
- **Complementary interventions**: Government also distributing **free transponders** and **turtle excluder devices (TEDs)** to promote safety and sustainable fishing.

Additional Info

- **Coverage**:
  - **9 Coastal States**: Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Odisha, West Bengal
  - **4 UTs**: Puducherry, Lakshadweep, Andaman & Nicobar Islands, Daman & Diu
- **Related Schemes**:
  - **PM-Matsya Sampada Yojana (PMMSY)**: ₹20,050 crore scheme (2020–2025) for sustainable fisheries development.
  - **PM-MKSSY**: Focuses on **income support**, **value chain infrastructure**, and **fishermen welfare**.
- **Institutional Framework**:
  - **CMFRI** (est. 1947): Premier research body under **ICAR** for marine fisheries data and policy inputs.
  - **NFDP**: Central digital registry for all fishers and fish farmers, linked to **Aadhaar** and **bank accounts** for DBT.

Controversy Erupts Over Yield Claims of India's First Gene-Edited Rice Varieties

What's the News?

- A public dispute has emerged over the performance of India's first two **gene-edited rice varieties**—Pusa DST-1 and **DRR Dhan 100 (Kamala)**—released by the **Union Ministry of Agriculture** in May 2025.
- The **Coalition for a GM-Free India**, comprising scientists, farmers, and civil society groups, alleges that the **Indian Council of Agricultural Research (ICAR)** manipulated or selectively reported trial data to exaggerate yield gains, stress tolerance, and early maturity.
- ICAR has **categorically denied** the claims, calling them "baseless" and "motivated," and insists the varieties underwent rigorous, transparent testing across 24 locations.

What Are the Allegations?

- **Pusa DST-1** (derived from MTU 1010):
  - **Claimed**: 20–30% higher yield under saline/alkaline conditions.
  - **Reality (per Coalition analysis of ICAR's 2023–24 reports)**:
    - No yield advantage in **coastal salinity trials** (2024).
    - Only **1.6% gain in alkaline soils**.
    - **Underperformed** in 12 of 20 trial sites (2023).
- **DRR Dhan 100 (Kamala)** (derived from Samba Mahsuri/BPT 5204):
  - **Claimed**: 17% higher yield, 20-day earlier maturity, better nitrogen use.
  - **Reality**:
    - **4% lower mean yield** than parent variety (2023).
    - Flowered only **3 days earlier on average**—in two zones, it matured **8–9 days later**.
    - No consistent improvement in grain quality or panicle density.

ICAR's Defense

- Both varieties tested under the **All India Coordinated Research Project on Rice (AICRPR)**, the official national platform for rice variety evaluation since 1965.
- Trials conducted at **24+ locations**, with **blind-coded entries** among 500+ breeding lines to prevent bias.
- All data publicly accessible via **aicrip-intranet.in**.
- ICAR asserts the edits used **CRISPR-Cas9 without foreign DNA**, complying with India's **2022 guidelines for genome-edited plants** (exempt from GMO regulations if no transgenes are inserted).

Additional Info

- **Genome Editing (SDN1/SDN2):**
  - The technology used modifies the plant's *existing* genes (in this case, using CRISPR-Cas9) and does not involve inserting foreign DNA, making it **non-transgenic**.
  - These rice varieties fall under the **Site-Directed Nuclease (SDN) 1 and 2** categories.
- **Regulatory Context:**
  - In 2022, the **Ministry of Environment, Forest and Climate Change (MoEFCC)** exempted SDN1 and SDN2 genome-edited crops from the stringent biosafety regulations that apply to traditional **Genetically Modified (GM) crops**.
  - This exemption means such varieties do not require clearance from the **Genetic Engineering Appraisal Committee (GEAC)**, a decision that is being contested by activist groups.
- **Key Organisations:**
  - **ICAR (Indian Council of Agricultural Research):** The apex body for co-ordinating, guiding, and managing agricultural research and education in India.
  - **IARI (Indian Agricultural Research Institute):** A premier institute for agricultural research, education, and extension, also known as the Pusa Institute.
  - **GEAC (Genetic Engineering Appraisal Committee):** The statutory body under the MoEFCC that regulates the use, manufacture, storage, import, and export of hazardous microorganisms or genetically engineered organisms.

NITI Aayog Unveils 'Reimagining Agriculture' Report

What's the News?

- The **NITI Aayog** has released a significant report titled **"Reimagining Agriculture: A Roadmap for Frontier Technology Led Transformation"**.
- The roadmap was developed by the **NITI Frontier Tech Hub** in collaboration with knowledge partners including **BCG, Google, and CII**.
- It was launched in Gandhinagar, Gujarat, outlining a strategic vision to harness advanced technologies for a tech-driven, inclusive, and resilient agricultural sector by 2047.

Key Highlights of the Report

Vision 2047 for Indian Agriculture

- Aim: To make India a **global leader in sustainable agriculture** by 2047.
- Focus on transforming agriculture into a **market- and technology-driven** sector while ensuring **climate resilience** and **income security**.
- Proposes three strategic shifts:
  - From **input-intensive** to **knowledge-intensive farming**.
  - From **production-centric** to **value-chain and market-centric** systems.
  - From **subsidy-based** to **incentive- and outcome-based** policy design.

Core Recommendations

- **Agritech Integration:**
  - Promote **Digital Public Infrastructure (DPI)** for agriculture.
  - Scale use of **AI, remote sensing, and blockchain** for crop insurance, soil health, and logistics.
- **Water & Climate Management:**
  - Prioritize **micro-irrigation, climate-smart crops**, and **water budgeting** at the panchayat level.
  - Incentivize **carbon farming** and **bioeconomy-based rural enterprises**.
- **Market & Value Chains:**
  - Develop **Farmer Producer Organizations (FPOs)** into **Agri-Business Clusters (ABCs)**.
  - Reform **APMC** and **contract farming** frameworks to improve price realization.
- **Institutional Reforms:**
  - Establish a **National Agricultural Transformation Authority (NATA)** for cross-ministerial coordination.
  - Promote **cooperative federalism** through joint action between Centre and States.
- **Financial & Policy Instruments:**
  - Shift from **input subsidies** to **direct income support**.
  - Expand **agri-credit** access via fintech and weather-indexed insurance.

Additional Info

- **NITI Aayog:**
  - Established in **2015**, replacing the **Planning Commission**.
  - Functions as the **policy think tank** of the Government of India.
  - Key divisions: **Agriculture & Allied Sectors, Energy, Health, SDGs Monitoring**.
- **Relevant Constitutional & Policy Context:**
  - **Article 48:** Directive for the State to organize agriculture and animal husbandry on modern and scientific lines.
  - **Entry 14, State List (7th Schedule):** Agriculture and related research fall under state jurisdiction; Centre intervenes via coordination and policy support.
  - Linked initiatives: **National Mission for Sustainable Agriculture (NMSA)**, **Digital**

Agriculture Mission, **Atmanirbhar Krishi Strategy 2047**.
- **Context of Indian Agriculture**:
  - The sector employs **45.8% of India's workforce**.
  - It faces persistent issues like fragmented landholdings (86% are smallholders), significant post-harvest losses (exceeding $18 billion annually), and digital/financial gaps.

FAO Releases State of Food and Agriculture (SOFA) 2025 Report

What's the News?
- The **Food and Agriculture Organization (FAO)** has released its flagship report, **"The State of Food and Agriculture (SOFA) 2025"**.
- The theme of this year's report is **"Investing in agriculture to transform rural areas"**.
- It highlights that rural areas are home to **3.4 billion people** and **80% of the world's poor**, making rural transformation essential.
- The report calls for a strategic overhaul of public spending in agriculture to make it more efficient, sustainable, and inclusive.

Key Report Findings
- **Inefficient Public Support**:
  - Global public support for food and agriculture (for producers, consumers, and general services) averaged over **$850 billion** annually from 2020–2022.
  - The report argues much of this support is **price-distorting**, environmentally unsustainable, and ineffective in reaching small-scale farmers.
- **Hidden Costs**:
  - Current agrifood systems generate significant "hidden costs" (environmental, social, and health impacts) estimated at over **$10 trillion** globally.
- **Pathways to Transformation**:
  - The report draws on successful rural transformations (e.g., in China and Vietnam), which involved strong public investment in both agriculture and the rural non-farm economy.

Core Recommendations
- **Repurpose Subsidies**:
  - Shift public funds away from price-distorting subsidies.
  - Re-channel these funds towards investments in **public goods and services**.
- **Invest in Public Goods**:
  - Prioritize funding for **agricultural research and development (R&D)**.
  - Enhance **infrastructure** (e.g., storage, transport, irrigation) and **extension services**.
- **Beyond the Farm**:
  - The report emphasizes that agricultural investment alone is insufficient.

- It must be complemented by investments in the **rural non-farm economy**, education, health, and social protection.
- **Develop Rural Hubs**:
  - Foster **"agglomeration economies"** by developing small towns and rural cities as hubs for economic activity and services.

Govt Notifies New Rules for Sustainable Fishing in India's EEZ

What's the News?
- The **Union Ministry of Fisheries, Animal Husbandry and Dairying** has notified the **Fisheries (Conservation, Management and Development in the Exclusive Economic Zone of India) Rules, 2025**.
- These rules were issued under the **Maritime Zones of India (Regulation of Fishing by Foreign Vessels) Act, 1981**.
- The primary objective is to regulate fishing activities by **Indian-flagged vessels** in India's **Exclusive Economic Zone (EEZ)**, which lies beyond the 12 nautical mile territorial waters.
- The focus is on ensuring the **sustainable harnessing** of fisheries, preventing overexploitation, and protecting marine biodiversity.

Key Provisions of the Rules
- **Mandatory Licensing:** Indian vessels with an overall length of **12 meters or more** are now required to have a valid registration and license to operate in the EEZ.
- **Data and Monitoring:** Mandatory maintenance of **electronic logbooks** by these vessels to record catch data, which will aid in scientific assessment and management of fish stocks.
- **Regulation of Fishing Gear:** The rules specify regulations for fishing gear, including **minimum mesh sizes for nets**, to prevent the bycatch of juvenile fish and protect non-target species.
- **Prohibition of Destructive Methods:** Destructive practices such as **dynamite fishing** and **bottom trawling** in ecologically sensitive areas are strictly prohibited.
- **Conservation Measures:** The government is empowered to implement specific conservation and management measures, such as:
  - **Spatial closures** (no-fishing zones) to protect vulnerable marine ecosystems.
  - **Temporal closures** (seasonal fishing bans) to protect fish during breeding seasons.
  - **Catch quotas** to limit the harvest of specific stocks and prevent overfishing.

Additional Info
- **Exclusive Economic Zone (EEZ):**
  - As defined by the **UN Convention on the Law of the Sea (UNCLOS), 1982**, the EEZ is an area of the sea extending up to **200 nautical miles** from a country's baseline (coast).
  - In this zone, the coastal state (India) has **sovereign rights** for exploring, exploiting,

conserving, and managing all natural resources.
- **Constitutional Provisions for Fisheries:**
  - **Union List (List I): Entry 57** grants the Union government jurisdiction over "Fishing and fisheries beyond territorial waters" (i.e., in the EEZ).
  - **State List (List II): Entry 21** places "Fisheries" under the control of state governments, but this jurisdiction is limited to territorial waters (up to 12 nautical miles from the coast).

Centre Releases Draft Seeds Bill, 2025 for Public Consultation

What's the News?
- The **Union Ministry of Agriculture and Farmers Welfare** has released the **Draft Seeds Bill, 2025**, for public consultation.
- The Bill aims to create a modern regulatory framework, replacing the existing **Seeds Act, 1966**, and the **Seeds (Control) Order, 1983**.
- The primary objectives are to regulate the quality of seeds and planting materials, ensure farmers' access to high-quality seeds, curb the sale of spurious seeds, and promote innovation.
- This is the government's third attempt at this legislation, following previous drafts in 2004 and 2019 that were withdrawn after opposition.

Key Provisions & Innovations
- **Mandatory Variety Registration:**
  - All seed varieties must be registered based on **Value for Cultivation and Use (VCU)** trials.
  - Existing notified varieties under the 1966 Act are **deemed registered**.
  - **Farmers' varieties** receive **provisional registration for 3 years**.
  - Registration may be suspended or revoked for poor performance or safety concerns.
- **Digital Traceability via SATHI Portal:**
  - Mandatory QR-code-based labelling for end-to-end tracking.
  - All stakeholders (producers, dealers, nurseries, researchers) must register on the **Seed Traceability Portal (SATHI)** to minimise fraud and ensure transparency.
- **Strengthened Certification Infrastructure:**
  - Establishment of **accredited Seed Certification Agencies**.
  - Upgraded **Central and State Seed Testing Laboratories** with standardised protocols.
  - Empowered **Seed Inspectors** for sampling, search, and seizure.

Farmer-Centric Safeguards
- **Explicit protection of farmers' rights:**
  - Right to **save, use, re-sow, exchange, and sell** farm-saved seeds retained.
  - **Exemption from penalties** for selling unbranded farm seeds.
  - Prohibition on branding farm-saved seeds without registration.

- **Price Regulation in Emergencies:**
  - Central government empowered to fix seed prices during scarcity, monopolistic practices, or profiteering.

Graded Penalty System (Decriminalisation + Deterrence)
- **Trivial offences:** Written warnings or minor fines.
- **Minor offences:** Penalties up to **₹2 lakh**.
- **Major offences** (e.g., spurious/misbranded seeds, repeat violations):
  - Fines up to **₹30 lakh**.
  - Cancellation of registration.
  - **Imprisonment up to 3 years** for serious/repeat cases.

Regulation of Seed Trade & Imports
- **Mandatory registration** for all in the seed chain: producers, processors, dealers, distributors, and plant nurseries.
- **Central Accreditation System** allows multi-state operators to be "deemed registered".
- **Seed imports** allowed only if compliant with Indian certification and quarantine norms.
  - Unregistered varieties permitted for **research and trials** with prior approval.

Additional Info
- **Rationale for Reform:**
  - Existing laws outdated amid rise of **hybrids**, **biotech traits**, and private seed companies
  - Previous attempts (e.g., Seeds Bill 2004) stalled due to opposition over farmer rights and corporate control
  - 2025 version seeks balance: stricter quality control + explicit farmer safeguards
- **Stakeholder Reactions:**
  - **Industry bodies** welcome clarity, digital systems, and decriminalisation of minor lapses
  - **Farm unions remain cautious**, seeking stronger liability clauses and grievance redress for seed failure
- **Constitutional & Policy Links:**
  - Agriculture is a **State subject**, but seed quality and inter-state trade fall under **Concurrent List (Entry 33)**
  - Aligns with **National Mission on Agricultural Extension and Technology (NMAET)** and **Seed Minikit Programme**
  - Supports **SDG 2 (Zero Hunger)** and **SDG 9 (Industry, Innovation)**

BHU Researchers Revive Heritage 'Adam Chini' Rice Variety

What's the News?
- Agricultural scientists at **Banaras Hindu University (BHU)** have successfully revived the **'Adam Chini' rice** variety.
- This traditional, aromatic rice, which holds a **Geographical Indication (GI) tag**, was nearly extinct due to significant agricultural challenges.

- The research initiative has developed improved, commercially viable versions of the rice, addressing its key drawbacks while retaining its famous qualities.

About Adam Chini Rice

- **Type**: A traditional, short-grained, **non-Basmati aromatic rice**.
- **Origin**: Primarily cultivated in the eastern **Uttar Pradesh** districts of **Chandauli, Mirzapur, Sonbhadra,** and **Varanasi**, part of the Vindhya region.
- **Key Features**: Renowned for its **sugar crystal-like grains** (hence "Chini"), pleasant aroma, and superior cooking quality and taste.
- **Recognition**: It received the **GI tag** in 2023 and is also included in the **'One District One Product' (ODOP)** scheme for Chandauli district.

Traditional Limitations vs. BHU's Improvements

Trait	Traditional Adam Chini	BHU Mutant Lines (e.g., M-14, M-19)
Plant Height	~165 cm (lodging-prone)	~105 cm (lodging-resistant)
Maturity Duration	155 days	~120 days
Yield	20–23 quintals/ha	30–35 quintals/ha
Grain Quality	Short, bold, highly aromatic	Retains aroma & superior cooking quality (comparable/superior to Basmati)

Additional Info

- **Constitutional & Policy Links**:
  - **Article 371-Z (Special provision for UP)**: Enables state-led agro-cultural initiatives.
  - **Protection of Plant Varieties and Farmers' Rights Act, 2001**: Supports farmers' rights to conserve and improve varieties like Adam Chini.
  - **National IPR Policy (2016)**: Encourages GI-based rural development.
- **Related GI-tagged Rice Varieties**:
  - **Kalanamak Rice** (UP)
  - **Gobindobhog Rice** (West Bengal)
  - **Chinnor Rice** (Chhattisgarh)

National Gopal Ratna Awards 2025 Announced to Honour Dairy Excellence

What's the News?

- The **Ministry of Fisheries, Animal Husbandry and Dairying** has announced the winners of the **National Gopal Ratna Awards 2025**.
- These awards, considered the **highest national honour** in the livestock and dairy sector, will be presented on **November 26, 2025**, during the **National Milk Day** celebrations.
- The initiative aims to recognize and motivate farmers, cooperatives, and technicians playing a pivotal role in India's **indigenous cattle conservation** and milk production.

Award Structure & Recognition

- **Categories & Prizes**:
  - **Best Dairy Farmer (rearing indigenous breeds)**
    - ₹5 lakh (1st), ₹3 lakh (2nd), ₹2 lakh (3rd).
    - Special ₹2 lakh awards for **NER/Himalayan States**.
  - **Best Dairy Cooperative/FPO/MPC**
    - Same cash prize structure.
  - **Best AIT**
    - **Certificate + Memento only** (no cash prize).
- **Selection Criteria**: Scientific breeding, innovation in dairy management, promotion of **indigenous cattle/buffalo breeds**, and cooperative excellence.

Institutional Framework & Policy Linkages

- **Launched under**: **Rashtriya Gokul Mission (RGM)**, initiated in **2014** to conserve and develop indigenous bovine breeds.
- **Administered by**: **Department of Animal Husbandry & Dairying (DAHD)**.
- **Strategic Alignment**:
  - Supports **National Action Plan for Dairy Development (NAPDD)**.
  - Contributes to **doubling farmers' income** and rural livelihood enhancement.
  - Aids India's goal to sustain **#1 global rank in milk production** (239.3 MMT in 2023–24).

Additional Info

- **2025 Highlights**:
  - First-ever **joint 3rd prize** in farmer category (Rajasthan & Maharashtra).
  - Kerala and Rajasthan dominated cooperative category.
  - Odisha's Mr. Dillip Kumar Pradhan won top AIT honour.
- **Rashtriya Gokul Mission (RGM)** Key Components:
  - Establishment of **Gokul Grams** (integrated cattle development centres).
  - **Indigenous Breed Improvement Programmes** (e.g., Gir, Sahiwal, Red Sindhi).
  - **Sex-sorted semen technology** and **embryo transfer** for genetic upgradation.
- **Constitutional & Governance Link**:
  - Livestock falls under **Entry 15 of the State List**, but central schemes like RGM/NGRA are enabled via **Article 282** (expenditure for public purpose) and cooperative federalism.
  - Aligns with **SDG 2 (Zero Hunger)** and **SDG 8 (Decent Work)** through rural enterprise promotion.

World Bank Report: AI Can Transform Agriculture in Developing Nations; Cites Telangana's 'Saagu Baagu' Success

What's the News?

- The **World Bank** released a new report titled **"Harnessing Artificial Intelligence for Agricultural Transformation"**, highlighting the potential of AI to address global food security challenges.
- The report provides a roadmap for **Low- and Middle-Income Countries (LMICs)** to responsibly deploy AI to boost agricultural **productivity, sustainability, and inclusivity**, while warning of risks like the **digital divide** and **data bias**.
- It specifically cites successful case studies, including India's **'Saagu Baagu'** project in Telangana, to demonstrate how AI can practically benefit smallholder farmers.

Key Findings & Recommendations

Transformative Potential

- **Productivity & Efficiency**: AI tools (e.g., precision farming, pest detection) can increase yields by **20–30%** and reduce chemical use by up to **95%** in some cases.
- **Climate Resilience**: AI helps breed **climate-resilient seeds**, model weather risks, and optimize resource use for water-scarce regions.
- **Financial Inclusion**: AI-driven **alternative credit scoring** can help unbanked farmers access loans and **microinsurance**.

Strategic Roadmap for Policymakers

- **National Strategies**: Countries should adopt **national AI strategies** that explicitly include agriculture, linking them to food security and climate goals.
- **Digital Public Infrastructure (DPI)**: The report urges investment in **DPI** (like digital IDs and payment systems) and **Agricultural Data Exchange Nodes (ADENs)** to create shared, interoperable data ecosystems.
- **"Small AI"**: A shift towards **lightweight AI models** that can run on basic smartphones or offline devices to reach farmers in low-connectivity areas.

Indian Context: The 'Saagu Baagu' Success Story

- **Project Overview**: **'Saagu Baagu'** (meaning "Agricultural Advancement") is a partnership between the **Government of Telangana**, the **World Economic Forum (WEF)**, and the **Bill & Melinda Gates Foundation**.
- **Implementation**: Implemented by **Digital Green** and agritech startups (e.g., AgNext, Krishi Tantra), it deployed AI tools for **soil testing, quality assaying, and crop advisories** to 7,000 chili farmers in Khammam district.
- **Impact Metrics**:
  - **21% increase** in chili yields.
  - **9% reduction** in pesticide use.
  - **5% reduction** in fertilizer use.
  - **Doubling of income** for some participating farmers.
- **Expansion**: The project is now scaling to **Phase 2**, targeting **500,000 farmers** across 10 districts.
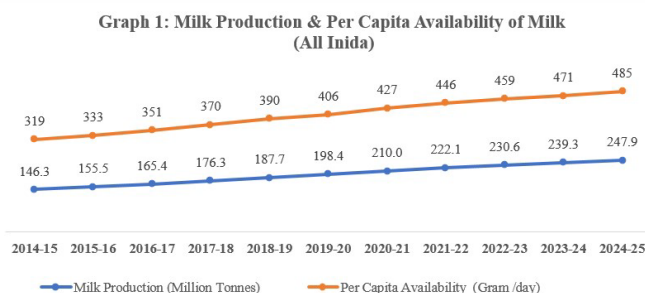
Additional Info

- **AgriStack & ADeX**:
  - **AgriStack**: A national-level **Digital Public Infrastructure (DPI)** built by the Union Government. It includes three core registries: **Farmer Registry**, **Crop Sown Registry**, and **Geo-referenced Village Maps**.
  - **UFSI (Unified Farmer Service Interface)**: The "UPI for Agriculture"—an open API layer within AgriStack that allows interoperability between various agritech apps and government data.
  - **ADeX (Agricultural Data Exchange)**: Launched by the **Telangana Government** with **IISc** and **WEF**, this open-source platform aligns with the World Bank's recommendation for **ADENs** and serves as a model for secure data exchange.
- **Related World Bank Projects in India**:
  - **UP AGREES**: The World Bank is funding this project in **Uttar Pradesh** to modernize agriculture and enhance export capability.
  - **AI Pragya**: A related initiative in UP to train youth and farmers in AI and digital skills.

Basic Animal Husbandry Statistics 2025 Released: India Leads in Milk Production

What's the News?

- The **Union Ministry of Fisheries, Animal Husbandry & Dairying** released the **Basic Animal Husbandry Statistics (BAHS) 2025** on the occasion of **National Milk Day** (November 26).
- The report provides production estimates for **Milk, Eggs, Meat, and Wool** for the year **2024-25**, based on the Integrated Sample Survey (ISS) conducted across three seasons (Summer, Rainy, Winter).
- The data highlights India's continued dominance as the **world's largest milk producer**, along with significant growth in egg and wool sectors.
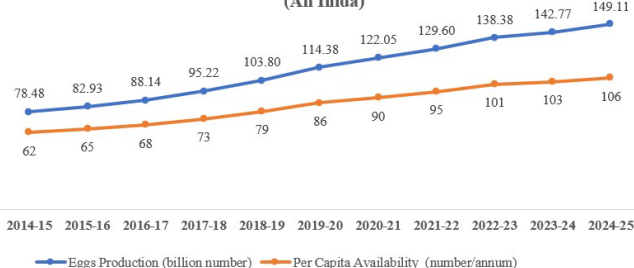
Milk Production Statistics

Graph 1: Milk Production & Per Capita Availability of Milk (All India)

Year	Milk Production (Million Tonnes)	Per Capita Availability (Gram /day)
2014-15	146.3	319
2015-16	155.5	333
2016-17	165.4	351
2017-18	176.3	370
2018-19	187.7	390
2019-20	198.4	406
2020-21	210.0	427
2021-22	222.1	446
2022-23	230.6	459
2023-24	239.3	471
2024-25	247.9	485

- **Global Standing**: India retains its **1st rank** globally in milk production.
- **Production Figures**: Total production reached **247.87 million tonnes**, registering a growth of **3.58%** over the previous year.
- **Per Capita Availability**: Increased to **485 grams/day** in 2024-25, up from **319 grams/day** in 2014-15.
- **Top Producing States**:
  - **Uttar Pradesh** (15.66%)
  - **Rajasthan** (14.82%)
  - **Madhya Pradesh** (9.12%)

- o **Gujarat** (7.78%)
- o **Maharashtra** (6.71%)
- o Together, these five states contribute **54.09%** of the country's total milk output.
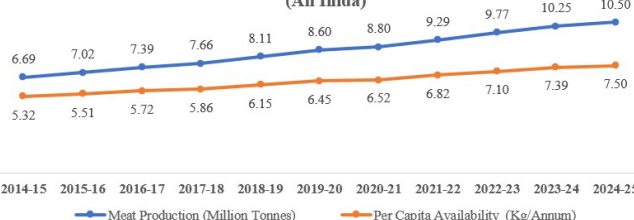
Egg Production Overview

Graph 2: Eggs Production & Per Capita Availability of Eggs (All Inida)

Eggs Production (billion number): 78.48, 82.93, 88.14, 95.22, 103.80, 114.38, 122.05, 129.60, 138.38, 142.77, 149.11

Per Capita Availability (number/annum): 62, 65, 68, 73, 79, 86, 90, 95, 101, 103, 106

Years: 2014-15, 2015-16, 2016-17, 2017-18, 2018-19, 2019-20, 2020-21, 2021-22, 2022-23, 2023-24, 2024-25

- **Global Standing**: India ranks **2nd** in the world for egg production.
- **Production Figures**: Total output stood at **149.11 billion** eggs, showing a growth of **4.44%**.
- **Sector Contribution**: **Commercial poultry** accounts for **84.49%** of production, while **backyard poultry** contributes **15.51%**.
- **Per Capita Availability**: Rose to **106 eggs per annum**, compared to **62** in 2014-15.
- **Top Producing States**:
  - o **Andhra Pradesh** (18.37%)
  - o **Tamil Nadu** (15.63%)
  - o **Telangana** (12.98%)
  - o **West Bengal** (10.72%)
  - o **Karnataka** (6.67%).

Meat and Wool Production

Graph 3: Meat Production & Per Capita Availability of Meat (All Inida)

Meat Production (Million Tonnes): 6.69, 7.02, 7.39, 7.66, 8.11, 8.60, 8.80, 9.29, 9.77, 10.25, 10.50

Per Capita Availability (Kg/Annum): 5.32, 5.51, 5.72, 5.86, 6.15, 6.45, 6.52, 6.82, 7.10, 7.39, 7.50

Years: 2014-15, 2015-16, 2016-17, 2017-18, 2018-19, 2019-20, 2020-21, 2021-22, 2022-23, 2023-24, 2024-25

- **Meat Production**:
  - o India ranks **4th** globally.
  - o Total production reached **10.50 million tonnes** (up by **2.46%**).
  - o **Poultry meat** drives the sector, contributing nearly **50%** (5.18 million tonnes) of the total.
  - o **Top States: West Bengal** (12.46%)**, Uttar Pradesh**, **Maharashtra**, **Andhra Pradesh**, and **Telangana**.
- **Wool Production**:
  - o Total production was **34.57 million kg**, a growth of **2.63%**.
  - o **Rajasthan** is the runaway leader, contributing **47.85%** of the national output, followed by **Jammu & Kashmir** (22.88%).

Additional Info

- **National Milk Day**:
  - o Observed annually on **November 26** to commemorate the birth anniversary of **Dr.**

Verghese Kurien, the "Father of the White Revolution" in India.
- o The day celebrates the achievements of the dairy sector and honors farmers' contributions.
- o **National Gopal Ratna Awards** were presented during the event to recognize exemplary work in livestock management.
- **Department of Animal Husbandry and Dairying (DAHD)**:
  - o The nodal agency responsible for livestock census and sample surveys.
  - o Recent initiatives include the **Rashtriya Gokul Mission** and **National Artificial Insemination Programme** to boost bovine productivity.

Important Days

International Day for Biosphere Reserves
What's the News?
- On **November 3**, the world observes the **International Day for Biosphere Reserves**, celebrating regions where nature and communities coexist in harmony.
- These reserves serve as living laboratories that demonstrate practical models of sustainable development, environmental conservation, and community well-being.
- Designated by **UNESCO**, the day underscores the importance of biosphere reserves as vital platforms for advancing scientific research, preserving ecological and cultural diversity, and fostering a balanced relationship between people and the planet.

What are Biosphere Reserves?
- **Definition**: BRs are designated by **UNESCO** as 'learning places for sustainable development'.
- **Purpose**: They serve as sites for testing interdisciplinary approaches to understand and manage the conflicts between human activities and biodiversity conservation.
- **Global Network**: The **World Network of Biosphere Reserves (WNBR)** currently includes **748 sites** in **134 countries**, including 22 transboundary sites.
- They function through a **three-zone model**:
  - **Core Area(s):**
    - This is a strictly protected zone dedicated to conserving landscapes, ecosystems, species, and genetic variation.
  - **Buffer Zone(s):**
    - It surrounds or adjoins the core area(s).
    - Activities are organized here that are compatible with sound ecological practices, such as scientific research, monitoring, training, and eco-tourism.
  - **Transition Area(s):**
    - The outermost part of the reserve where communities foster socio-culturally and ecologically sustainable economic and human activities.

India's Biosphere Reserves Recognised by UNESCO
- India has **19 biosphere reserves**, of which **12** are now part of the **World Network**.
- Key UNESCO-recognised reserves include:
  - **Nilgiri** (Tamil Nadu, Kerala, Karnataka) - *First BR in India*
  - **Gulf of Mannar** (Tamil Nadu)
  - **Sundarbans** (West Bengal)
  - **Nanda Devi** (Uttarakhand)
  - **Nokrek** (Meghalaya)
  - **Pachmarhi** (Madhya Pradesh)
  - **Simlipal** (Odisha)
  - **Great Nicobar** (Andaman & Nicobar Islands)
  - **Achanakmar-Amarkantak** (Madhya Pradesh, Chhattisgarh)
  - **Agasthyamala** (Kerala, Tamil Nadu)
  - **Khangchendzonga** (Sikkim)
  - **Panna** (Madhya Pradesh)
- These reserves represent diverse **ecological zones** – from **mangroves** to **Himalayan ecosystems** – supporting **endangered species** and **indigenous communities**.

Additional Info
- **Man and the Biosphere (MAB) Programme:**
  - Launched by **UNESCO in 1971**.
  - Aims to establish a scientific basis for **improving relationships between people and their environments**.
  - As of 2025, there are **759 biosphere reserves** in **136 countries**.
- **Legal and Policy Framework in India:**
  - Governed under the **Environment (Protection) Act, 1986**.
  - Coordinated by the **Ministry of Environment, Forest and Climate Change (MoEFCC)**.
  - Supported by schemes like **Integrated Development of Wildlife Habitats (IDWH)**.
- **Selection Criteria:**
  - Rich biodiversity and endemism.
  - Presence of **traditional ecological knowledge** and **sustainable livelihood systems**.
  - Representative of major **biogeographic zones**.

World Tsunami Awareness Day 2025: Be Tsunami Ready, Invest in Tsunami Preparedness
What's the News?
- **World Tsunami Awareness Day (WTAD)**, observed annually on **November 5**, aims to promote resilience-building measures to protect lives, livelihoods, and economies from the devastating impacts of tsunamis.
- The 2025 theme, **"Be Tsunami Ready: Invest in Tsunami Preparedness,"** emphasizes the importance of proactive measures, including risk assessment and infrastructure resilience, to safeguard coastal communities.

Coastal risk & global exposure
- More than **700 million people** live in low-lying coastal areas or small island developing states and face tsunami threat.
- Tsunamis are rare but high-impact events: over the past century ~120 fatal tsunamis hit global coastlines, causing more than ~260 000 deaths.
- Climate change (sea level rise, warming oceans) and urban expansion increase vulnerability of coastal communities.

Preparedness and governance

- The day links directly to the Sendai Framework for Disaster Risk Reduction (2015-2030), especially Target G on early warnings.
- Key actions highlighted:
    - Invest in early warning systems, evacuation mapping and drills.
    - Promote regional interoperability of warning systems for cross-border hazards.
    - Maintain continuous risk-communication and community awareness even in calm periods.

Additional Info

- **Background on WTAD**:
    - **Establishment**: World Tsunami Awareness Day was established by the United Nations in 2015.
    - **Inspiration**: The day draws inspiration from a Japanese story of a farmer who saved his village from an approaching tsunami by burning rice sheaves.
    - **Objective**: To promote awareness, early warning, and disaster readiness globally.
- **Why November 5**:
    - The date commemorates the day when a Japanese farmer saved his village from a tsunami by burning rice sheaves, alerting the villagers to seek higher ground.
- **Japan: Global Leader in Preparedness**:
    - Japan, which suffered the 2011 Tohoku tsunami, is a leader in tsunami preparedness.
    - Advanced early warning technologies and annual community drills set global standards.

Tsunami: Short Note

What is a Tsunami?

- A Tsunami (Japanese for "harbour wave") is a series of extremely long-wavelength ocean waves.
- They are **not tidal waves**, as their generation is not related to the gravitational pull of the moon or sun.
- They are caused by a large, sudden displacement of a massive volume of water, typically in an ocean or a large lake.
- In deep oceans, these waves travel at very high speeds (up to 800 km/h, like a jet plane) but have a low wave height (often less than 1 meter), making them unnoticeable to ships.
- As they approach shallow coastal waters, their speed decreases, but their wavelength is compressed, causing the wave height to increase dramatically (a process called **shoaling**).

Causes (Tsunamigenesis)

Tsunamis are generated by any event that displaces a large volume of water:

- **Submarine Earthquakes (Most Common):** The primary cause is vertical movement of the seafloor during a powerful, shallow-focus (less than 70km deep) undersea earthquake, particularly in **subduction zones**. The 2004 Indian Ocean tsunami was a prime example, caused by the Indian Plate subducting under the Burma Plate.
- **Volcanic Eruptions:** Explosive submarine eruptions or the collapse of a volcanic caldera (like Krakatoa in 1883) can displace huge amounts of water.

- **Submarine Landslides:** Large-scale landslides on the steep continental slope, often triggered by earthquakes, can also generate a tsunami.
- **Meteorite Impacts:** A large extraterrestrial object striking the ocean would cause a significant, though extremely rare, tsunami.
- **Glacial Calving:** The breaking off of massive icebergs from glaciers into the sea can generate localized tsunamis.

World Radiography Day Observed to Honour Medical Imaging Professionals

What's the News?

- **World Radiography Day** is celebrated globally on **November 8** every year.
- The day aims to raise public awareness of the crucial role that **radiographers** and **radiological technologists** play in healthcare.
- It highlights the importance of medical imaging in diagnosing and treating patients, while also promoting the need for high standards in patient safety.

Theme: "Radiographers: Seeing the Unseen"

- The theme for the day is **"Radiographers: Seeing the Unseen"**.
- This theme, continued from the previous year, emphasizes the critical expertise of radiographers.
- It spotlights their role in using advanced technology to visualize conditions inside the human body that are not visible to the naked eye, enabling accurate diagnosis and effective treatment.

Historical Context: The Discovery of X-rays

- The date **November 8** commemorates the anniversary of the discovery of **X-rays** in 1895.
- The discovery was made by German physicist **Wilhelm Conrad Röntgen** while experimenting with cathode rays.
- He named the new, invisible rays "X-rays," using the mathematical symbol "X" for an unknown quantity.
- This breakthrough revolutionized medicine by allowing doctors to view internal body structures without surgery.
- For this achievement, Röntgen was awarded the first-ever **Nobel Prize in Physics** in 1901.

Significance of Radiography

- **Essential Diagnostic Tool**: Medical imaging is fundamental for the diagnosis, staging, and monitoring of a vast range of diseases and injuries, including fractures, infections, and cancers.
- **Non-Invasive Examination**: Radiography provides a non-invasive method to examine internal organs and bones, reducing the need for exploratory surgeries.
- **Improved Patient Outcomes**: By enabling early and accurate detection, radiography plays a vital role in improving patient treatment plans and saving lives.
- **Technological Advancement**: The field is no longer limited to X-rays and now includes advanced modalities like **Computed Tomography (CT)**, **Magnetic Resonance Imaging (MRI)**, and **Ultrasound**.

- **Patient Safety:** The observance also stresses the importance of radiation safety protocols and the continuous education of professionals to ensure patients are protected during imaging procedures.

Additional Info
- **History:** World Radiography Day marks the anniversary of the discovery of X-rays by Wilhelm Conrad Roentgen on November 8, 1895.
- **Global Initiatives:** The **International Society of Radiographers and Radiological Technologists (ISRTT)** and the **Society of Radiographers (SoR)** lead global efforts to promote the profession.
- **India's Context:**
  - **Healthcare Infrastructure:** India is investing in modernizing its healthcare infrastructure, including the adoption of advanced imaging technologies.
  - **Policy Initiatives:** The **National Health Stack (NHS)** and the **Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)** aim to improve access to quality healthcare services, including diagnostic imaging.
  - **Educational Programs:** Various institutions offer specialized training programs for radiographers to meet the growing demand.
- **Radiographer vs. Radiologist:**
  - A **Radiographer** (or Radiological Technologist) is the healthcare professional who is trained to operate the imaging equipment (like X-ray, CT, MRI machines) to produce the images.
  - A **Radiologist** is a medical doctor who specializes in interpreting these medical images to diagnose conditions.

National Legal Services Day Observed to Promote Access to Justice
What's the News?
- **National Legal Services Day** is observed annually across India on **November 9**.
- The day commemorates the enactment of the **Legal Services Authorities Act, 1987**, which came into force on this day in 1995.
- The primary goal is to raise awareness about the availability of free legal aid and the legal rights of citizens, particularly for **marginalized and weaker sections** of society.
- The theme for 2025 is: **"Access to Justice for All through Legal Awareness and Empowerment"**.

Legal Services Framework in India
- **Objective:** To provide free and competent legal services to ensure that opportunities for securing justice are not denied to any citizen due to economic or other disabilities.
- **Hierarchical Structure:** The 1987 Act established a nationwide network of legal services bodies, including:
  - **National Legal Services Authority (NALSA)** at the national level.
  - **State Legal Services Authorities (SLSA)** at the state level.
  - **District Legal Services Authorities (DLSA)** at the district level.
  - **Taluk Legal Services Committees** at the taluk/mandal level.
- **Key Functions:**
  - Providing **free legal aid** and advice to eligible persons.
  - Organizing **Lok Adalats** (People's Courts) for the amicable, speedy, and low-cost settlement of disputes.
  - Conducting **legal awareness camps** and literacy programs, especially in rural and remote areas.

Constitutional & Legal Provisions
- **Constitutional Mandate:**
  - **Article 39A (Directive Principle):** Added by the 42nd Amendment, it mandates the State to "provide free legal aid… to ensure that opportunities for securing justice are not denied to any citizen by reason of economic or other disabilities".
  - **Article 14:** Guarantees **equality before the law**.
  - **Article 21:** The Supreme Court has interpreted the **Right to Life and Personal Liberty** to include the right to free legal aid in criminal cases.
- **Legal Services Authorities Act, 1987:**
  - This Act gives a **statutory basis** to legal aid programs and establishes the NALSA-led framework.
  - It also gives **statutory status to Lok Adalats**, making their awards final, binding, and equivalent to a decree of a civil court.
- **Eligibility for Free Legal Aid:**
  - The Act identifies several categories of persons as eligible, including:
    - **Women and children**
    - Members of **Scheduled Castes (SC) or Scheduled Tribes (ST)**
    - **Industrial workmen**
    - Victims of mass disasters, ethnic violence, or industrial disasters
    - Persons with **disabilities**
    - Persons in **custody**
    - Victims of **human trafficking** or *begar* (forced labour)
    - Individuals with an annual income below a specified limit.

National Education Day 2025: Commemorating India's First Education Minister
What's the News?
- India observes **National Education Day** every year on **November 11**.
- The day marks the birth anniversary of **Maulana Abul Kalam Azad**, a prominent freedom fighter and the first **Education Minister** of independent India.

- The theme for 2025 is **"Innovative Education for a Resilient Future."**
- The **Ministry of Human Resource Development** (now **Ministry of Education**) officially designated this day in **2008** to acknowledge his legacy.

Who Was Maulana Abul Kalam Azad?

- Born on **November 11, 1888**, in Mecca; settled in Kolkata.
- Freedom fighter, scholar, and youngest-ever **President of the Indian National Congress (1923)**.
- Served as India's **first Education Minister (1947–1958)**.
- Awarded **Bharat Ratna (1992)** posthumously.

Key Contributions to India's Education Architecture

- Institutional Foundations: Instrumental in establishing:
  - **University Grants Commission (UGC)**
  - **Indian Institutes of Technology (IITs)**
  - **Indian Institute of Science (IISc)** revitalization
  - **All India Council for Technical Education (AICTE)**
- Cultural Infrastructure: Championed creation of:
  - **Sahitya Akademi**
  - **Lalit Kala Akademi**
  - **Sangeet Natak Akademi**
- Policy Vision: Advocated for:
  - Universal primary education
  - Adult literacy drives
  - Technical & scientific education
  - Education as a tool for **social unity, secularism, and empowerment**.

Additional Info

- **International Day of Education**: Observed globally on **January 24**; 2025 theme was officially **"AI and Education: Preserving Human Agency in a World of Automation"** , likely influencing domestic discourse.
- **Statutory Backing for Education Day:** Declared by **Ministry of Human Resource Development (2008)** — now **Ministry of Education**.
- **NEP 2020 Linkages**:
  - **Foundational Literacy & Numeracy (FLN)** by Grade 3 (target: 2026–27)
  - **50% GER (Gross Enrolment Ratio)** in higher education by 2035
  - **Multidisciplinary, flexible learning** with **multiple entry–exit** options.

World Pneumonia Day 2025: Theme "Child Survival" & SAANS Campaign Implementation

What's the News?

- **World Pneumonia Day** was observed globally on **November 12, 2025**, with the specific theme **"Child Survival"** to highlight the urgency of protecting children from this preventable disease.
- The day emphasizes the need to strengthen health systems to reduce pneumonia-related deaths, which remain the **leading infectious cause of death** among children under five globally.

- In India, the observance coincides with the intensification of the **SAANS (Social Awareness and Action to Neutralise Pneumonia Successfully)** campaign, aiming to bring childhood pneumonia mortality to **less than 3 per 1,000 live births** by 2025.

SAANS Initiative: Goals and Strategy

- Launched in 2019, SAANS aims to reduce childhood pneumonia mortality to **<3 per 1,000 live births by 2025**.
- Key objectives include:
  - Strengthening adherence to the **National Childhood Pneumonia Management Guidelines (2019)**.
  - Community mobilisation for awareness, prevention, and early care-seeking.
  - Capacity-building of frontline workers (**ASHAs**, **ANMs**) for early identification and referral.
  - Scaling up **Home-Based Newborn Care Plus (HBNC+)** for postnatal pneumonia screening.

Immunisation: PCV Under UIP

- **PCV** was introduced nationally under UIP in a phased manner starting 2017, and completed rollout **nationwide by 2021**.
- PCV targets *Streptococcus pneumoniae*, the leading bacterial cause of severe pneumonia in children.
- Studies indicate PCV introduction is **cost-effective** and expected to significantly reduce pneumococcal disease burden.
- Integrated with **Mission Indradhanush** and **ICDS**, it ensures high-risk districts receive priority coverage.

Additional Info

- **Disease Profile**:
  - **Definition**: An acute respiratory infection affecting the lungs where alveoli (air sacs) fill with pus or fluid, limiting oxygen intake.
  - **Causes**: Bacteria (*Streptococcus pneumoniae*), viruses (Respiratory Syncytial Virus - RSV), and fungi.
  - **Viral Shift**: Recent data indicates a shift where **RSV** is becoming a leading cause of viral pneumonia in infants.
- **Historical Context**:
  - Established in **2009** by the **Global Coalition Against Child Pneumonia** to bring attention to the "forgotten killer".
- **Government Interventions (India)**:
  - **Universal Immunization Programme (UIP)**: Includes the **PCV (Pneumococcal Conjugate Vaccine)** to protect against bacterial pneumonia.
  - **MAA Programme**: Promotes breastfeeding to boost immunity.
  - **ASHA Workers**: Trained to use **Pulse Oximeters** and provide pre-referral antibiotic doses.

World Diabetes Day Observed on November 14

What's the News?

- **World Diabetes Day** was observed globally on **November 14** to raise awareness about diabetes as a major global public health issue.
- The theme for 2025, as highlighted by the **World Health Organization (WHO)** and the **United Nations (UN)**, is **"Diabetes Across Life Stages"**.
- The day serves as the primary global awareness campaign, led by the **International Diabetes Federation (IDF)** and the **WHO**.

Global & National Context

- **589 million people** globally live with diabetes; nearly **half remain undiagnosed**, especially in low- and middle-income countries.
- **India's burden**: Estimated **101 million people** with diabetes (ICMR–INDIAB 2023); another **136 million** in prediabetes.
- Rising incidence in youth (Type 2) and gestational diabetes (GDM), posing intergenerational health risks.

WHO's 2030 Global Diabetes Coverage Targets

Target	Goal by 2030
Diagnosis	**80%** of people with diabetes diagnosed
Glycaemic control	**80%** of diagnosed individuals achieve HbA1c <7%
Blood pressure control	**80%** of diagnosed individuals maintain BP <140/90 mmHg
Statin use	**60%** of people ≥40 years receive statins
Type 1 diabetes support	**100%** have access to affordable insulin & glucose monitoring

Prevention & Early Action Priorities

- **Prediabetes intervention**: Lifestyle modification can reduce progression to diabetes by **58%**.
  - Weight loss of **5–7%**, 150 min/week physical activity.
  - Limit ultra-processed foods, sugary drinks; prioritise whole grains, fibre, legumes.
- **Screening at key life stages**:
  - Children: BMI + family history.
  - Women: Preconception & antenatal GDM screening.
  - Adults ≥30 yrs: Annual fasting glucose/HbA1c if risk factors present.

Additional Info

- **Constitutional & Policy Links**:
  - Falls under **Article 21 (Right to Health)** as interpreted in *Bandhua Mukti Morcha, Paschim Banga Khet Mazdoor Samity*.
  - Aligns with **National Programme for Prevention & Control of Cancer, Diabetes, CVDs & Stroke (NPCDCS)**.
  - Supported by **Ayushman Bharat Health & Wellness Centres (AB-HWCs)** for early screening & follow-up.
- **Static Facts**:
  - WDD launched in **1991** by **International Diabetes Federation (IDF)** and **WHO**.
  - Became a **UN-recognised day** in **2006** (Resolution 61/225).
  - Date (Nov 14) honours **Sir Frederick Banting**, co-discoverer of insulin (1922).
- **India's Initiatives**:
  - **mDiabetes** (SMS-based awareness by MoHFW & WHO).
  - **National Guidelines for Management of Diabetes (2024)**.
  - Integration of NCD screening in **1.5+ lakh AB-HWCs**.

National Epilepsy Day: Raising Awareness and Reducing Stigma

What's the News?

- **National Epilepsy Day** is observed in India annually on **November 17**.
- The day is dedicated to **raising public awareness** about epilepsy, a common neurological disorder.
- The main objective is to **educate** the public, **dispel myths**, and **reduce the social stigma** associated with the condition.

What is Epilepsy?

- Epilepsy is a **chronic, non-communicable neurological disorder** of the brain.
- It is characterized by **recurrent, unprovoked seizures**, which are brief episodes of involuntary movement that may involve a part of the body (partial) or the entire body (generalized).
- Seizures are caused by **sudden, abnormal bursts of electrical activity** in the brain.
- Epilepsy is **not contagious** and is one of the most common neurological conditions globally.

Key Statistics: Global and Indian Context

- **Global Burden**: According to the **World Health Organization (WHO)**, approximately **50 million people** worldwide live with epilepsy.
- **Indian Burden**: India has a significant caseload, with estimates suggesting around **10 to 12 million people** are affected by the condition.
- **The Treatment Gap**: A major challenge, particularly in low- and middle-income countries like India, is the **"treatment gap"**.
  - This refers to the large percentage of people with active epilepsy who do not receive appropriate medical treatment.
  - Reasons include lack of awareness, social stigma, poverty, and poor access to healthcare infrastructure.

Causes and Management

- **Potential Causes**: The causes of epilepsy can be varied:
  - **Genetic** predisposition.
  - **Structural damage** to the brain from head injuries, strokes, or tumors.
  - **Infections** of the brain, such as cysticercosis or meningitis.

- o In many cases, the exact cause remains unknown.
- **Treatment and Management**:
  - o Epilepsy is a treatable condition.
  - o With proper diagnosis and consistent treatment, up to **70% of people** with epilepsy can live seizure-free.
  - o The most common treatment involves daily medication with **Anti-Epileptic Drugs (AEDs)**.

Role of Epilepsy Foundation of India (EFI)

- Founded in **2009 by Dr. Nirmal Surya** in Mumbai.
- Pioneered **National Epilepsy Day** to:
  - o Promote **rights-based care** and education access
  - o Facilitate **community-based rehabilitation**
  - o Advocate for inclusion in **schools and workplaces**

International Students' Day: A Commemoration of Courage and Activism

What's the News?

- **International Students' Day** is observed globally every year on **November 17**.
- The day is not a celebration but a solemn **commemoration of student courage** and a platform to advocate for **academic freedom** and **students' rights**.
- It traces its origins to the **1939 Nazi-era crackdown** on students in Prague, Czechoslovakia.

Historical Origins: The 1939 Prague Tragedy

- The day marks the anniversary of a brutal response by **Nazi forces** to student demonstrations in occupied Prague.
- Students from the **University of Prague** were protesting the German occupation and the earlier death of a medical student, **Jan Opletal**.
- On **November 17, 1939**, the Nazis stormed the universities, with severe consequences:
  - o **Nine student leaders** were executed without trial.
  - o Over **1,200 students** were arrested and sent to concentration camps.
  - o All Czech universities and colleges were forcibly **shut down**.

Significance and Evolution

- **First Declaration**: In **1941**, the **International Students' Council** in London, composed of student representatives and refugees from over 50 countries, declared November 17 as International Students' Day.
- **Modern Focus**: While rooted in this tragic act of resistance, the day has evolved. It now serves as a global observance to:
  - o Honour the role of students as **agents of social and political change**.
  - o Promote **multiculturalism** and unity among students worldwide.
  - o Advocate for the **right to education** and **academic freedom** without fear of discrimination or oppression.

Key Distinction: This day is different from **World Students' Day**, which is celebrated on **October 15** to mark the birth anniversary of **Dr. A.P.J. Abdul Kalam**.

National Press Day: Celebrating the Fourth Pillar of Democracy

What's the News?

- India observes **National Press Day** annually on **November 16**.
- The day commemorates the establishment of the **Press Council of India (PCI)**, which started functioning on this day in **1966**.
- It is dedicated to celebrating the role of a **free and responsible press** in a democracy, highlighting its importance in informing the public and **holding power to account**.

The Press as the "Fourth Pillar"

- The press is often referred to as the **"Fourth Pillar of Democracy"** (or "Fourth Estate").
- It coexists with the other three pillars: the legislature, the executive, and the judiciary.
- A free press is considered essential for a functioning democracy as it provides a platform for public discourse, shapes public opinion, and acts as a check on governmental power.

Institutional & Policy Developments (2024–25)

- **Press and Registration of Periodicals Act (PRP Act), 2023**:
  - o Replaced the colonial **Press and Registration of Books Act, 1867**.
  - o Introduced digital registration, QR-enabled certificates, and decriminalised minor procedural lapses.
  - o Renamed **Registrar of Newspapers for India (RNI)** as **Press Registrar General of India (PRGI)**.
- **Press Sewa Portal**:
  - o Over **40,000 publishers** and **3,000 printing presses** onboarded within 6 months.
  - o Features: e-signature, AI chatbot grievance redressal, real-time status tracking.
- **Press Council of India (PCI) Reforms**:
  - o Revised *Norms of Journalistic Conduct* to counter fake news, hate speech, and unethical reporting.
  - o Issued guidelines for sensitive reporting (e.g., disasters, gender, LGBTQ+ issues).
  - o Expanded suo-motu jurisdiction to address systemic press freedom violations.

Additional Info

- **Press Council of India (PCI)**:
  - o The PCI is a **statutory** and **quasi-judicial** body.
  - o It was established in 1966 under the **Press Council Act of 1965**.
  - o Its primary mandate is to **preserve the freedom of the press** and to maintain and improve the standards of newspapers and news agencies in India.
  - o It functions as a "watchdog of the press".

- **Constitutional Provision:**
  - **Article 19(1)(a):** Freedom of speech and expression (includes press freedom, per *Indian Express v. Union of India*, 1985).
  - **Article 19(2):** Permits reasonable restrictions (e.g., sovereignty, public order, decency).
  - **First Press Commission (1956):** Recommended PCI to ensure ethical standards and autonomy.

Centre Launches 'Hamara Shauchalaya: Hamara Bhavishya' Campaign on World Toilet Day

What's the News?

- The **Department of Drinking Water & Sanitation (DDWS)**, under the Ministry of Jal Shakti, launched the **'Hamara Shauchalaya: Hamara Bhavishya'** (Our Toilet: Our Future) campaign on **World Toilet Day (November 19, 2025)**.
- The campaign runs until **Human Rights Day (December 10, 2025)** and aims to reinforce the sustainability of the **Open Defecation Free (ODF)** status achieved by India.
- It focuses on revitalizing rural sanitation infrastructure by ensuring the **functionality, repair, and aesthetic upliftment** of toilets in rural households and community complexes.

Campaign Objectives & Pillars

- **ODF Sustainability:** To prevent slip-back into open defecation by ensuring all existing toilets are functional and accessible.
- **Behavioral Change:** To instill a sense of ownership and pride in sanitation facilities, positioning toilets as symbols of **Dignity (Sammaan), Health (Sehat)**, and **Happiness (Khushiyan)**.
- **Key Activities:**
  - **Renovation Drives:** Identification and repair of dysfunctional **Individual Household Latrines (IHHLs)** and **Community Sanitary Complexes (CSCs)**.
  - **Community Engagement:** Involving **Gram Panchayats**, schools, and active community groups (like **NSS, NYKS**) to lead sanitation drives.
  - **Best Toilet Contests:** Competitions to identify and reward the best-maintained toilets to encourage aesthetic upkeep.

Swachh Bharat Mission – Grameen (SBM-G) Phase II:

- Implemented from **2020-21 to 2025-26** with a focus on **ODF Plus**.
- **ODF Plus Components:**
  - **ODF Sustainability** (maintaining toilet usage).
  - **Solid and Liquid Waste Management (SLWM)** (managing biodegradable waste, plastic, and greywater).
- **Village Categories:** Villages are classified into **Aspiring** (Basic SLWM), **Rising** (Partial SLWM), and **Model** (Full SLWM + Visual Cleanliness).

International Day for the Elimination of Violence Against Women 2025 & Launch of Nayi Chetna 4.0

What's the News?

- The **International Day for the Elimination of Violence against Women** was observed globally on **November 25, 2025**, marking the start of the "16 Days of Activism" against gender-based violence.
- Aligning with this observance, the **Government of India** launched **"Nayi Chetna 4.0"**, a national campaign to combat gender-based violence and promote women's empowerment.
- The global focus for 2025 highlights the urgent need to address **digital violence**, while India's domestic campaign emphasizes grassroots community action.

Global Theme & Significance

- **2025 Theme:** **"UNiTE! Invest to Prevent Violence against Women and Girls"** with a specific focus on **"Ending Digital Violence Against All Women and Girls"**.
- **Key Statistics:** UN data highlights that violence against women remains a pervasive human rights violation, with **one woman or girl killed every 10 minutes** by an intimate partner or family member globally.
- **16 Days of Activism:** The day initiates a global campaign that runs until **December 10** (Human Rights Day), mobilizing governments and civil society.

Nayi Chetna 4.0 Campaign (India)

- **Launch Details:** Launched by Union Minister of Rural Development **Shivraj Singh Chouhan** and Minister of Women and Child Development **Annapurna Devi** in New Delhi.
- **Objective:** To create a **"Jan Andolan"** (people's movement) against gender-based violence, focusing on **"Pahal Badlaav Ki"** (Initiative for Change).
- **Implementation:**
  - **Nodal Ministry: Ministry of Rural Development**, implemented via the **DAY-NRLM** (National Rural Livelihoods Mission) network of Self-Help Groups (SHGs).
  - **Duration:** The campaign will run from **November 25 to December 23, 2025** across all States and Union Territories.
  - **Collaborative Approach:** Involves convergence with **12 line ministries** (including Home, Health, and Panchayati Raj) to ensure a "whole-of-government" approach.

Constitution Day 2025: India Celebrates 'Hamara Samvidhan Hamara Swabhimaan' & 75 Years of Adoption

What's the News?

- India observed **Constitution Day (Samvidhan Diwas)** on **November 26**, marking the **76th anniversary** of the adoption of the Constitution of India.

- The celebrations coincided with the culmination of the year-long **75th-year commemoration** of the Constitution's adoption (1949–2024).
- The President of India, **Droupadi Murmu**, led the nation in reading the **Preamble** from the Central Hall of Samvidhan Sadan, emphasizing the core values of Justice, Liberty, Equality, and Fraternity.

'Hamara Samvidhan Hamara Swabhimaan' Campaign

- **Objective**: Launched to reignite national pride in the Constitution and deepen the understanding of its principles among citizens.
- **Key Activities**:
  - **Preamble Reading**: A nationwide drive encouraging citizens to read the Preamble online via the **MyGov** portal and receive a certificate.
  - **Digital Releases**: The Constitution was released in **9 languages** (including Sanskrit, Maithili, and Dogri) to enhance accessibility.
  - **Competitions**: Online quizzes, essay writing, and debates were organized to engage the youth in constitutional discourse.
- **Significance**: The campaign serves as a reminder that the Constitution is not just a legal document but the **"vehicle of life"** for the nation's democracy.
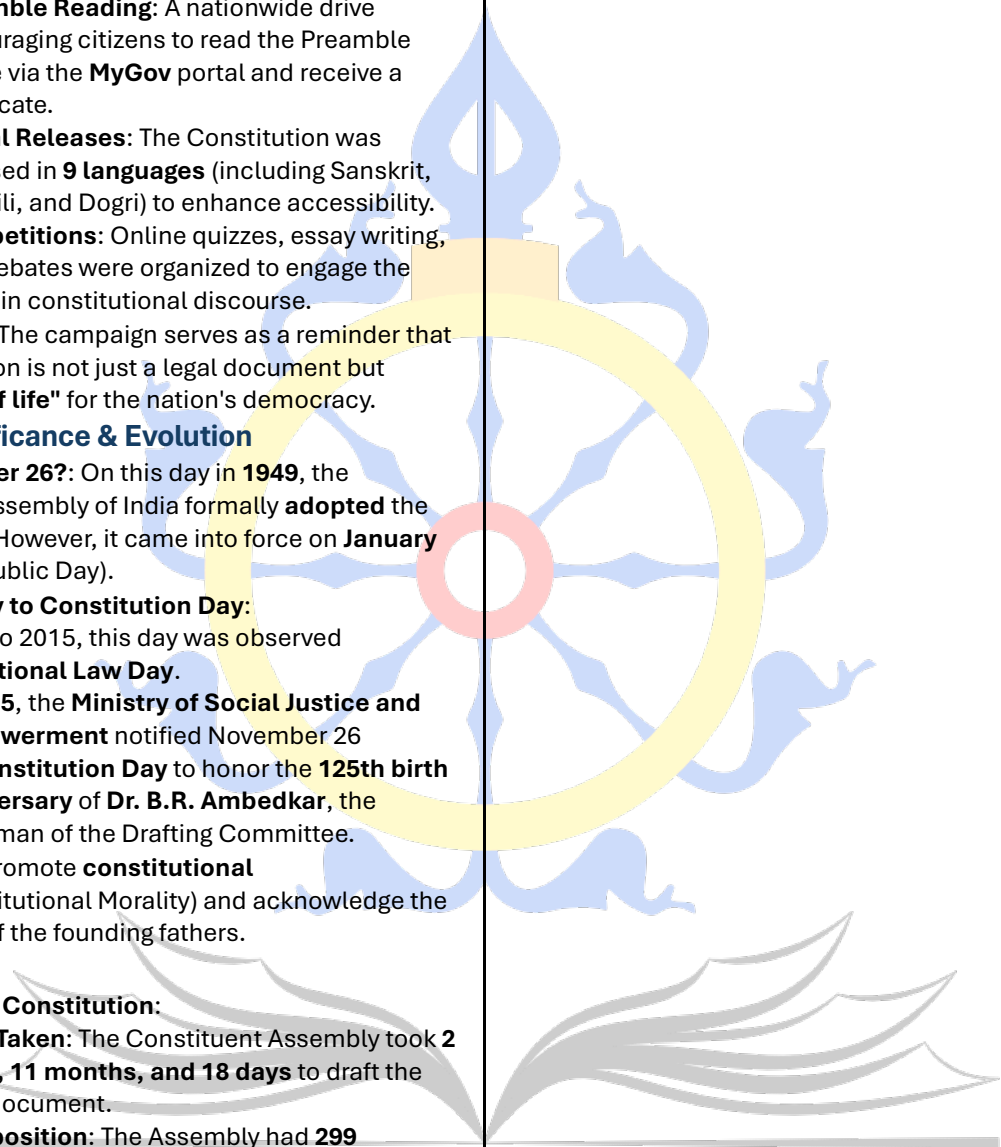
Historical Significance & Evolution

- **Why November 26?**: On this day in **1949**, the Constituent Assembly of India formally **adopted** the Constitution. However, it came into force on **January 26, 1950** (Republic Day).
- **From Law Day to Constitution Day**:
  - Prior to 2015, this day was observed as **National Law Day**.
  - In **2015**, the **Ministry of Social Justice and Empowerment** notified November 26 as **Constitution Day** to honor the **125th birth anniversary** of **Dr. B.R. Ambedkar**, the Chairman of the Drafting Committee.
- **Purpose**: To promote **constitutional values** (Constitutional Morality) and acknowledge the contribution of the founding fathers.

Additional Info

- **Making of the Constitution**:
  - **Time Taken**: The Constituent Assembly took **2 years, 11 months, and 18 days** to draft the final document.
  - **Composition**: The Assembly had **299 members** (after partition), and the **Drafting Committee** was chaired by Dr. B.R. Ambedkar.
  - **Original Text**: It was **handwritten** and **calligraphed** (not printed) in both English and Hindi.
- **Key Constitutional Concepts**:
  - **Preamble**: It declares India as a **Sovereign, Socialist, Secular, Democratic, Republic** (Socialist, Secular, and Integrity were added by the **42nd Amendment, 1976**).

- **Fundamental Duties (Article 51A)**: Often highlighted on this day, these were added in 1976 on the recommendation of the **Swaran Singh Committee** to remind citizens that rights come with responsibilities.
- **Article 394**: This specific article came into force on November 26, 1949, bringing 15 other articles (related to citizenship, elections, etc.) into immediate effect, while the rest came into force on January 26, 1950.

State Affairs

Blast in Car Near Delhi's Red Fort; Multi-Agency Probe Initiated

What's the News?

- A high-intensity explosion occurred in a car near the **Lal Qila (Red Fort) Metro Station** in Delhi.
- The blast resulted in at least **nine fatalities** and left over **20** people injured.
- The explosion, which originated from a **Hyundai i20** car at a traffic signal, ignited a major fire that destroyed several nearby vehicles, including other cars, e-rickshaws, and an auto-rickshaw.
- First responders, including the **Delhi Fire Services**, rushed to the scene, and the injured were transported to the **Lok Nayak Jai Prakash Narayan (LNJP) Hospital**.

Investigation & Response

- **Multi-Agency Probe:**
  - The **Delhi Police** have registered a First Information Report (FIR) at the Kotwali police station.
  - The case invokes sections of the **Unlawful Activities (Prevention) Act (UAPA)**, the **Explosives Act**, and the **Bharatiya Nyaya Sanhita (BNS)**.
  - High-level central agencies, including the **National Investigation Agency (NIA)** and the **National Security Guard (NSG)**, have joined the Delhi Police Special Cell and forensic teams at the site.
- **Vehicle & Leads:**
  - The car involved had a **Haryana** registration plate and had reportedly changed ownership multiple times.
  - The original registered owner of the vehicle was detained in Gurugram for questioning.
  - Investigators are analyzing **CCTV** footage from the area to trace the car's route and movements.

Security & Related Developments

- **High Alert Issued:**
  - A **high alert** was declared across the National Capital Region following the explosion.
  - Security was intensified at sensitive locations, including the **Delhi Metro**, **IGI Airport**, and government buildings secured by the **CISF**.
  - Neighboring states, including **Uttar Pradesh** and **Haryana**, were also placed on high alert.
- **Faridabad Terror Module Bust:**
  - The blast occurred hours after a major inter-state terror module linked to **Jaish-e-Mohammed (JeM)** was dismantled in **Faridabad**, Haryana.
  - A joint operation by **J&K Police** and **Haryana Police** led to arrests, including those of radicalized professionals.
  - A significant cache of explosives was recovered, including approximately **2,900**

kg of **IED-making material** and **360 kg** of suspected **ammonium nitrate**.
  - While officials have not confirmed a direct link, security agencies are probing potential connections given the timing and proximity of the two incidents.

Additional Info

- **Unlawful Activities (Prevention) Act, 1967 (UAPA):**
  - This is India's primary anti-terrorism legislation.
  - It grants the central government powers to designate organizations or individuals as "terrorist" if they are found to be involved in terrorist activities.
  - The Act includes stringent provisions regarding bail and allows for an extended period of detention (up to 180 days) for investigation before filing a charge sheet.
- **National Investigation Agency (NIA):**
  - The **NIA** is India's central counter-terrorism task force.
  - It was established by the **NIA Act, 2008**, following the 26/11 Mumbai terror attacks.
  - The agency has concurrent jurisdiction, enabling it to take over terror-related cases from state police forces across India without requiring special permission from the states.

Punjab Becomes First State to Implement Amended Bharat Net Scheme Statewide

What's the News?

- **Punjab** has become the **first state in India** to implement the **amended Bharat Net scheme** across all its villages.
- Announced by the **Union Minister of State for Communications**, the initiative will provide high-speed broadband internet connectivity to all **12,000 villages** in the state.
- The project aims to bridge the rural-urban digital divide and ensure digital access for all citizens.

Key Features of Amended BharatNet Programme (ABP)

- **Approved by Union Cabinet on August 4, 2023**, with an outlay of ₹**1,39,579 crore** (including ₹42,847 crore CAPEX and ₹48,717 crore for 10-year O&M).
- **Target**: High-speed optical fibre connectivity to **2.64 lakh Gram Panchayats (GPs)** using **ring topology** for redundancy and reliability.
- **Technology Stack**:
  - **OFC ring topology** (block-to-GP).
  - **IP-MPLS backbone network** for scalable traffic management.
  - **Centralised Network Operations Centre (CNOC)** for real-time monitoring.
  - **Last-mile connectivity** via Fibre-to-the-Home (FTTH), wireless, or satellite as needed.

- **FTTH Expansion**: **1.5 crore household connections** targeted through BSNL in next five years.
- **Universal Service**: Supports access for mobile operators, ISPs, cable providers, and content platforms to launch digital services in rural India.

Punjab's Implementation Milestones
- **43 "shadow areas"** (remote/border villages) already covered
- Digital backbone now supports **e-governance**, **e-health**, and real-time border surveillance
- Recognised nationally: Punjab's Chief Secretary awarded for "exemplary implementation" by BSNL
- Serves as a **replicable model** for other states aiming for last-mile rural connectivity

Notes:
- Original BharatNet launched in **2015** (renamed from NOFN).
- Phase I: Connected ~1 lakh GPs using existing fibre.
- ABP subsumes and expands Phase II with updated tech, financing, and scalability.

NDA Secures Majority in Bihar Assembly Elections; BJP Emerges as Single Largest Party

What's the News?
- The results for the **Bihar Assembly Elections** have been declared.
- The **National Democratic Alliance (NDA)** has secured a decisive majority, winning over 200 seats in the assembly.
- The **Bharatiya Janata Party (BJP)** has emerged as the single largest party in the state.

Seat Breakdown & Political Shifts
- **NDA Total: 202 seats**
  - BJP: **91**
  - JD(U): **83**
  - LJP(RV): **21**
  - HAM(S): **5**
  - RLM: **2** , ,
- **Mahagathbandhan (MGB): ~41 seats**
  - RJD: **35**
  - Congress: **6**
  - Smaller left parties (CPI, CPI-ML, etc.): **≤5**
- **Others**:
  - AIMIM: **6**
  - Jan Suraaj Party (JSP): **0** (blank debut) ,

Key Electoral Trends & Drivers
- **Strike Rates**: BJP recorded an **89% strike rate**, far exceeding expectations and surpassing its 2020 performance.
- **Social Welfare + Modi Wave**: The "**Nimo wave**" (Nitish + Modi) combined JD(U)'s welfare outreach (e.g., *Mukhyamantri Kanya Utthan Yojana*) with PM Modi's aggressive campaigning centred on governance and anti-corruption messaging.
- **Women Voter Turnout**: Record female participation reportedly bolstered NDA's rural and semi-urban gains.

- **Strategic Gains in Seemanchal**: BJP made inroads in Muslim-dominated border districts by foregrounding national security and anti-infiltration narratives.
- **MGB's Collapse**: RJD's over-reliance on Yadav-centric candidature and unrealistic poll promises (e.g., ₹2,500/month to all women) failed to resonate.

Constitutional & Governance Implications
- **Fifth Term for Nitish Kumar**: Set to take oath as Chief Minister again, reinforcing Bihar's trend of stable coalition governance under the NDA, despite leadership tussles over "big brother" status.
- **Alliance Cohesion Test**: With BJP now clearly ahead of JD(U), internal negotiations on portfolios - including possible Deputy CM demand by LJP(RV) - will shape the next government's functioning.
- **Model for Future State Polls**: The win is being interpreted as a validation of the BJP's "welfare populism + identity consolidation" model ahead of UP, MP, and Rajasthan polls in 2026–27.

Odisha's Sunapur and Puri Beaches Reaffirm 'Blue Flag' Status

What's the News?
- Two beaches in **Odisha** have successfully retained their prestigious **'Blue Flag' certification**.
- The beaches are **Sunapur Beach** in Ganjam district and **Puri Beach in** Puri district.
- This international eco-label recognizes their high standards in cleanliness, safety, and sustainable environmental management.

About the 'Blue Flag' Certification
- The **'Blue Flag' is** a renowned voluntary eco-label awarded to beaches, marinas, and sustainable boating tourism operators.
- It is granted by the **Foundation for Environmental Education (FEE)**, a non-profit organization headquartered in Copenhagen, **Denmark**.
- To receive the certification, a beach must meet **33 stringent criteria** under four main categories:
  - **Water quality** (e.g., microbiological parameters, bathing water compliance)
  - **Environmental management** (waste, biodiversity, energy use)
  - **Safety & services** (lifeguards, first aid, accessibility)
  - **Environmental education & community engagement**

Odisha's Beach Profiles

Beach	District	Certification Streak	Key Features
Sunapur	Ganjam	**3rd year**	800-metre certified stretch; river–bay confluence (Bahuda River & Bay of Bengal);

Beach	District	Certification Streak	Key Features
			community-led clean-ups; wheelchair access; zero liquid discharge system
Puri Golden Beach	Puri	**7th year**	India's most iconic pilgrimage-tourism beach; smart waste bins; trained lifeguards & paramedics; CCTV surveillance; dedicated eco-education kiosks

India's Performance (2025–26)

- **13 beaches** recognised, **12 fully certified**.
- **States represented**: Odisha (2), Tamil Nadu (2), Andhra Pradesh, Maharashtra, Gujarat, Karnataka, Kerala, Goa, West Bengal, Andaman & Nicobar.
- India now ranks among **top 15 countries globally** with highest number of certified beaches.

Centre Clarifies on Constitution (131st Amendment) Bill Amidst Punjab's Opposition

What's the News?

- A political controversy erupted over the proposed **Constitution (131st Amendment) Bill, 2025**, which sought to bring the Union Territory (UT) of **Chandigarh** under the ambit of **Article 240** of the Constitution.
- Following strong opposition from **Punjab**—which sees the move as diluting its claim over its capital— the **Ministry of Home Affairs (MHA)** clarified that there is **"no intention"** to introduce the Bill in the upcoming Winter Session.
- The MHA stated the proposal was merely "under consideration" to **simplify the law-making process** for the UT and not to alter its administrative structure or relationship with Punjab.

Proposed Changes & Objectives

- **Expanding Article 240**: The Bill aimed to add Chandigarh to the list of UTs under **Article 240**, which empowers the **President** to make regulations for their "peace, progress, and good governance".

- **Simplifying Governance**: Currently, changes to laws in Chandigarh often require Parliamentary approval. Inclusion under Article 240 would allow the Centre to amend or repeal laws (including the **Punjab Reorganisation Act, 1966**) directly through Presidential regulation, bypassing Parliament.
- **Alignment with Other UTs**: The move would align Chandigarh with other UTs without legislatures, such as **Andaman & Nicobar Islands**, **Lakshadweep**, and **Dadra & Nagar Haveli and Daman & Diu**.

Why is it Controversial?

- **Punjab's Opposition**: Political parties in Punjab (AAP, Congress, SAD) termed the move a "direct assault" on the state's rights and federalism, fearing it would detach Chandigarh from Punjab.
- **Fear of Independent Administrator**: Since **1984**, the **Governor of Punjab** has concurrently served as the **Administrator of Chandigarh** to facilitate coordination. Leaders fear this amendment could pave the way for a separate **Lieutenant Governor (LG)**, permanently severing the administrative link with Punjab.
- **Centralization Concerns**: Critics argue it would grant the Centre sweeping powers to unilaterally alter the city's governance and property laws without legislative oversight.

Legal & Constitutional Context

- **Article 240**:
  - Grants the **President** power to frame regulations for specific UTs.
  - These regulations have the **same force and effect as an Act of Parliament**.
  - Currently applies to: Andaman & Nicobar Islands, Lakshadweep, Dadra & Nagar Haveli and Daman & Diu, and **Puducherry** (only when its assembly is suspended/dissolved).
- **Chandigarh's Unique Status**:
  - Created in **1966** as a UT and joint capital of Punjab and Haryana.
  - Unlike Delhi or Puducherry, it has **no legislative assembly**.
  - It is administered by the President through an Administrator (currently the Punjab Governor) under **Article 239**.

Additional Info

- **Historical Context**:
  - **1966**: Punjab Reorganisation Act created Haryana and made Chandigarh a UT.
  - **1984**: The post of Chief Commissioner was replaced, and the Punjab Governor was made Administrator to manage security during the militancy period.
  - **2016 Attempt**: The Centre previously tried to appoint a separate Administrator (K.J. Alphons) but withdrew after protests from the Punjab government.
- **Legislative Process**: For a Constitutional Amendment to pass, it requires a **special majority** in Parliament (2/3rds present and voting + >50% of total strength).

SC Panel Recommends Phased Creation of Goa Tiger Reserve

What's the News?

- A **Supreme Court-appointed committee** has recommended the creation of a **Tiger Reserve in Goa**, specifically suggesting a **"phased approach"** to the notification process.
- The committee proposed that areas with **low or no human habitation** should be notified first to minimize conflict, while other areas can be included gradually.
- The Goa government, represented by Forest Minister **Vishwajit Rane**, stated that it will file its submissions before the Supreme Court regarding this recommendation, highlighting local concerns.

Key Recommendations & Phased Approach

- **Phase 1 (Immediate)**: Notification of areas with **low human presence** and **high ecological value**:
    - **Core Areas**:
        - Netravali Wildlife Sanctuary
        - Cotigao Wildlife Sanctuary
    - **Buffer Areas**:
        - Bhagwan Mahavir National Park
        - Northern portion of Bhagwan Mahavir Wildlife Sanctuary
- **Phase 2 (Deferred)**: Potential inclusion of **Mhadei Wildlife Sanctuary**, pending further assessment of socio-ecological impact.

Ecological Rationale

- **Connectivity with Kali Tiger Reserve (Karnataka)**:
    - Goa's forests form a **critical corridor** to the Kali TR, home to a **breeding tiger population**.
    - Enables **natural dispersal, genetic exchange**, and long-term **recovery of tiger numbers** in Goa.
- **Western Ghats Significance**:
    - Region identified as a **UNESCO World Heritage Site** and **global biodiversity hotspot**.
    - Already hosts documented (though low-density) tiger presence, supported by camera-trap and pugmark evidence.

Governance & Conservation Strategy

- **Minimizing Human Conflict**:
    - Phase 1 areas selected for having **very few households**, reducing displacement and livelihood disruption.
    - Aligns with **NTCA Guidelines (2023)** emphasizing *"people-centric tiger conservation"*.
- **Legal Backing**:
    - Notification to be made under **Section 38V of the Wildlife (Protection) Act, 1972**, enabling creation of Tiger Reserves.
    - CEC's role as a **fact-finding & advisory body** under Supreme Court supervision ensures technical legitimacy.

Additional Info

- **Institutional Context**:
    - **National Tiger Conservation Authority (NTCA)**: Statutory body under MoEFCC for tiger reserve management.

- **Project Tiger (1973)**: 54 tiger reserves as of 2025; Goa would become the **55th**, and first in the state.
- **Tiger Population Trends (India)**:
    - 3,682 tigers (2022 census) → projected to cross **4,000 by 2026** under *'Tx2'* (double tiger numbers by 2022, achieved ahead of schedule).
    - Goa's inclusion vital for achieving **landscape-level connectivity** in the Central-Western Ghats corridor.
- **State-Level Developments**:
    - Goa CM Pramod Sawant announced preparations to submit compliance report to the Supreme Court.
    - State has previously opposed notification citing impacts on **Mhadei water dispute** and **local tribal communities** — hence CEC's phased, evidence-based approach.

World Bank Approves $776 Million for Education and Agriculture Projects in Punjab & Maharashtra

What's the News?

- The **World Bank** has approved a combined funding of **$776 million** (approx. ₹6,500 crore) for two major projects in **Punjab** and **Maharashtra**.
- The initiative targets **human capital development** through education reforms in Punjab and **climate-resilient agriculture** in Maharashtra.
- The projects—**POISE** and **POCRA Phase II**—are expected to benefit over **6 million people** combined, aligning with India's vision of **Viksit Bharat** by leveraging digital infrastructure.

Punjab: POISE Project

- **Full Name**: Punjab Outcomes-Acceleration in School Education Operation (POISE).
- **Funding**: $286 million.
- **Objective**: To improve the quality of education by deploying **digital technologies** for tracking learning outcomes and managing school systems.
- **Key Beneficiaries**:
    - **1.3 million** students in primary schools.
    - **2.2 million** students in secondary schools.
    - **~5.9 lakh** children in early childhood education.
- **Focus Areas**:
    - Enhancing **school readiness** at the pre-primary level.
    - Strengthening **foundational learning** and **teacher training**.
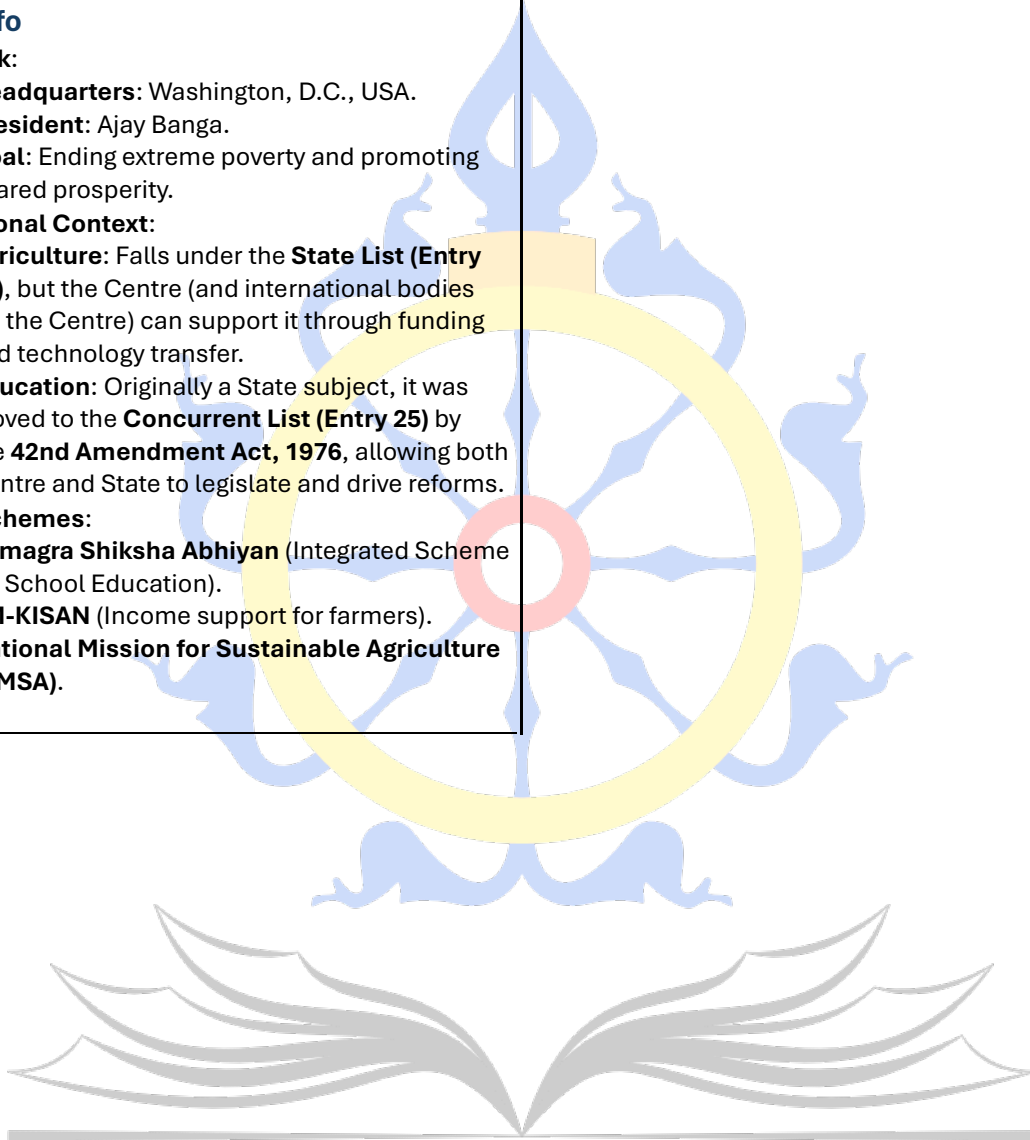   - Reducing dropout rates and improving the transition from school to higher education or work.

Maharashtra: POCRA Phase II

- **Full Name**: Maharashtra Project on Climate Resilient Agriculture (POCRA) Phase II.
- **Funding**: $490 million.

- **Objective**: To boost **crop productivity** and **climate resilience** for smallholders by promoting **precision farming** and efficient water use.
- **Key Targets**:
  - Benefit **2 million+ small and marginal farmers** (including ~3 lakh women).
  - Aim to raise farmer incomes by **30%**.
  - Cover **21 districts** in Maharashtra.
- **Strategic Interventions**:
  - Adoption of **climate-smart technologies** (e.g., drip irrigation, soil health management).
  - Promotion of **agri-tech startups** and **Village Community Groups** to guide local investments.

Additional Info
- **World Bank**:
  - **Headquarters**: Washington, D.C., USA.
  - **President**: Ajay Banga.
  - **Goal**: Ending extreme poverty and promoting shared prosperity.
- **Constitutional Context**:
  - **Agriculture**: Falls under the **State List (Entry 14)**, but the Centre (and international bodies via the Centre) can support it through funding and technology transfer.
  - **Education**: Originally a State subject, it was moved to the **Concurrent List (Entry 25)** by the **42nd Amendment Act, 1976**, allowing both Centre and State to legislate and drive reforms.
- **Related Schemes**:
  - **Samagra Shiksha Abhiyan** (Integrated Scheme for School Education).
  - **PM-KISAN** (Income support for farmers).
  - **National Mission for Sustainable Agriculture (NMSA)**.

Defence

India's Indigenous Tactical EV: VEER by Pravaig Dynamics

What's the News?

- Bengaluru-based startup Pravaig Dynamics has unveiled the near-production-ready all-terrain electric vehicle "VEER" developed for defence applications.
- The vehicle is designed for stealth operations, rugged terrain, and rapid deployment; it has already completed military trials and secured recognition under the iDEX (Innovations for Defence Excellence) scheme by the Defence Innovation Organisation.
- This signals a push for greater indigenous capability in India's defence technology domain.

Vehicle Features & Capabilities

Key Specifications

- Dual-electric motors deliver approximately **620 Nm of torque**.
- Top speed: ~120 km/h.
- Designed for all-terrain use: deserts, mountains, forests. Low noise and heat signature for stealth.
- Equipped with advanced systems including:
  - **Thermal imaging** and **night vision**
  - **360° cameras** and **77 GHz radar**
  - **Digital telemetry** for real-time battlefield data
  - Capability to operate **over 80 km on flat tires**.
- Features a **90.9 kWh battery pack** with a **500+ km range**, supporting extended deployment without refuelling.

Operational Utility

- Mission Roles: Reconnaissance, forward patrol, special operations in contested terrain.
- Advantages:
  - Electric propulsion reduces fuel/logistics load.
  - Indigenous design supports greater control over data and supply chains (sovereignty).
  - Potential for mass production and export if scaled.

India Launches Major Tri-Services Exercise Exercise Trishul 2025

What's the News?

- The Indian Armed Forces have initiated Exercise Trishul 2025, a large-scale joint operation involving the Indian Army, Indian Navy, and Indian Air Force (IAF) to bolster tri-service operational readiness.

Participating Formations:

- **Indian Army**: Southern Command
- **Indian Navy**: Western Naval Command
- **Indian Air Force**: South Western Air Command
- **Inter-Agency Coordination**: The **Indian Coast Guard**, **Border Security Force (BSF)**, and other central agencies are also participating, reinforcing integrated operations.

Operational Details

- **Timeline & Area of Operations**
  - Scheduled from about 30 October to 10 November 2025.
  - Primary theatres: Desert sector of Rajasthan and the Sir Creek / Rann of Kutch marsh-coast zone in Gujarat, extending into the northern Arabian Sea.
- **Scale & Forces Involved**
  - Multiple assets from land, air and naval services. Large formations of troops, ships, aircraft and amphibious units.
- **Key Focus Areas**
  - Amphibious landings, over-the-horizon strikes, creek/desert operations.
  - Electronic warfare, anti-drone operations, multi-domain command and control.

L&T and General Atomics Partner to Build MALE Drones in India

What's the News?

- Indian engineering major **Larsen & Toubro (L&T)** has formed a strategic partnership with US-based **General Atomics Aeronautical Systems, Inc. (GA-ASI)**.
- The collaboration is focused on manufacturing **Medium Altitude Long Endurance (MALE) Remotely Piloted Aircraft Systems (RPAS)** in India.
- These advanced unmanned aircraft will be produced for the **Indian armed forces**, including the **Indian Army**.

The Strategic Partnership

- Under this agreement, **L&T** will act as the **prime bidder** for the Ministry of Defence's upcoming program to procure **87 MALE RPAS**.
- **GA-ASI**, a world leader in unmanned systems, will serve as the **technology partner**, providing critical technology transfers.
- The partnership will involve the production of **GA-ASI's combat-proven MQ-series RPAS**. These are widely used globally and have millions of flight hours.

Significance for 'Make in India'

- This collaboration is a significant step for India's **'Atmanirbhar Bharat' (Self-Reliant India)** and **'Make in India'** initiatives in defence.
- The RPAS platforms will be **manufactured entirely in India**, fulfilling indigenous content requirements.
- The partnership aims to build a self-reliant defence ecosystem, strengthen **Indo-US defence collaboration**, and foster a competitive aerospace manufacturing base in India.

Additional Info

- **Background on MALE RPAS**:
  - MALE RPAS are designed for medium-altitude, long-endurance missions, providing sustained surveillance and strike capabilities.

- They are widely used by military forces around the world for various operations, including border security, counter-terrorism, and disaster management.
- **Previous Agreements**:
  - India and the US signed a $3.5 billion deal for the procurement of 31 MQ-9B armed High Altitude Long Endurance (HALE) RPAs in October 2024.
  - Deliveries of these HALE RPAs are expected to start from January 2029 and complete by October 2030.

Exercise Malabar 2025 Commences in Guam
What's the News?
- The 29th edition of the multilateral naval exercise, **Exercise Malabar 2025**, has commenced off the coast of **Guam**, a US territory in the Western Pacific.
- The exercise involves the navies of the four **Quadrilateral Security Dialogue (Quad)** nations: the **Indian Navy (IN)**, **US Navy (USN)**, **Japan Maritime Self-Defense Force (JMSDF)**, and **Royal Australian Navy (RAN)**.
- This edition is hosted by the **US Navy**.
- India's participation is led by the indigenously designed and built guided-missile stealth frigate, **INS Sahyadri**.
Key Phases & Objectives
- The exercise is conducted in two phases to enhance professional and operational synergy:
  - **Harbour Phase:** Held at Guam, this includes operational planning, subject matter expert exchanges (SMEEs), communication protocol alignment, and familiarisation visits.
  - **Sea Phase:** Involves complex and high-intensity naval operations at sea, including **anti-submarine warfare (ASW)**, **anti-aircraft warfare (AAW)**, surface gunnery drills, and joint fleet operations.
- **Primary Goal:** The exercise aims to enhance **interoperability** and mutual understanding among the four navies, strengthening their coordination and capability for joint maritime operations.
Additional Info
- **Evolution of Malabar:**
  - **1992:** Initiated as a bilateral exercise between the **Indian Navy** and the **US Navy**.
  - **2015:** **Japan** became a permanent member.
  - **2020:** The **Royal Australian Navy** participated, bringing all four **Quad** members into the exercise.
- **Quadrilateral Security Dialogue (Quad):**
  - An informal strategic forum comprising **India, the United States, Japan, and Australia**.
  - It is a diplomatic grouping focused on shared interests in the Indo-Pacific, including maritime security, climate change, and critical technologies.
- **INS Sahyadri:**

- A **Shivalik-class** (Project-17) multi-role guided-missile stealth frigate.
- It is one of the key frontline warships of the Indian Navy, built in India.

India-Sri Lanka Joint Military Exercise 'Mitra Shakti-XI' Begins
What's the News?
- The **11th edition** of the joint military exercise, **'Mitra Shakti-XI 2025'**, has commenced between the **Indian Army** and the **Sri Lankan Army**.
- The exercise is being conducted in **Belagavi (Belgaum)**, Karnataka.
Exercise Objectives and Scope
- **Primary Aim**: The exercise focuses on enhancing **jointness** and **interoperability** between the two forces, particularly in **counter-insurgency** and **counter-terrorism (CI-CT)** operations.
- **UN Mandate Focus**: Operations are practiced under **Chapter VII** of the **United Nations (UN) Charter**, which deals with action regarding threats to peace and acts of aggression.
- **Tactical Drills**: The exercise includes joint tactical operations such as raids, search and destroy missions, and heliborne operations.
Participant Details
- **Indian Contingent**: The Indian Army is represented by a battalion from the **Maratha Light Infantry Regiment**.
- **Sri Lankan Contingent**: The Sri Lankan contingent is represented by personnel from its **53 Infantry Division**.
Additional Info
- **Exercise Mitra Shakti** is an **annual** training program.
- It serves as a key platform for strengthening bilateral defence cooperation and positive relations between the armies of India and Sri Lanka.

MoD Inks ₹2,095 Crore Deal with BDL for INVAR Anti-Tank Missiles
What's the News?
- The **Ministry of Defence (MoD)** has signed a significant contract worth **₹2,095.70 crore** with **Bharat Dynamics Limited (BDL)**.
- The contract is for the procurement of **INVAR Anti-Tank Guided Missiles (ATGMs)**.
- These missiles are acquired to enhance the firepower and lethality of the **T-90 'Bhishma' tank**, the mainstay of the Indian Army's Armoured Regiments.
- The procurement is classified under the **Buy (Indian)** category, reinforcing the government's **'Aatmanirbhar Bharat'** (self-reliant India) initiative in defence.
Key Features of INVAR Missile System
- **Type & Guidance**: Laser beam–riding, **precision-guided ATGM**, produced under licence in India with technical collaboration from **Rosoboronexport (Russia)**

- **Launch Platform**: Fired through the **125 mm smoothbore gun** of T-90 tanks (compatible with 3UBK20 ammunition round)
- **Warhead & Penetration**:
  - **Tandem high-explosive anti-tank (HEAT) warhead**
  - Designed to defeat **explosive reactive armour (ERA)** and modern tank composites
- **Performance Metrics**:
  - **Effective range**: Up to **5 km**
  - **Flight time**: ~**17.6 seconds** at max range
  - **Hit probability**: Very high (described as "high hit and kill probability")
  - **Target capability**: Engages both **stationary and moving targets** (up to **70 kmph**)
- **Physical Specs**:
  - Missile length: **695 mm**; launch cartridge: **395 mm**
  - Weight: **17.2 kg**

Additional Info
- **T-90 Bhishma Specifications**:
  - 125 mm smoothbore gun with auto-loader
  - Advanced fire-control system (FCS), hunter-killer capability
  - Kontakt-5 ERA & Kanchan composite armour for survivability
- **Doctrine Alignment**:
  - Supports **Cold Start Doctrine** and rapid offensive operations by enabling deep, precise strikes
  - Strengthens deterrence on western and northern borders
- **Procurement Context**:
  - Part of MoD's **capital acquisition plan** FY2025–26 prioritising *critical operational deficiencies*
  - Follows fast-track procurement route to meet urgent battlefield requirements

DRDO Develops Indigenous Man-Portable Autonomous Underwater Vehicles
What's the News?
- The **Defence Research and Development Organisation (DRDO)** has successfully developed a new generation of **Man-Portable Autonomous Underwater Vehicles (MP-AUVs)**.
- These indigenous vehicles are designed for **Mine Countermeasure (MCM)** missions, enhancing the **Indian Navy's** underwater surveillance and warfare capabilities.

MP-AUV System: Design & Capabilities
- **Core Payloads**: **Side Scan Sonar** and **high-resolution underwater cameras** for real-time detection and imaging of mine-like objects.
- **AI Integration**: Onboard **deep learning-based target recognition algorithms** enable autonomous classification of threats, significantly reducing operator workload and mission time.

- **Networked Operations**: Integrated **underwater acoustic communication system** allows inter-AUV data exchange, enabling coordinated swarm operations and enhanced situational awareness.
- **Deployment Advantage**: Truly **man-portable**, facilitating rapid deployment from small vessels or shore without heavy infrastructure ,.

Additional Info
- **DRDO's Naval R&D Ecosystem**:
  - NSTL is DRDO's nodal lab for underwater weapon systems (e.g., torpedoes, mines, decoys, sonars).
  - Part of broader **Atmanirbhar Bharat** drive in defence, aiming for 70% domestic procurement by 2027.
- **Broader Naval Modernisation Context**:
  - Complements other MCM initiatives like the **Acquisition of 8 Anti-Submarine Warfare Shallow Water Craft (ASW-SWC)** and upgrades to **Mine Countermeasure Vessels (MCMVs)** under the Indian Navy's 15-year Long-Term Integrated Perspective Plan (LTIPP).
  - Aligns with focus on **unmanned & AI-augmented naval platforms**, alongside projects like **Autonomous Trawl Systems (ATS)** and **USVs for coastal surveillance**.

Indian Armed Forces to Deploy Indigenous Anti-Drone Systems with Laser Weapons
What's the News?
- The **Indian Army** and **Indian Air Force (IAF)** are strengthening their air defence capabilities by inducting 16 new indigenous **anti-drone systems**.
- These systems, identified as the **Integrated Drone Detection and Interdiction System (IDD&IS) Mark 2**, are designed for counter-drone warfare.
- A key feature of the new system is a powerful **laser-based "hard kill" weapon** with an effective strike range of over **2 kilometers**.

Key Capabilities
- The IDD&IS provides a comprehensive solution, able to **detect, track, identify, designate,** and **neutralise** hostile drones.
- It employs two primary methods for interdiction:
  - **Soft Kill**: Uses **jamming technology** to disrupt the drone's communication, video, and navigation links.
  - **Hard Kill**: Employs a **ground-based laser** to physically destroy the drone's structure or electronics.
- This new batch of systems represents an upgrade over the first-generation (Mark 1) systems, which had a laser range of 1 kilometer.

Mark-1 vs Mark-2 Comparison:

Feature	Mark-1	Mark-2
Laser Power	~3–5 kW	**10 kW**
Neutralisation Range	~1 km	**2 km**

Feature	Mark-1	Mark-2
Detection Integration	Limited sensor fusion	AI-enabled **multi-sensor fusion (Radar + RF + EO/IR)**
Deployment	Semi-static	**Mobile & rapid-response**

Indigenous Development

- The counter-drone systems are developed indigenously by the **Defence Research and Development Organisation (DRDO)**.
- The first-generation IDD&IS was co-developed by **DRDO** and **Bharat Electronics Limited (BEL)** and is already in service with the armed forces.
- The **DRDO** is also developing next-generation weapons to counter swarm drone attacks, including **High-Power Electromagnetics (HPEM)** and **High-Power Microwaves (HPM)** systems.

Indian Army Raises 'Rudra Brigade' to Integrate Future Warfare Technologies

What's the News?

- The **Indian Army** has established a specialized formation named the **Rudra Brigade**, designed as a dedicated **testbed** for integrating niche technologies into conventional military operations.
- This formation aims to validate the use of **futuristic weaponry** and **tactical concepts** before they are rolled out to the wider Army.
- The initiative serves as a major step in the Army's ongoing modernization drive, focusing on **technology absorption** and enhancing **combat effectiveness** through modern warfare tools.

Integrated All-Arms Structure

- **Composition**:
  - Infantry & mechanised infantry.
  - Armoured (tanks) & artillery (including self-propelled guns).
  - Engineers, Signals, Air Defence.
  - Special forces & **unmanned aerial systems (UAS)**.
- **Command**: Unified command structure enabling rapid decision cycles and deployment.
- **Deployment**:
  - At least **two brigades** already converted and deployed in border areas.
  - Additional formations planned for **northern (LAC)** and **western (LoC/Pakistan)** fronts.

Operational Role & Doctrine

- Designed for **both offensive and defensive roles**, with variants tailored to terrain:
  - *Plains*: Emphasise mechanised infantry, armour, and high-speed offensive capability.
  - *High-altitude/mountainous*: Optimised for mobility and firepower in rugged terrain.
- Supports **Cold Strike Doctrine** - a refinement of Cold Start - aiming to compress deployment timelines and execute rapid, limited offensives.

- Works in synergy with **Bhairav Battalions** (25+ planned), which act as light, elite commando units for raids, cross-border strikes, and shock-action support.

Doctrinal Evolution: Beyond IBGs

- Rudra Brigades build upon the earlier **Integrated Battle Group (IBG)** concept but are more **specialised, modular, and technology-integrated**.
  - Unlike generic IBGs, Rudra formations feature dedicated UAS, enhanced ISR, and embedded cyber/electronic warfare enablers.
  - Classified into *offensive* and *defensive* variants (e.g., "Defensive IBGs (Rudra)" prioritise infantry-heavy posture for holding terrain).

Coastal Security Exercise 'Sagar Kavach' Conducted to Strengthen Maritime Defences

What's the News?

- The **Indian Coast Guard (ICG)** successfully conducted the **'Sagar Kavach'** coastal security exercise to assess and validate the preparedness of the coastal security mechanism.
- The comprehensive drill was carried out along the coastlines of **Kerala, Mahe**, and **Tamil Nadu**, involving the active participation of the **Indian Navy**, **Coastal Police**, **Customs**, **Intelligence Bureau**, and the **Fisheries Department**.
- This exercise is part of a periodic initiative to ensure seamless coordination among central and state agencies in preventing **seaborne threats** and infiltration.

Operational Structure & Key Highlights

Red Force vs. Blue Force Simulation

- The exercise operated on a **simulated attack scenario** dividing participants into two groups:
  - **Red Force**: Acted as **infiltrators/terrorists** attempting to breach coastal security and enter via sea routes.
  - **Blue Force**: Comprised of security agencies tasked with **detecting, intercepting, and neutralizing** the threat.
- This dual-force structure tests the **reaction time**, **surveillance capabilities**, and **inter-agency communication** in real-time.

Strategic Objectives

- **Validation of SOPs**: To revalidate the **Standard Operating Procedures (SOPs)** established for coastal security and plug any operational gaps.
- **Surveillance**: Intensified patrolling and checking of **fishing vessels**, **fish landing centres**, **harbours**, and vulnerable coastal stretches.
- **Community Engagement**: The exercise actively engaged the **fishermen community**, designating them as the **"eyes and ears"** of the security architecture to report suspicious activities.

Additional Info

- **Indian Coast Guard (ICG)**:
  - Established under the **Coast Guard Act, 1978**.
  - Operates under the **Ministry of Defence**.

- o Headed by a **Director General** (DG ICG).
- o Mandate includes protecting **artificial islands**, **offshore terminals**, and assisting fishermen in distress.
- **Coastal Security Architecture (Post-26/11)**:
  - o Following the **2008 Mumbai terror attacks**, a **multi-tiered security grid** was established.
  - o **Tier 1**: **Marine Police** (patrols up to 12 nautical miles).
  - o **Tier 2**: **Indian Coast Guard** (patrols from 12 to 200 nautical miles - Exclusive Economic Zone).
  - o **Tier 3**: **Indian Navy** (patrols beyond 200 nautical miles and commands the overall maritime security).
- **Related Initiatives**:
  - o **Coastal Security Scheme (CSS)**: Central assistance to states for setting up coastal police stations.
  - o **SAGAR (Security and Growth for All in the Region)**: India's strategic vision for the Indian Ocean Region.

Defence Atmanirbharta: Record Production and Exports

What's the News?
- The **Ministry of Defence** has announced that India recorded its **highest-ever defence production** of **₹1.54 lakh crore** in the Fiscal Year 2024-25.
- Defence exports also touched a historic high of **₹23,622 crore**, registering a **12.04% growth** over the previous fiscal year.
- This surge is attributed to the government's consistent push for **'Atmanirbharta' (self-reliance)** in defence, policy reforms, and the growing contribution of the **private sector** alongside Defence Public Sector Undertakings (DPSUs).

Record-Breaking Growth in Numbers
- **Production Surge**: Indigenous defence production hit **₹1.54 lakh crore** in FY 2024-25, a significant jump from **₹46,429 crore** in 2014-15.
- **Export Success**: Exports have grown from less than **₹1,000 crore** in 2014 to **₹23,622 crore** in 2024-25, with India now exporting to over **100 countries**, including the **USA, France, and Armenia**.
- **Private Sector Role**: The private sector's share in total production has risen to **23%**, with **DPSUs** contributing the remaining **77%**.
- **Contracts Signed**: In FY 2024-25, the Ministry signed a record **193 contracts** worth **₹2,09,050 crore**, with **75%** of the value awarded to domestic industry.

Drivers of Indigenisation
- **Policy Reforms**: Initiatives like **simplified industrial licensing**, liberalized **FDI norms**, and the **Make in India** program have removed bottlenecks.
- **MSME Participation**: Over **16,000 MSMEs** are now part of the defence supply chain, functioning as "game-changers" for the sector.
- **Indigenisation Lists**: The implementation of **Positive Indigenisation Lists (PILs)** has mandated the domestic procurement of thousands of items, from simple components to complex systems like **Light Combat Helicopters**.

Strategic Targets & Future Outlook
- **2029 Vision**: The government has set an ambitious target to achieve annual defence production of **₹3 lakh crore** and exports of **₹50,000 crore** by **2029**.
- **Global Hub**: The aim is to transition India from being one of the world's largest arms importers to a **global defence manufacturing hub**.

Additional Info
- **Key Initiatives for Self-Reliance**:
  - o **Positive Indigenisation Lists (PIL)**:
    - ▪ Lists notified by the **Department of Military Affairs (DMA)** and **Department of Defence Production (DDP)** that ban the import of specific items after a cut-off date.
    - ▪ The **5th PIL for DPSUs** was notified in July 2024, adding 346 items like **Line Replacement Units** and **sensors**.
  - o **SRIJAN Portal**:
    - ▪ A "one-stop-shop" online portal that displays imported items that the industry can choose to **indigenize**.
    - ▪ Recently upgraded to **SRIJAN DEEP** to further streamline vendor databases.
  - o **Defence Industrial Corridors (DICs)**:
    - ▪ Two corridors established in **Uttar Pradesh** and **Tamil Nadu** to create manufacturing clusters.
    - ▪ As of late 2025, they have attracted investments worth over **₹9,145 crore**.
- **Major Indigenised Platforms**:
  - o **Aircraft**: **LCA Tejas**, **LCH Prachand**, **C-295 Transport Aircraft** (Tata-Airbus JV).
  - o **Artillery**: **Dhanush** Gun System, **ATAGS** (Advanced Towed Artillery Gun System).
  - o **Naval**: **INS Vikrant** (Aircraft Carrier), various frigates and corvettes.
- **Budgetary Support**:
  - o The Defence Budget for **2025-26** stands at **₹6.81 lakh crore**, reflecting a sharp increase to support modernization.

BEL and Safran Partner to Manufacture HAMMER Precision Weapon System in India

What's the News?
- **Bharat Electronics Limited (BEL)** has signed a Memorandum of Understanding (MoU) with France's **Safran Electronics & Defense** to manufacture and integrate the **HAMMER** advanced weapon system in India.
- The agreement aims to indigenize the production of this precision-guided munition under the **Make in India** initiative, strengthening the operational capabilities of the **Indian Air Force**.

What is the HAMMER System?

- **Definition**: HAMMER stands for **Highly Agile Modular Munition Extended Range**. It is a **rocket-boosted air-to-ground precision-guided weapon** capable of striking targets from a significant distance.
- **Modular Design**: It consists of a **guidance kit** and a **range extension kit** fitted onto standard aerial bombs, converting gravity bombs into precision weapons.
- **Key Features**:
  - **Fire-and-Forget**: Once launched, the weapon navigates autonomously to the target.
  - **Range**: It can engage targets at ranges between **20 km to 70 km**, allowing aircraft to launch attacks from a **stand-off distance** (outside the range of enemy air defences).
  - **All-Weather Capability**: Operates effectively in diverse terrain and weather conditions using **GPS, Infra-Red, or Laser** guidance.
- **Platform Compatibility**: While already deployed on **Rafale** fighter jets, it is now being integrated into the indigenous **Tejas Light Combat Aircraft (LCA)**.

Joint Venture & Indigenisation Plan

- **Structure**: Private limited company with **50:50 equity** between BEL and SED.
- **Indigenisation target**: Up to **60% local content** over time, covering:
  - Key sub-assemblies
  - Electronics and mechanical components
- **BEL's role**: Final assembly, integration, testing, and quality assurance
- **Phased transfer**: Technology and production know-how to be transferred incrementally

Additional Info

- **Bharat Electronics Limited (BEL)**:
  - A **Navratna Public Sector Undertaking (PSU)** under the **Ministry of Defence**.
  - It is a premier electronics company catering to the defence needs of the Indian Armed Forces.
- **Safran Electronics & Defense**:
  - A leading global French company specializing in optronics, avionics, electronics, and critical software for civil and defence applications.
- **LCA Tejas**:
  - A 4.5 generation, single-engine, multi-role light fighter aircraft.
  - Designed by the **Aeronautical Development Agency (ADA)** and manufactured by **Hindustan Aeronautics Limited (HAL)**.
- **Stand-off Weapon**: A missile or bomb launched from a distance sufficient to allow the attacking personnel to evade defensive fire from the target area.

ITBP to Deploy 10 All-Women Border Outposts Along India-China LAC

What's the News?

- The **Indo-Tibetan Border Police (ITBP)** has announced the establishment of **10 all-women Border Outposts (BOPs)** along the **Line of Actual Control (LAC)** with China.
- This initiative is part of the force's strategic **"forwardisation" plan**, aimed at enhancing border visibility and operational reach following the 2020 military standoff.
- The first two all-women posts will be operationalised in **Lukung (Ladakh)** and **Thangi (Himachal Pradesh)**, with eight more to follow in other sectors.

Operational & Strategic Context

- **Forwardisation Plan**:
  - Total forward-deployed BOPs increased from **180 to 215** as of November 2025.
  - **41 additional forward bases** planned in near future.
- **Infrastructure Augmentation**:
  - **7 new ITBP battalions** and **1 sector headquarters** sanctioned in 2023 (~9,400 personnel added).
  - Enhances supervision, logistical reach, and rapid response capability in remote sectors.
- **High-Altitude Deployment**:
  - ITBP posts operate between **9,000–14,000 ft**—exposed to sub-zero temperatures, hypoxia, and terrain challenges.
  - Female personnel will undergo same **rigorous acclimatisation and combat training** as male counterparts.

All-Women BOPs: Significance & Design

- **Pioneering Role**: First dedicated female combat detachments along the **entire LAC**, marking a shift from support roles to **frontline border guarding**.
- **Training & Capability Building**:
  - ITBP training institutes restructured with **5 new skilling modules**, including:
    - Mountain warfare
    - Tactical survival
    - Medical emergency response
    - Snow & avalanche rescue
    - High-altitude mobility
- **Symbolic & Strategic Value**:
  - Strengthens India's **soft power narrative** on gender equity in security architecture.
  - Aligns with **National Security Strategy (NSS) draft (2023)** emphasis on *"inclusive human security"*.

Additional Info

- **About Indo-Tibetan Border Police (ITBP)**:
  - **Established**: October 24, 1962, in the wake of the Sino-Indian War.
  - **Mandate**: Primary responsibility is to guard the **3,488 km** India-China border (from Karakoram Pass in Ladakh to Jachep La in Arunachal Pradesh).
  - **Operational Context**: Posts are located at altitudes ranging from **9,000 to 18,800 feet**, where temperatures can drop to minus 45 degrees Celsius.
- **Women in ITBP**:

- o **Combat Officers**: The force inducted its first two women combat officers (**Assistant Commandants**) in **August 2021**.
- o **Constabulary**: Women have been serving in constable ranks for longer, but their deployment was traditionally limited to internal security or rear-area duties. This move marks a significant shift towards **frontline combat roles**.
- **Related Government Initiatives**:
  - o **Vibrant Villages Programme (VVP)**:
    - ▪ A Centrally Sponsored Scheme to develop **2,967 villages** in 46 border blocks across 19 districts aimed at reversing out-migration and enhancing border security.
    - ▪ The ITBP plays a key role in this by providing security and aiding in community development, often acting as the first responders in these remote areas.

INS Mahe Commissioned: India's First Indigenous Anti-Submarine Shallow Water Craft

What's the News?
- The **Indian Navy** has commissioned **INS Mahe**, the first of the eight indigenously built **Mahe-class Anti-Submarine Warfare Shallow Water Craft (ASW-SWC)**, at the **Naval Dockyard, Mumbai**.
- The ceremony was presided over by the **Chief of Army Staff**, General Upendra Dwivedi, marking a significant display of **tri-service synergy** and **jointness**.
- Built by **Cochin Shipyard Limited (CSL)**, the vessel is a key milestone in the **Aatmanirbhar Bharat** initiative, boasting over **80% indigenous content**.

Strategic Capabilities & Features
"Silent Hunters" of the Coast
- **Motto & Mascot**: The ship's motto is **"Silent Hunters"**, reflecting its stealth capabilities, and its mascot is the **Cheetah**, symbolizing agility and speed.
- **Shallow Water Specialist**: Designed specifically for operations in **littoral waters** (close to shore) where larger destroyers and frigates cannot maneuver effectively. It features a unique **diesel engine and waterjet propulsion** system, making it the largest waterjet-powered vessel in the Indian Navy.
- **Key Specifications**:
  - o **Length**: ~78 meters
  - o **Displacement**: ~1,100 tonnes
  - o **Speed**: 25 knots
  - o **Range**: 1,800 nautical miles.

Indigenous Weaponry & Sensors
- The vessel is equipped with a **Hull-Mounted Sonar** and a **Low-Frequency Variable Depth Sonar** to detect enemy submarines in shallow, noisy waters.
- **Armament** includes:
  - o Lightweight **anti-submarine torpedoes**
  - o **ASW rockets**

- o **Mine-laying rails** (capable of laying mines to protect harbor approaches)
- o Remote-controlled **30mm naval gun** for surface threats.

Symbolism & Doctrine
- **Name**: After historic port-town **Mahe** (Malabar Coast), reflecting maritime heritage.
- **Crest**: **Urumi** (flexible sword of Kalaripayattu)—symbolising **agility, precision, lethal grace**.
- **Motto**: *"Silent Hunters"*—emphasising stealth and readiness.
- **Mascot**: **Cheetah**—signifying speed and focus.

Additional Info
- **Historical Legacy**:
  - o **The Name**: Named after the historic town of **Mahe** (Puducherry) on the Malabar Coast.
  - o **The Crest**: Features the **Urumi** (a flexible sword from Kalaripayattu) rising from blue waves, symbolizing lethal agility.
  - o **The Predecessor**: The name was previously held by a **Soviet-built minesweeper** (INS Mahe) that served the Indian Navy from 1983 to 2006.
- **Synergy in Defence**:
  - o The commissioning by the **Army Chief** (instead of a Navy official) highlights the push for **Integrated Theatre Commands** and greater interoperability among the three services (Army, Navy, Air Force).
- **Mahe Class Project**:
  - o The contract involves **8 vessels** built by CSL. A parallel project for **8 Arnala-class** ASW-SWCs is being executed by **Garden Reach Shipbuilders & Engineers (GRSE)**.

HAL Terms Tejas Crash in Dubai an 'Isolated Occurrence'; Confirms Deliveries on Track

What's the News?
- **Hindustan Aeronautics Limited (HAL)** has termed the recent crash of a **Tejas Light Combat Aircraft (LCA)** during the **Dubai Air Show** as an **"isolated occurrence"** arising out of **"exceptional circumstances"**.
- The incident, which occurred during an aerial display, resulted in the tragic death of **Indian Air Force (IAF)** pilot **Wing Commander Namansh Syal**.
- In a filing to the stock exchanges, HAL assured stakeholders that the accident would have **no impact** on the company's **business operations, financial performance, or future deliveries** of the fighter jets.

HAL's Reassurance & Market Reaction
- **Official Stance**: HAL emphasized that the crash does not reflect a structural flaw in the aircraft, which has otherwise maintained a high safety record. The company is extending full support to the **Court of Inquiry** constituted by the IAF to investigate the cause.
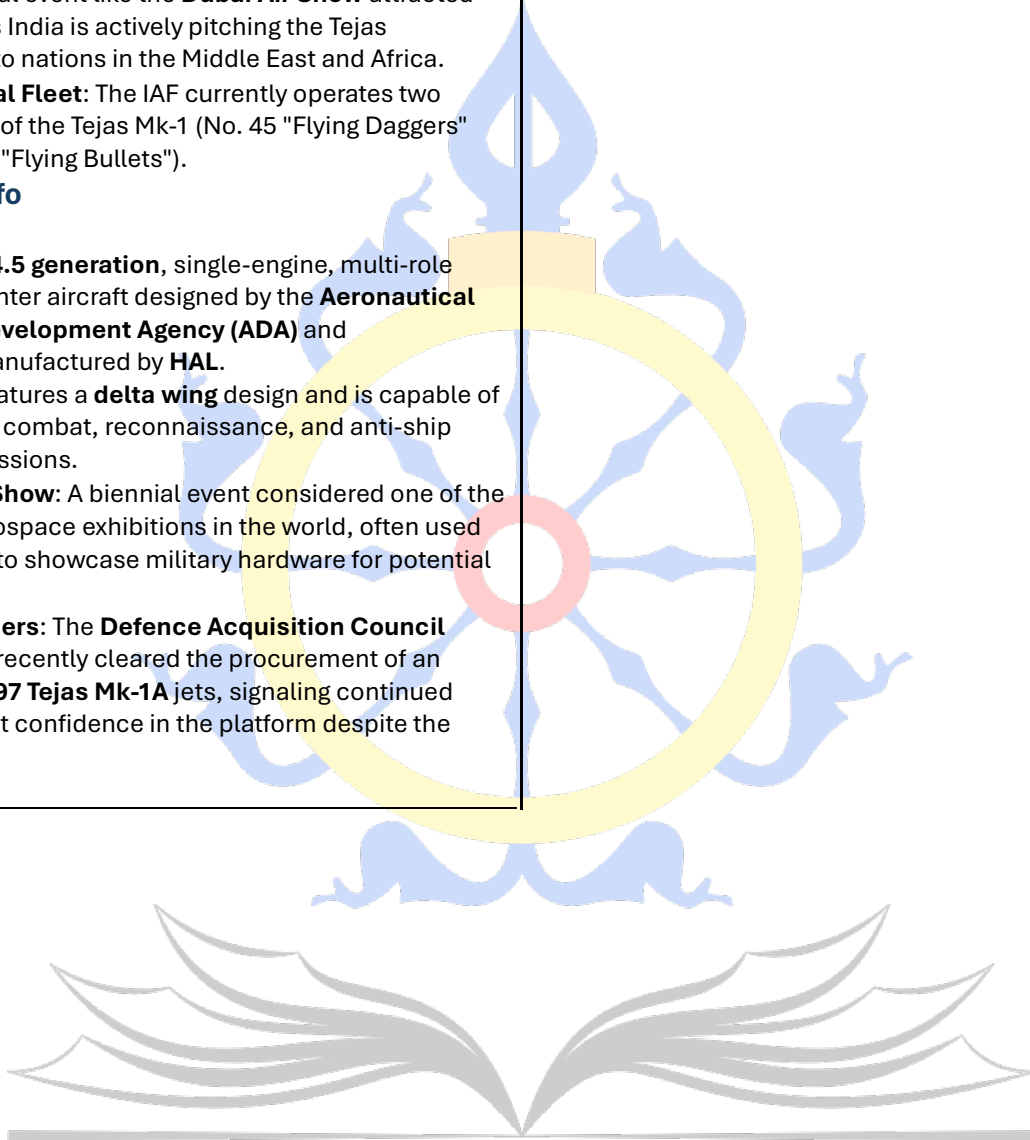
- **Market Impact**: Following the news, HAL shares witnessed a sharp decline of nearly **8-9%** in early trade but recovered partially later.
- **Delivery Schedule**: The company reiterated its commitment to the delivery schedule of the **83 Tejas Mk-1A** jets ordered by the IAF, with the first deliveries expected in the coming months.

Program Context & Background

- **Second Incident**: This is the second crash involving the indigenous Tejas fighter in **20 months**. The previous incident occurred in **March 2024** near Jaisalmer, Rajasthan, where the pilot ejected safely.
- **Strategic Importance**: The crash at a high-profile international event like the **Dubai Air Show** attracted scrutiny, as India is actively pitching the Tejas for **export** to nations in the Middle East and Africa.
- **Operational Fleet**: The IAF currently operates two squadrons of the Tejas Mk-1 (No. 45 "Flying Daggers" and No. 18 "Flying Bullets").

Additional Info

- **Tejas LCA**:
    - A **4.5 generation**, single-engine, multi-role fighter aircraft designed by the **Aeronautical Development Agency (ADA)** and manufactured by **HAL**.
    - Features a **delta wing** design and is capable of air combat, reconnaissance, and anti-ship missions.
- **Dubai Air Show**: A biennial event considered one of the largest aerospace exhibitions in the world, often used by nations to showcase military hardware for potential buyers.
- **Future Orders**: The **Defence Acquisition Council (DAC)** had recently cleared the procurement of an additional **97 Tejas Mk-1A** jets, signaling continued government confidence in the platform despite the incident.

International Relations

China Pauses Rare Earth Export Controls in US Trade Truce

What's the News?

- **China** has agreed to a **one-year pause** on its **export restrictions** for **rare earth elements (REEs)** as part of a new **trade truce** with the **United States**.
- The agreement was reportedly reached following a meeting between **US President Donald Trump** and **Chinese President Xi Jinping** at the **G20 summit**.
- In return for China pausing the export curbs, the **US** has agreed to refrain from imposing new **technology sanctions** on Chinese companies for the 12-month period.

Details of the Truce

- The deal addresses significant trade tensions, particularly concerns that China would use its dominance in the rare earths market as leverage.
- China had previously considered export controls on these critical materials, which are vital to US high-tech and defense industries.
- The US commitment to pause new technology sanctions provides a temporary reprieve for Chinese tech firms that have faced increasing restrictions.

Significance of Rare Earths

- **Strategic Materials**: **Rare earth elements** are a group of 17 metals essential for manufacturing a wide range of modern technologies.
- **Key Applications**: They are critical components in smartphones, **electric vehicles (EVs),** wind turbines, and advanced military hardware, such as F-35 fighter jets.
- **Global Supply Chain**: China dominates the global **rare earth** market, controlling a vast majority of the world's mining and, more importantly, its processing and refining capacity.
- **Economic Leverage**: This dominance gives China significant geopolitical leverage, as restricting their export could severely disrupt global supply chains for the defense, electronics, and automotive sectors.

Additional Info

- **Rare Earth Elements (REEs)**:
  - Despite their name, rare earths are not all exceptionally rare in the earth's crust.
  - Their "rarity" stems from the fact that they are typically dispersed and not found in economically exploitable concentrated deposits.
  - The extraction and processing of REEs are complex and often environmentally hazardous.
- **Geopolitical Context**:
  - The US and other Western nations have been actively seeking to diversify their **rare earth supply chains** to reduce their dependency on China.

  - This includes efforts to revive domestic mining and processing and form partnerships with other REE-producing countries.

India Hosts First BIMSTEC Marine Research Network (BIMREN) Conference

What's the News?

- India hosted the first biennial conference of the **BIMSTEC-India Marine Research Network (BIMREN)** in **Kochi, Kerala**.
- The conference marked a significant step in reinforcing cooperation in marine research and advancing **Blue Economy** initiatives among the member nations of the **Bay of Bengal** region.
- The event brought together researchers, scientists, and policymakers to discuss progress, challenges, and innovations in marine science.

The BIMSTEC-India Marine Research Network (BIMREN)

- **What it is:** BIMREN is an initiative of India's **Ministry of External Affairs (MEA)**, launched in 2024. It is a joint initiative with the **Bay of Bengal Programme-Inter Governmental Organisation (BOBP-IGO)**.
- **Origin**: The network was first announced by the Prime Minister of India during the **BIMSTEC Summit in Colombo** in 2022.
- **Objective**: To strengthen collective research in marine sciences by connecting leading Indian research institutions with their counterparts in other BIMSTEC countries.
- **Mechanism:** The network facilitates institutional collaboration through:
  - **Twinning research grants** for joint projects.
  - **Split-site PhD fellowships** for researchers from BIMSTEC nations to conduct research in India.
- **Progress**: In its pilot phase, BIMREN has already connected **25 institutions** and over **50 researchers** across the member states.

Significance and Strategic Context

- **Boosting Blue Economy**: The initiative is central to sustainably harnessing the economic potential of the oceans, including fisheries, maritime transport, and tourism.
- **Sustainable Fisheries**: It underscores India's commitment to sustainable fisheries management in the Bay of Bengal, a region that accounts for **6% of the world's fish catch** and hosts over a third of the global fishing fleet.
- **Alignment with Indian Foreign Policy**: The BIMREN initiative is a key component of India's broader regional strategies, including:
  - **Neighbourhood First Policy**
  - **Act East Policy**
  - **Indo-Pacific Strategy**

- o **MAHASAGAR** (Security and Growth for All in the Region)

About BIMSTEC:
- **Full Form**: Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation.
- **Member Countries**: It is a regional organization comprising seven nations: **Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka,** and **Thailand**.
- **Purpose**: It serves as a bridge between South and Southeast Asia.
- **Secretariat**: Located in **Dhaka, Bangladesh**.

Australia and Indonesia Agree to New Security Treaty

What's the News?
- **Australia** and **Indonesia** have agreed to a new, landmark security treaty designed to strengthen defence and security cooperation between the two nations.
- The agreement was announced by Australian Prime Minister **Anthony Albanese** and Indonesian President **Prabowo Subianto**.
- The treaty commits both neighbours to consult each other and consider joint or individual measures if the security of either country is threatened.

Key Aspects of the Treaty
- **Mutual Consultation**: The core of the treaty is the commitment to consult if either or both nations face a security threat.
- **Regular Dialogue**: It formalises regular security dialogues between the leaders of both countries.
- **Broad Cooperation**: The agreement provides a framework for closer cooperation in various defence and security fields.
- **Regional Balancing**: The move is seen as part of Australia's strategy to strengthen ties with its neighbours and as a way for Indonesia to maintain its non-aligned foreign policy by balancing its relationships in the region.

Historical Context:
- This agreement is described as a major extension of previous security deals.
- It is reportedly modelled on a **1995 security agreement** between the two countries.
- That 1995 deal was withdrawn by Indonesia in 1999 after Australia led the **United Nations** peacekeeping force in **East Timor** during its independence from Indonesia.

Status: The treaty is expected to be formally signed next year.

South Africa Hosts Historic G20 Summit in Johannesburg; India Proposes 6 Key Initiatives

What's the News?
- **South Africa** hosted the **G20 Leaders' Summit** in **Johannesburg**, marking the first time the summit was held on the African continent.
- The summit, held under the theme **"Solidarity, Equality, and Sustainability,"** concluded with the adoption of the **Johannesburg Declaration**, which prioritized the needs of the **Global South**, climate finance, and energy access.
- Prime Minister **Narendra Modi** represented India, proposing **six key initiatives** to address global challenges and announcing a new technology partnership with **Australia** and **Canada**.

India's 6-Point Agenda
- **Global Traditional Knowledge Repository**: A proposed platform to preserve and share humanity's collective wisdom, modeled on India's own initiatives.
- **G20-Africa Skills Multiplier**: A plan to create **1 million certified trainers** in Africa over the next decade to boost youth employability and local capacity.
- **Global Healthcare Response Team**: Establishing a network of medical experts from G20 nations ready for rapid deployment during health emergencies and disasters.
- **Countering Drug-Terror Nexus**: A coordinated initiative to disrupt the financial flows linking drug trafficking and terrorism.
- **Critical Minerals Circularity Initiative**: Promoting recycling, urban mining, and innovation to secure supply chains for **critical minerals** (like lithium and cobalt) essential for clean energy.
- **Open Satellite Data Partnership**: Making satellite data from G20 nations accessible to the Global South for applications in agriculture, disaster management, and resource monitoring.

Major Global Outcomes & Pacts
- **Mission 300**: A joint initiative by the **World Bank** and **African Development Bank (AfDB)** to connect **300 million people** in Sub-Saharan Africa to electricity by **2030**.
- **Climate Finance Shift**: The declaration acknowledged the need to mobilize **$1.3 trillion annually by 2035** for developing countries to meet climate goals, marking a shift from "billions to trillions" in global finance rhetoric.
- **ACITI Partnership**: India, Australia, and Canada launched the **ACITI (Australia-Canada-India Technology and Innovation) Partnership** to collaborate on digital governance, AI, and clean energy, signaling a diplomatic realignment.
- **India-Italy Initiative**: A joint initiative aimed at **countering the financing of terrorism** was adopted by PM Modi and Italian PM Giorgia Meloni.

Additional Info
- **G20 Troika**:
  - o The **Troika** ensures continuity in the G20 agenda.

- o Current Troika: **Brazil** (2024), **South Africa** (2025), and **United States** (2026 - Incoming Presidency).
- o *Note*: The 2022-2025 period represents a unique "Global South Continuum" of presidencies (Indonesia, India, Brazil, South Africa).
- **IBSA Forum**:
  - o Leaders of **India, Brazil, and South Africa (IBSA)** met on the sidelines, asserting that **UN Security Council (UNSC) reform** is "no longer an option but a necessity".
  - o They emphasized IBSA's role as the "democratic voice of the Global South".
- **Constitutional Context (India)**:
  - o **Article 51**: Directs the State to promote **international peace and security** and foster respect for international law (basis for India's active G20 participation).
  - o **Article 253**: Empowers Parliament to make laws for implementing international treaties and agreements (relevant for enforcing G20 declarations domestically).

PM Modi Calls for Urgent UNSC Reforms and United Stand Against Terror at IBSA Summit

What's the News?

- Prime Minister **Narendra Modi** addressed the **6th India-Brazil-South Africa (IBSA) Summit** held in **Johannesburg, South Africa**, on the sidelines of the **G20 Summit**.
- PM Modi asserted that reforming the **United Nations Security Council (UNSC)** is "no longer an option, but a necessity" to reflect contemporary global realities.
- The meeting was attended by **Brazilian President Luiz Inacio Lula da Silva** and **South African President Cyril Ramaphosa**, marking a gathering of three major democracies from three different continents.

Key Proposals & Declarations

- **UNSC Reform**:
  - o Modi stressed that **contemporary geopolitical realities** are not reflected in the current UNSC structure.
  - o Emphasised need for **expanded permanent membership**, including representation for the **Global South**.
- **Counter-Terrorism Unity**:
  - o Urged **zero tolerance for double standards** in counter-terrorism actions.
  - o Proposed formalising **NSA-level IBSA meetings** to institutionalise security cooperation.
- **IBSA Digital Innovation Alliance**:
  - o Aims to share **digital public infrastructure (DPI)** across:
    - **Unified Payments Interface (UPI)**
    - **CoWIN-like health platforms**
    - **Cybersecurity frameworks**

- **Women-led tech initiatives**
- **IBSA Fund for Climate-Resilient Agriculture**:
  - o New vertical under the **existing IBSA Fund**, targeting:
    - Smallholder farmer resilience
    - Climate-smart practices (e.g., millets, natural farming)
    - South-South knowledge transfer
- **AI Governance**:
  - o PM Modi invited IBSA partners to India's **2026 AI Impact Summit**.
  - o Advocated for **safe, trustworthy, and human-centric AI norms** co-developed by the Global South.

Additional Info

- **About IBSA Dialogue Forum**:
  - o **Established**: Formalized in **June 2003** through the **Brasilia Declaration**.
  - o **Members**: **India, Brazil, South Africa** (Three large democracies and economies from three different continents).
  - o **Objective**: To promote **South-South cooperation**, build consensus on international issues, and advocate for the interests of developing nations.
- **IBSA Fund**:
  - o Full name: **IBSA Facility for Poverty and Hunger Alleviation**.
  - o It supports development projects in other developing countries (partner nations) in areas like health, education, and sanitation.
  - o PM Modi praised the fund for supporting projects in over **40 countries**.
- **G20 Context**:
  - o The 2025 G20 Summit is being held in **South Africa**, the first time the summit is hosted on African soil.
  - o **Troika**: The current G20 Troika comprises **Brazil (past), South Africa (current), and the US (future)**. *Note: Previous troika was India-Brazil-South Africa.*

India Launches Operation Sagar Bandhu to Aid Cyclone-Hit Sri Lanka

What's the News?

- India has launched **Operation Sagar Bandhu** to provide urgent humanitarian assistance to **Sri Lanka**, which has been severely affected by floods and landslides triggered by **Cyclone Ditwah**.
- An **Indian Air Force (IAF) C-17 Globemaster** military transport aircraft was deployed to airlift relief supplies to Colombo, reinforcing India's role as the **"First Responder"** in the Indian Ocean Region (IOR).
- The aid consignment was handed over by the Indian High Commissioner to Sri Lankan authorities, symbolizing strong bilateral ties.
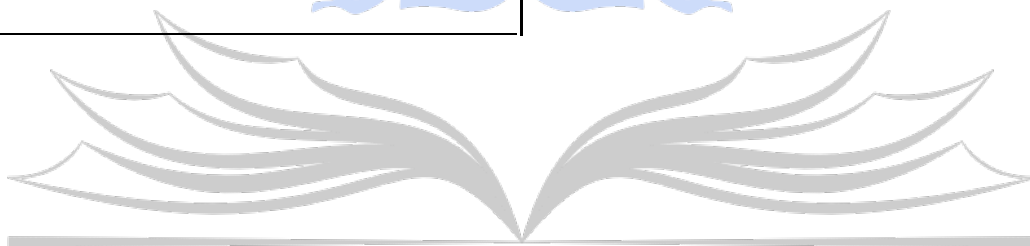
Mission Details & Objectives

- **Humanitarian Assistance**: The operation is a specific **Humanitarian Assistance and Disaster Relief**

(HADR) mission aimed at mitigating the distress caused by the cyclone.

- **Relief Material**: India dispatched approximately **12 tonnes** of essential supplies, which included:
    - **Food items** and ready-to-eat meals.
    - **Medicines** and medical supplies.
    - **Hygiene kits** and water purification tablets.
    - Emergency equipment like **generators** and inflatable boats.
- **Strategic Alignment**: The operation serves as a practical execution of India's diplomatic frameworks, specifically the **'Neighbourhood First' policy** and the **SAGAR (Security and Growth for All in the Region)** doctrine.

Additional Info

- **Strategic Policies**:
    - **Neighbourhood First Policy**: Focuses on improving ties with immediate neighbours in South Asia, prioritizing their needs in connectivity, trade, and disaster management.
    - **SAGAR Doctrine**: Announced in 2015, it outlines India's vision to deepen economic and security cooperation with maritime neighbours and assist in capacity building.
- **Previous HADR Operations**:
    - **Operation Karuna**: Assistance to **Myanmar** following Cyclone Mocha.
    - **Operation Dost**: Search and rescue mission in **Turkey and Syria** after the 2023 earthquake.
    - **Operation Ganga**: Evacuation of Indians from **Ukraine**.
- **Cyclone Ditwah**:
    - A tropical cyclone originating in the **Bay of Bengal**, causing widespread heavy rains and landslides across Sri Lanka's eastern and northern provinces.
- **C-17 Globemaster III**:
    - A heavy-lift transport aircraft of the **Indian Air Force**, capable of rapid strategic delivery of troops and cargo to main operating bases or forward operating bases.

International

UN Adopts Doha Declaration at Second World Summit for Social Development

What's the News?

- World leaders and government representatives have adopted the **Doha Declaration** at the **Second World Summit for Social Development**.
- The declaration aims to renew and strengthen the global commitment to social development, addressing failures and gaps in progress since the first summit in Copenhagen in 1995.
- The **United Nations General Assembly** President emphasized that the declaration is a "promise to our people" to prioritize human dignity, eradicate poverty, and combat inequality.

Key Focus Areas of the Doha Declaration

- **Renewed Commitments**: The declaration reaffirms the goals of the **1995 Copenhagen Declaration**, focusing on:
    - Poverty eradication
    - Full and productive employment and decent work for all
    - Social inclusion
- **Addressing Modern Challenges**: It calls for action on new and emerging challenges that hinder social progress, including:
    - The impacts of the **COVID-19 pandemic**
    - Climate change
    - Digital divides
    - Geopolitical conflicts
- **Strengthening Multilateralism**: The summit stressed the need for a "revitalized multilateralism" and strengthened international cooperation to finance and achieve social development goals.
- **Inclusive Policies**: Member States committed to creating people-centered policies, strengthening social protection systems, and investing in education, health, and decent job creation.

India's Initiatives and Improvements on Social Development

- India's success: 248 million people lifted from multidimensional poverty (2011–2023); poverty down to 2.3% (2022–23).
- Progress driven by PM Garib Kalyan Anna Yojana, PM Awas Yojana, Jan Dhan Yojana.
- Social protection coverage rose from 19% (2015) to 64.3% (2025) — over 940 million beneficiaries, verified by ILO.
- Achieved through JAM Trinity (Jan Dhan–Aadhaar–Mobile) for transparent delivery

Additional Info

- **First World Summit for Social Development (1995)**:
    - Held in **Copenhagen, Denmark**.
    - It was the largest gathering of world leaders at the time.
    - It established a consensus to put people at the center of development, resulting in the **Copenhagen Declaration and Programme of Action**.
- **UN Commission for Social Development (CSocD)**:
    - This is the key UN body responsible for monitoring and implementing the outcomes of the Social Summit.
    - It operates under the **UN Economic and Social Council (ECOSOC)**.
- **Link to SDGs**: The summit's goals are intrinsically linked to the **2030 Agenda for Sustainable Development**, particularly:
    - **SDG 1 (No Poverty)**
    - **SDG 8 (Decent Work and Economic Growth)**
    - **SDG 10 (Reduced Inequalities)**

US and Japan Sign Framework on Critical Minerals and Rare Earths

What's the News?

- The **United States** and **Japan** have signed a new framework agreement aimed at securing the supply chains for **critical minerals** and **Rare Earth Elements (REEs)**.
- The pact outlines a plan for coordinated investment and economic policies to accelerate the development of diversified and secure sources for these materials, which are vital for advanced technologies.
- This strategic move is designed to reduce dependency on limited global suppliers and ensure the resilience of the domestic industries in both nations.

Key Objectives of the Framework

- **Secure Supply Chains**: To intensify cooperative efforts in accelerating the secure supply of critical minerals and REEs, covering the entire value chain from mining and separation to processing.
- **Coordinated Investment**: Both nations intend to mobilize government and private sector financial support (such as grants, loans, or equity) for selected projects.
- **Timeline**: The framework aims to identify and provide financial support to selected projects within six months, with the goal of delivering end products to buyers in the US, Japan, and other "like-minded countries."
- **Addressing Unfair Practices**: The agreement includes a commitment to work together to address non-market policies and unfair trade practices by other countries that affect the critical minerals market.
- **Rapid Response Group**:
    - A **U.S.-Japan Critical Minerals Supply Security Rapid Response Group** will be established.
    - It will be co-led by the **U.S. Secretary of Energy** and **Japan's Minister of Economy, Trade, and Industry**.

- Its purpose is to identify priority minerals, assess supply vulnerabilities, and develop coordinated plans to address them.

Additional Info
- **What are Critical Minerals?**:
  - These are metallic or non-metallic elements that are essential for the functioning of modern technologies, defense, and economies.
  - Their supply chains are considered vulnerable to disruption.
- **What are Rare Earth Elements (REEs)?**:
  - A set of 17 metallic elements (including neodymium, dysprosium, and yttrium).
  - They are not necessarily "rare" but are difficult and costly to mine and process.
  - They are crucial for manufacturing high-strength permanent magnets, catalysts, and electronics.
- **Historical Context**:
  - Japan has been actively working to diversify its REE sources for over a decade, particularly after China imposed a rare earth export embargo in 2010 during a diplomatic dispute.
  - This agreement builds on previous efforts, including a 2023 critical minerals agreement between the two nations related to the **U.S. Inflation Reduction Act (IRA)**.

Bangladesh Accedes to UN Water Convention
What's the News?
- **Bangladesh** has become the first country in South Asia to accede to the **UN Water Convention**.
- The move makes it the 56th party globally to join the legally binding framework.
- The decision is seen as a significant step by the downstream nation to secure its water rights and promote sustainable management of its numerous transboundary rivers.

The UN Water Convention
- **Official Name**: Convention on the Protection and Use of Transboundary Watercourses and International Lakes.
- **Adoption**: It was adopted in **Helsinki in 1992** and entered into force in 1996.
- **Scope**: Initially a regional framework for the **United Nations Economic Commission for Europe (UNECE)**, it was opened for global accession to all UN Member States in 2016.
- **Core Principles**: The convention is built on three main pillars:
  - **Principle of Equitable and Reasonable Use**: Requires parties to use shared water resources in a fair and reasonable manner.
  - **Principle of No Significant Harm**: Obligates parties to take all appropriate measures to prevent, control, and reduce transboundary impacts that cause significant harm to other riparian states.

  - **Principle of Cooperation**: Mandates that parties sharing a transboundary watercourse cooperate by entering into specific agreements and establishing joint bodies.

Significance of Bangladesh's Accession
- **High Water Dependency**: Bangladesh is a lower riparian deltaic nation, with over 90% of its freshwater inflow coming from rivers that cross national borders, primarily from India and China.
- **Addressing Disputes**: The accession provides Bangladesh with a multilateral legal platform to address long-standing water-sharing issues, most notably the unresolved **Teesta River dispute** with India.
- **Managing Upstream Projects**: It reflects growing concerns over the impact of large-scale upstream infrastructure projects, such as hydropower dams on the **Brahmaputra (Yarlung Tsangpo)** by China.
- **Climate Vulnerability**: The move seeks to bolster water security and access international support for managing severe climate risks, including floods, droughts, and salinity intrusion.

Implications for India
- **India's Stance**: **India is not a signatory** to the UN Water Convention.
- **Policy Preference**: India has consistently favoured **bilateral mechanisms** for resolving water disputes, such as the **Indus Waters Treaty (1960)** with Pakistan and the **Ganga Water Sharing Treaty (1996)** with Bangladesh.
- **Ganga Treaty Renewal**:
  - Bangladesh's accession comes as the 30-year **Ganga Water Sharing Treaty** is due for renewal in **2026**.
  - There are concerns that Bangladesh may now leverage the convention's "equitable use" principle to seek a higher share of water, moving negotiations from a bilateral to a multilateral context.
- **Regional Shift**: This could encourage other co-riparian neighbours of India, such as **Nepal** and **Bhutan**, to join the convention, potentially shifting the region's hydro-politics away from India's preferred bilateral approach.

Shared Water Resources:
- India and Bangladesh share **54 transboundary rivers**, including the major **Ganges-Brahmaputra-Meghna (GBM) basin**.
- The **Joint Rivers Commission (JRC)**, established in 1972, is the primary bilateral institution for managing these shared resources.

Chile's Humboldt Penguins Face Extinction Risk: Scientists Warn of "Critically Endangered" Status
What's the News?
- Scientists in Chile have issued a grave warning that the **Humboldt Penguin** (*Spheniscus humboldti*) is at risk of becoming **critically endangered** following a drastic population decline.

- The Chilean government recently reclassified the species from "vulnerable" to **"endangered"** after data revealed that the population along the country's Pacific coast - home to **80% of the world's remaining Humboldt penguins** - has plummeted.
- Researchers estimate the population has dropped from roughly **45,000** in the late 1990s to **fewer than 20,000** today.

Key Drivers of Decline
- **The "Perfect Storm"**: A combination of **Avian Influenza (Bird Flu)** and the **El Niño** weather phenomenon has devastated reproductive rates, causing them to drop to nearly zero in some recent breeding seasons.
- **Human-Induced Threats**:
  - **Commercial Fishing**: Creates fierce competition for food, particularly for **anchovies and sardines**, which are the penguins' primary diet.
  - **Habitat Entrapment**: Penguins frequently die after getting entangled in fishing nets.
  - **Pollution**: Marine pollution and habitat disturbance further reduce their survival chances.
- **Climate Impact**: Changing ocean currents and temperatures disrupt the nutrient-rich waters the penguins depend on, leading to severe food shortages.

Path to "Critically Endangered"
- **Warning**: Biologists state that if current threats - especially industrial fishing and climate instability - persist, the species is "very likely" to move from endangered to **critically endangered,** a step just before extinction.
- **Call to Action**: Experts are demanding stricter legislation to ensure **sustainable fishing** and the creation of effective marine protected areas to allow the species to recover.

Additional Info
- **About Humboldt Penguins**:
  - **Scientific Name**: *Spheniscus humboldti.*
  - **Habitat**: Endemic to the **Pacific coasts of Chile and Peru**. They nest on rocky islands and coasts, burrowing into guano (bird droppings) for shelter.
  - **Humboldt Current**: Named after the cold, nutrient-rich ocean current (also known as the **Peru Current**) that flows north along the western coast of South America, sustaining the fish populations they eat.
- **Conservation Status**:
  - **IUCN Red List**: Globally listed as **Vulnerable**.
  - **CITES**: Listed under **Appendix I**, which prohibits international commercial trade.
- **Humboldt Penguin National Reserve**:
  - A major reserve in Chile comprising three islands (**Chañaral, Damas, and Choros**) that serves as a critical breeding ground.
  - It was temporarily closed in 2023 due to the severe bird flu outbreak.

Oman Elected to UNESCO's Man and the Biosphere (MAB) Council
What's the News?
- The **Sultanate of Oman** has been elected as a member of the **International Coordinating Council (ICC)** of the **UNESCO Man and the Biosphere (MAB) Programme**.
- Oman, represented by its **Environment Authority**, will serve a four-year term from **2025 to 2029**.
- The election took place during the **43rd session of the UNESCO General Conference** in Samarkand, Uzbekistan.

About the Man and the Biosphere (MAB) Programme
- Launched by **UNESCO in 1971**, MAB is an **intergovernmental scientific initiative** aimed at improving the relationship between people and their environments through research, capacity building, and policy innovation.
- **Core Objective**: Reconcile biodiversity conservation with sustainable socio-economic development by promoting **"learning places for sustainable development"** - the Biosphere Reserves.
- Operates under the **International Coordinating Council (MAB-ICC)** of **34 elected Member States**, which sets strategic direction and oversees the **World Network of Biosphere Reserves (WNBR)**.

Oman's Strategic Relevance
- Oman's election reflects its growing role in **arid-zone ecosystem management**, leveraging unique landscapes such as the **Dhofar monsoon forest**, **Al-Hajar Mountains,** and **Rub' al-Khali desert fringe** - all ecologically sensitive and culturally rich zones.
- The country has already designated **three Biosphere Reserves**:
  - **Jabal Samhan** (2021)
  - **Al Wusta** (2022)
  - **Masirah Island** (2023)
    - demonstrating commitment to balancing heritage preservation, climate resilience, and community-based conservation.

Additional Info
- **Constitutional & Policy Links**:
  - Biosphere Reserves in India fall under the **National Biodiversity Act, 2002** and are managed jointly by **State Forest Departments**, **Ministry of Environment, Forest and Climate Change (MoEF&CC),** and local communities.
  - Aligns with **SDG 13 (Climate Action)**, **SDG 15 (Life on Land),** and **National Mission for Green India**.
- **Global Stats**:
  - 748 Biosphere Reserves across **134 countries** as of 2025.
  - MAB promotes transboundary reserves (e.g., **Karakoram–Pamir** involving India, China, Pakistan, Tajikistan), offering a model for regional cooperation.

US-Proposed Peace Plan for Ukraine Narrowed to 19 Points After Geneva Talks

What's the News?
- A controversial **28-point peace plan** proposed by the **Trump administration** to end the Russia-Ukraine war has been reportedly narrowed down to a **19-point framework** following high-stakes negotiations in **Geneva**.
- The original plan, which was drafted without Ukraine's initial involvement, faced severe backlash for demanding significant **territorial concessions** from Kyiv and blocking its **NATO membership**.
- Ukrainian President **Volodymyr Zelenskyy** confirmed that the new draft has "fewer points" and incorporates "correct elements," though the most "sensitive issues" remain to be discussed directly with President Trump.

Key Provisions of the Original 28-Point Plan
- **Sovereignty & Security Restrictions**:
  - Ukraine's sovereignty formally affirmed—but with binding constraints:
    - **Constitutional ban on NATO membership**; NATO to amend statutes to permanently exclude Ukraine.
    - Cap on Ukrainian Armed Forces at **600,000 personnel** (≈33% reduction from current 900,000 wartime strength).
    - No NATO troops permitted on Ukrainian soil; European fighter jets redeployed to Poland.
- **Territorial Concessions**:
  - **De facto recognition of Russian control** over:
    - Crimea, Donetsk, Luhansk (full annexation)
    - Kherson and Zaporizhzhia (frozen along current frontlines).
  - Ukrainian withdrawal from parts of Donetsk Oblast to form a **demilitarized buffer zone**, recognized as Russian territory.
- **Economic & Legal Arrangements**:
  - **$100 billion** from frozen Russian assets + **$100 billion** from EU to fund Ukraine's reconstruction—**50% of profits** accruing to the US.
  - **Full amnesty** for all wartime actions, including alleged war crimes—raising concerns on ICC jurisdiction and accountability.
  - Russia invited to **rejoin G8**; sanctions lifted gradually in exchange for cooperation.

Revised 19-Point Framework: Key Shifts
- Negotiated over the weekend of **November 23–24, 2025**, in Geneva between US, Ukrainian, and European officials.
- Ukrainian First Deputy Foreign Minister stated: *"Very few things are left from the original version"*.
- **Major concessions reportedly dropped or diluted**:
  - Explicit **NATO ban** and **territorial cession clauses** softened or deferred for top-level decision.

- Most contentious issues—e.g., status of Donbas, constitutional neutrality—now reserved for direct talks between **Trump and Zelenskyy**.
- White House acknowledged "meaningful progress toward aligning positions", though **Russia claims no official engagement** yet.

Additional Info
- **Constitutional Hurdles**:
  - The proposal for Ukraine to amend its constitution (e.g., neutrality, territorial changes) faces a legal deadlock: **Ukrainian law prohibits constitutional amendments while martial law is in effect**.
  - Holding elections within 100 days is also legally complex under current martial law conditions.
- **Budapest Memorandum (1994)**:
  - Ukraine gave up its nuclear arsenal in exchange for security assurances from the US, UK, and Russia. The proposed new "security guarantees" are viewed skeptically by Kyiv given the failure of this previous agreement.
- **Frozen Assets Context**:
  - The plan to use frozen Russian assets ($300bn total globally) for reconstruction is a key leverage point, but the US proposal to take 50% of the "profits" from this venture has raised eyebrows among allies.

India Ranks 36th in Global Commitment to Development Index 2025; Sweden Tops List

What's the News?
- **India** has been ranked **36th** out of **38 major economies** in the **Commitment to Development Index (CDI) 2025**, released by the **Center for Global Development (CGD)**.
- While India performed poorly in **Trade** and **Development Finance**, it secured a top-tier position in the **Environment** category, ranking **8th** globally due to its low per-capita emissions.
- **Sweden** topped the index for the second consecutive time, followed by **Germany** and **Norway**.

Global Rankings & Key Trends
- **Top Performers**:
  - **Rank 1: Sweden** (Leader in Environment, strong in Finance and Health).
  - **Rank 2: Germany**
  - **Rank 3: Norway**
- **Global Decline**: The report highlights a "retreat" by wealthy nations in supporting global development. Key concerning trends include:
  - **Decreased Development Finance**: 21 nations provided less finance relative to their income compared to previous years.
  - **Rising Militarization**: Military spending has surged (global total hit **$2.7 trillion**), often at the expense of foreign aid and peacekeeping.
  - **Trade Barriers**: Increasing tariffs and subsidies in rich nations are hindering exports from poorer countries.

India's Performance Breakdown
- **Overall Rank**: **36th** (among 38 countries).
- **Income-Adjusted Rank**: **29th** (When adjusted for income level, India performs better than its raw score suggests).
- **Sector-wise Performance**:
  - **Strengths**:
    - **Environment (8th)**: High score driven by **low greenhouse gas emissions per capita** and strong climate commitments.
    - **Security (31st)**: While ranked lower overall, India was noted for its significant contributions to **UN Peacekeeping missions**.
  - **Weaknesses**:
    - **Trade (38th - Last)**: Ranked lowest due to high **tariffs** and barriers that restrict imports from other developing nations.
    - **Development Finance (38th - Last)**: Ranked last for transparency and the volume of finance provided relative to its economic size.
    - **Other Areas**: **Investment (31st)**, **Migration (36th)**, and **Technology (31st)** also saw low scores, indicating restrictive policies on FDI and migration.

Additional Info
- **About Commitment to Development Index (CDI)**:
  - Published by the **Center for Global Development (CGD)**, a non-profit think tank based in **Washington, D.C.** and **London**.
  - **Objective**: To measure how well wealthy and emerging nations support development in poorer countries **"beyond just aid"**.
  - **8 Components**: It evaluates countries on:
    1. **Development Finance** (Quantity and quality of aid)
    2. **Investment** (Policies encouraging healthy investment)
    3. **Migration** (Openness to migrants and refugees)
    4. **Trade** (Openness to goods/services from poor nations)
    5. **Environment** (Climate policies and emissions)
    6. **Health** (Support for global health innovations)
    7. **Security** (Peacekeeping and arms control)
    8. **Technology** (Support for R&D and knowledge sharing)
- **Significance of Income-Adjusted Rank**:
  - The CDI acknowledges that richer countries have more capacity to help. The **Income-Adjusted** score compares a country's performance relative to its **Gross National Income (GNI)**.
  - India's jump from **36th (overall)** to **29th (adjusted)** suggests it is "punching above its weight" in certain areas despite having fewer resources than Western nations.

Italy Passes Landmark Law Criminalising Femicide

What's the News?
- The **Italian Parliament** has unanimously approved a new law that formally recognizes **femicide**—the intentional killing of a woman due to gender-related motives—as a distinct crime in the country's penal code.
- Passed on **November 25, 2025** (International Day for the Elimination of Violence against Women), the legislation makes femicide punishable by **life imprisonment**, marking a significant shift in Italy's legal approach to gender-based violence.
- The bill received **bipartisan support**, passing with **237 votes in favor** and none against in the Lower Chamber, reflecting a "national resolve" to combat violence against women.

"Femicide" as a Standalone Crime
- **Definition**: The law applies when a woman is killed due to discrimination, hatred, or an attempt to control her, including cases where violence follows her refusal to continue a relationship.
- **Punishment**: It mandates an automatic **life sentence**, aligning Italy with nations like Mexico and Chile that have similar severe penalties.
- **EU Context**: Italy breaks ranks with most EU nations (where gender is an aggravating factor) to join **Cyprus, Malta, and Croatia** in defining femicide as an autonomous crime.
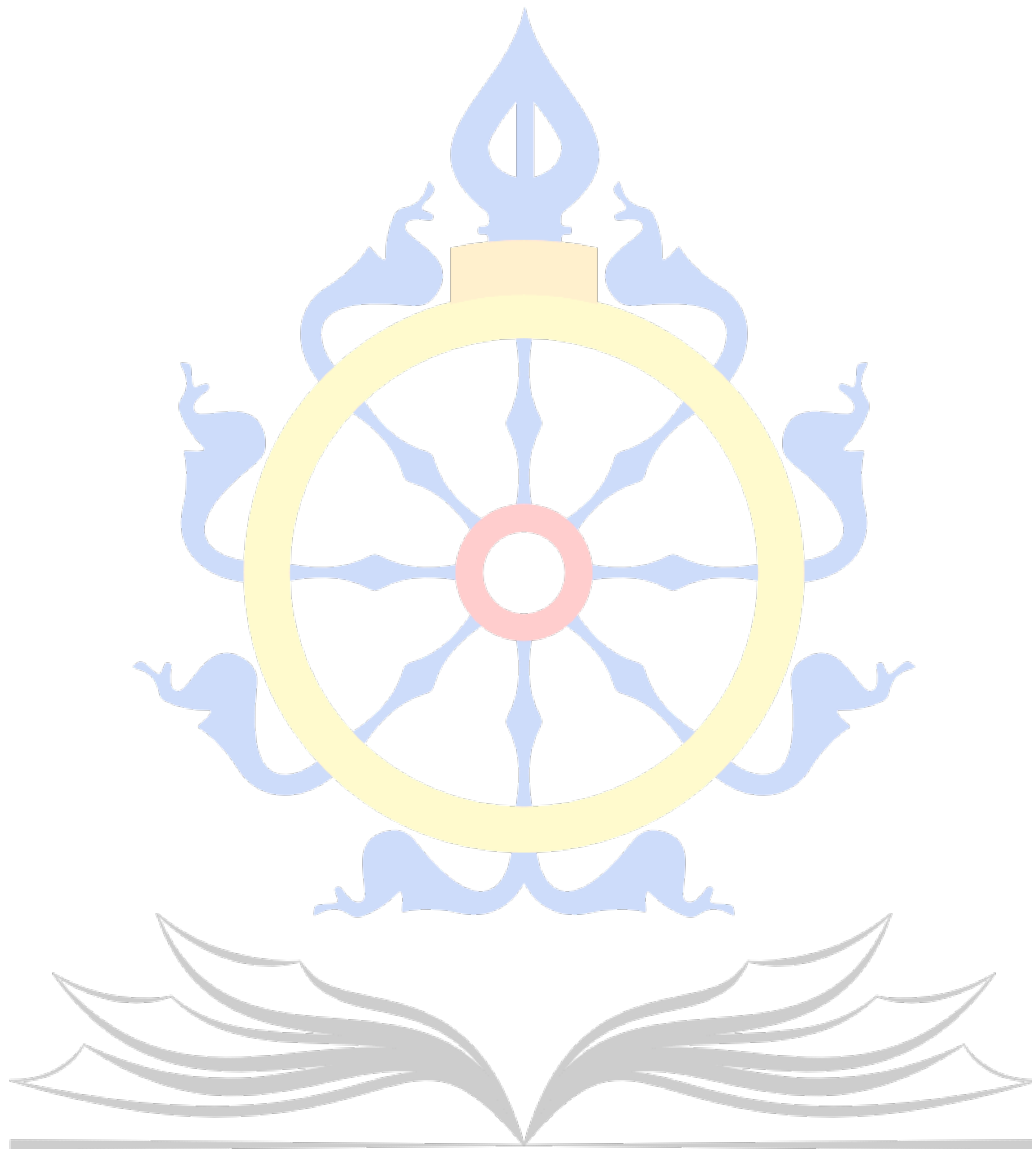
Broader Measures
- **Funding & Support**: The government has doubled funding for **anti-violence centers** and shelters and promoted emergency hotlines.
- **Stricter Controls**: The law includes stronger measures against stalking, revenge porn, and strengthens the existing "Code Red" protections.
- **Political Debate**: While supporting the law, opposition parties criticized the lack of mandatory **sexual and emotional education** in schools, which they argue is essential to address the root "patriarchal" causes.

Additional Info
- **The Catalyst: Murder of Giulia Cecchettin (2023)**:
  - The law is widely seen as a response to the brutal murder of 22-year-old student **Giulia Cecchettin** by her ex-boyfriend in November 2023.
  - Her death triggered massive nationwide protests and a cultural reckoning regarding **patriarchy** and "toxic masculinity" in Italy.
  - Her sister, **Elena Cecchettin**, famously called for a "cultural revolution" rather than a moment of silence, stating that femicide is the result of a society that tolerates controlling behavior.
- **Femicide Statistics**:

- o Italy recorded **106 femicides in 2024**, with over half committed by partners or former partners.
- o Despite a drop in overall homicide rates, the proportion of female victims remains high, often killed by family members.
- **International Day for the Elimination of Violence against Women**:
  - o Observed on **November 25**, designated by the UN General Assembly to raise awareness of the fact that women around the world are subject to rape, domestic violence, and other forms of violence.

India Achieves Record 48-Medal Haul at Asian Youth Games 2025

What's the News?

- India registered its **best-ever performance** at the **2025 Asian Youth Games**, securing a record total of **48 medals**.
- The third edition of the continental event was held in **Manama, Bahrain**, and marked the games' return after a 12-year gap.
- The Indian contingent included **222 athletes** (119 women and 103 men).

India's Performance

- **Final Medal Tally:** India finished **sixth** in the overall standings.
    - **Gold:** 13
    - **Silver:** 18
    - **Bronze:** 17
    - **Total:** 48
- **Previous Best:** This performance significantly surpassed India's previous medal hauls of 11 medals (2009) and 14 medals (2013).

Sports Representation

- **Athletics:** Largest contingent with 31 participants.
- **Kabaddi:** 28 participants.
- **Handball:** 16 participants.
- **Boxing:** 14 participants.
- **Taekwondo, Wrestling, Weightlifting:** 10 participants each.

Key Highlights

- **Weightlifting: Priteesmita Bhoi** secured India's first individual gold medal by setting a new **world youth record** in the girls' 44kg clean and jerk event.
- **Kabaddi:** The Indian **boys' and girls' kabaddi teams** both won **gold medals**, each defeating Iran in their respective finals.
- **Combat Sports:** Boxing and wrestling were major sources of medals.
    - **Boxing:** Athletes secured seven medals, including four golds won by women.
    - **Wrestling:** Wrestlers (freestyle and beach) accounted for 12 medals, including six golds.
- **First Medal: Khushi** won India's first medal of the games, a bronze in the girls' 70kg kurash event.
- **Youth Olympics Qualification:** The games also served as a qualifier for the **2026 Youth Olympics** in Dakar, Senegal.

Additional Info

- **About the Asian Youth Games (AYG):**
    - A continental multi-sport event for athletes aged **14 to 17**.
    - It is organized by the **Olympic Council of Asia (OCA)**.
    - The first edition was held in Singapore in 2009, followed by Nanjing in 2013.
- **Indian Olympic Association (IOA) Recognition:**
    - The **IOA** announced cash rewards for the medallists and their coaches to honour the historic performance.
    - Gold medallists will receive ₹5 lakh, silver ₹3 lakh, and bronze ₹2 lakh.

India Clinches Maiden Women's ODI World Cup Title

What's the News?

- The ICC Women's Cricket World Cup 2025 held in India concluded with the home-team securing their **first-ever** World Cup victory.
- India women's cricket team defeated South Africa women's cricket team by **52 runs** in the final at the Dr DY Patil Sports Academy, Navi Mumbai.

Key Performances & Match Details

- **Player of the Match (Final): Shafali Verma** (India) was named Player of the Match for her all-round performance.
    - She top-scored with **87 runs** off 78 balls.
    - She also took two crucial wickets (2/36).
- **Player of the Tournament: Deepti Sharma** (India) received this honour for her exceptional campaign.
    - In the final, she contributed a vital **58 runs** and took a five-wicket haul (**5/39**).
    - She finished the tournament as the **highest wicket-taker** with 22 wickets.
- **Other Key Contributions:**
    - **Smriti Mandhana** (India) scored 45 runs in the final and finished as the tournament's second-highest run-scorer with 434 runs.
    - **Laura Wolvaardt** (South Africa) was the tournament's top run-scorer with 571 runs, setting a new record for the most runs in a single edition of the Women's World Cup.

Additional Info

- **Tournament Host:** The 2025 ICC Women's Cricket World Cup was hosted by **India**.
- **India's Past Finals:** This was India's third appearance in the Women's ODI World Cup final. They had previously finished as runners-up in **2005** (to Australia) and **2017** (to England).

India Tops Medal Tally at Asian Archery Championships 2025 for the First Time

What's the News?

- **India** created history by topping the medal tally at the **24th Asian Archery Championships 2025** held in **Dhaka, Bangladesh**.
- The Indian contingent finished with a total of **10 medals** - 6 Gold, 3 Silver, and 1 Bronze - surpassing the archery powerhouse **South Korea** for the first time in the tournament's history.

- The event witnessed historic "firsts" for India, including individual gold medals in both Men's and Women's **Recurve** categories, ending years of South Korean dominance.

Key Performances & Records
- **Individual Milestones**:
  - **Ankita Bhakat** (Women's Recurve): First Indian woman to win individual recurve gold; defeated Olympic silver medallist **Nam Suhyeon (South Korea)** 7–3.
  - **B. Dhiraj Bommadevara** (Men's Recurve): First Indian man to win individual recurve gold; beat compatriot Rahul 6–2 in an all-Indian final.
- **Team Dominance**:
  - **Women's Recurve Team**: Gold (defeated South Korea).
  - **Compound Women's Team** (Deepshikha, Jyothi Surekha Vennam, Prithika Pradeep): Gold (236–234 vs. Korea).
  - **Compound Mixed Team** (Abhishek Verma & Deepshikha): Gold (153–151 vs. Bangladesh).
  - **Compound Men's Team**: Silver (lost to Kazakhstan).
  - **Sangeeta** (Women's Recurve): Bronze (after shoot-off win over Deepika Kumari).
- **Strategic Significance**: Ended South Korea's **12-year winning streak** in the men's recurve team event.

Event & Organisational Highlights
- **Host**: Bangladesh (3rd time hosting the championships).
- **Participants**: 200+ archers from **30 countries**, competing across **10 events** (5 recurve, 5 compound).
- **Indian Contingent**: 16-member team, including Olympians **Deepika Kumari** and **Jyothi Surekha Vennam**.
- **Governance Update**:
  - **Kazi Razib Uddin Ahmed Chapol** (Bangladesh) elected President of **World Archery Asia (WAA)** - first Bangladeshi to hold the post.
  - Succeeded **Chung Eui-sun** (Hyundai Motor Group), who served since 2005.

India Scripts History with Record 9 Golds at World Boxing Cup Finals 2025
What's the News?
- **India** delivered its best-ever performance at the **World Boxing Cup Finals 2025** in **Greater Noida**, bagging a historic tally of **9 Gold medals**.
- The Indian contingent finished with a total of **20 medals** (9 Gold, 6 Silver, 5 Bronze), ensuring a **100% success rate** as every participating boxer secured a podium finish.
- The women's team led the charge with a **golden sweep**, winning **7 out of 10** weight categories, while the men added two golds to the tally.

India's Golden Run: Key Winners
Women's Dominance (7 Golds)
- **Nikhat Zareen (51kg)**: The two-time world champion defeated Chinese Taipei's Guo Yi Xuan **5-0** to clinch gold.
- **Jaismine Lamboria (57kg)**: Stunned Paris Olympic bronze medalist **Wu Shih Yi** (Chinese Taipei) with a **4-1** victory.
- **Minakshi Hooda (48kg)**: Opened India's gold rush by defeating Uzbekistan's Fozilova Farzona **5-0**.
- **Other Gold Medalists**:
  - **Preeti Pawar** (54kg)
  - **Parveen Hooda** (60kg)
  - **Arundhati Choudhary** (70kg)
  - **Nupur Sheoran** (80+kg)

Men's Performance (2 Golds)
- **Sachin Siwach (60kg)**: Defeated Paris Olympics silver medalist **Munarbek Seitbek Uulu** (Kyrgyzstan) to win gold.
- **Hitesh Gulia (70kg)**: Won a gritty bout **3-2** against Kazakhstan's **Nurbek Mursal**.

Medal Tally & Significance
- **Total Medals**: **20** (9 Gold, 6 Silver, 5 Bronze).
- **Significance**:
  - This was the **debut campaign** for India at the World Boxing Cup Finals, held at the **Shaheed Vijay Singh Pathik Sports Complex**.
  - It marks a massive boost for Indian boxing ahead of the **2028 Los Angeles Olympics**, highlighting the depth of talent, especially in the women's division.
- **Notable Silver Medalists**:
  - **Pooja Rani** (80kg), **Jadumani Singh** (50kg), **Pawan Bartwal** (55kg), **Abhinash Jamwal** (65kg), **Ankush Panghal** (80kg), and **Narender Berwal** (90+kg).

Additional Info
- **World Boxing Cup**:
  - A new competition series organized by **World Boxing**, the international federation established to ensure boxing's future in the Olympics.
  - The finals featured top boxers from global powerhouses like **Uzbekistan, Kazakhstan, and England**, though India fielded the largest contingent as hosts.
- **Scoring System**: Matches were decided on the standard **5-judge scoring system**, with several Indians winning by **Unanimous Decision (5-0)**, reflecting technical superiority.
- **Future Events**: The performance sets the stage for the upcoming **Asian Games** and **World Championships**.

India Wins Inaugural Blind Women's T20 World Cup 2025
What's the News?
- The **Indian Women's Blind Cricket Team** has created history by winning the **inaugural T20 World Cup for the**

Blind, defeating **Nepal** by 7 wickets in the final held in **Colombo, Sri Lanka**.

- The Indian team, led by captain **Deepika TC**, remained **undefeated** throughout the tournament, capping a dominant campaign that also saw them win the ODI World Cup recently.

Match Highlights & Key Performances

- **Final Verdict**: Chasing a target of **115 runs**, India reached **117/3** in just **12.1 overs**, securing a comfortable victory with 7 wickets in hand.
- **Star Performer**: Opener **Phula Saren** (from Odisha) was adjudged the **Player of the Match** for her match-winning knock of **44 runs off 27 balls**.
- **Bowling Effort**: India's bowlers restricted Nepal to **114/5** in 20 overs, with Nepal managing only a single boundary in their entire innings due to disciplined Indian fielding.
- **Tournament Run**: India defeated **Sri Lanka, Australia, USA, and Pakistan** in the league stages before thrashing Australia by 9 wickets in the semi-finals.

Tournament Overview

- **Host**: The tournament was **co-hosted by India and Sri Lanka**, with matches played in New Delhi, Bengaluru, and Colombo.
- **Participants**: Six teams participated: **India, Nepal, Sri Lanka, Pakistan, Australia, and the USA**.
- **Organizer**: The event was organized by the **Cricket Association for the Blind in India (CABI)** under the aegis of the **Samarthanam Trust for the Disabled**.

Additional Info

- **Blind Cricket Categories**: Players are classified into three categories based on visual ability to ensure fair competition:
    - **B1**: Totally blind (must bowl/bat with a runner).
    - **B2**: Partially blind (vision up to 2-3 meters).
    - **B3**: Partially sighted (vision up to 6 meters).
    - **The Ball**: A special **white plastic ball** filled with **ball bearings** is used, allowing players to track it by sound (auditory cues).