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FOR UPSC EXAM

**COMPREHENSIVE | ANALYTICAL
EXAM-FOCUSED**

VIDHVATH VIMARSHA



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POLITY & CONSTITUTION

1. Demand for Sarna Religious Code: Identity and Constitutional Rights

The Jharkhand government has formally urged the Union to include a separate 'Sarna' religious code in the Census 2027. This demand seeks to provide a distinct identity to tribal communities who practice nature worship, ensuring their socio-religious uniqueness is reflected in official data for better policy targeting.

- **Core Demand and Context:** Chief Minister Hemant Soren has requested the President and Prime Minister to include a dedicated column for the 'Sarna' faith in the upcoming Census. This follows the Jharkhand Assembly's 2020 resolution seeking a separate code to distinguish tribal practitioners from other organized religions.
- **Demographic Evidence:** According to the 2011 Census, approximately 50 lakh people across 21 states manually identified themselves as 'Sarna' in the religion column despite the absence of a dedicated code. This highlights a significant population seeking a distinct religious identity.
- **Distinctive Features of Sarna Faith:** The faith is characterized by "Nature Worship" rather than idol worship. It centers on the protection of 'Jal, Jangal, Jameen' (Water, Forest, Land) and revolves around sacred groves (Sarnas), village deities, and rituals deeply tied to the ecological cycle.
- **Rationale for the Code:** The primary argument is that clubbing tribals under other religious categories (like Hindu or Christian) leads to the erosion of their unique cultural heritage and inaccurate demographic data. A separate code is viewed as essential for "fact-based" policymaking and balanced development.
- **Protection of Tribal Rights:** Proponents argue that a distinct identity is necessary to protect constitutional rights and ensure that welfare benefits reach the intended beneficiaries without religious ambiguity. It is also seen as a safeguard against forced or incentivized religious conversions.
- **Administrative Challenges:** While the state acknowledges that new classifications could complicate Census operations, it maintains that the long-term benefits of accurate socio-religious data outweigh these procedural hurdles, especially given the delay of the 2021 Census to 2027.



Key Definitions

- **Sarnaism:** An indigenous religious system practiced by several tribal groups (such as Munda, Oraon, Ho, and Santhal) in India, centered on the worship of nature and sacred groves.
- **Census Code:** A numerical identifier used during data collection to classify respondents into specific categories like religion, occupation, or language for statistical analysis.

Constitutional & Legal Provisions

- **Article 25:** Grants freedom of conscience and the right to freely profess, practice, and propagate religion. Tribal groups argue this includes the right to be recognized under their own distinct faith.



- **Article 29:** Mandates the protection of the interests of minorities, specifically those having a distinct language, script, or culture. Sarna followers seek protection under this cultural mandate.
- **Fifth & Sixth Schedules:** Provide for the administration of tribal areas. Accurate demographic data is vital for the effective functioning of Tribes Advisory Councils and the allocation of funds under these schedules.
- **The Census Act, 1948:** Provides the legal framework for conducting the Census. The Union Government holds the power to decide the format and categories included in the census questionnaire.

Important Key Points

- **Identity vs. Benefits:** While many tribals are categorized as Scheduled Tribes (ST) for reservation benefits, the Sarna code is specifically about religious and cultural identity, which they feel is missing in the current Hindu/Muslim/Christian/Sikh/Buddhist/Jain framework.
- **National Implications:** Though the movement is strongest in Jharkhand, it has resonance in Odisha, Chhattisgarh, West Bengal, and Bihar, making it a pan-Indian tribal identity issue.

Conclusion: The demand for a Sarna code represents a transition from "tribal identity" to "religious identity." While the administrative machinery fears fragmentation of data, the constitutional promise of pluralism supports the recognition of distinct cultural identities. A balanced approach would involve scientific data collection that respects the self-identification of indigenous communities while maintaining the integrity of the national census.

2. Supreme Court Directives on Judicial Delays

- **Mandatory Timeline for Judgments:** The Supreme Court (SC) has directed all High Courts to pronounce verdicts within three months of reserving a judgment. This measure addresses systemic delays between the conclusion of hearings and the final delivery of orders.
- **Prioritization of Personal Liberty:** The SC emphasized the need for "extra promptitude" in matters concerning personal liberty and bail. Orders on bail applications should ideally be pronounced and uploaded online on the very same day.
- **Next-Day Upload Mandate:** If a bail order is reserved, it must be pronounced the following day and uploaded to the court website within 24 hours to ensure transparency and quick administrative execution.
- **Reasoned Open-Court Judgments:** The directives mandate that reasoned judgments pronounced in open courts must be accessible on High Court websites within 24 hours, enhancing the litigant's right to seek timely redress.
- **Infringement of Fundamental Rights:** The SC explicitly ruled that undue delay in pronouncing verdicts after concluding arguments is an infringement of the right to personal liberty, providing legal grounds for litigants to challenge systemic judicial inertia.

Key Terms, Constitutional Framework, and Institutional Mechanics

Key Definitions

- **Reserved Judgment:** A legal scenario where a judge hears arguments from all parties in a case but delays delivering the final verdict to deliberate on legal points, review evidence, or draft the detailed order.



- **Bail:** The conditional release of an accused person from judicial custody, pending a final judgment, under a financial or personal guarantee to appear in court when required.

Constitutional & Legal Provisions

- **Article 21 (Right to Life and Personal Liberty):** The SC has repeatedly interpreted the right to a speedy trial and timely justice as an integral part of fair procedure under Article 21. Delaying bail orders directly curtails this fundamental right.
- **Article 141 (Law of the Land):** Orders and directives passed by the Supreme Court are binding on all courts within the territory of India, making these timelines legally enforceable across all High Courts and subordinate judiciaries.
- **Section 353 of the Code of Criminal Procedure (CrPC) / Section 258 of Bharatiya Nagarik Suraksha Sanhita (BNSS):** Governs the pronouncement of judgments in criminal cases, requiring them to be delivered in open court immediately after the termination of the trial or at a subsequent noticed time.

ADDRESSES CONCERNS OVER DELAY

Bail to verdict: SC pushes High Courts to speed up justice

Directs judgment be delivered within 3 months of matter being reserved, uploading of bail plea order the same day

Conclusion & UPSC Relevance

Conclusion

Long-standing judicial delays undermine public trust in the rule of law and turn pre-trial detention into a punitive measure. By establishing rigid timelines for reserving judgments and uploading bail orders, the Supreme Court has reinforced the constitutional primacy of personal liberty and institutional accountability.

3. NIA Court Pendency and UAPA Trial Delays

- **Institutional Pendency Crisis:** A severe gap exists between Supreme Court (SC) directives for timebound Unlawful Activities (Prevention) Act (UAPA) trials and reality, exemplified by Delhi's Patiala House National Investigation Agency (NIA) Court handling 43 UAPA cases—eight times the SC's recommended baseline of 10 cases per judge.
- **Frequent Judicial Transfers:** Frequent transfers undermine judicial continuity; the Delhi NIA court has seen five judges since September 2022, with predecessors averaging an 11-month tenure. This forces replacement judges to hear complex arguments afresh, significantly lengthening trial durations.
- **SC Structural Guidelines:** To enable timebound disposal, the SC mandated that if more than 15 trials are pending within a High Court's jurisdiction, two exclusive NIA courts must be set up, scaling to three courts if trials exceed 25. It also ruled that NIA judges should not be burdened with additional work.

• NIA COURT PENDENCY

- Only 18 of 53 designated NIA courts have no pending cases.
- Only 3 of 53 designated NIA courts deal exclusively with NIA cases.
- Jharkhand (28), Delhi (19), J&K (16), West Bengal (13), Chhattisgarh, Kerala and TN (8 each), Assam and Gujarat (6 each) rank the highest in terms of cases
- pending for at least 5 yrs, or more
- Chhattisgarh: Highest number of cases under trial at 73, with 4 NIA dedicated courts.
- J&K, with 71 cases, has only 1 court; as does Jharkhand with 52 cases
- Delhi, with 44 cases and 2 NIA courts; West Bengal, with 38 cases and 3 courts





- **National Disparity in Special Courts:** Across India, only 3 of 53 designated NIA courts deal exclusively with NIA matters, while 18 have zero pending cases. This highlights deep structural mismatches in judicial resource allocation.
- **State-Level Backlogs:** States show extreme variations in backlogs; Chhattisgarh holds the highest volume at 73 cases across 4 dedicated courts, whereas Jammu & Kashmir faces 71 cases and Jharkhand faces 52 cases with only 1 dedicated court each.
- **Impact on Undertrials:** With an average case disposal time stretching between three to seven years—vastly exceeding the SC's one-month expectation—extended delays lead to prolonged incarceration of undertrials due to strict bail thresholds under anti-terror laws.

Key Terms, Constitutional Framework, and Institutional Mechanics

Key Definitions

- **Unlawful Activities (Prevention) Act (UAPA):** India's primary anti-terror legislation designed to provide more effective prevention of certain unlawful activities of individuals and associations, and for dealing with terrorist activities.
- **Special NIA Courts:** Special courts constituted by the Central Government under Section 11 or Section 22 of the NIA Act, 2008, for the trial of scheduled offenses like terrorism, espionage, and counterfeiting.

Constitutional & Legal Provisions

- **Article 21 (Right to a Speedy Trial):** The Supreme Court recognizes the right to a speedy trial as an implicit fundamental right under Article 21. Prolonged pre-trial detention without trial progression constitutes a direct violation of personal liberty.
- **Section 43D(5) of UAPA:** Imposes stringent statutory restrictions on bail, making it nearly impossible for an accused to secure release if the court finds prima facie ground that the accusation is true. This heightens the necessity for rapid trial completion.
- **Section 19 of the NIA Act, 2008:** Mandates that trials by Special Courts shall have precedence over all other trials and shall be held on a day-to-day basis until conclusion.

Conclusion & UPSC Relevance

Conclusion

The mismatch between the statutory intent of the NIA Act and the practical capacity of Special Courts undermines counter-terrorism judicial infrastructure. Ensuring structural continuity through longer judicial tenures and strictly implementing the Supreme Court's case-to-court scaling ratios are vital steps to uphold procedural justice and state security.

4. Supreme Court Clarification on Sedition Trials (Section 124A IPC)

Key Summary Points

- **Procedural Modification:** The Supreme Court of India clarified that pending trials, appeals, and legal proceedings involving the offence of sedition under Section 124A of the Indian Penal Code (IPC) can proceed on merits if the accused explicitly states they have no objection.



- **The Origin of the Stay:** This ruling modifies the apex court's historic interim order passed on May 11, 2022 (in the *S.G. Vombatkere v. Union of India* case), which had placed all pending sedition trials and investigations across the country in abeyance.
- **Context of the Clarification:** The decision was delivered by a three-judge Bench comprising Chief Justice of India Surya Kant, Justice Joymalya Bagchi, and Justice Vipul M. Pancholi during the hearing of a petitioner who has been incarcerated for 17 years and wished for his appeal to be heard on its merits.
- **Judicial Rationale:** The Bench noted that if an undertrial or convict does not object to the continuation of the proceedings, there should be no structural impediment for courts to decide the matter, ensuring that the stay does not inadvertently prolong the incarceration of an accused.
- **The Original Mandate:** The 2022 freeze was intended to allow the Union Government time to re-examine and reconsider the colonial-era law, with the court expecting the Centre and states to refrain from registering fresh FIRs or taking coercive actions under Section 124A during the review period.

Evolution of the law

Sedition is a cognisable, non-bailable and non-compoundable offence under Section 124A of Indian Penal Code

BEFORE INDEPENDENCE

1870: The section on sedition is introduced by the British to the IPC

The British rulers used the law to muzzle demands for freedom. For instance, Bal Gangadhar Tilak was the first person to be convicted of sedition in colonial India.

AFTER INDEPENDENCE

1948: In discussions, Indian leaders agree to drop "sedition" from the Constitution

1949: "Sedition" is no longer part of the Indian Constitution adopted on November 26 this year. However, Section 124A remains in the IPC

1951: Nehru govt brings in first amendment under Article 19(1)(a), and puts in "reasonable restrictions" on the right to free speech

1974: Indira Gandhi govt makes Section 124A a cognisable offence that authorises police to make arrests without a warrant

PRESENTLY

2019 data shows that sedition cases rose by 25% and arrests by 41% over the previous year. However, only 3% of cases led to convictions

Definitions of Key Terms

- **Sedition (Section 124A IPC):** A colonial-era provision that criminalizes any act, speech, or visual representation that attempts to bring hatred, contempt, or excites disaffection towards the Government established by law in India.
- **Abeyance:** A state of temporary disuse, suspension, or inactivity. In legal terms, the 2022 order meant the enforceability and trial mechanisms of the sedition law were frozen, though the law itself was not struck down.
- **Incarceration:** The state of being confined in prison or detained as an undertrial or a convicted prisoner.

Key Constitutional and Legal Provisions

- **Article 19(1)(a) of the Constitution:** Guarantees the fundamental right to freedom of speech and expression. The constitutional validity of Section 124A is frequently challenged on the grounds that it imposes an unreasonable restriction on this right.
- **Article 19(2) of the Constitution:** Permits the State to impose "reasonable restrictions" on free speech in the interests of the sovereignty and integrity of India, the security of the State, friendly relations with foreign States, or public order.
- **Section 124A of the Indian Penal Code, 1860:** The statutory provision defining sedition as a non-bailable, cognizable offence punishable with imprisonment ranging from three years to life.



- **Section 152 of the Bharatiya Nyaya Sanhita (BNS):** The provision in the updated criminal code that addresses acts endangering the sovereignty, unity, and integrity of India. Though the term "sedition" is avoided, it covers similar substantive actions.

Landmark Judicial Precedents

- **Kedar Nath Singh v. State of Bihar (1962):** A five-judge Constitutional Bench upheld the validity of Section 124A but severely restricted its application. The court ruled that sedition is only applicable when the speech or action involves an incitement to violence or a tendency to create public disorder.
- **Vinod Dua v. Union of India (2021):** The Supreme Court reiterated the *Kedar Nath* guidelines, firmly stating that journalists are protected from sedition charges unless their expressions directly incite violence against the state.

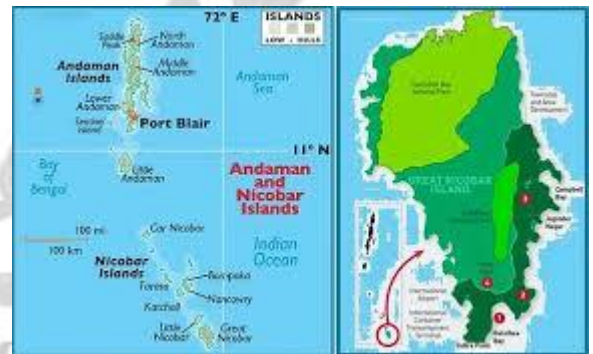
Conclusion

The Supreme Court's recent clarification introduces a pragmatic equilibrium to the ongoing sedition debate. By allowing trials to proceed when the accused consents, the judiciary ensures that a mechanism meant to protect citizens from a sweeping law does not inadvertently result in prolonged detention without trial. As India transitions into newer statutory frameworks like the Bharatiya Nyaya Sanhita (BNS), balancing national security with the foundational right to dissent remains crucial to upholding constitutional democracy.

5. Great Nicobar Project: Controversy over Gram Sabha Quorum and FRA Compliance

Executive Summary

- **Quorum Violation:** The Andaman and Nicobar administration reportedly bypassed the mandatory 50% quorum requirement under the Forest Rights Act (FRA) for the ₹72,000-crore Great Nicobar Island project.
- **Discrepancy in Figures:** Attendance at Gram Sabha meetings ranged from a mere 1.83% to 14.72% of the population, significantly lower than the statutory requirement.
- **Legal Defense:** The administration argued in the Calcutta High Court that these figures constituted a "proper quorum," claiming resolutions for the project were passed unanimously despite the low turnout.
- **Procedural Lapses:** Petitions allege that the "Stage-I" forest clearance was granted based on these contested consents, potentially violating the rights of the local tribal communities and settlers.
- **FRA Implementation:** Central rules explicitly state that a Gram Sabha quorum is achieved only if one-half (50%) of the adult members are present, with at least one-third being women.
- **Scale of Consent:** In total, only 349 individuals (approximately 4.6% of the 2011 Census population) signed off on a project impacting seven villages and vast tracts of ecologically sensitive forest land.





Key Definitions

- **Gram Sabha:** A body consisting of persons registered in the electoral rolls relating to a village comprised within the area of Panchayat at the village level. It is the cornerstone of local self-governance.
- **Quorum:** The minimum number of members of an assembly or society that must be present at any of its meetings to make the proceedings of that meeting valid.
- **Forest Rights Act (FRA), 2006:** A landmark legislation that recognizes the rights of forest-dwelling communities to land and other resources, which had been denied to them over decades.

Constitutional & Legal Provisions

- **Forest Rights Act (FRA) Rules:** The 2012 amendment to the FRA Rules specifies that for the purpose of seeking consent for the diversion of forest land, the quorum of the Gram Sabha must be at least 50% of the members.
- **Article 243G:** Empowers State Legislatures to endow Panchayats with such powers and authority as may be necessary to enable them to function as institutions of self-government.
- **PESA Act, 1996:** While the A&NI are not currently under the Fifth Schedule, the principles of the Provisions of the Panchayats (Extension to Scheduled Areas) Act emphasize the "informed consent" of Gram Sabhas in tribal regions.
- **The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006:** Specifically Section 6, which outlines the authorities to vest forest rights and the process for verification by the Gram Sabha.

Critical Analysis & Key Points

- **Procedural Integrity:** The reliance on 2011 Census data suggests that even by older population standards, the participation was insufficient. Using current population estimates would likely show an even lower percentage of participation.
- **Women's Representation:** The FRA mandate for one-third women's participation in the quorum is a safeguard for gender-inclusive decision-making, which is often sidelined in large-scale infrastructure projects.
- **Environmental vs. Development Balance:** The Great Nicobar project (including a transshipment port, airport, and power plant) faces scrutiny for its impact on the Shompen and Nicobarese tribes and the endemic biodiversity of the region.

Conclusion

The controversy surrounding the Great Nicobar project highlights a significant friction point between ambitious national development goals and the statutory rights of grassroots democratic institutions. The bypass of quorum requirements undermines the spirit of the Forest Rights Act, which seeks to rectify "historical injustices" against forest dwellers. A judicial determination on whether "attendance figures" can override "statutory percentages" will set a critical precedent for future infrastructure projects in ecologically and culturally sensitive zones.



6. Expansion of Supreme Court Judicial Strength: 2026 Amendment Bill

Key Highlights and Summary

- **Proposed Legislative Change:** The Union Cabinet, chaired by Prime Minister Narendra Modi, has approved the Supreme Court (Number of Judges) Amendment Bill, 2026, to increase the judge strength from the current 34 to 38.
- **Judicial Recommendation:** This move follows a formal recommendation made in March 2026 by Chief Justice of India (CJI) Surya Kant to address the acute shortage of judges hindering the formation of permanent Constitution Benches.
- **Focus on Constitutional Matters:** The primary objective of the increase is to allow the apex court to constitute dedicated Constitution Benches to hear high-stakes matters, such as the Sabarimala review, without disrupting regular judicial proceedings.
- **Addressing Vacancy Pressures:** The court currently operates with a working strength of 32 judges, facing additional pressure from several high-profile retirements—including Justices J.K. Maheshwari, Pankaj Mithal, Sanjay Karol, and Satish Sharma—scheduled throughout 2026.
- **Fiscal Provisions:** Financial implications, including the salaries of the additional judges and supporting staff, will be met through the Consolidated Fund of India.
- **Evolution of Strength:** This marks the latest expansion since 2019; historically, the court started with 8 judges (including the CJI) in 1950, growing incrementally to 14 in 1960, 18 in 1978, 26 in 1986, 31 in 2008, and 34 in 2019.



Conceptual Definitions

- **Constitution Bench:** A special bench of the Supreme Court consisting of at least five judges, constituted for cases involving a substantial question of law as to the interpretation of the Constitution (Article 145(3)).
- **Supreme Court Collegium:** A system for the appointment and transfer of judges that has evolved through decisions of the Supreme Court, currently headed by the CJI and comprising the four most senior associate judges.
- **Consolidated Fund of India:** The primary account of the Government of India where all revenues received and loans raised are credited, and from which all legally authorized expenditure is met.

Constitutional and Legal Provisions

- **Article 124(1):** Vests the Parliament with the power to increase the number of Supreme Court judges by law. The Supreme Court (Number of Judges) Act, 1956, is the specific legislative vehicle used for this purpose.
- **Article 145(3):** Mandates that any case involving a "substantial question of law as to the interpretation of the Constitution" must be heard by a bench of at least five judges.
- **Article 124(2):** Details the appointment process of Supreme Court judges by the President in consultation with such judges of the Supreme Court and High Courts as deemed necessary.



Additional Important Keypoints

- **Speedy Justice:** Union Home Minister Amit Shah noted the bill aims to expedite the resolution of pending constitutional matters and provide relief to poor and remote petitioners.
- **Imminent Collegium Tasks:** If the bill is cleared, the SC Collegium under CJI Surya Kant will need to make at least nine recommendations this year to fill both new and existing vacancies.
- **Historical Restriction:** In 1979, the Cabinet temporarily restricted the working strength to 15 judges, a restriction later withdrawn at the request of the then CJI.

Conclusion

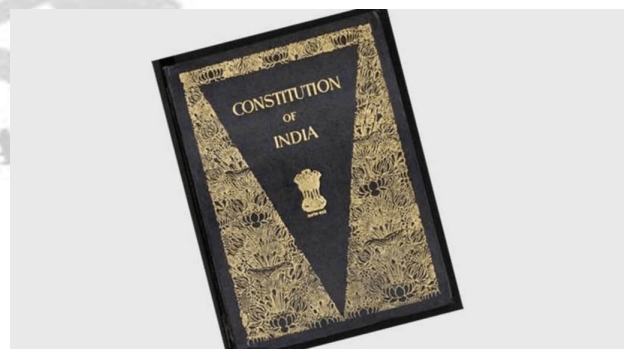
The decision to raise the judicial strength to 38 is a strategic response to the burgeoning caseload and the specific need for specialized benches. By expanding the bench, the government aims to bridge the gap between judicial demand and supply, ensuring that fundamental constitutional interpretations are not delayed by the pressures of routine litigation. This structural reform is essential for maintaining the Supreme Court's role as the final arbiter of law and the protector of constitutional values.

7. Constitutional Status of Religious Instruction in Schools: SC Judicial Review

The Supreme Court recently addressed a petition seeking to redefine the legal classification of educational institutions that impart religious instruction. The Court has deferred to the Ministry of Education to determine if such schools should be categorized as "religious or charitable establishments" under Article 26(a) rather than "secular or professional" institutions under Article 30(1). This case highlights the delicate balance between religious freedom, minority rights, and the state's interest in standardized secular education.

Core Summary of the Judicial Observation

- **Executive Domain:** The Supreme Court Bench, led by Justice Dipankar Datta, stated that the classification of schools imparting religious education falls within the administrative domain of the Ministry of Education.
- **Classification Dichotomy:** The petition seeks to distinguish between institutions promoting a specific religion (under Article 26) and those providing secular/professional education (under Article 30).
- **Impact on Regulation:** Categorizing these schools under Article 26(a) would subject them to state-imposed restrictions based on public order, health, and morality.
- **Interpretation of Article 30(1):** The petitioner argued that the phrase "educational institutions of their choice" should be interpreted strictly as "secular/professional" rather than religious.
- **National Security & Oversight:** The plea emphasized the need for a central mechanism to register and monitor institutions for children up to 14 years to prevent potential manipulation or trafficking.
- **Ambiguity in Hybrid Models:** Current deliberations remain unclear on how to categorize schools that offer both secular curriculum and optional religious instruction.





Key Definitions & Concepts

- **Religious Instruction:** Direct teaching or promotion of specific religious tenets or beliefs as part of an institutional curriculum.
- **Article 26(a):** Grants religious denominations the right to establish and maintain institutions for religious and charitable purposes.
- **Charitable Establishments:** Institutions organized for the public good rather than profit, which may include religious goals but are subject to broader state regulations.

Constitutional & Legal Provisions

- **Article 19(1)(g):** Guarantees the right to practice any profession or to carry on any occupation, trade, or business.
- **Article 26:** Freedom to manage religious affairs, specifically the right to establish and maintain institutions for religious and charitable purposes.
- **Article 28:** Prohibits religious instruction in educational institutions wholly maintained out of State funds.
- **Article 30(1):** Empowers all minorities, whether based on religion or language, to establish and administer educational institutions of their choice.

Additional Strategic Keypoints

- **State Responsibility:** The petition underscores the state's "onus" to ensure the safety and security of children by preventing the operation of unrecognised and unregistered institutions.
- **Quality of Education:** Concerns were raised regarding whether unregistered religious institutions can provide the quality of education necessary for the nation's future.
- **Scope of Minority Rights:** The case questions whether the "choice" provided under Article 30 is absolute or if it can be partitioned into secular and religious segments by the state.

Conclusion

The Supreme Court's decision to refer this matter to the government indicates a cautious approach toward altering the established interpretation of minority educational rights. By shifting the focus to the Ministry of Education, the Court acknowledges that the regulation of religious vs. secular curriculum is a complex policy issue involving national security and child welfare. The outcome will likely redefine how "charitable purposes" are viewed in the context of modern schooling, potentially bringing religious seminaries or specialized schools under stricter state oversight.



ECONOMY

1. Expansion of Samarth Panchayat Portal: Towards Fiscal Decentralization

The Ministry of Panchayati Raj is expanding the "Samarth Panchayat" portal to major states like Uttar Pradesh, Maharashtra, and Assam following successful pilot runs in Himachal Pradesh and Chhattisgarh. This digital initiative aims to enhance the financial autonomy of Gram Panchayats by streamlining the collection of Own Source Revenue (OSR) and ensuring transparent local governance.

- **Objective and Scope:** The Samarth portal is a unified digital platform designed to digitize the demand, collection, and management of both tax and non-tax revenues. It covers 2,66,999 panchayats across India, with a primary focus on making local bodies "Atmanirbhar" (self-reliant) by reducing their absolute dependence on Central and State grants.
- **Key Functional Features:** The platform enables online demand generation, digital payment collection (via UPI, cards, and net banking), and real-time revenue monitoring. It also includes an "Asset Management" module to track and monetize panchayat-owned properties like community halls, shops, and ponds.
- **Strengthening Fiscal Autonomy:** By providing a structured mechanism to collect House Tax, Water Charges, and License Fees, the portal helps Panchayats build their "Own Source Revenue" (OSR). This financial pool allows local bodies to address specific community needs that might not be covered under rigid central schemes.
- **Transparency and Accountability:** The portal features a real-time dashboard that tracks revenue performance. This "digitization of records" minimizes manual errors, prevents leakages, and fosters trust among rural taxpayers by providing digital receipts and clear accounting of how local taxes are utilized.
- **Assam's Strategic Inclusion:** The expansion into Assam is significant as it serves as a gateway for digital governance in the Northeast. It addresses the unique administrative challenges of the region and integrates the traditional local governance structures with modern fiscal technology.

Key Definitions

- **Own Source Revenue (OSR):** Revenue generated by Panchayats through their own internal powers of taxation and non-tax levies (e.g., property tax, market fees, and user charges for sanitation).
- **Fiscal Decentralization:** The process of devolving taxing and spending powers to lower levels of government (like Panchayats) to ensure that local needs are met with local resources.

Constitutional & Legal Provisions

- **Article 243-H:** Specifically empowers State Legislatures to authorize Panchayats to levy, collect, and appropriate certain taxes, duties, tolls, and fees.





- **73rd Constitutional Amendment Act, 1992:** Mandated the creation of a three-tier Panchayati Raj system and provided the structural basis for financial devolution to local bodies.
- **Article 243-I:** Mandates the constitution of a State Finance Commission (SFC) every five years to review the financial position of Panchayats and recommend the distribution of taxes between the State and local bodies.

Important Key Points

- **The Finance Commission Link:** The 15th and 16th Finance Commissions have increasingly linked "Performance Grants" for local bodies to their ability to show an upward trend in OSR collection, making portals like Samarth a prerequisite for higher funding.
- **Atmanirbhar Panchayat Initiative:** This portal is a core component of the government's vision to transform Gram Panchayats into self-governing economic units rather than just implementing agencies for central schemes.

Conclusion: The expansion of the Samarth Panchayat portal represents a transition from "administrative" decentralization to "fiscal" empowerment. While the digital infrastructure is a leap forward, its ultimate success will depend on the "willingness to tax" at the local level and the capacity building of rural officials to manage these digital systems effectively.

2. Indian Power Market: The Phenomenon of Zero-Price Electricity

On May 1, 2026, India's power exchange witnessed a historic event as electricity prices hit zero for the first time in specific time blocks. This occurrence, driven by record solar generation and a sudden dip in demand, highlights the growing complexities of grid management as India aggressively pursues its ambitious target of 500 GW non-fossil fuel capacity by 2030.

- **Supply-Demand Mismatch:** The price crash was triggered by a "perfect storm" of high supply and low demand. Record solar generation (reaching ~57.5 GW) coincided with cooler weather and light rains in Northern and Eastern India, which lowered cooling requirements. Additionally, industrial demand dropped significantly due to the Labour Day holiday.
- **Inflexible Thermal Base:** A critical factor in zero pricing is the "inflexibility" of thermal power plants. Unlike solar or hydro, coal-fired plants cannot be switched off and on rapidly. To maintain grid frequency at the mandatory 50 Hz, these plants continue generating even when demand is low, leading to a massive oversupply on the exchange.
- **Market Dynamics on IEX:** On the Real-Time Market (RTM) platform of the Indian Energy Exchange (IEX), sell bids reached 46 GW against purchase bids of only 6 GW during the affected blocks. While exchange-traded power accounts for only 13% of total supply (the rest being long-term PPAs), it acts as a crucial barometer for the health of India's energy ecosystem.
- **The Case for Negative Pricing:** Experts suggest that India may eventually need to follow the European and Australian models of "negative pricing." This mechanism essentially pays consumers or storage operators to take excess power off the grid, providing a financial incentive to balance supply and prevent grid instability.
- **Storage as a Solution:** The price crash is viewed not as a lack of demand for renewables, but as an urgent signal for Battery Energy Storage Systems (BESS) and Pumped Hydro Storage. Capturing excess daytime solar energy to meet evening peak demand is essential to prevent value erosion for renewable energy developers.



Key Definitions

- **Real-Time Market (RTM):** A market segment on power exchanges that allows participants to buy or sell electricity just an hour before delivery, helping in managing last-minute demand-supply variations.
- **Grid Frequency:** Measured in Hertz (Hz), it represents the balance between power generation and load. In India, it must stay near 50 Hz; oversupply increases frequency, while undersupply decreases it, both risking grid collapse.
- **Open Access Consumers:** Large consumers (typically with a load of 1 MW or more) who are permitted to buy power directly from the market or private generators rather than relying solely on local Discoms.

Constitutional & Legal Provisions

- **The Electricity Act, 2003:** The foundational legal framework that de-licensed generation and introduced competition through power exchanges. It mandates the "Security of the Grid" as a primary responsibility of the Load Despatch Centers.
- **Article 246 (Seventh Schedule):** Electricity is a "Concurrent List" subject (Entry 38), meaning both the Union and State governments can legislate on it, necessitating coordinated efforts for grid balancing.
- **CERC Regulations:** The Central Electricity Regulatory Commission (CERC) frames the rules for market operations and grid codes that govern how prices are discovered and how surpluses are handled on the exchange.

Important Key Points

- **Impact on Investment:** Frequent zero-price events can discourage private investment in renewable energy if developers cannot realize value for the power generated during peak sun hours.
- **Optimization Opportunity:** For Distribution Companies (Discoms) and industrial users, these price dips offer a chance to significantly lower power procurement costs by shifting flexible loads to daytime slots.

Conclusion: The occurrence of zero-priced power is a "growing pain" of India's energy transition. It underscores that the challenge is no longer just about "adding capacity," but about "integrating flexibility." Moving forward, the focus must shift toward mandatory energy storage obligations, demand-side management, and potentially evolving market rules to include negative pricing to ensure a stable and financially viable green energy future.

3. Transition to VB-GRAM G: Analyzing the Decline in Rural Job Demand

The Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), recently rebranded as the **Viksit Bharat Guarantee for Rozgar and Ajeevika Mission Gramin (VB-GRAM G)**, witnessed a significant 36% year-on-year decline in work demand this April. This shift reflects a combination of structural transitions, seasonal agricultural cycles, and a strengthening broader economy that is beginning to absorb rural surplus labor.

- **Significant Quantitative Dip:** Only 17.5 million individuals sought work in April 2026, compared to 27.2 million in April 2025. This downward trend has been consistent since mid-2025, with



monthly declines ranging between 11% and 36%, signaling a departure from the high-demand years of the early 2020s.

- **The "Automatic Stabilizer" Effect:** Economists view the scheme as an economic cycle tracker. The current decline is largely attributed to a robust 2025 monsoon and a productive Rabi harvest season, which naturally redirected the labor force toward active farm work and away from government-guaranteed manual labor.
- **Industrial Absorption:** A 4.1% growth in the Index of Industrial Production (IIP) for March 2026, driven by manufacturing and mining, suggests that secondary sector activities are picking up. This revival likely provided alternative employment opportunities, reducing the reliance on the rural safety net.
- **Structural Transition Challenges:** The rebranding and shift to the VB-GRAM G iteration in April 2026 may have introduced temporary implementation hurdles. As states transition to new digital and administrative frameworks, data reporting and work allocation might experience a stabilization period.
- **Demand-Driven Nature:** Despite the dip, the government maintains the scheme's demand-driven character. Officials have instructed states to maintain a "shelf of works" to ensure that should rural distress resurface, the infrastructure to provide immediate employment remains intact.

Key Definitions

- **Automatic Stabilizer:** An economic tool or program that naturally offsets fluctuations in an individual's or nation's economic activity without explicit government intervention.
- **Shelf of Works:** A pre-approved list of projects (like pond excavation or road building) kept ready by local authorities to be initiated as soon as workers demand employment.

Constitutional & Legal Provisions

- **Article 41:** Directive Principle of State Policy (DPSP) which mandates the State to secure the right to work, to education, and to public assistance in cases of unemployment.
- **Section 3(1) of the MGNREG Act, 2005:** Legally guarantees at least 100 days of wage employment in a financial year to every rural household whose adult members volunteer to do unskilled manual work.
- **Article 21:** The Right to Life has been interpreted by the Judiciary to include the Right to Livelihood, which provides the moral and legal bedrock for such guarantee missions.

Important Key Points

- **VB-GRAM G Transition:** The new iteration focuses on transforming the scheme from simple "work provision" to "Aajeevika" (Livelihood) mission, emphasizing asset creation that leads to long-term income.
- **Seasonality Factor:** Historically, demand for MGNREGS/VB-GRAM G peaks during the "lean period" (summer) but dips during the sowing and harvesting seasons (Kharif and Rabi).

Conclusion: The 36% drop in rural job demand should be interpreted as a sign of rural economic resilience rather than a failure of the scheme. As the labor force moves toward farm activities and the industrial sector, the VB-GRAM G is performing its intended role as a fallback mechanism. However, ensuring that the



administrative transition to the new mission format does not exclude genuine seekers remains the primary challenge for the Rural Development Ministry.

4. RBI Annual Report: Economic Headwinds, Scams, and Growth Projections

- **Macroeconomic Headwinds:** The Reserve Bank of India (RBI) Annual Report for FY26 warns that escalating geopolitical conflicts, specifically the West Asia crisis and US-Iran tensions, pose near-term risks to India's short-run growth and inflation trajectories by triggering supply chain disruptions and volatile energy prices.
- **Positive Growth Outlook:** Despite global uncertainties, India's macroeconomic outlook remains structurally positive, with the central bank projecting a real GDP growth rate of 6.9% for FY27, though risk factors remain tilted toward the downside.
- **Financial Market Overvaluation:** The report flags potential overvaluation in technology sectors, noting that elevated equity valuations may undergo market corrections, adding vulnerabilities to corporate earnings and loan portfolio performance.
- **Proposed 'Kill Switch' for Scams:** To combat rampant digital payment fraud and bolster consumer trust, the RBI is examining a centralized "kill switch" mechanism—an emergency button integrated into payment applications allowing users to instantly freeze all banking operations if a scam is suspected.
- **Spike in Bank Fraud Volume:** While the absolute number of fraud cases dropped to 10,114 from 23,722 in the previous year, the total financial value involved in bank fraud shot up significantly by 46%, reaching ₹48,021 crore in FY26. Public sector banks accounted for the largest share at ₹35,709 crore.

RBI plans 'kill switch': How it can stop scams

ENS Economic Bureau
Mumbai, May 29

THE RESERVE BANK of India is exploring the possibility of introducing a 'kill switch' mechanism that would allow users at the receiving end of a potential digital scam to immediately stop all financial transactions from their accounts.

Besides, it has also proposed a 'switch on' and 'switch off' facility for all digital payment modes. It would help bolster consumer confidence and contribute towards con-

trolling frauds in digital payment transactions, the RBI Annual Report said.

The proposal for a 'kill switch' — being examined by the government and the RBI — envisages, among other possibilities, an emergency button integrated into payment applications of lenders that could instantly freeze all banking operations when a user suspects they are being targeted by fraudsters.

FULL REPORT ON
WWW.INDIANEXPRESS.COM

Key Terms, Constitutional Framework, and Institutional Mechanics

Key Definitions

- **Real GDP Growth:** An inflation-adjusted measure that reflects the value of all goods and services produced by an economy in a given year, expressed in base-year prices to capture true economic output.
- **Kill Switch:** A cybersecurity and consumer protection protocol designed to immediately halt financial transactions or deactivate digital access to sensitive bank accounts to mitigate ongoing cyber attacks or digital monetary scams.

Constitutional & Legal Provisions

- **The Reserve Bank of India Act, 1934:** Provides the comprehensive legislative foundation for the operational powers of the RBI, including its role as the regulator and supervisor of the domestic financial system.
- **The Banking Regulation Act, 1949:** Grants the RBI statutory powers to inspect, control, and direct banking entities in India to protect depositor interests and prevent corporate malpractices.



- **The Payment and Settlement Systems Act, 2007:** Empowers the RBI to regulate and supervise all electronic payment systems, providing the necessary legal backing to mandate technical solutions like the digital "kill switch."

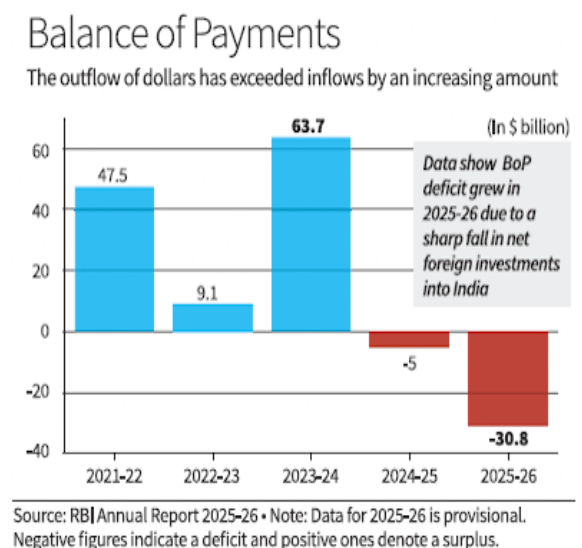
Conclusion & UPSC Relevance

Conclusion

The RBI's annual review highlights a resilient domestic economy capable of steady growth, balanced against acute external geopolitical risks and a qualitative surge in digital financial fraud. Securing long-term stability requires building proactive supply-side buffers and implementing robust institutional cybersecurity safeguards like integrated payment kill switches.

5. India's Balance of Payments Crisis

- **Surging BoP Deficit:** India's Balance of Payments (BoP) recorded a deficit of \$30.8 billion in 2025-26, marking a six-fold increase over the previous fiscal year and a complete reversal from recent surpluses.
- **Capital Account Shrinkage:** The capital account surplus collapsed by over 99.5%, plunging to just \$72 million due to massive Foreign Portfolio Investment (FPI) outflows of \$4.3 billion and residents parking funds abroad.
- **Widening Current Account Deficit:** The Current Account Deficit (CAD) hit a three-year high of \$30.2 billion as the contraction in India's services surplus outpaced the marginal improvement in the merchandise trade deficit.
- **Depletion of Forex Reserves:** The entire \$30.8 billion BoP deficit was financed by drawing down the Reserve Bank of India's (RBI) foreign exchange reserves, significantly denting the nation's import cover.
- **Immediate Policy Interventions:** To contain dollar outflows driven by inelastic imports, the government hiked import duties on gold and silver from 6% to 15% and restricted silver imports alongside state advisories to curb fuel consumption.



Key Terms, Constitutional Framework, and Institutional Mechanics

Key Definitions

- **Balance of Payments (BoP):** A systematic economic record of all financial and economic transactions conducted between the residents of a country and the rest of the world over a specific time period.
- **Current Account Deficit (CAD):** A measurement of a country's trade where the total value of goods, services, and transfers it imports exceeds the total value of products it exports.



Constitutional & Legal Provisions

- **Article 246 (Seventh Schedule - Union List):** Entry 41 grants Parliament exclusive legislative competence over "Trade and commerce with foreign countries; import and export across customs frontiers," empowering the Centre to alter import tariffs.
- **The Foreign Exchange Management Act (FEMA), 1999:** The primary statutory framework giving the RBI and the central government powers to regulate foreign exchange payments, cross-border capital transfers, and capital account transactions.

Conclusion & UPSC Relevance

Conclusion

The dramatic widening of India's BoP deficit highlights a structural vulnerability to global capital flight and inelastic import reliance. Reversing this trend demands moving beyond short-term tariff hikes on gold toward systemic export diversification, integration into global value chains, and aggressive transition toward domestic renewable energy to permanently reduce the crude oil import bill.

6. Annapurna Yojana in West Bengal: Fiscal and Administrative Challenges

- **Policy Transition and Scale:** The new West Bengal government is transitioning from the previous *Lakshmir Bhandar* scheme to the *Annapurna Yojana*, doubling monthly women's cash incentives from ₹1,500 to ₹3,000. This massive welfare rollout targets approximately 2 crore beneficiaries out of the existing 2.2 crore pool, following targeted exclusions based on updated electoral parameters.
- **Fiscal Sustainability and Budgetary Strain:** The revised cash transfer presents an immense fiscal challenge, demanding ₹6,000 crore monthly and ₹72,000 crore annually. This commitment consumes roughly 18% of the State's ₹4.06 lakh crore interim budget for 2026–27, highlighting structural anxieties surrounding fiscal deficits and the compression of capital expenditure for state asset creation.
- **Administrative Verification Hurdles:** To manage costs and eliminate institutional leakages, a mandatory 90-day verification process requires all existing beneficiaries to reapply using an intensive 11-page form. This verification acts as an administrative filter, requiring comprehensive family documentation including land records, identification numbers, and verified bank accounts to weed out invalid entries.
- **Welfare Economics and Cooperative Federalism:** The policy emphasizes the ongoing debate between merit subsidies and competitive populism. While direct benefit transfers (DBT) enhance financial inclusion and gender empowerment, their long-term viability depends heavily on a state's own tax revenue (SOTR) robustness and unconditional fiscal transfers from the Union government.
- **Constitutional and Legal Provisions:** Welfare governance falls under the Directive Principles of State Policy (Article 39), which mandates securing an adequate livelihood for citizens. However, states must balance these goals with fiscal prudence under the Fiscal Responsibility and Budget Management (FRBM) Act, 2003, which sets strict targets for containing revenue and fiscal deficits.

Definition of Key Terms

- **Direct Benefit Transfer (DBT):** An administrative mechanism to transfer subsidies directly into the bank accounts of verified beneficiaries, minimizing intermediate leakages.



- **Fiscal Deficit:** The structural gap occurring when a government's total expenditure exceeds its total non-borrowing revenue during a specific financial year.

Conclusion & UPSC Relevance

The Annapurna Yojana illustrates the complex balance required between maintaining socio-economic safety nets and practicing long-term macro-fiscal sustainability.

7. RBI Policy Interventions to Stabilize the Indian Rupee

Key Summary Points

- **Currency Depreciation Crisis:** The Reserve Bank of India (RBI) is actively evaluating aggressive monetary interventions after the Indian Rupee (INR) plunged to an all-time low of nearly 97 against the US Dollar (USD).
- **Monetary Policy Options:** Key options under consideration by Governor Sanjay Malhotra and top central bank officials include implementing a strategic repo rate hike, introducing fresh currency swap windows, and issuing offshore dollar bonds.
- **Inflationary and Capital Pressures:** The sharp depreciation is driven by sustained foreign capital outflows, a widening merchandise trade deficit, and rising global commodity prices, threatening to import inflation into the domestic economy.
- **Capital Mobilization Strategies:** To augment foreign exchange liquidity, the RBI is contemplating specialized schemes targeting Non-Resident Indians (NRIs) and overseas institutional investors to attract stable, long-term dollar inflows.
- **Liquidity Management Objectives:** These extraordinary measures aim to curb speculative trading in the onshore and offshore non-deliverable forward (NDF) currency markets while ensuring adequate domestic systemic liquidity.

Definitions of Key Terms

- **Currency Depreciation:** A decrease in the value of a currency in a floating exchange rate system relative to one or more foreign reference currencies, driven by market demand and supply dynamics.
- **Currency Swap:** A foreign exchange agreement between two parties to exchange principal and interest payments on a loan in one currency for an equivalent loan in another currency, used here by the central bank to infuse dollar liquidity into the banking system.
- **Offshore Dollar Bonds:** Debt instruments denominated in US Dollars issued by domestic entities or the sovereign in international financial markets to raise foreign capital directly.
- **Non-Deliverable Forward (NDF):** An over-the-counter currency derivative contract where parties settle the difference between the contracted NDF rate and the prevailing spot rate in a convertible currency (usually USD), outside the direct jurisdiction of the domestic central bank.

Key Institutional and Legal Provisions

- **Reserve Bank of India Act, 1934:** The statutory framework granting the RBI the explicit mandate to manage India's foreign exchange reserves and maintain domestic monetary stability. Section 45ZB outlines the constitution of the Monetary Policy Committee (MPC) to fix the policy repo rate.



- **Foreign Exchange Management Act (FEMA), 1999:** The primary legislation regulating foreign exchange transactions, cross-border trade, and capital flows, consolidating the law to facilitate external trade and maintain an orderly foreign exchange market.
- **External Commercial Borrowings (ECB) Framework:** Statutory guidelines governed by the RBI that regulate the quantum, maturity, and end-use of foreign currency loans raised by Indian corporate entities to avoid systemic external debt vulnerabilities.

Macroeconomic Stabilization Mechanisms

- **Foreign Exchange Intervention:** The direct selling of US Dollars from the country's official Forex Reserves by the RBI in the spot market to absorb excess rupee liquidity and arrest sudden, volatile depreciations.
- **Interest Rate Differential:** The gap between the domestic policy interest rate and foreign interest rates (e.g., the US Federal Reserve rate). Raising domestic interest rates widens this gap, making Indian debt instruments more attractive to foreign portfolio investors (FPIs) and reducing capital flight.

8. Debating Central Bank Intervention Versus Free-Market Depreciation of the Indian Rupee

Key Summary Points

- **The Policy Dilemma:** As the Indian Rupee (INR) faces sustained downward pressure near 97 against the US Dollar (USD), a major macroeconomic debate has emerged regarding whether the Reserve Bank of India (RBI) should aggressively intervene or allow the currency to find its own market-determined equilibrium.
- **The Non-Interventionist Argument:** Mainstream economic models, supported by global economists like Gita Gopinath, argue that a depreciating currency acts as an automatic stabilizer. By making imports more expensive and exports more competitive, it naturally curtails a Current Account Deficit (CAD) without draining foreign exchange reserves.
- **Conflation of Weak vs. Falling Rupee:** Critics of non-intervention point out that a "weak rupee" and a "falling rupee" are fundamentally different. A rapidly falling rupee fails to boost exports if foreign buyers delay purchases anticipating further depreciation; conversely, it causes import front-loading as domestic buyers rush to secure essential commodities like crude oil before prices rise further.
- **Speculative Capital Dynamics:** Unlike textbook trade models driven by consumer demand, the ongoing currency slide is heavily driven by speculative outflows from Foreign Institutional Investors (FIIs) capitalising on rising interest rates in developed markets. This implies that the rupee's current valuation reflects volatile market sentiment rather than core economic fundamentals.
- **The Threat of Imported Inflation:** Allowing unchecked, speculative depreciation presents severe domestic risks. The escalating import bill for inelastic commodities passes directly into the domestic economy, causing structural inflation that disproportionately impacts a population already coping with stagnant real wages and pandemic-induced reverse migration.
- **Global Precedents of Intervention:** Currency defense is not confined to emerging economies; even developed nations actively manage extreme volatility. For instance, during a sharp slide of the Yen against the Dollar, Japanese Finance Minister Satsuki Katayama signaled decisive market



interventions, demonstrating that major economies routinely disrupt pure speculation to preserve financial stability.

Definitions of Key Terms

- **Current Account Deficit (CAD):** A macroeconomic metric that occurs when the total value of goods, services, and transfers imported by a country exceeds the total value of those it exports.
- **Imported Inflation:** A sustained rise in domestic prices attributable to an increase in the costs of imported raw materials or finished products, frequently exacerbated by a depreciating domestic currency.
- **Automatic Stabilizer (Exchange Rate):** The theoretical mechanism by which a floating exchange rate automatically adjusts to trade imbalances, where currency depreciation corrects a deficit by altering relative import-export pricing.
- **Front-Loading (Imports):** The behavioral tendency of market importers to advance or accelerate their purchase timelines to buy goods immediately, driven by the expectation that the domestic currency will lose value in the near future.

Key Constitutional and Legal Provisions

- **Article 246 read with Seventh Schedule (Union List):** Places all matters concerning foreign loans, foreign exchange, and the regulation of international trade exclusively under the legislative domain of the Parliament of India.
- **Reserve Bank of India Act, 1934:** Grants statutory power to the central bank to maintain monetary stability and regulate the country's credit and currency systems. The RBI utilizes its foreign exchange reserves under this mandate to smooth out erratic currency fluctuations.
- **Foreign Exchange Management Act (FEMA), 1999:** Enacted to consolidate and amend the laws relating to foreign exchange, with the explicit objective of facilitating external trade and payments and promoting the orderly development and maintenance of the foreign exchange market in India.

Macroeconomic Trilemma Analysis

- **The Impossible Trinity:** A foundational macroeconomic concept stating that an economy cannot simultaneously maintain three conditions: a fixed foreign exchange rate, free capital flow (absence of capital controls), and an independent monetary policy.
- **India's Policy Choice:** India operates on a managed float, meaning it permits capital mobility and maintains monetary independence, choosing to intervene in the exchange rate market only to check extreme, non-fundamental volatility.

Conclusion

The debate over rupee stabilization highlights that pure reliance on free-market adjustments can be deeply problematic when a currency's trajectory is dictated by speculative capital rather than trade fundamentals. While letting the rupee find its level aligns with theoretical economic frameworks, the real-world consequence involves severe imported inflation and structural stress on the domestic populace. In an era of volatile global capital flows and tightening interest rates by foreign central banks, targeted interventions by the RBI remain an essential tactical shield. Ultimately, safeguarding India's long-term economic sovereignty requires a deeper structural evaluation of the role of speculative foreign capital within the national growth narrative.



9. Strategic Trade Resilience: India's Diversification Beyond the Strait of Hormuz

Core Summary

- **Strategic Shift:** India has operationalized alternative shipping services to bypass the Strait of Hormuz—a vital chokepoint handling 20% of global oil and gas trade—due to heightened regional conflict and blockades.
- **Alternative Port Activation:** Shipping lines like Maersk and CMA CGM are now connecting Indian hubs (JNPA, Mundra, Hazira) to West Asian ports outside the conflict zone, specifically Sohar (Oman), Fujairah (UAE), and Khorfakkan (UAE).
- **Economic Stakes:** The West Asia and North Africa (WANA) region is critical for India, with bilateral trade exceeding \$216 billion in FY25 and MSMEs contributing nearly 48% of the country's total exports.
- **Energy Security Management:** To prevent domestic fuel shortages during geopolitical instability, the government is coordinating refinery maintenance schedules (e.g., Jamnagar and Vadinar) and exploring new LPG storage facilities.
- **Logistics Challenges:** Despite the "normalization" of port congestion, exporters face surging freight costs and "last-mile" connectivity issues from neutral ports to final inland destinations in the Gulf.
- **MSME Impact:** Rising freight rates and cargo delays are disproportionately affecting small-scale exporters, necessitating government intervention through fixed shipping schedules and logistics assistance.

Key Definitions

- **Strait of Hormuz:** A narrow waterway between the Persian Gulf and the Gulf of Oman; it is the world's most important oil transit chokepoint.
- **WANA Region:** West Asia and North Africa; a geo-economic grouping vital for India's energy security and diaspora remittances.
- **Chokepoint:** A strategic narrow passage (usually maritime) that can be easily blocked to disrupt international traffic and trade.

Constitutional & Legal Provisions

- **Article 73:** Extends the executive power of the Union to matters with respect to which Parliament has power to make laws, including "Foreign Affairs" and "Trade and Commerce with foreign countries" under the Union List (Seventh Schedule).
- **Territorial Waters, Continental Shelf, Exclusive Economic Zone and Other Maritime Zones Act, 1976:** Provides the legal framework for India's maritime rights and security of trade routes.
- **Energy Conservation Act, 2001:** While primarily for efficiency, it provides the statutory basis for the government to manage energy resources during national exigencies and supply disruptions.

Additional Key Insights

- **Refinery Synergy:** The Ministry of Petroleum is ensuring that major refineries do not undergo maintenance simultaneously, safeguarding the domestic supply of 33 million tonnes from the Jamnagar complex.



- **Strategic Petroleum Reserves (SPR):** The crisis underscores the urgency of Phase II of India's SPR program to mitigate supply shocks from the Hormuz blockade.
- **Multi-modal Connectivity:** The reliance on ports like Khorfakkan highlights the need for integrated road-rail links within the Arabian Peninsula to move cargo when sea lanes are contested.

Conclusion

India's proactive tapping of Omani and UAE ports reflects a pragmatic "de-risking" strategy in its neighborhood policy. By diversifying transit points, India is not just securing its \$64 billion export market but also ensuring that domestic energy prices remain insulated from global volatility. However, for these alternatives to be sustainable, the government must address the "assistance gap" in moving cargo from neutral transshipment hubs to conflict-adjacent destinations.

10. Rising Dormancy in PMJDY Accounts: Challenges to Financial Inclusion

Inoperative Account: As per RBI guidelines, a savings or current account is classified as inoperative or dormant if there are no customer-induced transactions (such as ATM withdrawals, cash deposits, or online transfers) for a continuous period of over two years.

- **Widening Usage Gap:** While the Pradhan Mantri Jan Dhan Yojana (PMJDY) has achieved record-breaking numbers in account openings (581.8 million), a significant 26% of these accounts at public sector banks (PSBs) have turned dormant as of March 2026.
- **Public vs. Private Sector Divergence:** State-run banks, which hold the lion's share of Jan Dhan accounts (449.8 million), are seeing a sharp rise in inactivity, whereas private banks have shown a marginal improvement in their dormancy ratios, falling to 36%.
- **Concentration of Inactivity:** Major lenders like State Bank of India have seen dormancy ratios double to 23%, while others like Bank of India and Union Bank report as high as 36% inactivity, reflecting a struggle in sustaining active banking habits among the rural and semi-urban poor.
- **Structural Bottlenecks:** Experts attribute this trend to the proliferation of multiple accounts by migrant laborers across different states and a lack of recurring direct benefit transfers (DBT) or credit linkages that would otherwise keep the accounts active.
- **Capital Accumulation Performance:** Despite the high dormancy, the scheme has successfully mobilized significant domestic savings, with total deposits in PMJDY accounts reaching ₹3.02 trillion by April 2026, showcasing the program's potential for formalizing the economy.
- **The Private Sector Outlier:** High dormancy persists in specific private entities, such as ICICI Bank (65%) and Kotak Mahindra Bank (49%), indicating that the challenge of account "utility" transcends ownership types and points toward deeper behavioral or systemic issues.

Key Terms

- **Financial Inclusion:** The process of ensuring access to appropriate financial products and services needed by all sections of the society in general and vulnerable groups in particular at an affordable cost.
- **JAM Trinity:** The integration of Jan Dhan accounts, Aadhaar (Biometric Identity), and Mobile numbers to plug leakages in government subsidies via Direct Benefit Transfer.
- **Zero-Balance Account:** An account where the holder is not required to maintain a minimum average balance, a core feature of the Basic Savings Bank Deposit Account (BSBDA) under PMJDY.



Constitutional and Legal Provisions

- **Article 38 (Directive Principles):** Mandates the State to secure a social order for the promotion of the welfare of the people and to minimize inequalities in income and status, which forms the bedrock of financial inclusion schemes like PMJDY.
- **Article 39:** Directs the state to ensure that the operation of the economic system does not result in the concentration of wealth, supporting the mandate for universal banking access.
- **National Strategy for Financial Inclusion (2019-2024):** A policy framework by the RBI aimed at providing a formal financial services tube to every adult, focusing on the "last mile" delivery through Jan Dhan, Aadhaar, and Mobile (JAM) trinity.
- **RBI Master Circular on Customer Service:** Governs the classification of inoperative accounts and mandates banks to conduct annual reviews and contact customers of accounts that have not been operated for a year.

Conclusion

The surge in dormant PMJDY accounts highlights that "access" to banking does not automatically translate into "usage." While the initial phase of financial inclusion was successful in terms of physical reach, the current phase faces the "utility challenge." Without creating a vibrant ecosystem of micro-insurance, micro-pension, and localized credit products, these accounts risk becoming mere statistical entries rather than tools for economic empowerment.

11. Proposed Disinvestment in Coal India: Fiscal and Strategic Implications

Offer for Sale (OFS): A simplified mechanism used by promoters of listed companies (including the Government) to reduce their shareholding and dilute stakes through the exchange platform, typically used for fast-track divestment.

- **Stake Divestiture Plan:** The Government of India is reportedly planning to divest approximately 3-4% of its equity in Coal India Limited (CIL) to mobilize roughly ₹10,000 crore, aiming to meet annual disinvestment targets and shore up non-tax revenue.
- **Fiscal Management:** This move serves as a vital tool for fiscal consolidation, helping the government manage the fiscal deficit by tapping into the valuation of a high-performing Maharatna Central Public Sector Enterprise (CPSE).
- **Market Mechanism:** The divestment is expected to follow the OFS route, often featuring a floor price at a slight discount to the prevailing market price to attract institutional and retail investors, which can lead to short-term stock price volatility.
- **Energy Transition Context:** While the government is divesting financial stake, Coal India remains a strategic asset as the backbone of India's energy security, producing over 80% of the nation's domestic coal output.
- **Minimum Public Shareholding (MPS):** Periodic stake sales in PSU giants like CIL also help the government move closer to the SEBI-mandated 25% minimum public shareholding requirement for listed entities.
- **Impact on Maharatna Status:** Strategic disinvestment of a minor stake does not alter the Maharatna status or operational autonomy of the entity, as the government continues to maintain a majority controlling interest.



Constitutional and Legal Provisions

- **Article 266:** Deals with the Consolidated Fund of India, where the proceeds from disinvestment are credited before being utilized for various social and infrastructure projects.
- **Department of Investment and Public Asset Management (DIPAM):** Operating under the Ministry of Finance, DIPAM is the nodal agency empowered to manage the government's investments in CPSEs and oversee the disinvestment process.
- **SEBI (Issue of Capital and Disclosure Requirements) Regulations:** Governs the technicalities of the OFS mechanism to ensure transparency, fair price discovery, and protection of minority shareholders.
- **Public Asset Management Policy:** The "New PSE Policy" (2021) classifies coal as a 'Strategic Sector', where the government intends to maintain a bare minimum presence while allowing for partial disinvestment to improve market discipline.

Key Terms for UPSC

- **Disinvestment:** The action of a government selling or liquidating an asset or subsidiary. It is often referred to as "divestiture" or "minority stake sale."
- **Maharatna CPSE:** A status granted to top-performing PSUs that allows them to make independent investments up to ₹5,000 crore in a project without seeking government approval.
- **Non-Tax Revenue:** Revenue earned by the government from sources other than taxes, such as dividends from PSUs, interest receipts, and disinvestment proceeds.

Conclusion

The proposed stake sale in Coal India underscores the government's balanced approach to asset monetization—extracting financial value without compromising state control over a sector critical to national energy security. By utilizing the OFS route, the government ensures a swift and transparent transaction that aligns with broader fiscal targets. However, long-term success will depend on maintaining the profitability of the coal sector amidst a global shift toward renewable energy.

12. Standardization of State GDP: New Uniform Norms and Base Year 2022-23

Gross State Domestic Product (GSDP): The total value of all finished goods and services produced within the geographical boundaries of a state during a specific period, serving as a key indicator of a state's economic health and size.

- **Uniform Measurement Framework:** The Ministry of Statistics and Programme Implementation (MoSPI) has issued mandatory guidelines to standardize the compilation of GSDP and Gross State Value Added (GSVA), ensuring that economic performance is comparable across all states and Union Territories.
- **Base Year Revision:** In alignment with the updated National Accounts, the base year for GSDP calculation has been shifted from 2011-12 to 2022-23 to better reflect the current structural changes in the economy, particularly in the digital and service sectors.
- **Enhanced Data Integration:** The new norms mandate the use of modern data sources, including GST records, the Periodic Labour Force Survey (PLFS), and the Ministry of Corporate Affairs (MCA) database, to minimize "statistical discrepancies" and improve the reliability of regional accounts.



- **Onboarding of Excluded UTs:** For the first time, concerted efforts are being made to onboard Lakshadweep and Dadra & Nagar Haveli and Daman & Diu (DNH&DD) into the formal GSDP compilation process, ensuring 100% geographical coverage of India's economic mapping.
- **Fiscal Federalism Implications:** Standardized GSDP figures are critical for the Finance Commission's tax devolution formulas and the Department of Expenditure's determination of borrowing limits for states under the FRBM framework.
- **Improved Deflation Strategy:** The guidelines introduce a "Double Deflation" method (adjusting both input and output for price changes) for the manufacturing sector, replacing older, less accurate estimation techniques to provide a more realistic picture of constant-price growth.

Constitutional and Legal Provisions

- **Article 280:** The Finance Commission relies on GSDP data to assess the "fiscal capacity" of states when recommending the horizontal distribution of central taxes.
- **Article 293:** Empowers the Central Government to set borrowing limits for states; these limits are typically calculated as a percentage (e.g., 3-3.5%) of a state's GSDP.
- **Collection of Statistics Act, 2008:** Provides the legal backbone for MoSPI and state agencies to collect the socio-economic data required for GDP and GSDP estimations.
- **Entry 94 (Union List):** The Seventh Schedule gives the Union the power to conduct inquiries, surveys, and collect statistics for the purpose of any of the matters in the list, ensuring central oversight over national accounting standards.

Key Terms for UPSC

- **Base Year:** A specific year used as a benchmark for measuring real growth by eliminating the effects of inflation. It must be a "normal" year free from major economic shocks.
- **GSVA (Gross State Value Added):** Defined as GSDP minus net taxes on products. It provides a picture of the economic activity from the supply side (producer's perspective).
- **Benchmark-Indicator Methodology:** A method where estimates for a benchmark year are extrapolated using high-frequency indicators (like power consumption or vehicle sales) to estimate current growth.

Conclusion: The shift to a 2022-23 base year and uniform GSDP guidelines marks a significant upgrade in India's statistical architecture. By moving away from the outdated 2011-12 series, the government is ensuring that fiscal policy and resource allocation are based on the post-pandemic economic reality. While this improves transparency, the challenge remains for states with lower administrative capacity to meet these high-frequency data integration standards.

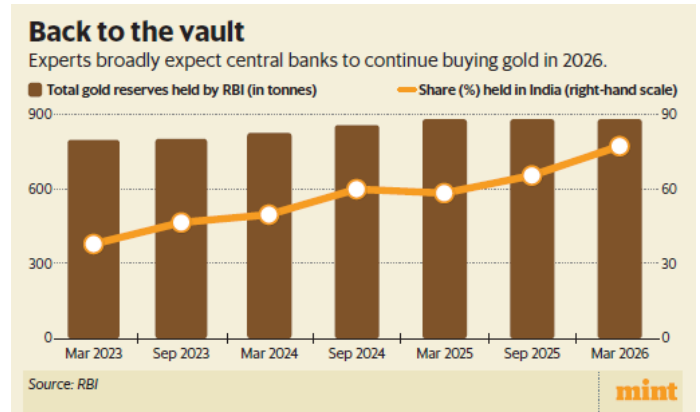
13. Repatriation of Gold Reserves by the RBI: Strategic and Economic Implications

Key Highlights and Summary

- **Strategic Repatriation:** The Reserve Bank of India (RBI) shifted over 100 tonnes of gold from the UK to domestic vaults in the six months ending March 2026, bringing total gold stored within India to 680 tonnes.



- **Shift in Storage Dynamics:** Historically, a significant portion of India's gold was held with the Bank of England and the Bank for International Settlements (BIS); however, domestic holdings have surged as the share of gold stored overseas dropped from 48.5% in 2023 to 22% by end-March 2026.
- **Diversification of Reserves:** Gold now constitutes approximately 17% of India's total \$698.5 billion reserves, a steady increase from 7.8% in 2023, reflecting a move to reduce over-reliance on foreign currency assets (FCAs).
- **Mitigating Geopolitical Risk:** The move is largely driven by "weaponization of finance" concerns, following the freezing of Russia's foreign assets by Western nations, prompting central banks to prioritize physical possession to avoid potential sanctions.
- **Global Trend of Accumulation:** Led by nations like Poland and India, central banks are aggressively buying gold (244 tonnes in Q1 2026 alone) to hedge against rising US Treasury yields and global inflationary pressures.
- **Signaling Economic Strength:** Keeping gold onshore serves as a psychological buffer for global investors, signaling that India possesses immediate "firepower" to handle Balance of Payments (BoP) crises without external interference.



Conceptual Definitions

- **Gold Repatriation:** The process of a country moving its physical gold reserves from foreign storage locations (like London or New York) back to its own sovereign territory.
- **Foreign Exchange (Forex) Reserves:** Assets held by a central bank in foreign currencies, gold, and Special Drawing Rights (SDRs) to back liabilities and influence monetary policy.
- **Sanction Net:** A restrictive measure where a country's assets held in foreign jurisdictions are frozen or seized, preventing their use in international trade or debt servicing.

Constitutional and Legal Provisions

- **RBI Act, 1934:** Section 17 and Section 33 of the Act empower the RBI to manage the nation's foreign exchange reserves and authorize the purchase, sale, and custody of gold as part of its "Issue Department" and "Banking Department" assets.
- **Management of Forex:** While the Government of India sets the overall policy framework, the RBI acts as the custodian and manager of reserves under the legal mandate to maintain external stability.
- **Article 246:** Under the Seventh Schedule (Union List), the Parliament has exclusive power to legislate on matters related to currency, coinage, legal tender, and foreign exchange.

Additional Important Keypoints

- **Storage Logistics:** Domestic gold is primarily stored in secure vaults in Mumbai and Nagpur.
- **Opportunity Cost:** While gold provides security, it does not yield interest like sovereign bonds; however, the current yield volatility in US Treasuries has made gold's capital appreciation more attractive.



- **Confidence Building:** Repatriation reduces the storage costs paid to foreign central banks and eliminates "counterparty risk"—the danger that the holding institution might fail to deliver the asset during a crisis.

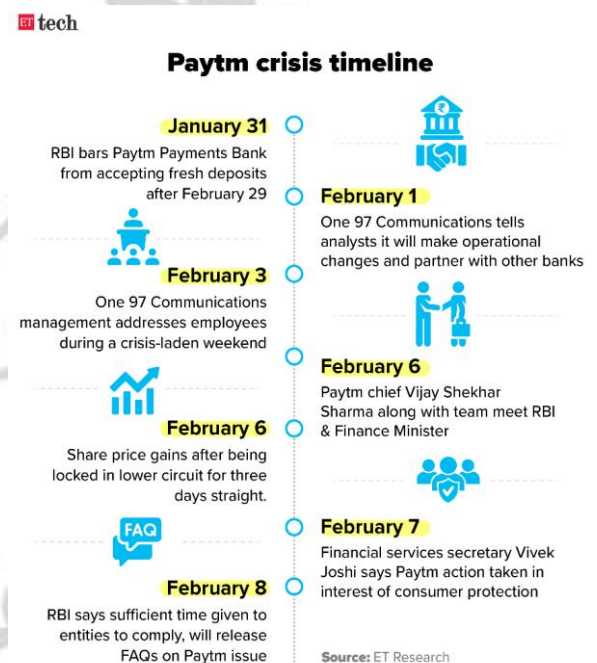
Conclusion

The RBI's decision to bring gold back to Indian soil marks a shift toward "strategic autonomy" in financial management. In an era of fragmented geopolitics and volatile debt markets, physical possession of gold ensures that India's ultimate "reserve of last resort" remains liquid, safe, and immune to external diplomatic pressures. This de-risking strategy strengthens the rupee's credibility and fortifies the nation against global economic shocks.

14. Crisis and Viability of Payments Banks in India

Key Highlights and Summary

- **Regulatory Crackdown:** The RBI's cancellation of Paytm Payments Bank's licence due to persistent supervisory non-compliance and onboarding violations has triggered a survival crisis for the "differentiated banking" model in India.
- **The UPI Challenge:** The rapid proliferation of the Unified Payments Interface (UPI) has eroded the core value proposition of payments banks; UPI's zero-cost, bank-to-bank transfers have rendered digital wallets and small-value stored balances largely redundant.
- **Structural Revenue Constraints:** Unlike traditional commercial banks that earn through high-interest lending spreads (averaging 10-12%), payments banks are legally barred from lending, forcing them to rely on thin margins (6-7%) from government securities and fee-based services.
- **Market Concentration:** The sector exhibits heavy dominance by a few players; India Post Payments Bank (IPPB) holds 73% of total deposits, leveraging its massive rural postal network, leaving little room for smaller private entities to scale.
- **Profitability Lag:** Despite being conceived in 2014, the sector only turned profitable in 2022-23; however, this recovery remains fragile due to high compliance costs, intense fintech competition from platforms like PhonePe and Google Pay, and limited monetization avenues.
- **Divergence from Global Models:** While mobile money (e.g., M-Pesa) revolutionized finance in Sub-Saharan Africa, India's model faces "obsolescence risk" due to near-universal bank account ownership under Jan Dhan Yojana and the "public good" nature of free digital payments.



Conceptual Definitions

- **Differentiated Banks:** Specialized banks licensed by the RBI to provide specific services or cater to a particular niche, such as Payments Banks (deposits/payments) and Small Finance Banks (credit to unserved sections).



- **Payments Bank:** A non-full-service bank that can accept demand deposits (up to ₹2 lakh) and offer remittance services but cannot issue credit cards or loans.
- **Net Interest Margin (NIM):** The difference between the interest income earned by a bank and the interest paid out to its lenders/depositors, which is structurally narrow for payments banks.

Constitutional and Legal Provisions

- **Banking Regulation Act, 1949:** Provides the legal framework for the RBI to grant and cancel banking licences and conduct "Supervisory Action" against non-compliant entities.
- **RBI Act, 1934:** Empowers the central bank to regulate the credit system and manage the country's monetary stability.
- **Nachiket Mor Committee (2014):** The expert committee on Comprehensive Financial Services for Small Businesses and Low Income Households that originally recommended the creation of Payments Banks.

Additional Important Keypoints

- **Investment Mandate:** Payments banks must invest 75% of their demand deposit balances in Statutory Liquidity Ratio (SLR) eligible Government securities with maturity up to one year.
- **Financial Inclusion Paradox:** While payments banks were meant to drive inclusion, the success of the PM Jan Dhan Yojana (PMJDY) meant that the "unbanked" population they targeted now already has functional savings accounts with commercial banks.
- **Operational Costs:** High upfront technology costs and strict KYC (Know Your Customer) compliance requirements have made the low-margin business model difficult to sustain for most of the 11 original "in-principle" licensees.

Conclusion

The "Payments Bank" experiment in India stands at a crossroads. While the model successfully pioneered digital-first banking, the concurrent rise of UPI as a free public utility and the saturation of basic savings accounts have stripped these banks of their unique competitive edge. The exit of a major player like Paytm suggests that for the remaining entities, survival will depend on transitioning into Small Finance Banks or finding niche para-banking roles that UPI cannot fulfill.

15. Emergency Credit Line Guarantee Scheme (ECLGS 5.0): Strategic Financial Cushion

Key Highlights and Summary

- **Fiscal Stimulus for Resilience:** The Union Cabinet has approved an ₹18,100-crore allocation for ECLGS 5.0, forming part of a broader ₹50,000-crore support package aimed at stabilizing sectors like shipping, railways, and electronics amid global volatility.
- **Credit Multiplier Effect:** This government-backed guarantee is projected to facilitate an additional credit flow of approximately ₹2.55 trillion into the economy, addressing liquidity mismatches caused by the West Asia crisis and geopolitical disruptions.
- **Tiered Guarantee Coverage:** The scheme provides a 100% guarantee for MSMEs and a 90% guarantee for non-MSMEs and the aviation sector (specifically allocated ₹5,000 crore) on defaulted amounts of the additional credit facility.



- **Scope of Credit Access:** Eligible borrowers can access additional collateral-free credit of up to 20% of their peak outstanding debt, specifically designed to ease working capital pressures and prevent business insolvency.
- **Sectoral Diversification:** Beyond MSMEs, the scheme identifies critical infrastructure and high-employment sectors like aviation and electronics to sustain operations and protect employment during external shocks.
- **Operational Mechanism:** By providing sovereign guarantees, the scheme encourages Banks and Non-Banking Financial Companies (NBFCs) to lend to stressed sectors without the fear of rising Non-Performing Assets (NPAs).

Conceptual Definitions

- **Credit Guarantee:** A financial mechanism where a third party (the government) promises to pay the lender if the borrower defaults, thereby reducing the risk for the lender.
- **Liquidity Stress:** A condition where a business has sufficient long-term assets but lacks enough cash or liquid assets to meet its immediate short-term obligations.
- **MSME (Micro, Small and Medium Enterprises):** Defined under the MSMED Act based on investment in plant/machinery and annual turnover (e.g., Micro: Investment <₹1cr, Turnover <₹5cr).

Constitutional and Legal Provisions

- **Article 292:** Empowering the Union Government to give guarantees within limits fixed by Parliament, providing the constitutional basis for sovereign guarantee schemes.
- **FRBM Act, 2003:** While the government provides guarantees, these are "contingent liabilities" that must be disclosed under the Fiscal Responsibility and Budget Management framework to ensure transparency in fiscal health.
- **MSME Development (MSMED) Act, 2006:** The legal bedrock for policy interventions aimed at enhancing the competitiveness and credit flow to the MSME sector.

Additional Important Keypoints

- **Geopolitical Linkage:** The scheme specifically targets "short-term liquidity mismatches" triggered by the West Asia crisis, highlighting the vulnerability of Indian supply chains and shipping costs to external conflicts.
- **Collateral-Free Nature:** The additional credit is provided without requiring further collateral, which is crucial for MSMEs that often lack additional assets to pledge during a crisis.
- **National Credit Guarantee Trustee Company (NCGTC):** The implementing agency that manages the guarantee trust and handles claims from lending institutions.
- **Employment Preservation:** By stabilizing working capital, the scheme acts as a social safety net, preventing large-scale layoffs in labor-intensive sectors like aviation and manufacturing.

Conclusion

ECLGS 5.0 represents a proactive shift in India's economic management, moving from generic stimulus to targeted "geopolitical hedging." By absorbing the credit risk of stressed businesses, the government ensures that external shocks do not translate into domestic industrial collapse. However, the long-term success of the

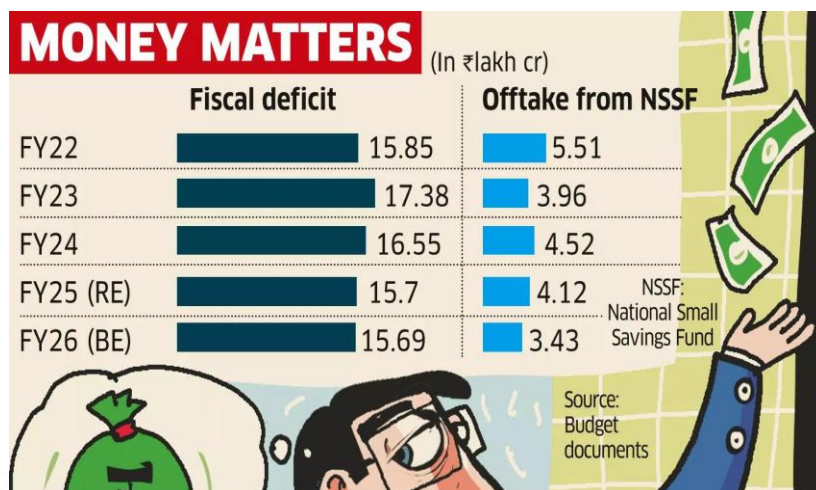


scheme depends on the eventual recovery of global trade routes and the ability of businesses to transition from credit-supported survival to organic growth.

16. National Small Savings Fund (NSSF) and Fiscal Deficit Management

Key Highlights and Summary

- Increased Fiscal Reliance:** The Central Government has increasingly leaned on the National Small Savings Fund (NSSF) to finance its budget deficit, with collections rising to ₹2.19 trillion in the 11 months leading to February 2026.
- Reduction in Market Borrowing:** Robust inflows into long-term, lock-in-based schemes like the Public Provident Fund (PPF) and National Savings Certificate (NSC) have provided a "stable cushion," allowing the government to reduce its reliance on volatile market bond auctions.
- Interest Rate Attraction:** Despite global economic uncertainty, a 21.7% increase in NSSF collections reflects a household shift toward these instruments, driven by marginally higher interest rates and the sovereign guarantee of returns compared to equities or private bonds.
- Counteracting Yield Pressures:** By utilizing small savings, the government can contain the supply of government securities (G-Secs) in the open market, which helps in softening bond yields and reducing the overall interest cost of public debt.
- Impact of Tax Regimes:** While the "New Tax Regime" does not offer deductions for these investments, the "Old Regime" under Section 80C continues to drive massive inflows, particularly in March, as taxpayers seek to maximize their ₹1.5 lakh deduction limit.
- Fiscal Deficit Targets:** For FY26, the government has pegged the fiscal deficit at 4.4% of GDP (₹15.58 trillion), with the NSSF expected to contribute a revised estimate of ₹3.72 trillion toward this financing.



Conceptual Definitions

- National Small Savings Fund (NSSF):** Established in 1999 within the Public Account of India, it pools all collections from small savings schemes. The net collections are invested in Central and State Government special securities.
- Fiscal Deficit:** The gap between the government's total expenditure and its total receipts (excluding borrowings), indicating the total amount of money the government needs to borrow.
- Bond Yields:** The annual return an investor gets on a bond. When the government borrows less from the market, bond prices rise and yields fall, lowering borrowing costs for the entire economy.



Constitutional and Legal Provisions

- **Article 266(2):** Small savings collections are credited to the **Public Account of India**, not the Consolidated Fund. This money does not belong to the government; it belongs to the depositors, and the government acts as a banker or custodian.
- **Government Savings Promotion Act, 1873:** The primary legislation (amended recently) that governs the operation and regulation of small savings instruments in India.
- **Article 292 & 293:** These articles define the borrowing powers of the Union and State Governments respectively. NSSF acts as an "internal debt" component under these provisions.

Additional Important Keypoints

- **Shyamala Gopinath Committee:** The benchmark for small savings interest rates is based on this committee's recommendation to link rates to G-Sec yields of comparable maturity with a spread of 25–100 basis points.
- **Administrative Structure:** While the Department of Economic Affairs (Ministry of Finance) oversees policy, the **National Savings Institute (NSI)** handles promotion, and India Post serves as the primary distribution channel.
- **Non-Lapsable Nature:** Unlike the Consolidated Fund, the NSSF is a non-lapsable fund where balances are carried forward annually, providing a consistent liquidity pool for the government.

Conclusion

The surge in NSSF collections acts as a vital "internal hedge" for India's fiscal policy. By channeling domestic household savings into public debt, the government not only fosters a culture of thrift but also secures a low-risk financing route that is insulated from global capital flight. However, the sustainability of this model depends on balancing attractive interest rates for savers with the government's need to keep its own borrowing costs manageable.

17. India-Canada Comprehensive Economic Partnership Agreement (CEPA)

Definition of Key Terms

- **Comprehensive Economic Partnership Agreement (CEPA):** An advanced, deeply integrated bilateral trade pact that extends beyond traditional Free Trade Agreements (FTAs). While regular FTAs focus primarily on reducing tariffs on physical goods, a CEPA covers trade in services, investment protections, intellectual property rights (IPR), competition policy, and broad regulatory cooperation.
- **Bilateral Trade:** The systemic exchange of goods, services, and capital between two sovereign nations, measured through import and export valuations.
- **Agri-Technology (Agri-Tech):** The application of technological innovations—such as digital supply chains, automated farming software, and scientific food processing—to improve agricultural yield, efficiency, and sustainability.

Executive Summary

- **High-Level Ministerial Engagements:** The Union Minister of Commerce and Industry led the largest-ever Indian business delegation, featuring leaders from over 100 prominent domestic



companies, on a three-day strategic visit to Ottawa and Toronto to fast-track bilateral economic integration.

- **Fast-Tracking the Trade Pact:** Building on momentum generated by top leadership meetings since mid-2025, Indian and Canadian ministers reviewed prior technical evaluations and formally committed to concluding a balanced, ambitious, and mutually beneficial CEPA by the end of 2026.
- **Ambitious Trade Targets Set:** To match the full economic potential of both G20 nations, the respective governments reaffirmed a shared long-term target to expand bilateral trade from the current estimate of USD 8.5 billion to USD 50 billion by the year 2030.
- **Synergy in Agri-Tech and Food Security:** Focused bilateral talks with Canada's Ministry of Agriculture centered on supply chain integration, sustainable agriculture, and investments in food processing, aimed at optimizing Indian farmers' incomes while strengthening mutual food security.
- **Diversified Investment Avenues:** The Indian delegation presented structured opportunities for long-term Canadian institutional investors and pension funds within India's expanding national infrastructure pipelines, renewable energy grids, logistics networks, and digital public infrastructure.
- **Parallel Technical Negotiations:** Demonstrating institutional commitment, a concurrent round of technical negotiations running from May 25–29 was operationalized in Ottawa to iron out regulatory parameters across diverse sectors, including artificial intelligence, pharmaceuticals, critical minerals, and telecommunications.

Constitutional and Legal Provisions

- **Union List Jurisdiction (Seventh Schedule):** Trade and commerce with foreign countries, along with the formulation of international treaties, fall exclusively under the legislative and executive competence of the Union Government. This is explicitly mandated under **Entry 14** (Entering into treaties and agreements with foreign countries) and **Entry 41** (Trade and commerce with foreign countries) of List I (Union List) in the Seventh Schedule of the Constitution of India.
- **Article 253 of the Constitution:** Empowers the Parliament of India to enact any domestic law necessary for implementing international treaties, agreements, and conventions signed with foreign nations, bypassing normal state-level distribution of legislative powers if required to fulfill a global commitment.
- **Foreign Trade (Development and Regulation) Act, 1992:** This statutory act provides the baseline legal framework for the development, regulation, and facilitation of India's foreign trade. It empowers the Central Government to formulate and announce the National Foreign Trade Policy (FTP), which governs tariff lines and trade concessions negotiated under bilateral mechanisms like the proposed CEPA.

Strategic Sectors for Economic Convergence

- **Critical Minerals and Clean Energy:** Canada possesses extensive reserves of critical minerals like lithium, cobalt, and nickel, which are vital for India's domestic electric vehicle (EV) manufacturing ecosystem and its clean energy transition goals.
- **Portfolio and Institutional Investments:** Canadian pension funds represent a significant source of long-term foreign portfolio investments in India, actively backing large-scale infrastructure assets and real estate investment trusts (REITs).



- **The Living Bridge (Diaspora Ecosystem):** The presence of an estimated 1.8 million Indo-Canadians provides a resilient cultural and economic network that underpins bilateral service sectors, education pathways, and startup innovations.

Conclusion

The accelerated push for the India-Canada CEPA marks a major turning point in restoring and modernizing economic ties between the two democratic nations. By moving past historical diplomatic hurdles and establishing a firm deadline for the end of 2026, both countries are showing a pragmatic focus on mutual economic growth. For India, a successful CEPA ensures reliable supply chains for critical energy resources, agriculture, and high-tech inputs, while giving its services sector and domestic manufacturing industries a competitive edge in a major North American market.

GEOGRAPHY & ENVIRONMENT

1. India's Cell Broadcast Alert System: Strengthening Disaster Resilience

India recently conducted a massive trial of its indigenous emergency alert system, reaching nearly 14 crore mobile users within seconds. Developed by the Centre for Development of Telematics (C-DOT), this multilingual broadcast technology aims to revolutionize the country's disaster management and public safety communication infrastructure.

- **Mechanism of Cell Broadcast:** Unlike traditional SMS, which delivers messages individually and can clog networks, Cell Broadcast sends a single message simultaneously to all handsets connected to specific mobile towers. This "one-to-many" approach ensures near-instantaneous delivery without being affected by network congestion or the absence of internet connectivity.
- **Core Features and Overrides:** The system is designed to bypass silent modes and user settings, emitting a loud, distinct buzz followed by a voice message. Its multilingual capability allows authorities to send alerts in local languages "on the fly," ensuring the message is understood by diverse populations during critical windows of time.
- **Strategic Utility:** Beyond natural calamities like earthquakes, cyclones, and floods handled by the NDMA and IMD, the system serves strategic purposes. It is equipped to provide rapid warnings during war-like situations, missile attacks, or other national security threats, similar to systems used in Israel and Ukraine.
- **Technological Sovereignty:** India has opted for an indigenously developed system by C-DOT rather than relying on global vendors. This ensures better data security, customization for Indian conditions (like regional language support), and lower long-term operational costs.





- **Future Roadmap:** The government plans to evolve this into a two-way communication tool, enabling users to request help via weblinks or Interactive Voice Response (IVR) systems. Plans are also underway to integrate this emergency alert technology into television broadcasting for wider reach.

Key Definitions

- **Cell Broadcast Service (CBS):** A mobile technology feature that allows a mobile network operator to send messages to all mobile phone users in a specific geographical area.
- **Model Code of Conduct (MCC):** A set of guidelines issued by the Election Commission of India to regulate the conduct of political parties and candidates during elections, which led to the exclusion of certain states from the recent alert trial.

Constitutional & Legal Provisions

- **Disaster Management Act, 2005:** Provides the legal framework for disaster management in India. The new alert system directly supports the mandate of the National Disaster Management Authority (NDMA) to ensure timely early warnings.
- **Article 21 (Right to Life):** The state has a constitutional obligation to protect the lives of its citizens. Providing timely alerts during life-threatening disasters is a functional extension of this right.
- **Indian Telegraph Act, 1885:** Regulates the use of telegraphs and telecommunications in India, providing the government with powers to take over or monitor networks during public emergencies.

Important Key Points

- **Global Precedents:** India joins a select group of nations like Japan (earthquake alerts), the US (Wireless Emergency Alerts), and Israel (missile warnings) that utilize broadcast tech for civilian safety.
- **Eliminating Panic:** While the loud buzz caused temporary panic among some users, the government emphasized that pre-trial SMS notifications and press releases are crucial for public sensitization to avoid chaos during real emergencies.

Conclusion: The rollout of the Cell Broadcast Alert System marks a shift from reactive to proactive disaster management in India. By leveraging indigenous technology to overcome the limitations of SMS and internet-dependent apps, India is building a robust digital fortress. The success of this system will ultimately depend on its seamless integration with state-level disaster agencies and the continuous upgrading of older mobile handsets to support this protocol.

2. Indian Monsoon Forecast and Implications

- **Downward Forecast Revision:** The India Meteorological Department (IMD) has revised its monsoon forecast downward to 90% of the Long Period Average (LPA), signaling the potential for the driest monsoon season in a decade. This revision stems from unfavorable global climate indicators, specifically a strong El Niño phenomenon and adverse Indian Ocean conditions.
- **LPA Benchmarking:** The LPA serves as the baseline for "normal" rainfall, calculated over a 50-year period (currently 1971–2020) and updated decennially. The country-wide baseline for the four-month southwest monsoon season (June to September) stands at 89 cm.

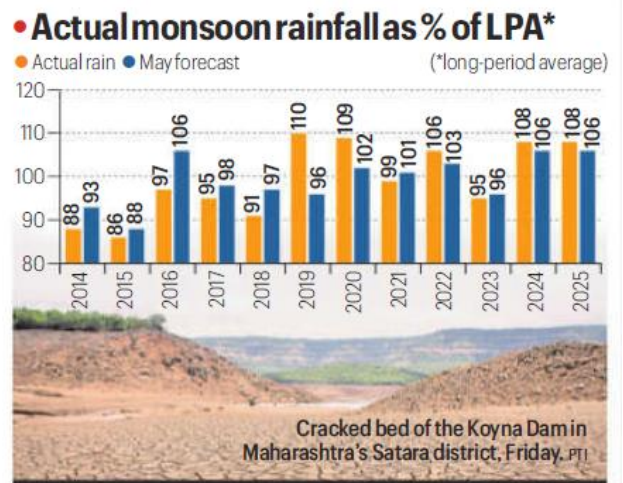


- **Mitigating "Silver Lining":** Despite the deficit forecast, immediate vulnerabilities regarding food security and water scarcity are buffered by ample central foodgrain stocks and adequate water levels in major reservoirs across the country.
- **Historical Context:** The projected 90% of LPA represents the lowest initial forecast issued by the IMD in the last 20 years, highlighting the severe macro-climatic shifts altering traditional precipitation cycles.

Key Terms, Constitutional Framework, and Institutional Mechanics

Key Definitions

- **El Niño:** A climate pattern characterized by the abnormal warming of surface waters in the central and eastern tropical Pacific Ocean. It disrupts global atmospheric circulation, typically weakening the monsoon winds and suppressing rainfall over the Indian subcontinent.
- **Long Period Average (LPA):** The benchmark framework utilized by the IMD to gauge whether a monsoon is normal, deficient, or excess. Precipitation between 96% and 104% of the LPA is classified as a "normal" monsoon.



Constitutional & Legal Provisions

- **Article 39(b) & (c) (Directive Principles of State Policy):** Mandates the State to direct policy toward securing that the ownership and control of material resources are distributed to subserve the common good, placing an obligation on the government to manage food security and water distribution during droughts.
- **The Disaster Management Act, 2005:** Provides the overarching legal institutional framework for drought management, declaration, and mitigation strategies via the National Disaster Management Authority (NDMA).
- **The Essential Commodities Act, 1955:** Empowers the central government to regulate the supply, distribution, and pricing of foodgrains to prevent hoarding and inflation during deficit rainfall periods.

Conclusion & UPSC Relevance

Conclusion

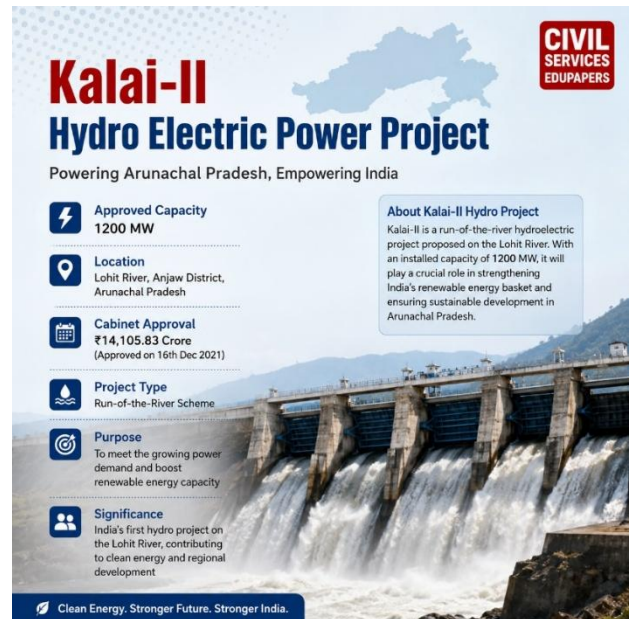
While macro-climate disruptions like El Niño threaten agricultural yields through suppressed rainfall, India's enhanced buffer stocks and reservoir management showcase improved structural resilience. Mitigating future risks requires accelerating climate-resilient agriculture and micro-irrigation systems.

3. Kalai-II Hydel Project Forest Clearance and Ecological Concerns

- **In-Principle Forest Clearance:** The Environment Ministry's Forest Advisory Committee (FAC) has granted Stage-I (in-principle) forest clearance to the 1,200 MW Kalai-II Hydroelectric Project proposed on the Lohit River in Arunachal Pradesh.



- **Extensive Forest Diversion:** The project involves clearing 869.35 hectares of semi-evergreen forest land, including areas classified as very dense and moderately dense forests, which will require the felling of over 33,338 trees across the Namsai and Anjaw forest divisions.
- **Habitat Threat to Rare Species:** The diversion directly impacts the critical riverine habitat of the critically endangered White-Bellied Heron, as well as other prominent wildlife such as the Hoolock gibbon, leopard, capped langur, and Assamese macaque.
- **Mandatory Wildlife Plan Vetting:** Although local state officials reported no recent sightings in the immediate diversion zone, the FAC noted the bird's recorded presence in the broader landscape and mandated that the Wildlife Institute of India (WII) vet the project's wildlife management plan.
- **Inter-State Compensatory Afforestation:** Because Arunachal Pradesh maintains a high forest cover exceeding two-thirds of its geographical area, the compensatory afforestation for this project will be carried out on degraded forest land in Madhya Pradesh.
- **Strategic Run-of-the-River Infrastructure:** Developed by central PSU THDC India Limited at an estimated cost of ₹14,176.26 crore, this run-of-the-river project with pondage near the India-China border features a 128.5-meter concrete gravity dam and an underground powerhouse.



Key Terms, Constitutional Framework, and Institutional Mechanics

Key Definitions

- **White-Bellied Heron (*Ardea insignis*):** The second-largest heron species globally, strictly dependent on undisturbed, fast-flowing Himalayan riverine ecosystems. It is classified as Critically Endangered on the IUCN Red List.
- **Forest Advisory Committee (FAC):** A statutory body composed of independent experts and forestry officials that functions within the Ministry of Environment, Forest and Climate Change (MoEFCC) to review proposals involving the diversion of forest lands for non-forestry purposes.

Constitutional & Legal Provisions

- **Article 48A (Directive Principles of State Policy):** Mandates that the State shall endeavor to protect and improve the environment and to safeguard the forests and wildlife of the country.
- **Article 51A(g) (Fundamental Duties):** Enjoins every citizen of India with the duty to protect and improve the natural environment including forests, lakes, rivers, and wildlife.
- **The Forest (Conservation) Act, 1980:** Governs the legal framework for the diversion of forest land. Stage-I in-principle clearance lays down binding conditions (like compensatory afforestation) that the developer must fulfill before formal execution.
- **Wildlife (Protection) Act, 1972:** Places the White-Bellied Heron under Schedule I, granting it the highest level of legal protection and prohibiting any deliberate habitat destruction or hunting.



Conclusion & UPSC Relevance

Conclusion

The Kalai-II project emphasizes India's strategic balancing act between expanding renewable energy capacity along border regions and preserving sensitive Himalayan biodiversity hotspots. Mitigating these ecological externalities requires strict adherence to landscape-level conservation plans formulated by bodies like the WII to protect vulnerable indicator species.

4. Ecological Crisis at Sanjay Lake: Heatwave and Anthropogenic Pressures

Key Summary Points

- **Mass Mortality Event:** Hundreds of fish were found dead, floating belly-up in Sanjay Lake located in East Delhi's Trilokpuri area, following a rapid drop in water levels and severe ecological degradation.
- **Compounding Factors:** The crisis is driven by a combination of intense regional heatwave conditions and a technical failure in a critical supply pipeline, which routinely delivers treated water from the Kondli Sewage Treatment Plant (STP) but recently developed leaks.
- **Water Quality Deterioration:** Due to receding water levels and extreme temperatures, the lake has turned into shallow, stagnant green pools of slush, causing an acute drop in dissolved oxygen levels and making the aquatic habitat hostile.
- **Systemic Pollution Inflows:** The National Green Tribunal (NGT) had previously flagged that the lake, located within 3-5 km of the Ghazipur landfill, exhibits high Chemical Oxygen Demand (COD) values due to unabated solid waste dumping and local sewage inflows.
- **Broader Regional Trend:** Similar mass fish die-offs have been reported across related regional water networks, including the Sahibi river channel and the Najafgarh drain, primarily due to the sudden release of untreated effluents from stormwater drains and the Dhansa regulator.
- **Extreme Meteorological Conditions:** The incident coincided with Delhi experiencing its warmest night in 14 years with a minimum temperature of 31.9°C, alongside daytime maximums soaring to 43.6°C (3.4 notches above normal), triggering sustained orange alerts.

Definitions of Key Terms

- **Chemical Oxygen Demand (COD):** An indicative measure of the amount of oxygen required to chemically oxidize organic and inorganic matter in water. Higher COD values indicate severe chemical pollution and low health of the aquatic ecosystem.
- **Dissolved Oxygen (DO):** The amount of gaseous oxygen dissolved in a water body, which is fundamental for the respiration of aquatic organisms. High temperatures naturally reduce oxygen solubility in water.
- **Sewage Treatment Plant (STP):** An industrial facility designed to remove contaminants from municipal wastewater and domestic sewage to produce an environmentally safe effluent suitable for discharge or reclamation.
- **Heatwave:** A period of abnormally uncomfortable hot weather. In India, it is officially declared for plains when the maximum temperature reaches at least 40°C and departs by 4.5°C to 6.4°C from the normal long-term average.



Key Environmental Law and Institutional Frameworks

- **The Water (Prevention and Control of Pollution) Act, 1974:** Provides the statutory basis for maintaining and restoring the wholesomeness of water bodies and establishes Central and State Pollution Control Boards (CPCB/SPCB) to regulate effluent discharges.
- **National Green Tribunal (NGT) Act, 2010:** A specialized judicial body set up for the expeditious disposal of cases relating to environmental protection, conservation of forests, and enforcement of legal rights relating to the environment.
- **Wetlands (Conservation and Management) Rules, 2017:** Framed under the Environment (Protection) Act, 1986, these rules prohibit activities like reclamation, dumping of solid waste, and discharge of untreated effluents in notified wetland ecosystems.
- **Article 48A of the Constitution (Directive Principles):** Mandates that the State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country.
- **Article 51A(g) of the Constitution (Fundamental Duties):** Enshrines a duty upon every citizen of India to protect and improve the natural environment including forests, lakes, rivers, and wildlife.

Conclusion

The ecological collapse at Sanjay Lake serves as a stark warning regarding the vulnerability of urban water bodies to climate change and inadequate municipal infrastructure. As global temperatures rise, urban lakes cannot survive as isolated ornamental features; they require consistent replenishment with treated water and absolute protection from sewage contamination. Addressing these crises demands a shift toward integrated urban wetland management, strict enforcement of the Water Pollution Act, and the climate-proofing of civic infrastructure to sustain urban biodiversity and combat the rising urban heat island effect.

5. Rare Sighting of Rusty-spotted Cat in Aravalli Scrublands: Ecological Significance

Core Summary

- **Rare Sighting:** The Rusty-spotted cat (*Prionailurus rubiginosus*), one of the world's smallest wildcat species, was recently sighted and photographed breeding in the Aravalli scrublands near Delhi-NCR (specifically Faridabad and Gurgaon).
- **Evidence of Breeding:** This is the first recorded instance of the species breeding in this landscape, with photographic evidence of a mother and kitten in Kot village, indicating a resident and reproducing population.
- **Conservation Status:** Classified as "Near Threatened" on the IUCN Red List, the species is native to India, Sri Lanka, and Nepal, surviving in "virgin forests" and undisturbed scrublands.
- **Habitat Under Threat:** Approximately 75% of its habitat is currently threatened by land-use changes, including intensive agriculture and rapid urban expansion in the Delhi-NCR region.
- **Ecological Indicator:** The presence of this elusive and sensitive species serves as a "proof of health" for the Aravalli ecosystem, highlighting the need to protect these scrublands from further fragmentation.
- **Research Milestone:** The findings, documented by researchers from Indira Gandhi University and published in the journal *Zoo's Print*, transition the species status in the region from "sporadic visitor" to "resident wildlife."



Key Definitions

- **Scrubland:** An area of land that is uncultivated and covered with sparse, stunted trees and bushes; a critical but often ignored ecosystem for small carnivores.
- **Near Threatened (IUCN):** A conservation category assigned to species that may be considered threatened with extinction in the near future, although they do not currently qualify for the threatened status.
- **Elusive Species:** Animals that are naturally secretive, have low population densities, or are well-camouflaged, making them extremely difficult to observe or document in the wild.

Constitutional & Legal Provisions

- **Wildlife (Protection) Act, 1972:** The Rusty-spotted cat is protected under **Schedule I** of this Act, providing it the highest level of legal protection in India, equivalent to that of the Tiger or Asiatic Lion.
- **Article 48A (DPSP):** Mandates that the State shall endeavor to protect and improve the environment and to safeguard the forests and wildlife of the country.
- **Article 51A(g) (Fundamental Duties):** It is the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers, and wildlife.
- **Forest (Conservation) Act, 1980:** Relevant for the Aravalli region to prevent the diversion of forest land (including "deemed forests" or scrublands) for non-forest purposes like mining or real estate.



Additional Key Insights

- **Physical Characteristics:** Measuring only 35-48 cm in length (about half of which is tail), it is often referred to as the "hummingbird of the cat family." Its fur is reddish-grey with distinctive rusty spots.
- **Aravalli Conservation:** The sighting reinforces the demand for a "Green Wall" or a protected corridor in the Aravallis to prevent the desertification of the Indo-Gangetic plain and preserve regional biodiversity.
- **Technological Role:** The shift from rare camera-trap recordings to live sightings indicates either a growing population or improved ecological monitoring techniques in the Haryana-Delhi border areas.

Conclusion

The discovery of a breeding population of Rusty-spotted cats at the "doorstep of Delhi" is a major conservation win. It challenges the perception of the Aravalli scrublands as "wastelands" and underscores their role as a vital biodiversity repository. Ensuring the survival of this Schedule I species will require strict enforcement of land-use regulations and the recognition of these scrublands as critical wildlife habitats rather than mere buffer zones for urban sprawl.



6. Kerala's Oil Spill Contingency Plan (OSCP): A Framework for Marine Protection

Nurdles: Small plastic pellets (approximately 5 mm) used as raw material in the manufacture of plastic products. In marine accidents, they represent a significant "hazardous cargo" threat as they are nearly impossible to recover completely and can absorb toxic chemicals, entering the food chain via marine life.

- **Genesis of the Plan:** Triggered by the 2025 shipwrecks of *MSC Elsa 3* and *MV Wan Hai 503* off the Kerala coast, the State has finalized a draft Oil Spill Contingency Plan (OSCP) to mitigate severe ecological threats posed by hazardous cargo and oil leaks.
- **Strategic Vulnerability:** Kerala's 590 km coastline is highly susceptible to disasters due to its proximity to international oil transportation routes. The OSCP aims to formalize a "response-focused" framework that was previously stalled by technical and financial hurdles since 2016.
- **Scope and Jurisdiction:** The plan covers marine oil spills occurring within **12 nautical miles (24 km)** of the coastline and extends **40 km inland** into riverine systems or up to the tidal limit, ensuring protection for both the open sea and sensitive backwater ecosystems.
- **Mapping and Sensitivity:** A core component of the OSCP is the **Environmental Sensitive Index (ESI)** mapping, which identifies vulnerable areas like fishing grounds, mangroves, and biodiversity hotspots to prioritize protection during an emergency.
- **Operational Chain of Command:** The plan establishes a clear hierarchy for crisis management, detailing the responsibilities of various departments, list of available machinery (booms, skimmers), and contact databases for rapid mobilization.
- **Regulatory Alignment:** The draft is prepared in accordance with the **National Oil Spill Disaster Contingency Plan (NOS-DCP)** guidelines and requires vetting by an expert committee followed by final approval from the **Indian Coast Guard**.



Constitutional and Legal Provisions

- **Article 48A (DPSP):** Mandates the State to protect and improve the environment and safeguard the forests and wildlife, providing the foundational duty for disaster response planning like the OSCP.
- **Article 51A (g):** Imposes a fundamental duty on citizens to protect and improve the natural environment, including forests, lakes, rivers, and wildlife.
- **The Environment (Protection) Act, 1986:** Empowers the Central and State governments to take measures for the prevention, control, and abatement of environmental pollution, including marine spills.
- **The Merchant Shipping Act, 1958:** Contains provisions regarding the prevention of sea pollution by oil and other hazardous substances, enabling the government to take action against polluting vessels.
- **National Green Tribunal (NGT) Act, 2010:** As the judicial overseer in this case, the NGT ensures that states adhere to environmental safety norms and expedite disaster management frameworks.



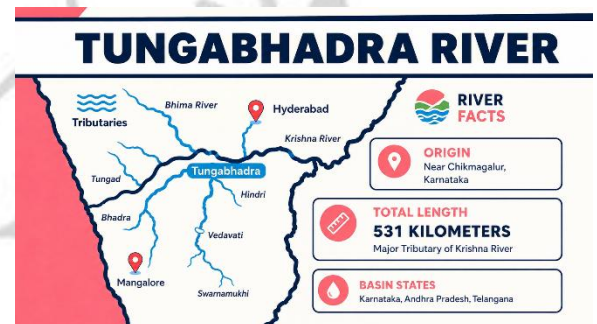
Key Terms for UPSC

- **NOS-DCP (National Oil Spill Disaster Contingency Plan):** The apex national plan promulgated by the Indian Coast Guard (the Central Coordinating Authority) to respond to oil spills in Indian waters.
- **Oil Spill Booming:** A tactical response where floating barriers (booms) are used to contain spilled oil, preventing it from spreading to sensitive shorelines or diverting it to recovery areas.
- **Net Environmental Benefit Analysis (NEBA):** A process used by response teams to compare the environmental benefits of different clean-up options against the risks, ensuring the chosen method does not cause more harm than the spill itself.

Conclusion: The formulation of the OSCP marks a critical transition for Kerala from reactive to proactive disaster management. By integrating scientific modeling with administrative accountability, the plan seeks to bridge the "preparedness gap" exposed by recent shipwrecks. Its success will depend on the periodic conduct of mock drills and the seamless coordination between the Kerala State Pollution Control Board (KSPCB) and the Indian Coast Guard.

7. Geographical and Hydrological Profile of the Tungabhadra River

- **Point of Origin:** The Tungabhadra River is formed by the confluence of two sacred rivers, the Tunga and the Bhadra, which originate at Gangamoola in the Varaha Parvata of the Western Ghats (Chikkamagaluru district, Karnataka). The two streams flow down independently and merge at Koodli near Shimoga city to form the unified Tungabhadra River.
- **Course and River Mouth:** From Koodli, the river flows primarily in a northeastern direction across the Deccan Plateau, traversing roughly 531 kilometers. It serves as a natural boundary between states before reaching its final fall, where it empties into the Krishna River (as its largest right-bank tributary) at Sangamaleshwaram near Gundimalla village on the border of Andhra Pradesh and Telangana.
- **Left-Bank Tributaries:** The northern or left-bank drainage system of the river is primarily fed by the Tunga River (prior to confluence), the Kumudvati River, and the prominent Varada River, which drains large parts of the Shimoga, Uttara Kannada, and Haveri districts.
- **Right-Bank Tributaries:** The southern or right-bank network is dominated by the Bhadra River (prior to confluence), the extensive Vedavathi River (also known as the Hagari River, flowing through Chitradurga and Bellary), and the Handri River in the lower reaches near Kurnool.
- **Catchment Area and Basin Size:** The Tungabhadra basin covers a total catchment area of approximately 71,417 square kilometers. The upper and middle catchment zones lie heavily within Karnataka (accounting for over 57,000 square kilometers), while the lower portion of the catchment spans across the semi-arid, drought-prone regions of Andhra Pradesh and Telangana.



Key Definitions

- **Confluence:** The exact geographical point where two or more distinct bodies of water flow together to merge into a single, unified channel.



- **Doab:** A term used in South Asia for the tract of land lying between two confluent or parallel rivers, such as the strategic Raichur Doab situated between the Krishna and Tungabhadra rivers.

Constitutional & Legal Provisions

- **Inter-State River Water Disputes Act, 1956:** Enacted under Article 262, this statute provides the legal framework for the central government to resolve water sharing disputes between riparian states via tribunals.
- **The Tungabhadra Board:** A statutory inter-state body established under the provisions of the Andhra State Act, 1953, tasked with regulating the water release, maintenance, and structural safety of the joint project works.

Additional Keypoints

- **Historical Significance:** The southern bank of the river served as the institutional and defense anchor for the medieval Vijayanagar Empire, with its UNESCO World Heritage site capital, Hampi, situated directly on its banks.
- **Monsoonal Regimen:** The river possesses a rain-fed perennial character heavily dependent on the South-West monsoon, leading to massive variations where summer discharge can drop significantly compared to peak monsoon inflows.

Conclusion

The Tungabhadra River stands out as a critical hydrological and lifeline component of the peninsular river system. Its vast catchment area and strategic position feeding into the Krishna River make understanding its tributaries, origin, and flow mechanics crucial for regional water management, agricultural sustainability, and resolving inter-state riparian sharing frameworks.

INTERNATIONAL RELATIONS

1. India-Nepal Boundary Dispute: The Lipulekh Impasse

The longstanding territorial dispute over the Kalapani-Limpiyadhura-Lipulekh tri-junction has resurfaced following Nepal's formal "concerns" regarding India's planned Kailash Mansarovar Yatra. While Nepal asserts sovereign rights over the region, New Delhi maintains that the claims lack historical evidentiary backing, highlighting a complex diplomatic challenge in South Asia.

- **The Core Contention:** The dispute centers on the interpretation of the **Treaty of Sugauli (1816)**, specifically the origin of the Kali River. Nepal claims the river originates at Limpiyadhura (further west), making the entire block—including Lipulekh—Nepalese territory. India maintains the river begins at Kalapani, where the river actually takes its name.
- **Strategic Significance of Lipulekh:** Located at an altitude of over 5,000 meters, the Lipulekh Pass is a





vital tri-junction point between India, Nepal, and China. For India, it is geostrategic for monitoring Chinese movements and provides the shortest trekking route for the Kailash Mansarovar Yatra.

- **The 2020 Map Controversy:** Tensions escalated in 2020 when India inaugurated an 80-km road to Lipulekh. In retaliation, Nepal passed the **Constitution (Second Amendment) Act, 2020**, updating its national emblem and political map to include the disputed 372 \$sq.km\$ area, a move India termed an "artificial enlargement" of claims.
- **Diplomatic Protocol Hurdles:** Current friction is exacerbated by internal Nepalese politics. Prime Minister Balendra Shah's restrictive diplomatic protocols have complicated high-level engagements, potentially shadowing the upcoming visit of Indian Foreign Secretary Vikram Misri.
- **Bilateral Mechanism Status:** Both nations have established the **Boundary Working Group (BWG)** to resolve technical issues; however, the Kalapani and Susta segments remain "unresolved" as they require high-level political intervention rather than purely technical surveying.

Key Definitions

- **Cartographic Assertion:** The act of using maps to claim sovereignty over a territory, often used as a tool of political signaling in international relations.
- **Tri-junction:** A geographical point where the boundaries of three countries or sub-national entities meet.

Constitutional & Legal Framework

- **Treaty of Sugauli (1816):** Signed between the East India Company and the Kingdom of Nepal; it established the Mahakali River as Nepal's western boundary but left the river's source undefined.
- **Article 1 (Nepal Constitution):** Defines the territory of Nepal, which was amended in 2020 to include the disputed regions, making the claim a matter of constitutional law in Kathmandu.
- **Article 51 (Constitution of India):** Promotion of international peace and security, which guides India's preference for resolving border disputes through peaceful bilateral dialogue.

Important Key Points

- **China Factor:** Nepal's simultaneous protest to Beijing suggests an attempt to internationalize a bilateral issue, challenging the 2015 India-China agreement to expand border trade through Lipulekh.
- **Neighborhood First Policy:** The dispute tests India's "Neighborhood First" doctrine, balancing regional hegemony with the sensitivities of a smaller, landlocked sovereign neighbor.

Conclusion: The Lipulekh issue is a manifestation of "cartographic nationalism" clashing with established "administrative possession." While historical maps are subject to varied interpretations, the resolution lies in revitalizing the Joint Boundary Committee and moving beyond domestic political rhetoric. For India, maintaining the sanctity of the "Special Relationship" with Nepal is crucial to preventing a strategic vacuum that external powers might exploit.



2. Anti-Sanction Legislation: Protecting Domestic Interests from Extra-Territorial Laws

The Government of India is exploring the feasibility of enacting a law modeled after the European Union's "Blocking Statute" to protect domestic entities from the adverse effects of third-country sanctions. This move aims to prevent the disruption of critical digital infrastructure and services by foreign corporations that might comply with unilateral sanctions imposed by foreign jurisdictions like the US.

- **The EU Blocking Statute Model:** New Delhi is studying the 1996 EU framework which acts as a "shield" for domestic companies against the extra-territorial application of third-country laws. This statute nullifies the effect of foreign court rulings or administrative decisions within the domestic territory, ensuring that local firms are not forced to comply with external sanctions that conflict with national interests.
- **Trigger for Policy Action:** A major catalyst for this deliberation was a 2025 incident where Microsoft suspended IT services for Nayara Energy, an Indo-Russian oil refining firm, citing foreign sanctions. Such sudden disruptions highlight the extreme vulnerability of Indian critical infrastructure to the compliance policies of global technology giants.
- **Reducing Digital Dependency:** The proposal underscores deep-seated concerns regarding the over-dependence of Indian companies on foreign digital infrastructure. By creating a legal barrier, India seeks to ensure that critical IT and marketing services remain operational regardless of geopolitical shifts or foreign legislative maneuvers.
- **Sovereignty in Commerce:** The proposed law is envisioned as a mechanism to assert India's economic sovereignty. It intends to provide a legal basis for Indian companies to continue business operations with sanctioned nations (like Russia or Iran) without fear of being abandoned by foreign service providers operating within India.
- **Compelling Need for a Mechanism:** Senior officials have emphasized that having a "template" like the EU anti-sanctions law is on the table to mitigate risks to vital digital infrastructure. The focus is on preventing foreign companies from unilaterally withdrawing essential services provided to Indian entities based on foreign jurisdictions.

Key Definitions

- **Blocking Statute:** A law designed to prevent the application of foreign extra-territorial legislation within a domestic territory, essentially "blocking" the enforcement of foreign sanctions.
- **Extra-territorial Application:** When a country applies its laws to people, activities, or entities outside its own physical borders or jurisdiction.

Constitutional & Legal Provisions

- **Article 51:** A Directive Principle of State Policy that mandates the state to foster respect for international law and treaty obligations, while also promoting international peace and security based on sovereign equality.
- **Public Policy of India:** A legal doctrine used to refuse the enforcement of foreign judgments or contracts that are contrary to the fundamental interests of the nation or its legal system.
- **The Civil Procedure Code, 1908 (Section 13):** Governs when foreign judgments are not conclusive in India, providing a legal precedent for rejecting external legal dictates that violate domestic laws.



Important Key Points

- **Shielding Indo-Russian Trade:** Given India's significant energy and defense ties with Russia, an anti-sanction law would provide critical legal protection for Indian firms involved in these sectors against Western "secondary sanctions."
- **Global Precedents:** Apart from the EU, countries like China have also enacted "Anti-Foreign Sanctions" laws recently to counter Western economic pressure, indicating a global trend toward protecting economic sovereignty.

Conclusion: Enacting an EU-like blocking statute would be a bold step toward "strategic autonomy" in the economic and digital spheres. While it may create friction with global tech companies and Western regulators, it is a necessary safeguard to protect India's critical services from becoming collateral damage in geopolitical conflicts. Success will depend on balancing these protective measures with the need to remain an attractive destination for foreign direct investment.

3. Quad's Strategic Challenges and Divergent Member Objectives

- **Incremental Progress Amid Disparities:** The recent Quadrilateral Security Dialogue (Quad) Foreign Ministers meeting in New Delhi underscored the group's ongoing struggle to transform conceptual alignment into decisive action due to the varying strategic objectives of its member states.
- **Divergent Strategic Priorities:** Each member views the threat landscape differently: the US seeks a network to counter China and anchor its Indo-Pacific strategy; Australia requires security partnerships to resist Chinese posturing while remaining economically dependent on Beijing; Tokyo focuses on maritime security in the South China Sea; and India aims to balance China along its land border while preserving its strategic autonomy.
- **Key Non-Military Initiatives:** To transition from dialogue to tangible outcomes, the meeting advanced practical cooperation on maritime surveillance coordination, an energy security framework, supply chain resilience, and a critical minerals operation.
- **Infrastructure Deliverables:** The grouping announced its inaugural joint physical project—the development of port infrastructure in Fiji—aiming to counter China's infrastructure diplomacy and reduce regional reliance on Beijing.
- **Geopolitical Backlash:** China strongly opposes the grouping, characterizing it as an exclusive clique designed to foster bloc confrontation, with Chinese officials historically dismissing the alliance as temporary "sea foam."



Key Terms, Constitutional Framework, and Institutional Mechanics

Key Definitions

- **Quadrilateral Security Dialogue (Quad):** An informal strategic forum comprising India, the United States, Japan, and Australia, maintained by semi-regular summits, information exchanges, and joint military exercises.



- **Strategic Autonomy:** A foreign policy doctrine wherein a nation state maintains its independence to pursue national interests and form partnerships without entering binding multi-state military alliances.

Constitutional & Legal Provisions

- **Article 51 (Directive Principles of State Policy):** Instructs the Indian State to promote international peace and security, maintain just and honorable relations between nations, and foster respect for international law and treaty obligations.
- **The Allocation of Business Rules, 1961:** Vests the executive authority over international relations, treaty negotiations, and diplomatic representations exclusively with the Ministry of External Affairs (MEA).
- **United Nations Convention on the Law of the Sea (UNCLOS):** The legal bedrock guiding Quad's foundational commitment to maintaining a "free, open, and inclusive Indo-Pacific" and upholding freedom of navigation.

Conclusion & UPSC Relevance

Conclusion

The Quad's long-term efficacy depends on its capacity to balance India's insistence on strategic autonomy with the collective security expectations of its partners. Shifting the focus from explicit military alignment to concrete geo-economic projects, like the Fiji port development, offers a sustainable path forward.

4. India-China 35th WMCC Meeting

- **Context & Institutional Framework:** The 35th meeting of the Working Mechanism for Consultation and Coordination on India-China Border Affairs (WMCC) was held in Beijing. Led by Joint Secretary-level diplomats, this institutional mechanism (established 2012) focuses on maintaining peace along the Line of Actual Control (LAC). Unlike the Special Representatives (SR) mechanism which handles political boundary resolution, the WMCC manages tactical border stability.
- **Key Deliberations & River Diplomacy:** Discussions focused on stabilizing mechanisms, border management, and preparing for upcoming SR talks. India specifically pushed for reviving the Expert Level Mechanism (ELM) on Trans-Border Rivers (Brahmaputra/Satluj) to ensure critical monsoon data-sharing, aiming to separate ecological security from geopolitical friction.
- **Legal & Constitutional Provisions:** Border governance falls exclusively under the Union List (Seventh Schedule) of the Indian Constitution. Internationally, relations are guided by bilateral agreements (1993, 1996, 2005, 2013) that outline standard operating procedures for patrol face-offs and mandate the reduction of military forces along the LAC.

Definition of Key Terms

- **Border Delimitation:** The formal process of legally defining and determining physical state boundaries via treaties or negotiations.
- **Line of Actual Control (LAC):** The operational demarcation line separating Indian and Chinese-controlled territories, subject to differing cartographic perceptions.



Conclusion & UPSC Relevance

Sustained institutional dialogue via the WMCC is vital to prevent operational miscalculations and create a predictable frontier environment.

5. India-South Korea CEPA Review: Addressing Trade Imbalance and Modernizing Ties

Core Summary

- **Negotiation Schedule:** India and South Korea are set to hold formal negotiations on May 25, 2026, to review and upgrade the existing Comprehensive Economic Partnership Agreement (CEPA).
- **Trade Deficit Concerns:** A primary driver for the review is the widening trade imbalance; India's trade deficit with Korea surged to \$15.19 billion in FY25, with exports at \$5.81 billion against imports of \$21 billion.
- **Modernization Focus:** India aims to negotiate a "contemporary" agreement (CEPA 2.0) that addresses non-tariff barriers, improves market access for Indian services and engineering goods, and updates Rules of Origin.
- **Strategic Growth Target:** Both nations have reaffirmed a target to double bilateral trade to \$54 billion by 2030, leveraging new sectors like semiconductors, green hydrogen, and electric vehicle (EV) supply chains.
- **Investment Synergies:** The review coincides with major industrial collaborations, including POSCO's \$1.09 billion joint venture for a steel plant in Odisha and defense deals like the K9 Vajra howitzers.
- **Geopolitical Context:** Amid global supply chain shifts and the ongoing West Asia crisis affecting energy routes, the two countries are seeking a "Technology-Driven Partnership" to ensure resource stability.



Key Definitions

- **CEPA (Comprehensive Economic Partnership Agreement):** A type of free trade pact that covers negotiation on trade in services and investment, and other areas of economic partnership beyond just trade in goods.
- **Trade Deficit:** An economic measure of a negative balance of trade in which a country's imports exceed its exports.
- **Rules of Origin (RoO):** The criteria needed to determine the national source of a product. Their duties and restrictions in several cases depend upon the source of imports.

Constitutional & Legal Provisions

- **Article 253:** Empowers Parliament to make any law for the whole or any part of the territory of India for implementing any treaty, agreement, or convention with any other country.



- **Union List (Entry 14):** Entering into treaties and agreements with foreign countries and implementing of treaties, agreements and conventions with foreign countries falls under the exclusive domain of the Central Government.
- **Customs Act, 1962:** Provides the legal framework for the levy and collection of duties, including preferential rates agreed upon under bilateral treaties like the CEPA.

Additional Key Insights

- **CAROTAR Rules, 2020:** India's "Customs (Administration of Rules of Origin under Trade Agreements) Rules" will be critical during the review to prevent the "re-routing" of third-country goods through Korea.
- **Korea Plus:** A special strategic facilitation cell established in 2016 to promote and facilitate Korean investments in India, acting as a bridge for MSMEs and large conglomerates like Samsung and Hyundai.
- **Sectoral Focus:** India is pushing for the "revival of mango exports" and greater recognition of Ayurveda products in the Korean market to diversify its export basket beyond mineral fuels and organic chemicals.

Conclusion

The upcoming May 25 talks signify a shift from mere trade facilitation to a strategic economic re-alignment. For India, the CEPA review is not just about reducing the \$15 billion deficit but about integrating into the high-tech supply chains of East Asia. As South Korea looks to diversify its manufacturing base away from China, India's "Viksit Bharat" goals and "Make in India" initiatives provide a timely platform for a more balanced and futuristic economic partnership.

6. Global Digital Capacity Building Alliance (GDCBA) and India-Sri Lanka Governance Collaboration

Definition of Key Terms

- **Capacity Building Commission (CBC):** An independent body established under Mission Karmayogi to oversee civil services training institutions, facilitate preparation of annual capacity building plans, and monitor global benchmarks in public administration.
- **Mission Karmayogi:** Officially known as the National Programme for Civil Services Capacity Building (NPCSCB), it is a comprehensive reform initiative aimed at upgrading the post-recruitment training architecture of Indian civil servants to transition from a "rules-based" to a "roles-based" governance framework.
- **Global Digital Capacity Building Alliance (GDCBA):** A strategic global platform launched by India that utilizes a "Petalled Partnerships" approach to unite governments, academia, and digital public infrastructure (DPI) partners to build digital and artificial intelligence (AI)-native capacities in public administration.
- **Digital Public Infrastructure (DPI):** Open, interoperable, and scalable digital platforms—such as digital identity, payment systems, and data exchange layers—that enable the delivery of essential public and private services at a national scale.



Executive Summary

- **Bilateral Capacity Building Initiative:** The Capacity Building Commission (CBC), in partnership with the National Centre for Good Governance (NCGG), conducted a strategic session titled "Building Future-Ready Public Institutions" for a high-level delegation of 40 senior civil servants from Sri Lanka during the 19th Capacity Building Programme on Disaster Management.
- **Launch of the GDCBA Blueprint:** At the India AI Impact Summit 2026, the CBC officially introduced the blueprint for the Global Digital Capacity Building Alliance (GDCBA), establishing a global coalition to train AI-native public officials and optimize Digital Public Goods as a shared developmental asset.
- **Showcasing Mission Karmayogi:** The initiative showcased India's domestic administrative milestone under Mission Karmayogi, which has scaled up to provide continuous, competency-driven capability building for over 1.65 crore public officials across central, state, and local administrative tiers.
- **Six Pillars of Governance Transformation:** The framework presents a whole-of-government approach organized across six fundamental pillars: Policy and Governance, Technology and Digital Platforms, Content Quality and Assurance, Programme Delivery, Measurement and Outcomes, and Global Partnerships and Ecosystem Development.
- **International Footprint of Indian DPI:** The collaboration marks the rising global export of India's governance architecture, highlighted by the international rollout of the iGOT Karmayogi digital learning platform in partner nations like Mauritius under enhanced strategic partnerships.
- **Diplomatic Realization of Vasudhaiva Kutumbakam:** By offering indigenous public service innovations as adaptable blueprints for foreign civil services, India is positioning its digital governance models as scalable solutions encapsulated in the philosophy of "Made in India, Made for the World."

Constitutional and Legal Provisions

- **Article 51 of the Constitution (Directive Principles of State Policy):** Mandates that the State shall endeavor to promote international peace and security, maintain just and honorable relations between nations, and foster respect for international law, which provides the constitutional backing for cross-border civil service capacity-building programs.
- **Union List (Seventh Schedule) - Entry 10 and Entry 41:** Entry 10 vests the legislative and executive jurisdiction of "Foreign Affairs; all matters which bring the Union into relation with any foreign country" exclusively with the Parliament. Entry 41 covers "Union Public Services; All-India Services", empowering the Central Government to dictate structural training frameworks and international knowledge-sharing pacts.
- **The Public Services (Establishment, Recognition and Regulation) Framework:** Governed by executive rules under **Article 309** of the Constitution, the institutionalization of CBC and NCGG provides the legal and administrative sanction to upgrade training curricula to handle AI and digital administration.



Key Institutional Pillars of Civil Service Reform

- **Shift from Episodic to Continuous Learning:** Moving away from traditional, single-event institutional training toward a lifelong learning cycle accessible through cloud-based digital infrastructure.
- **Competency-Driven Framework:** Mapping specific roles within the government to required behavioral, functional, and domain-specific competencies, ensuring officials are precisely equipped for their designated administrative desks.
- **The "Petalled Partnerships" Approach:** A collaborative organizational design under the GDCBA that connects isolated stakeholders—including multilateral bodies, private technology firms, civil society, and academic institutions—into a cohesive network for capacity building.

Conclusion

The collaboration between CBC, NCGG, and international civil servants highlights India's transition from a consumers' market of global governance methodologies to a leading exporter of administrative innovation. By integrating Artificial Intelligence and Digital Public Infrastructure into civil service training through the GDCBA and Mission Karmayogi, India is building a resilient domestic bureaucracy while creating an adaptable, low-cost model for developing nations. This positioning strengthens South-South cooperation and elevates India's stature as a tech-driven norm-setter in modern public administration.

SOCIAL

1. Compulsory Singing of Vande Mataram in West Bengal Madrasas

Key Summary Points

- **Mandatory Directive:** The West Bengal government issued an official order making the singing of the national song, *Vande Mataram*, mandatory during morning assembly prayers across all categories of madrasas in the state.
- **Broad Institutional Scope:** The order applies to Government Model Madrasas (English Medium), Recognized Government-Aided Madrasas, Approved Madhyamik Shiksha Kendras (MSKs), Approved Shishu Shiksha Kendras (SSKs), and Recognized Unaided Madrasas under the Minority Affairs and Madrasah Education Department.
- **Preceding Policy Context:** This development follows a state government directive that made the singing of six stanzas of the national song compulsory in all regular schools functioning under the state's Department of Education.
- **Political and Social Debate:** The order has triggered significant political debate, with opposition parties arguing that forcing the song on minority-run institutions infringes upon cultural autonomy, while the BJP has defended the policy as a positive move for national integration.
- **National Precedent:** The discussion surrounding the national song was reignited earlier in the year following a similar directive issued by the central government, emphasizing an increasing regulatory focus on symbolic national uniformity across educational frameworks.



Definitions of Key Terms

- **Madrasa:** An educational institution, often serving the Muslim community, which can range from primary religious schools to advanced institutes offering a combined curriculum of traditional theological studies and state-approved modern subjects.
- **National Song vs. National Anthem:** *Vande Mataram* (composed by Bankim Chandra Chattopadhyay in Sanskritized Bengali) holds the status of India's National Song, which historically shares equal status with the National Anthem, *Jana Gana Mana* (composed by Rabindranath Tagore), though they have different legal and regulatory implementation frameworks.
- **Minority Educational Institutions:** Educational bodies established and administered by linguistic or religious minorities to preserve their distinct culture, script, or language, protected under specific constitutional safeguards.

Key Constitutional and Legal Provisions

- **Article 30(1) of the Constitution:** Guarantees all religious and linguistic minorities the fundamental right to establish and administer educational institutions of their choice, shielding them from arbitrary state interference in core administrative and cultural practices.
- **Article 28(3) of the Constitution:** Stipulates that no person attending an educational institution recognized by the State or receiving aid out of State funds shall be required to take part in any religious instruction or attend any religious worship without their consent.
- **Article 19(1)(a) of the Constitution:** Guarantees the right to freedom of speech and expression, which the judiciary has consistently interpreted to include the passive right to remain silent or abstain from singing if it conflicts with genuine conscientious beliefs.
- **Article 51A(a) of the Constitution:** Enshrines a Fundamental Duty for every citizen to abide by the Constitution and respect its ideals and institutions, the National Flag, and the National Anthem (notably, the literal text omits explicit mention of the National Song).

Landmark Judicial Precedents

- **Bijoe Emmanuel v. State of Kerala (1986):** A foundational Supreme Court ruling where three Jehovah's Witness students were expelled for not singing the National Anthem. The apex court reversed the expulsion, holding that compelling someone to sing against their religious convictions violates Article 19(1)(a) and Article 25, provided they show proper respect by standing.
- **Aruna Roy v. Union of India (2002):** The Supreme Court clarified that teaching or promoting national values, secularism, and historical patriotic symbols in educational institutions does not amount to imparting religious instruction under Article 28.

Conclusion

The state directive forcing the recitation of *Vande Mataram* in minority-administered madrasas reflects a delicate constitutional conflict between promoting collective national integration and preserving individual minority rights. While the state possesses a valid interest in introducing a uniform, non-sectarian patriotic curriculum, it must balance these aims with constitutional safeguards. Moving forward, the resolution of such friction will heavily rely on strict judicial adherence to established precedents, ensuring that efforts toward national cohesion do not inadvertently dilute the pluralistic and secular ethos guaranteed by the Indian Constitution.

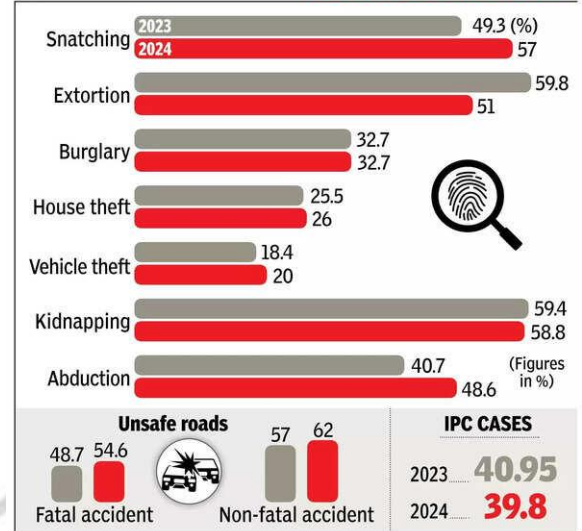


2. NCRB Data 2024: Delhi's Crime Landscape and Urban Security Challenges

Executive Summary

- Highest Crime Volume:** Delhi continues to record the highest number of total crime cases among India's 19 metropolitan cities, with 2,75,402 cases registered in 2024—a figure significantly higher than Mumbai, which ranks second with 51,428 cases.
- Vulnerable Groups:** The national capital remains the most unsafe for women and senior citizens; it recorded 13,396 cases of crimes against women and 1,267 cases against senior citizens in 2024, accounting for nearly one-third of such cases across all metros.
- Theft and Juvenile Offending:** Delhi dominates the country in theft-related statistics, accounting for nearly 30% of all such offences nationally; additionally, 41.6% (2,306) of crimes committed by juveniles across major metros occurred in Delhi.
- Prison Overcrowding:** The city faces a severe crisis in prison infrastructure, with 19,512 inmates against a capacity of 10,026—reflecting an occupancy rate of 194.6%. Notably, 88% of these prisoners are undertrials.
- Murder and Kidnapping:** While murder cases saw a slight dip (504 in 2024), the murder rate of 2.3 per lakh population remains higher than the national average of 1.9. Kidnapping and abduction cases stood at 5,580, accounting for 35% of all such cases in metropolitan areas.
- Cybercrime Trends:** In a rare positive trend, cybercrime cases in Delhi (404) are significantly lower than the national metropolitan average, though officials highlight the growing menace of "money mule" accounts.

MIXED RESULTS ON DETECTION RATE



Key Definitions

- NCRB (National Crime Records Bureau):** An Indian government agency responsible for collecting and analyzing crime data as defined by the Indian Penal Code (IPC) and Special and Local Laws (SLL).
- Undertrial:** A person who is currently on trial in a court of law but has not yet been convicted, frequently highlighting delays in the judicial process.
- Metropolitan City:** For NCRB data categorization, these are cities with a population of one million or more as per the last census.

Constitutional & Legal Provisions

- Public Order and Police:** Under the Seventh Schedule (List II - State List) of the Constitution, "Police" and "Public Order" are state subjects. However, in the case of Delhi, these powers vest with the Union Government via the Lieutenant Governor.
- Article 21:** The Right to Life and Personal Liberty. Overcrowded prisons and the high percentage of undertrials (88%) often raise concerns regarding the violation of this fundamental right and the right to a speedy trial.



- **Juvenile Justice (Care and Protection of Children) Act, 2015:** The primary legal framework for dealing with children in conflict with the law; Delhi's high juvenile crime rate (41.6% of metro cases) necessitates a review of the Act's implementation at the grassroots level.
- **Bharatiya Nyaya Sanhita (BNS):** The new penal code (replacing the IPC) under which these crimes are now classified, aiming for more efficient registration and prosecution.

Additional Key Insights

- **Institutional Factors:** High registration figures in Delhi are often attributed by officials to "liberal registration" policies, where cases are filed promptly on the basis of the first complaint, unlike in other cities where "burking" (suppression) of crime might occur.
- **Social Isolation:** Senior citizens in upscale localities are increasingly targeted due to isolation, making them vulnerable to "inducement" and robbery.
- **Infrastructure Lag:** The prison occupancy rate of 194.6% underscores a massive gap between judicial processing speed and the physical capacity of correctional facilities.

Conclusion

The 2024 NCRB data underscores a paradox: while Delhi's high crime statistics reflect a robust mechanism for case registration, they also highlight systemic failures in urban safety, particularly for women and the elderly. The disproportionately high rates of juvenile crime and prison overcrowding suggest that punitive measures alone are insufficient. A holistic approach involving urban planning (for theft prevention), social counseling (for juveniles), and judicial reforms (to reduce undertrial populations) is essential for changing Delhi's narrative from the "Crime Capital" to a secure global metropolis.

3. Tuberculosis Elimination in India: Intensive Screening and Tech-driven Interventions

Active Case Finding (ACF): A proactive systematic screening approach to identify people with suspected TB in a predetermined target group, rather than waiting for them to present themselves to a healthcare facility with symptoms.

- **Intensified Screening Drive:** Delhi has detected over 12,000 TB cases in just six weeks through the 'TB Mukht Bharat Abhiyan 2.0', showcasing the efficacy of door-to-door screening in slums, high-risk neighborhoods, and congregate settings.
- **Technological Integration:** A critical shift in strategy involves the mass deployment of handheld X-ray machines, which allow health workers to identify asymptomatic or early-stage infections in the field far more rapidly than traditional microbiological tests alone.
- **Targeting Asymptomatic Transmission:** The campaign focuses on "missing cases"—individuals who are infected but do not yet show visible symptoms—to break the chain of transmission in high-density areas like JJ colonies, prisons, and shelter homes.
- **Demographic Insights:** Official data reveals a significant burden across age groups, with roughly 11% of notified patients being pediatric cases (children), and a nearly balanced gender distribution (52.6% male, 47.3% female), emphasizing the universal risk.
- **Public Health Challenges:** Despite intensified efforts, experts highlight systemic gaps, including the inadequate involvement of the private healthcare sector in case notification and the lingering impact of the pandemic on the 2025 elimination timeline.



- **Institutionalization of Care:** The 100-day campaign interventions are now being integrated into the routine public health system, ensuring that high-risk screening and portable diagnostics remain permanent fixtures of the urban health model.

Constitutional and Legal Provisions

- **Article 21:** The right to health is an integral part of the Right to Life; the state is constitutionally obligated to provide effective disease control and public health infrastructure.
- **Article 47 (DPSP):** Directs the State to regard the improvement of public health as among its primary duties, providing the ethical mandate for the National TB Elimination Programme (NTEP).
- **Epidemic Diseases Act, 1897:** Provides the legal framework for the government to take special measures and prescribe regulations to prevent the outbreak or spread of dangerous epidemic diseases.
- **Notification Mandate (2012):** It is legally mandatory for all healthcare providers (private and public) to notify TB cases to the local health authority (Nikshay portal), failing which can lead to legal penalties under Section 269 and 270 of the IPC.

Key Terms for UPSC

- **Ni-kshay Portal:** The web-enabled patient management system for TB control under the NTEP that facilitates tracking of notifications and treatment adherence.
- **Latent TB Infection (LTBI):** A state of persistent immune response to stimulation by Mycobacterium tuberculosis antigens without evidence of clinically manifested active TB.
- **Congregate Settings:** High-risk environments where people live in close proximity for extended periods, such as prisons, homeless shelters, and old age homes, where TB spreads rapidly.

Conclusion

The detection of a high volume of cases in a short window underscores that while TB remains a persistent threat, the transition from passive to active screening is a game-changer. The use of portable technology like handheld X-rays bridges the "diagnostic gap" in urban slums. However, achieving true elimination will require a multi-sectoral approach that seamlessly integrates private practitioners and addresses the social determinants of health, such as malnutrition and overcrowded housing.

4. Abortion Rights in India: Decisional Autonomy and Legal Barriers

Reproductive Decisional Autonomy: A constitutional principle recognized by the Supreme Court, affirming that the choice to carry a pregnancy to term or terminate it belongs solely to the pregnant person, as an extension of their right to privacy, dignity, and bodily integrity under Article 21.

- **Dual Legal Framework:** Abortion in India is regulated by a "conditional framework" consisting of the Medical Termination of Pregnancy (MTP) Act, 1971 (as an exception) and Section 88 of the Bharatiya Nyaya Sanhita (BNS), which criminalizes "causing miscarriage" without a life-saving medical justification.
- **Expansion of Eligibility:** Following the 2021 Amendment and the 2022 Supreme Court ruling (*X v. Health & Family Welfare Department*), the law now allows all women—regardless of marital status—and transgender persons to access abortion, extending the gestational limit to 24 weeks for specific vulnerable categories.



- **The Provider-Centric Gap:** Despite liberal amendments, the law remains "provider-centric," meaning the final authority to grant an abortion rests with a Registered Medical Practitioner (RMP) or a Medical Board, which often leads to denials based on personal biases or fear of criminal prosecution.
- **Rigid Gestational Limits:** Statutory cut-offs (20/24 weeks) often ignore ground realities where victims of sexual assault or minors may discover pregnancies late due to trauma or lack of awareness, forcing many to approach Courts for special permissions.
- **Interplay of Conflicting Laws:** Mandatory reporting requirements under POCSO (for minors) and the strict regulations of the PCPNDT Act (to prevent sex selection) create a "chilling effect" for doctors, who may hesitate to provide legal services to avoid legal scrutiny.
- **Transition to Reproductive Justice:** Experts advocate for "delinking" abortion from criminal law (BNS) and moving toward a rights-based framework where early-term abortion is available "on demand," ensuring safe and stigma-free access for all sections of society.

Constitutional and Legal Provisions

- **Section 88, BNS:** Replaces Section 312 of the IPC; it criminalizes causing miscarriage except in "good faith" to save a woman's life, carrying a punishment of up to 3 years (or 7 years if the woman is "quick with child").
- **Article 21:** Interpreted by the Supreme Court to include reproductive rights as a fundamental right, covering the "decisional autonomy" to make choices about one's body without state interference.
- **MTP (Amendment) Act, 2021:** Increased the upper limit for termination from 20 to 24 weeks for survivors of rape, minors, and women with disabilities, and mandated State-level Medical Boards for cases involving substantial fetal anomalies after 24 weeks.
- **POCSO-MTP Harmonization:** The Supreme Court (2022) ruled that RMPs are not required to disclose the identity of a minor in their mandatory report under POCSO if the minor seeks an abortion, prioritizing the minor's privacy and access to healthcare.

Key Terms for UPSC

- **Quick with Child:** A legal and medical term (historically used) referring to the stage of pregnancy where the fetus's movements are first felt by the pregnant person (approx. 16–20 weeks).
- **Medical Board:** A specialist body (including a gynecologist, pediatrician, and radiologist) designated by the State to decide on terminations beyond 24 weeks in cases of severe fetal abnormalities.
- **Chilling Effect:** A situation where legal threats or complex regulations discourage individuals (like doctors) from exercising or providing a legal right for fear of punishment.

Conclusion: While India's abortion laws are among the most progressive globally, they remain anchored in a criminal justice framework that treats abortion as an exception rather than a right. The persistent need for judicial intervention indicates that statutory limits and provider biases continue to obstruct "safe and timely" access. True reform would involve decriminalizing the act for pregnant persons and simplifying the "gatekeeping" role of medical professionals to align the law with the Supreme Court's vision of reproductive justice.



5. UMMID Programme: Revolutionizing Management of Inherited and Rare Genetic Disorders

Definition of Key Terms

- **Inherited Genetic Disorders:** Conditions caused by pathological alterations or mutations in an individual's DNA sequence that are transmitted from parents to offspring across generations.
- **Precision Medicine:** An innovative medical approach that tailors disease prevention and treatment protocols to the individual genetic profile, environment, and lifestyle variations of each patient.
- **NIDAN Kendras:** National Inherited Diseases Administration Kendras; specialized diagnostic and counseling centers established at public hospitals to deliver advanced genomic testing, prenatal screening, and clinical counseling services.
- **Genomic Medicine:** An interdisciplinary field of medicine that utilizes an individual's complete genomic information (all their genes and intergenic interactions) to guide clinical diagnostic and therapeutic decisions.

Executive Summary

- **National Initiative Dedication:** The Union Government has formally dedicated the UMMID (Unique Methods of Management of Inherited Disorders) network to the nation, establishing a comprehensive public health framework focused on early intervention, advanced genetic diagnostics, and affordable healthcare for rare genetic conditions.
- **Paradigm Shift toward Genome-Based Care:** The program marks India's strategic transition into an era of precision and individualized healthcare, establishing the necessary clinical infrastructure to transition from traditional generalized treatments to targeted gene-based interventions.
- **Institutional Architecture and Monitoring:** Orchestrated by the Department of Biotechnology (DBT), the national rollout included the launch of the UMMID Dashboard and the release of the UMMID Compendium to systematically monitor nationwide screening, clinical outreach, and diagnostic access.
- **Mitigating the Rare Disease Burden:** The scheme addresses a historically neglected public health sector where low prevalence and high molecular complexity led to delayed diagnoses, lack of clinician awareness, and prohibitively expensive import-dependent therapies.
- **Decentralized Diagnostic Expansion:** The initiative has successfully operationalized nearly 30 NIDAN Kendras, consciously moving advanced molecular diagnostics out of metropolitan hubs and into underserved regions and Aspirational Districts to achieve equitable health equity.
- **Mass Scale Outreach and Prevention:** The UMMID network has already provided direct screening and diagnostic benefits to nearly three lakh individuals, integrating newborn screening, prenatal counseling, and intensive capacity-building programs for medical practitioners.

Constitutional and Legal Provisions

- **Article 21 (Right to Life and Health):** The Supreme Court of India has repeatedly affirmed that the right to health and access to affordable medical care is an integral component of the Right to Life under **Article 21**. UMMID directly executes this constitutional mandate by making genetic healthcare accessible to marginalized families.



- **Directive Principles of State Policy (Article 47):** Mandates that the State shall regard the raising of the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties.
- **National Policy for Rare Diseases (NPRD), 2021:** This policy provides the statutory framework for financial support and institutional treatment of rare conditions in India. It categorizes rare diseases into three groups based on treatment feasibility and integrates with technical networks like UMMID to optimize domestic research, lower drug costs, and localise diagnostic facilities.

Strategic Objectives of the UMMID Initiative

- **Clinician Capacity Building:** Establishing specialized fellowship programs in medical genetics to train conventional pediatricians, gynecologists, and internal medicine specialists in identifying and managing genetic abnormalities.
- **Prevention via Prenatal Screening:** Implementing mandatory screening protocols for pregnant women and newborns at tertiary healthcare facilities to identify metabolic and chromosomal disorders before irreversible clinical damage occurs.
- **Ecosystem for Translational Research:** Utilizing India's vast and unique population genetic diversity to generate localized genomic datasets, which serve as foundational material for developing affordable domestic therapeutics.

Conclusion

The institutionalization of the UMMID Programme represents a landmark integration of advanced biotechnology and inclusive public policy in India. By establishing the NIDAN Kendra network and expanding genetic screening into Aspirational Districts, UMMID systematically breaks the financial barriers associated with genomic medicine. This initiative not only addresses the immediate distress of families battling rare conditions but also lays down the essential digital and scientific foundation for a modern, precision-driven, and preventive national healthcare architecture.

SECURITY & DEFENCE

1. Indigenous Naval Strength: The Naval Anti-Ship Missile Short Range (NASM-SR)

The Defence Research and Development Organisation (DRDO) and the Indian Navy recently achieved a milestone by successfully test-launching a salvo of Naval Anti-Ship Missiles Short Range (NASM-SR) from a helicopter off the Odisha coast. This indigenously developed system is designed to replace aging foreign stockpiles, providing the Navy with a highly adaptable and lethal edge in littoral warfare.

- **Successful Salvo Capability:** The recent test involved a "salvo launch," where two missiles were fired in quick succession from the same helicopter. This capability is critical in modern naval combat to overwhelm the sophisticated air defense systems of hostile vessels through sheer volume and precision.
- **Superiority over Sea Eagle:** The NASM-SR is set to replace the British-origin Sea Eagle missiles currently used on Sea King helicopters. While a single Sea Eagle weighs 580 kg, the NASM-SR is



significantly lighter at 380 kg, allowing helicopters to carry a higher number of missiles and strike from a safer standoff range of 55 km.

- **Advanced "Man-in-the-Loop" Tech:** Unlike older "fire-and-forget" missiles, the NASM-SR features a two-way data link that allows a human operator to adjust the missile's path mid-flight. This minimizes the risk of collateral damage in crowded maritime corridors and ensures the missile can hit moving or decoyed targets effectively.
- **Lethal Waterline Hit Precision:** The missile is designed for a "waterline hit," striking a vessel at the point where the hull meets the water. Damage at this vulnerable location causes rapid flooding, which can quickly disable or sink a ship, a capability that was largely absent in the previous generation of short-range naval missiles.
- **Sophisticated Subsystems:** The missile utilizes a solid propulsion booster for initial thrust and a long-burn sustainer engine for extended flight. It is equipped with an advanced seeker for target tracking, a radio altimeter for sea-skimming, and a proximity fuse that detonates when the missile is at an optimal distance from the target.
- **Collaborative Development:** The project highlights the strength of the domestic defense ecosystem, with premier DRDO labs in Hyderabad, Pune, and Chandigarh partnering with private sector entities, MSMEs, and startups to ensure the mass production of these high-tech assets.



Key Definitions

- **Salvo Launch:** The firing of multiple missiles or projectiles in rapid succession at a single target or multiple targets to saturate enemy defenses.
- **Sea-Skimming:** A flight profile where a missile flies at a very low altitude, just above the water surface, to evade enemy radar and point-defense systems.

Constitutional & Legal Provisions

- **Seventh Schedule (Entry 1, Union List):** "Defence of India" is an exclusive Union subject, mandating the Central Government to ensure the modernization and self-reliance of the Armed Forces.
- **Article 51A(d):** Fundamental Duty of every citizen to defend the country and render national service when called upon to do so, which is supported by the development of indigenous defense technology.
- **Defence Acquisition Procedure (DAP) 2020:** The policy framework that prioritizes "Make in India" (IDDM - Indigenously Designed, Developed, and Manufactured) categories for defense procurement.

Important Key Points

- **Standoff Range:** The missile's 55-km range allows Navy helicopters to engage hostile fast-attack crafts or smaller vessels without entering the effective range of their surface-to-air defenses.
- **Strategic Autonomy:** By replacing 1980s-era British missiles with homegrown technology, India reduces its dependence on foreign Original Equipment Manufacturers (OEMs) for spares and upgrades during conflict.



Conclusion: The NASM-SR is not just a technological upgrade but a strategic necessity for the Indian Navy's ship-borne aviation wing. Its lighter weight, "man-in-the-loop" flexibility, and specific waterline hit capability transform standard utility helicopters into potent anti-access/area-denial (A2/AD) platforms. This success reinforces India's commitment to "Aatmanirbharta" in high-end missile technology.

2. Proposed Changes to BSF Mandate and Territorial Security

- **Shift to Territorial Security:** The Central Government is considering an expansion of the Border Security Force (BSF) operational mandate, transitioning from the traditional doctrine of "border security" to a holistic concept of "territorial security."
- **Quadrangular Integration:** The newly proposed operational framework introduces a quadrangular concept that integrates the public, civic administration, local police, and the military, with the BSF maintaining the primary leadership responsibility.
- **Smart Border Suraksha Project:** The initiative aims to fortify India's international borders shared with Pakistan and Bangladesh by deploying an advanced security grid financed via major central capital investment.
- **Technological Force Multipliers:** The updated security infrastructure shifts heavily toward modern surveillance assets, utilizing a multi-layered grid composed of drones, high-resolution radar, watchtowers, and advanced technology to assist active jawans.
- **Strategic Announcement:** The policy reassessment was announced by the Union Home Minister during an operational review at the G-7 and G-13 border outposts located in Bhuj, Kutch, coinciding with the 60th foundation year of the BSF.

Key Terms, Constitutional Framework, and Institutional Mechanics

Key Definitions

- **Border Security:** A localized defensive strategy focused strictly on guarding physical border lines against infiltration, cross-border smuggling, and illegal immigration.
- **Territorial Security:** A broader geopolitical strategy encompassing internal security coordination, community policing in border tracts, civic integration, and hybrid warfare defense.

Constitutional & Legal Provisions

- **Article 355 of the Constitution:** Explicitly places the duty on the Union to protect every State against external aggression and internal disturbance, providing the primary constitutional basis for deploying central armed forces like the BSF.
- **Seventh Schedule (List I - Union List):** Entry 2 places the "Naval, military and air forces; any other armed forces of the Union" under the exclusive legislative domain of Parliament.
- **The Border Security Force Act, 1968:** The parent statutory framework regulating the constitution, governance, and specific jurisdiction of the force. Sections within the Act allow the Central Government to alter the geographic and functional scope of the BSF's powers through official gazette notifications.



Conclusion & UPSC Relevance

Conclusion

Transitioning the BSF from a perimeter-guarding unit to a territorial security leader addresses the evolving nature of hybrid threats. Integrating local administration and high-tech tools ensures enhanced national security while minimizing coordination friction between central forces and state police agencies.

3. Cross-Border Cyber Trafficking Crisis in Myanmar: Strategic Implications

- **Emerging Transnational Crisis:** Organized transnational syndicates, particularly operating within lawless enclaves like the Myawaddy region of Myanmar near the Thai border, are driving a severe cross-border human trafficking crisis. Vulnerable Indian youth are targeted through social media and illegal recruitment networks under false promises of legitimate employment, only to be held captive in armed-guarded camps and forced to run international online fraud operations.
- **Geopolitical Challenges in Conflict Zones:** Rescuing trapped citizens faces major obstacles due to Myanmar's deep internal civil instability. Vast portions of the frontier, including specialized economic zones, are managed by independent armed groups like the Border Guard Force (BGF) or foreign criminal networks rather than the formal military junta. Consequently, the Ministry of External Affairs (MEA) must implement complex diplomatic maneuvers, heavily relying on cross-border coordination with Thailand (such as using Mae Sot as an evacuation corridor) to secure safe passages.
- **Institutional Frameworks and Repatriation Actions:** The Indian government treats the safety of its overseas diaspora as a top priority. Indian embassies in Yangon and Bangkok work closely with host-nation immigration, defence, and law enforcement agencies to identify, verify, and extract citizens. Evacuation operations have expanded significantly—rescuing over 1,500 nationals from Myanmar alone between 2022 and late 2025—frequently requiring direct tactical coordination with the Indian Air Force for emergency airlifts.
- **Domestic Countermeasures and Enforcement:** To stop these operations at the source, the Indian Central Government maintains the *e-Migrate portal*, which lists over 3,500 unregistered recruitment agencies to warn citizens. The MEA also coordinates directly with State Home Departments and the Indian Cyber Crime Coordination Centre (I4C) under the Ministry of Home Affairs to arrest local handlers, monitor digital footprints, and dismantle the localized networks facilitating illicit travel arrangements.
- **Constitutional and Legal Safeguards:** Human trafficking is strongly prohibited under Article 23 of the Constitution of India. The primary legislative response is governed by Section 370 of the Indian Penal Code (IPC), alongside the Immoral Traffic (Prevention) Act. However, because these traditional statutes often fall short when dealing with digital coercion and cross-border jurisdictions, Parliament has prioritised the comprehensive *Trafficking in Persons (Prevention, Care and Rehabilitation) Bill* to formalize international rescue operations.





Definition of Key Terms

- **Cyber-Trafficking:** The illegal practice of using deception, coercion, or force to transport individuals across borders to entrap them in forced digital labor, including online financial scams and phishing factories.
- **Consular Protection:** The statutory framework and diplomatic services provided by a sovereign state's foreign missions to protect the rights, security, and interests of its citizens traveling or residing abroad.

Conclusion

The Myawaddy crisis underlines the urgent need for India to update its maritime and land-border security strategies. Mitigating this threat requires blending high-level neighborhood diplomacy with strict domestic cyber-patrolling and public awareness to protect citizens from deceptive overseas employment offers.

4. Operation Sindoor: A Paradigm Shift in India's Strategic Doctrine

Operation Sindoor, launched on May 7, 2025, marks a watershed moment in India's national security history. Executed as a direct response to the Pahalgam carnage of April 22, 2025, the operation involved high-intensity strikes against terrorist infrastructure and a massive integrated military response to Pakistani retaliation. This transition from "reactive restraint" to a "zero tolerance" policy signifies the emergence of a new Indian doctrine where cross-border terrorism is treated as an act of war, effectively redrawing the strategic red lines in a nuclear-armed sub-continent.



Key Pillars of Operation Sindoor

- **Doctrinal Evolution:** The operation signals the end of "reactive restraint" and the "dossier approach," replacing it with a proactive "zero tolerance" policy where state-sponsored terrorism is met with decisive military retribution.
- **Integrated Tri-Service Action:** It served as a real-world test for the integration of the Indian Army, Navy, and Air Force, demonstrating seamless synergy in hitting high-value targets across the border, including Bahawalpur and Muridke.
- **Escalation Dominance:** India demonstrated masterful control of the escalation ladder by countering Pakistani airstrikes on May 9 and 10 with precise waves of strikes hitting 11 Pakistani airbases, including Sargodha and Bholari.
- **Strategic Coercion:** The deployment of robust networked air defences like the S-400 and aggressive naval and land positioning created a "denial of airspace" and operational paralysis, forcing the adversary to request a ceasefire within 88 hours.
- **Political Resolve:** The operation reflected an unambiguous political mandate, giving the armed forces a "free hand" to act, thereby dismantling the "nuclear blackmail" narrative traditionally used by the adversary.



- **Indigenous Capability Validation:** The success of the operation was underpinned by the stellar performance of indigenous defense systems, providing a major boost to the "Atmanirbhar Bharat" initiative in the defense sector.

Definitions of Key Terms

- **Reactive Restraint:** A historical diplomatic and military posture where India avoided direct military escalation following terror attacks, often relying on international diplomatic pressure and dossiers of evidence.
- **Escalation Ladder:** A concept in strategic studies referring to the series of steps or stages in an increasing conflict; "masterful control" implies the ability to outpace the adversary at every level of intensity.
- **Under-Recoveries / Nuclear Overhang:** In a military context, this refers to the strategic complications and risks of conventional war breaking out between two nuclear-armed states.
- **Atmanirbharata:** Self-reliance; in this context, the indigenous design, development, and manufacture of critical defense hardware to reduce foreign dependency.

Constitutional & Legal Provisions

- **Article 51:** Under Directive Principles of State Policy, while India promotes international peace and security, the "Right to Self-Defence" is an inherent sovereign right under international law (Article 51 of the UN Charter).
- **Article 355:** It is the duty of the Union to protect every State against external aggression and internal disturbance; Operation Sindoor is a functional execution of this constitutional mandate.
- **The Armed Forces Acts:** Statutory frameworks that empower the three services to carry out operations as directed by the Union Government for national integrity.

Additional Key Points

- **Targeting Logic:** The choice of targets like Muridke and Bahawalpur—hubs of terror organizations—was intended to send a direct signal to the backers of cross-border terrorism.
- **Whole-of-Nation Approach:** The operation emphasizes the need for integrating the private sector, MSMEs, and startups with DRDO and DPSUs to build a robust defense ecosystem.
- **Global Perception:** Analytical communities have noted this as a rare instance of a concise, high-impact military action taken against a nuclear-armed adversary without triggering a full-scale war.

Conclusion Operation Sindoor has successfully established a "new normal" in the Indian subcontinent. By demonstrating that nuclear status does not grant immunity for sub-conventional warfare (terrorism), India has permanently altered its strategic mindset. The transition from a defensive to a "proactive-retributive" posture ensures that the cost of cross-border provocation is now prohibitively high, making the "Modi redlines" an irreversible pillar of Indian foreign and defense policy.

5. Tactical Advanced Range Augmentation (TARA) Glide Weapon System

The Defence Research and Development Organisation (DRDO) and the Indian Air Force (IAF) successfully conducted the maiden flight-trial of the Tactical Advanced Range Augmentation (TARA) weapon system off the coast of Odisha. This indigenous development represents a major leap in India's aerial strike capabilities, providing a cost-effective solution to modernize existing inventories. By integrating advanced guidance and



range extension technologies, TARA enables the Indian Air Force to conduct high-precision strikes from safer stand-off distances, minimizing risk to the launch platform while maximizing impact on ground-based targets.

Key Highlights of the TARA Weapon System

- **Inaugural Flight-Trial:** The system underwent its first successful flight-test off the Odisha coast, marking a critical milestone in its induction process into the Indian Air Force.
- **Indigenous Precision Technology:** TARA is India's first indigenously developed glide weapon system designed to convert conventional, unguided warheads into high-precision guided munitions.
- **Modular Range Extension:** The system utilizes a modular kit, developed by Research Centre Imarat (RCI) and other DRDO labs, which can be retrofitted onto existing low-cost aerial weapons to enhance their range and lethality.
- **Strategic Engagement:** It is specifically engineered to accurately engage ground-based targets, allowing the IAF to strike with pinpoint accuracy without the high cost associated with fully dedicated missile systems.
- **Enhanced Survivability:** By providing glide capabilities, the system allows the launch aircraft to remain at a stand-off distance, reducing vulnerability to enemy surface-to-air defense systems.
- **Cost-Effective Modernization:** The platform focuses on improving the utility of massive existing stocks of conventional bombs, aligning with the "Atmanirbhar Bharat" vision in the defense sector.



Definitions of Key Terms

- **Glide Weapon:** A type of munition that uses aerodynamic surfaces (wings/fins) to fly toward its target after release from an aircraft, rather than falling in a purely ballistic arc.
- **Range Augmentation:** The process of increasing the distance a weapon can travel through mechanical or aerodynamic enhancements.
- **Research Centre Imarat (RCI):** A premier DRDO laboratory based in Hyderabad, specialized in the development of missile avionics, navigation, and control systems.
- **Precision-Guided Munition (PGM):** A guided weapon intended to precisely hit a specific target to minimize collateral damage and increase lethality.

Constitutional and Legal Provisions

- **Article 51A (h):** The Fundamental Duties of Indian citizens include the development of a scientific temper and the spirit of inquiry, which is the foundational drive behind indigenous R&D like TARA.
- **Seventh Schedule (List I, Entry 1):** The "Defence of India" is a Union Subject, giving the central government exclusive power to legislate and manage the development of advanced weaponry through organizations like DRDO.
- **National Security Act, 1980:** Provides the overarching legal framework for measures taken by the state to maintain national security, supported by technical advancements in defense.



- **Defence Acquisition Procedure (DAP) 2020:** The policy framework that prioritizes "Buy (Indian-IDDMM)" to promote indigenous design and manufacturing of systems like TARA.

Additional Important Key Points

- **Stand-off Capability:** Such systems are vital in modern "contested airspaces" where entering the range of enemy air defenses is highly risky for manned aircraft.
- **Modular Design:** The modularity ensures that the technology is not restricted to one type of bomb, allowing for wide application across various weight categories of unguided munitions.
- **Strategic Autonomy:** Reducing reliance on imported precision kits (like the Israeli SPICE or American JDAM) enhances India's strategic independence during conflicts.

Conclusion The successful trial of the TARA glide weapon system is a testament to India's maturing defense R&D ecosystem. By transforming "dumb" bombs into "smart" weapons, the IAF can now achieve surgical strike capabilities at a fraction of the cost of traditional missiles. This development not only strengthens the tactical offensive capability of the Indian Air Force but also reinforces the country's commitment to self-reliance in high-technology defense domains.

6. Homegrown AI For Defence: Towards Strategic Autonomy

- **Strategic Decoupling:** In light of the conflicts in West Asia (Iran) and Ukraine, the Indian defence establishment is prioritizing the decoupling of military technology from foreign-made systems to prevent dependencies during geopolitical crises.
- **Domestic Partnerships:** The Ministry of Defence (MoD) is in active consultations with domestic AI firms like SarvamAI and BharatGen to integrate indigenous foundational AI models into India's existing military infrastructure.
- **Operational Imperative:** Lessons from recent global conflicts highlight that AI is no longer a secondary tool but a primary driver for real-time operational decisions, predictive logistics, and battlefield management.
- **The "Indian Palantir" Goal:** The government aims to develop an Indian version of 'Palantir' (a renowned US big-data analytics firm) to provide high-level data integration and actionable intelligence for the armed forces.
- **Bridging the Tech Gap:** Officials acknowledge that while India may currently be "behind the curve" in foundational AI models compared to global leaders, creating a sovereign AI stack is now a "growing strategic imperative."
- **Integration with Defence Capabilities:** The focus is on ensuring that these domestic AI systems are natively compatible with India's existing hardware and communication networks to ensure seamless data flow and security.



KEY DEFINITIONS

- **Foundational AI Models:** Large-scale artificial intelligence models (like LLMs) trained on vast amounts of data that can be adapted to a wide range of downstream tasks, including military intelligence.



- **Strategic Decoupling:** A policy of reducing economic or technological interdependence with foreign nations to ensure national security and self-reliance.
- **Sovereign AI Stack:** A complete set of software and hardware technologies (from chips to algorithms) developed and owned within a country to ensure data privacy and operational independence.

CONSTITUTIONAL & LEGAL PROVISIONS

- **Seventh Schedule (List I, Entry 1):** "Defence of India and every part thereof" is the primary responsibility of the Union Government, providing the legal basis for all defence-tech procurement and development.
- **Defence Acquisition Procedure (DAP) 2020:** The primary manual for procurement that emphasizes 'Make in India' and 'Innovation for Defence Excellence' (iDEX) to support startups and domestic AI development.
- **Article 51A (d):** Fundamental Duty of every citizen to defend the country and render national service when called upon, which extends to indigenous technological contributions.
- **IT Act, 2000 & Proposed Digital India Act:** Legal frameworks governing data security and the use of algorithms, critical for deploying AI in sensitive strategic sectors.

CONCLUSION

The push for homegrown AI in defence represents a critical transition from being a technology importer to a technology creator. By leveraging domestic innovators like SarvamAI and BharatGen, India is not just seeking to modernize its military but to build a "digital shield" that remains immune to foreign sanctions or supply chain disruptions. The success of this initiative will depend on sustained funding and the ability to convert high-level AI research into ruggedized, battlefield-ready applications.

7. Tactical Advanced Range Augmentation (TARA) Weapon System

Definition of Key Terms

- **Glide Weapon System:** An aerial munition equipped with aerodynamic surfaces (such as fold-out wings and tail fins) that provide lift, allowing the weapon to glide towards its target over an extended distance rather than falling in a purely ballistic, free-fall trajectory.
- **Precision-Guided Munition (PGM):** A guided weapon intended to precisely destroy a point target, utilizing guidance systems like Global Positioning System (GPS), Inertial Navigation System (INS), or Electro-Optical (EO) seekers to correct its flight path in real time.
- **Range Extension Kit (REK):** A modular, add-on technological suite containing guidance electronics and flight control surfaces that can be retrofitted onto conventional, unguided bombs to transform them into long-range smart weapons.

Executive Summary

- **Successful Flight-Trial Milestone:** The Defence Research and Development Organisation (DRDO) and the Indian Air Force (IAF) successfully conducted the maiden flight-trial of the Tactical Advanced Range Augmentation (TARA) weapon system off the coast of Odisha on May 07, 2026.



- **Indigenous Technological Solution:** TARA is designed as India's first indigenous glide weapon system to function as a modular range extension kit, specifically engineered to upgrade existing inventories of unguided conventional warheads into state-of-the-art precision-guided munitions.
- **Nodal Development Agency:** The weapon architecture has been designed and developed by the Research Centre Imarat (RCI), Hyderabad, a premier laboratory under DRDO, with active collaborative support from other dedicated DRDO facilities across the nation.
- **Cost-Effective Defense Architecture:** Emphasizing economic sustainability, TARA stands out as the first domestic glide weapon to integrate low-cost subsystems, significantly enhancing the lethality and precision of basic munitions to neutralize high-value ground-based targets without prohibitive expenses.
- **Public-Private Defense Manufacturing Eco-system:** The development program has been structurally executed through the Development cum Production Partners (DcPP) model alongside multi-tier domestic private industries, which have concurrently initiated mass production activities.

Constitutional and Legal Provisions

- **Union List Jurisdiction (Seventh Schedule):** Under the Constitution of India, defence of India and its armed forces fall under **Entry 1 and Entry 2 of List I (Union List)** in the Seventh Schedule. The legislative and executive mandate for developing advanced weapon systems like TARA rests exclusively with the Central Government.
- **Allocation of Business Rules, 1961:** The mandate for defence research, technology indigenization, and indigenous development of military hardware is legally assigned to the Department of Defence Research and Development (DDR&D) under the Ministry of Defence.
- **Defence Acquisition Procedure (DAP) 2020:** The rapid transition of TARA from design to production via the Development cum Production Partners (DcPP) framework aligns directly with DAP 2020 provisions. This legal policy framework streamlines public-private partnerships, boosts the 'Make in India' ecosystem, and promotes the acquisition of indigenous military equipment to attain self-reliance.

Key Operational Advantages of TARA

- **Standoff Range Advantage:** By providing gliding flight capabilities, the kit extends the operational release range (reaching up to an estimated 150-180 km under ideal conditions), enabling IAF fighter platforms to launch munitions while staying safely outside the coverage zone of enemy air defense networks.
- **Inventory Maximization:** TARA allows the armed forces to upgrade thousands of stockpiled, conventional unguided "dumb bombs" into high-precision precision-guided weapons, bypassing the need to procure expensive new foreign standalone weapon airframes like the American JDAM or French HAMMER.
- **Multi-Platform Integration:** The modular design parameters ensure that the TARA range extension kit can be seamlessly configured across a spectrum of legacy and contemporary frontline fighter aircraft within the current IAF inventory, maximizing overall fleet utilization.



Conclusion

The milestone flight-trial of the Tactical Advanced Range Augmentation (TARA) system marks a profound achievement in India's pursuit of strategic autonomy and defense self-reliance (Aatmanirbharta). By transforming low-cost conventional munitions into precise, stand-off strike instruments via indigenous R&D, India reduces its financial and logistical vulnerabilities associated with importing foreign precision kits. TARA reinforces the operational readiness of the Indian Air Force while setting a resilient precedent for public-private production synergy in the domestic aerospace sector.

SCIENCE & TECHNOLOGY

1. Mission Drishti: Revolutionizing Earth Observation via OptoSAR Technology

The Indian space startup GalaxEye has achieved a global milestone by launching 'Drishti', the world's first satellite capable of capturing simultaneous optical and radar images of the same location. Launched via a SpaceX Falcon 9 rocket from California, this satellite addresses a critical gap in Earth observation by integrating two distinct imaging technologies onto a single platform.

- **The OptoSAR Innovation:** Drishti is the first satellite equipped with "OptoSAR" technology, which synchronizes optical sensors and Synthetic Aperture Radar (SAR). While optical sensors provide intuitive, high-resolution photos, they are limited by clouds and darkness; SAR uses microwave signals to penetrate these barriers but produces complex images that are difficult to interpret.
- **Overcoming Tropical Challenges:** Most global satellite companies cater to Western nations with clearer skies. Drishti is specifically engineered for tropical conditions like India's, where frequent cloud cover and monsoon weather often blind traditional optical satellites, ensuring consistent data availability.
- **Simultaneous Data Synchronization:** Previously, users had to manually align data from different satellites taken at different times, often leading to inaccuracies due to ground-level changes. Drishti eliminates this by taking both image types at the exact same instant, providing a comprehensive and real-time view of any location.
- **AI-Driven Image Synthesis:** GalaxEye utilizes Artificial Intelligence to translate SAR data into optical-like images. This allows users to understand what is happening on the ground even when the optical sensor is blinded by smoke or heavy cloud cover, making space imagery accessible to non-experts.
- **Private Sector Prowess:** Developed by alumni of IIT Madras, this is the largest privately built satellite in India. It joins a growing list of Indian space-tech achievements by startups like Pixxel, Skyroot, and Agnikul Cosmos, reflecting the success of the government's space sector reforms.





Key Definitions

- **Synthetic Aperture Radar (SAR):** An active data collection method where a sensor transmits its own microwave signals and measures the reflection to create images, unaffected by weather or light.
- **OptoSAR:** A proprietary technology stack that allows optical and radar sensors to operate in perfect sync on the same satellite platform.

Constitutional & Legal Provisions

- **Article 51A(h):** Part of the Fundamental Duties, it mandates every citizen to develop the scientific temper, humanism, and the spirit of inquiry and reform, which is exemplified by indigenous space-tech innovation.
- **Space Policy 2023:** The legal framework that opened the space sector to private players (Non-Government Entities), facilitating startups like GalaxEye to lead missions previously reserved for ISRO.
- **The Geospatial Data Guidelines (2021):** Liberalized the acquisition and production of geospatial data, allowing Indian startups to operate Earth observation satellites with greater autonomy.

Important Key Points

- **Strategic Utility:** Simultaneous imaging is vital for disaster management (floods/cyclones), defense surveillance (border monitoring through clouds), and precision agriculture.
- **Global First:** While SAR and optical sensors exist separately, the technological feat of putting them on one satellite and making them "look" at the same spot simultaneously is a first in global space history.

Conclusion: The launch of Drishti marks the transition of the Indian space sector from a state-led model to a vibrant, startup-driven ecosystem. By solving the "cloud cover" problem inherent to tropical geographies, GalaxEye has created a globally competitive product that enhances India's strategic and commercial capabilities in Earth observation.

2. Technical Overview of the Environmental Control and Life Support System (ECLSS) for Gaganyaan

Key Summary Points

- **Core Functionality:** The Environmental Control and Life Support System (ECLSS) artificially replicates Earth's atmospheric conditions in orbit by precisely managing air revitalisation, water supply, ambient temperature, pressure, humidity, and metabolic waste within the spacecraft cabin.
- **Air Revitalisation Mechanism:** To prevent hypercapnia, the ECLSS removes the roughly 1 kg of carbon dioxide exhaled daily per astronaut using replaceable lithium hydroxide canisters equipped with activated charcoal filters, while maintaining metabolic oxygen levels via high-pressure gas bottles supplying 0.84 kg of oxygen per person daily.
- **Microgravity Fluid and Circulation Challenges:** In the absence of natural convection and gravity, small internal fans are used to prevent lethal carbon dioxide or oxygen pockets from forming. Additionally, water storage relies on pressurized bladders to force liquid forward mechanically, preventing floating water globules from causing electrical short-circuits or choking hazards.



- **Environmental Matrix Optimization:** The system maintains an Earth-like sea-level pressure of 101.3 kPa, keeps cabin temperatures tightly regulated between 20°C and 26°C using active heat exchangers that expel electronic and metabolic heat into space, and stabilizes relative humidity between 30% and 70% via condensing units.
- **Waste and Fire Safety Management:** Due to microgravity conditions, the module utilizes suction-based airflow systems to collect human waste into specialized fecal collection bags and urine funnels, chemically treating them to suppress ammonia and microbial growth; meanwhile, specialized fire extinguishers deploying a fine water mist are integrated to cool spherical zero-gravity flames and scrub toxic smoke particles.

Definitions of Key Terms

- **Hypercapnia:** A medical condition marked by abnormally elevated carbon dioxide levels in the blood, leading to headaches, dizziness, respiratory distress, and cognitive impairment in closed space environments.
- **Microgravity:** An environment in which the pull of gravity is greatly reduced, causing objects and fluids to appear weightless and rendering natural thermal convection and traditional fluid pouring impossible.
- **Relative Humidity:** The ratio of the current absolute humidity to the highest possible absolute humidity at a given temperature, expressed as a percentage; its control in space prevents skin irritation at low levels and electronic short-circuits or microbial growth at high levels.
- **Active Cooling System:** A thermal management network that utilizes mechanical heat exchangers and circulated fluids or air to collect waste heat from internal electronics and metabolic processes, discharging it externally into deep space.



Key Institutional and Programmatic Frameworks

- **Gaganyaan Programme:** India's maiden human spaceflight mission undertaken by the Indian Space Research Organisation (ISRO), aimed at demonstrating indigenous capability to launch a three-member crew to a 400 km low Earth orbit (LEO) and safely return them to Earth.
- **Space Technology Cells (STCs):** Collaborative institutional frameworks established between ISRO and premier academic laboratories (such as the IITs and IISc) to indigenize complex aerospace subsystems like the ECLSS, minimizing dependence on foreign space agencies.
- **Space Liability Convention, 1972:** An international treaty defining the rules of strict liability for damage caused by space objects, emphasizing why complex structural life support technologies must be perfectly designed to prevent catastrophic orbital failures.



System Architecture of Closed versus Open-Loop ECLSS

- **Open-Loop Life Support:** A system architecture where all metabolic consumables (oxygen, water) are launched directly from Earth and all metabolic waste products (carbon dioxide, urine, graywater) are stored in specialized containment units for post-mission disposal; this is the configuration optimized for short-duration missions like Gaganyaan.
- **Closed-Loop Life Support:** An advanced regenerative architecture utilized in long-duration missions (such as the International Space Station) where metabolic waste is actively recycled back into breathable oxygen and potable water using Sabatier reactors and advanced filtration assemblies, reducing cargo resupply requirements.

Conclusion

The successful indigenization of the Environmental Control and Life Support System (ECLSS) represents a critical milestone in India's space journey, transitioning ISRO from launching unmanned satellites to sustaining human life in extreme orbital environments. By resolving the complex physics of microgravity fluid dynamics and air chemistry, the system guarantees astronaut safety while laying the technical foundation for future long-duration operations, such as the proposed Bharatiya Antariksha Station. Ultimately, achieving self-reliance in life-support engineering elevates India's status within the global space economy and secures its position as a primary stakeholder in future interplanetary exploration.

3. Space-Based AI Data Centres: Prospects and Challenges

Data Centre in Space: A decentralized network of satellites equipped with high-performance Graphics Processing Units (GPUs) and storage systems designed to process AI workloads and manage massive data sets directly in Earth's orbit.

- **Decoupling Environmental Impact:** Moving data centres to space addresses Earth-based concerns regarding the massive consumption of water for cooling and the heavy reliance on land and terrestrial power grids, potentially reducing the carbon footprint of AI.
- **Solar Energy Synergy:** Satellites can theoretically harness continuous, uninterrupted solar radiation, providing a consistent power source for energy-intensive GPU clusters that would otherwise strain terrestrial renewable energy targets.
- **Critical Infrastructure Barriers:** The transition is hindered by exorbitant launch costs, the necessity of heavy heat shielding to protect hardware from solar radiation, and the extreme difficulty of maintaining hardware in a zero-gravity, high-vacuum environment.
- **Latency and Connectivity Gaps:** Current satellite communication technology struggles with the high-bandwidth, low-latency requirements of real-time AI processing, making it difficult to compete with fiber-optic terrestrial speeds.
- **The Indian Landscape:** While Indian startups like Agnikul Cosmos, Pixxel, and Sarvam AI have formed strategic partnerships to explore this frontier by FY27, they face significant hurdles in commercial viability, capital requirements, and a lack of proven orbital track records.
- **Sovereignty and Security:** Space data centres offer a potential solution for "Data Sovereignty," allowing nations to process sensitive information in a jurisdiction-free or highly controlled orbital environment, away from terrestrial physical interference.



Constitutional and Legal Provisions

- **Article 51A(h):** The Indian Constitution emphasizes the "scientific temper, humanism and the spirit of inquiry," providing a fundamental backing for high-technology exploration like space-based computing.
- **Indian Space Policy 2023:** This policy enables End-to-End participation of Non-Governmental Entities (NGEs) in all domains of space activities, providing the legal framework for startups to launch and operate data-processing satellites.
- **Outer Space Treaty (1967):** As a signatory, India must ensure that its space data centres are used for peaceful purposes and that the nation remains liable for any space debris or damage caused by these private orbital assets.
- **UN COPUOS Guidelines:** International guidelines on the Long-term Sustainability of Outer Space Activities govern how these large constellations of "computing satellites" must manage orbital crowding and debris mitigation.



Additional Key Insights

- **Edge Computing in Orbit:** Rather than replacing Earth centres, these systems may serve as "Edge" nodes, processing satellite imagery (e.g., from Pixxel) in-situ before sending refined insights to Earth, saving downlink bandwidth.
- **Thermal Management Paradox:** While space is cold, dissipating heat in a vacuum is difficult because convection is absent; satellites must rely on bulky radiators, complicating the engineering of "cool" data centres.

Conclusion: While the vision of orbiting AI factories captures the imagination of global tech leaders like Elon Musk and Indian innovators, it currently sits at the intersection of high-risk venture capital and theoretical engineering. For India to lead, it must bridge the gap between "paper plans" and successful orbital deployments. Success will depend on reducing launch costs through reusable rockets and developing radical new thermal management systems.

4. Hantavirus Outbreak on Cruise Ship: Global Health Emergency and Response

Spanish authorities and the World Health Organization (WHO) are managing a critical health crisis involving a Hantavirus outbreak aboard the Dutch-flagged vessel, *MV Hondius*, currently en route to the Canary Islands. The situation highlights the challenges of containing viral outbreaks within the confined environment of maritime travel and the necessity of rigorous international health protocols. **Key Highlights of the Hantavirus Crisis**

- **Emergency Evacuation:** Spanish health officials are preparing to evacuate over 140 passengers and crew members to a "completely isolated, cordoned-off area" upon the ship's arrival at Tenerife.
- **Mortality and Infection:** The outbreak has already resulted in three confirmed deaths, with five additional passengers known to be infected after departing the vessel at various ports.
- **Timeline of Transmission:** The crisis began on April 1, 2024, following the ship's departure from Ushuaia, Argentina, with the first fatality recorded on April 11 and subsequent cases emerging throughout April and May.



- **Global Monitoring:** The WHO is actively responding to the situation, particularly after three more individuals fell ill on May 3, underscoring the virus's potential for sustained transmission.
 - **Quarantine Measures:** While the cruise operator, Oceanwide Expeditions, claims no current passengers show active symptoms, health authorities are maintaining strict isolation protocols to prevent community spread.
 - **Geographical Spread:** The ship's route touched multiple jurisdictions—including Argentina, St. Helena, South Africa, and Cape Verde—necessitating a multi-national epidemiological investigation.
- Definitions of Key Terms**



- **Hantavirus:** A family of viruses spread mainly by rodents that can cause varied disease syndromes in people worldwide, including Hantavirus Pulmonary Syndrome (HPS) and Hemorrhagic Fever with Renal Syndrome (HFRS).
 - **Zoonotic Disease:** An infectious disease that is transmitted between species from animals to humans; Hantavirus is typically contracted through contact with rodent urine, droppings, or saliva.
 - **Epidemiological Surveillance:** The continuous, systematic collection, analysis, and interpretation of health-related data needed for the planning, implementation, and evaluation of public health practice.
- Constitutional and Legal Provisions**

- **International Health Regulations (IHR) 2005:** A legally binding instrument of international law that requires WHO Member States to report certain disease outbreaks and public health events to WHO.
 - **Maritime Labour Convention (MLC):** Ensures the right of seafarers to a safe and secure workplace that complies with safety standards, including health protection and medical care.
 - **National Health Act (India Perspective):** While this is a Spanish event, in India, the Epidemic Diseases Act, 1897, provides the state with powers to take special measures and prescribe regulations to prevent the spread of dangerous diseases.
- Additional Important Key Points**
- **Transmission Concerns:** Although Hantavirus is primarily zoonotic, this outbreak raised concerns regarding potential transmissibility in close-quarters environments like cruise ships.
 - **Logistical Challenges:** The evacuation involves specialized medical transport to ensure that infected or exposed individuals do not come into contact with the general population of Tenerife.

Aviation Safety Link: A flight attendant who boarded a plane with an infected passenger fortunately tested negative, alleviating fears of wider spread through air travel. **Conclusion** The *MV Hondius* incident serves as a stark reminder of the vulnerability of global transport hubs to infectious diseases. Successful containment depends entirely on the seamless coordination between ship operators, port authorities, and international health bodies like the WHO. As the vessel nears the Spanish coast, the focus remains on ensuring that the evacuation is executed without compromising public safety or the health of the local population in the Canary Islands.



5. Cell Broadcast System (CBS): Transforming India's Disaster Management

Definition of Key Terms

- **Cell Broadcast System (CBS):** A mobile-network-based public warning technology designed to broadcast simultaneous, non-interactive, and geo-targeted emergency messages to all mobile devices within a specified geographical area served by designated cell towers.
- **Common Alerting Protocol (CAP):** A digital, XML-based data format used for exchanging public warnings and emergencies between various alerting authorities and communication networks, standardizing the structure of emergency alerts.
- **SACHET Platform:** An indigenous, CAP-compliant pan-India integrated alert system developed to disseminate geo-targeted disaster alerts directly to citizens via multiple media channels including SMS, mobile apps, and cell broadcasts.

Executive Summary

- **Indigenous Technology Launch:** The Union Government has launched the Cell Broadcast System (CBS), a state-of-the-art public safety infrastructure developed indigenously by the Centre for Development of Telematics (C-DOT) under the Department of Telecommunications (DoT), in collaboration with the National Disaster Management Authority (NDMA) and the Ministry of Home Affairs (MHA).
- **Paradigm Shift in Disaster Response:** The deployment marks a critical transition from a reactive to a proactive disaster management framework, enabling near real-time, geo-targeted emergency warnings to reach millions of citizens instantly during critical situations like flash floods, cyclones, or industrial gas leaks.
- **Technical Superiority over Traditional SMS:** Unlike standard SMS systems that suffer from queuing delays and network congestion during emergencies, CBS utilizes a dedicated broadcast channel, ensuring immediate delivery as high-priority pop-up notifications accompanied by distinct loud tones and text-to-speech capabilities.
- **Universal and Resilient Outreach:** The system offers complete geographic scalability, functioning seamlessly across 2G, 3G, 4G, and 5G networks to cover both urban and rural populations; it ensures last-mile connectivity by automatically delivering non-disableable alerts to all active handsets within the targeted cell tower clusters, including inbound roaming users.
- **Global Alignment and Scalability:** Having completed successful field deployments during domestic disasters in Odisha, Andhra Pradesh, and Uttarakhand (as well as the Char Dham Yatra), the technology has also been demonstrated internationally in nations like Mauritius and Cambodia, aligning directly with the United Nations' "Early Warnings for All" initiative.

Constitutional and Legal Provisions

- **Constitutional Framework:** Disaster management as a subject is not explicitly mentioned in any of the three lists of the Seventh Schedule. However, the Supreme Court has ruled that it falls under the residuary powers of the Parliament under **Article 248** read with **Entry 97 of the Union List**. Furthermore, ensuring public safety and right to life aligns with **Article 21** of the Constitution of India.



- **The Disaster Management Act, 2005:** This Act provides the legal institutional framework for disaster management in India. **Section 6** mandates the NDMA to lay down policies, plans, and guidelines for disaster management, while **Section 10** empowers the National Executive Committee to control and coordinate emergency response and early warning systems.
- **The Telecommunications Act, 2023:** Replaces colonial-era laws and provides the legal backing for the government to take control of telecommunication networks during public emergencies, prioritize public safety messages, and mandate telecom service providers to transmit disaster alerts without cost.

Key Operational Features of CBS

- **Congestion Immunity:** Because it uses a broadcast mechanism rather than point-to-point routing, network congestion caused by mass panic does not impact the delivery speed of CBS alerts.
- **Multilingual Capability:** The system can transmit alerts simultaneously in multiple regional languages based on the target demographic location, enhancing community compliance and reducing localized panic.
- **Non-Disableable Alerts:** Emergency alerts bypass standard user configuration settings, meaning they appear as compulsory overrides on mobile screens to guarantee visibility.

Conclusion

The institutionalization of the Cell Broadcast System represents a monumental leap in India's technological sovereignty and disaster resilience framework. By bypassing the traditional bottlenecks of telecom congestion and offering highly precise, multilingual, and localized alerts, CBS bridges the critical gap in last-mile emergency communication. This system effectively mitigates human casualties, streamlines administrative evacuation protocols, and establishes a robust blueprint for technology-driven governance in climate-vulnerable geographies.

6. Stellar Indigenization: Massive Stars Triggering Star Formation in Bright Rimmed Cloud 44

Definition of Key Terms

- **Molecular Cloud:** A dense interstellar cloud of gas (primarily molecular hydrogen) and dust where the temperature and density allow the formation of molecules, acting as the primary breeding grounds for new stars.
- **Bright Rimmed Cloud (BRC):** A dense, isolated molecular cloud structure characterized by an ionized, glowing edge or "bright rim," formed when ultraviolet radiation from an external massive star impacts and compresses the cloud's boundary.
- **Young Stellar Object (YSO):** A star in its earliest stages of evolutionary development, encompassing protostars and pre-main-sequence stars that have not yet initiated steady hydrogen fusion in their cores.
- **Brown Dwarf:** A substellar object that possesses a mass below the necessary limit to sustain stable hydrogen fusion in its core (typically less than 0.08 times the mass of the Sun), occupying the evolutionary gap between the most massive planets and the lowest-mass stars.



Executive Summary

- **Breakthrough in Stellar Evolution:** Scientists from the Aryabhata Research Institute of Observational Sciences (ARIES), Nainital, an autonomous body under the Department of Science and Technology (DST), have discovered direct evidence that massive stars actively trigger the birth of subsequent generations of stars.
- **Target Observation Area:** The study investigated a specific interstellar region known as Bright Rimmed Cloud 44 (BRC 44), situated roughly 900 parsecs ($1 \text{ parsec} \approx 3.26 \text{ light-years}$) from Earth within the larger Cepheus OB2 star-forming complex.
- **Mechanism of Radiation-Driven Implosion:** The research demonstrates that intense ultraviolet (UV) radiation emitted by external massive stars ionizes the surface of BRC 44, causing rapid heating and compression that generates forward-moving shock waves, which increase cloud density and ignite star birth.
- **Discovery of Substellar Objects:** The multi-wavelength investigation successfully identified 22 new young stellar objects (YSOs) within the BRC 44 complex, including several rare brown dwarfs, providing vital clues on how low-mass and substellar entities form under extreme radiation fields.
- **Multilateral Technological Synergy:** The discovery utilized a sophisticated multi-wavelength approach combining optical and infrared data from India's 3.6-meter Devasthal Optical Telescope (DOT) and Devasthal Fast Optical Telescope (DFOT) alongside global space assets like the Spitzer Space Telescope.
- **Dual-Mode Star Formation:** The findings published in *The Astrophysical Journal* reveal that star formation in these clusters occurs via two distinct pathways: an earlier group that formed concurrently with the primary massive star, and a younger group generated subsequently by the massive star's propagating shock waves.

Constitutional and Legal Provisions

- **Article 51A(h) of the Constitution (Fundamental Duties):** Mandates that it shall be the duty of every citizen of India to develop the scientific temper, humanism, and the spirit of inquiry and reform. State funding and institutional support for deep-space astronomy through DST directly fulfill this constitutional objective.
- **Union List (Seventh Schedule) - Entry 68:** Covers "Survey of India, the Geological, Botanical, Zoological and Anthropological Surveys of India; Meteorological organisations." This entry provides the legislative competence under which the Central Government establishes and maintains apex astronomical research bodies like ARIES.
- **Science, Technology, and Innovation Policy (STIP):** The strategic operationalization of the Devasthal Optical Telescope facility aligns with the statutory objectives of India's national science policies, which prioritize the development of indigenous mega-science infrastructure, international research consortia, and basic research capacity-building.

Key Features and Capabilities of the Devasthal Observatory

- **Strategic Geographical Advantage:** Situated at an altitude of 2450 meters in the Central Himalayan region, the Devasthal site offers pristine atmospheric conditions, low pollution, and minimal angular blurring (seeing), making it ideal for deep-space optical observations.



- **Largest Optical Telescope in India:** The 3.6-meter Devasthal Optical Telescope (DOT) is India's largest fully steerable optical telescope, capable of capturing faint optical and near-infrared signals from high-redshift galaxies, exoplanets, and star-forming regions.
- **Global Data Integration:** The telescope operates in tandem with international space telemetry data, establishing India as a primary data provider and hub for high-resolution deep-space mapping within South Asia.

Conclusion

The definitive research conducted at BRC 44 challenges traditional astronomical assumptions that massive stars act solely as destructive forces that disperse their parental gas clouds through strong stellar winds. Instead, it proves their constructive capacity to catalyze and regulate cosmic density, initiating the birth of low-mass stars and brown dwarfs. By utilizing the indigenous technological prowess of the Devasthal Optical Telescope, Indian astronomers have enriched global astrophysical literature, reinforcing the country's rising institutional capability in managing complex, multi-wavelength deep-space research programs.

HISTORY & CULTURE

1. Vande Mataram: Historical Context and the Debate on Multicultural Nationalism

- **Mandatory Usage in Official Ceremonies:** In February 2026, the Government of India mandated the playing or singing of the full version of *Vande Mataram* at all official state functions. This was recently observed during the oath-taking ceremony of the 13th Chief Minister of Tamil Nadu, C. Joseph Vijay, where the song was performed alongside the National Anthem and the State Anthem (*Tamil Thai Vaazhthu*).
- **Historical Origins and Literary Context:** Written by Bankim Chandra Chatterji in his 1882 novel *Anandamath*, the song was originally set against the backdrop of the Sannyasi Rebellion. Early English translations, such as the 1906 *Abbey of Bliss*, highlight that the novel's narrative contained strong anti-Muslim sentiments and viewed British rule as a transformative force for reviving Hindu objective knowledge.
- **Evolution of the Song's Narrative:** During the independence movement, the song was "sanitized" in subsequent translations (notably in 1941) to remove communal undertones and align with the secular goals of the freedom struggle. While the song became a powerful anti-colonial slogan, scholars argue that the original context remained rooted in religious nationalism rather than a multicultural identity.
- **The 1937 Congress Compromise:** Recognizing that the later stanzas of the song invoked specific religious imagery that could alienate minority communities, a Congress sub-committee led by Jawaharlal Nehru resolved in 1937 to sing only the first two stanzas. These stanzas focus on the natural beauty and abundance of the motherland, omitting the sections with religious glorification.





- **Constituent Assembly and National Status:** During the drafting of the Constitution, despite strong advocacy from members like Syama Prasad Mookerjee, *Jana Gana Mana* was adopted as the National Anthem due to its inclusive character. *Vande Mataram* was accorded the status of "National Song," with the understanding that it held equal honor but a different functional role in a secular state.
- **Modern Debate on Multiculturalism:** The current push to sing the full version has reignited concerns among opposition parties and civil society. Critics argue that imposing a text with specific religious origins at secular government events may undermine the "monocultural vs. multicultural" balance of Indian nationalism and the constitutional promise of secularism.

Key Definitions

- **National Song:** A patriotic song (*Vande Mataram*) that holds equal status with the National Anthem but is not governed by the same strict statutory rules for performance.
- **Multicultural Nationalism:** A form of nationalism that defines the national identity through a synthesis of various cultures, languages, and religions, rather than a single dominant tradition.
- **Secularism (Indian Context):** Unlike the Western concept of separation of church and state, Indian secularism (*Sarva Dharma Sambhava*) implies equal respect for all religions and state neutrality in religious matters.
- **Sannyasi Rebellion:** A late 18th-century uprising in Bengal involving monks and displaced peasants against the East India Company, which served as the historical inspiration for *Anandamath*.

Constitutional and Legal Provisions

- **Article 51A(a):** A Fundamental Duty of every citizen to abide by the Constitution and respect its ideals and institutions, the National Flag, and the National Anthem (notably, the National Song is not explicitly mentioned here, though it is respected by custom).
- **Article 25 to 28:** Guarantees Freedom of Religion, which includes the right not to be compelled to participate in religious rituals or prayers in state-funded educational institutions or government functions.
- **State Song Status (Tamil Nadu):** In 2021, the Tamil Nadu government declared *Tamil Thai Vaazhthu* as the State Song, mandating that people stand (except PwDs), following a Madras High Court observation that it was previously regarded only as a prayer song.
- **The Prevention of Insults to National Honour Act, 1971:** Provides for punishment for those who intentionally prevent the singing of the National Anthem or cause disturbance to an assembly engaged in such singing. The Act does not currently extend the same penal provisions to the National Song.

Conclusion

The revival of the full version of *Vande Mataram* represents a tension between historical ritual and the evolving needs of a pluralistic democracy. While the song remains a symbol of India's struggle for independence, its mandatory use in official settings raises fundamental questions about state neutrality. Balancing patriotic fervor with the protection of India's multicultural fabric is essential to ensuring that national symbols unite rather than divide the citizenry.



2. Restitution of the Chola-Era Anaimangalam Copper Plates from the Netherlands

Definition of Key Terms

- **Copper Plate Charters (Tamra-shasana):** Legal epigraphical documents engraved on copper sheets, used by ancient and medieval Indian rulers to record royal decrees, land grants, tax exemptions, and dynastic genealogies.
- **Restitution:** The formal legal and diplomatic process of returning cultural property, antiquities, or historical artifacts to their country of origin or rightful owners after involuntary or illegal removal.
- **Chulamanivarma-vihara:** A prominent Buddhist monastery established in the 11th century CE at the port city of Nagapattinam, Tamil Nadu, by the maritime rulers of the Srivijaya Empire (modern-day Sumatra/Indonesia) with local Chola patronage.
- **Leiden Plates:** The historiographical name given to the specific sets of Chola copper charters because they were preserved in the Leiden University Library in the Netherlands for over 160 years.

Executive Summary

- **Landmark Repatriation Diplomatic Event:** In a bilateral meeting held in The Hague, the Leiden University Library of the Netherlands formally returned the historic 11th-century Chola-era Anaimangalam copper plates to the Government of India in the presence of Prime Minister Narendra Modi and Dutch Prime Minister Rob Jetten.
- **Composition of Royal Charters:** The repatriated artifacts weigh nearly 30 kilograms and consist of 24 pieces in total—comprising a larger set of 21 plates issued by Rajendra Chola I and a smaller set of 3 plates issued later by Kulottunga Chola I—all bound securely by a massive bronze ring.
- **Bilingual Inscriptions and Dynastic Seals:** The plates feature bilingual inscriptions, with 5 plates written in Sanskrit using the Grantha script outlining Chola genealogies, and 19 plates written in Tamil recording administrative laws. The assembly is authenticated by a royal bronze seal depicting the Chola tiger, the Pandya twin fish, and the Chera bow.
- **Record of Inter-Religious Patronage:** The charters officially ratify the grant of revenue from Anaimangalam village to the Buddhist Chulamanivarma-vihara at Nagapattinam, illustrating an era of religious tolerance where Saivite Chola monarchs actively financed and protected Buddhist monastic institutions.
- **Evidence of Global Maritime Relations:** The texts offer invaluable epigraphical data proving the deep-seated diplomatic, trade, and cultural networks across the Bay of Bengal, linking the Coromandel Coast directly with the Srivijaya and Sailendra dynasties of Southeast Asia.
- **Provenance and Colonial Plunder:** Historical investigations by the Netherlands' Colonial Collections Committee confirmed that the plates were excavated without local consent by the Dutch East India Company (VOC) at Nagapattinam between 1687 and 1700, rendering their removal an involuntary loss of domestic possession.

Constitutional and Legal Provisions

- **Union List (Seventh Schedule) Jurisdiction:** Under **Entry 67 of List I (Union List)** of the Seventh Schedule, the Parliament of India has exclusive legislative competence over "Ancient and historical



monuments and records, and archaeological sites and remains, declared by or under law made by Parliament to be of national importance."

- **The Antiquities and Art Treasures Act, 1972:** Regulates the domestic trade of antiquities and provides the legal mechanism for India to exercise ownership rights over cultural property. It functions in tandem with the Archaeological Survey of India (ASI) under the Ministry of Culture to receive, verify, and house repatriated historical assets.
- **UNESCO 1970 Convention:** India is a signatory to the *UNESCO Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property*. This international treaty underpins the legal framework used by India's Ministry of External Affairs to negotiate the recovery of stolen national treasures from foreign museums.

Administrative and Architectural Details Recorded in the Plates

- **The Royal Insignia Seal:** The masterfully crafted bronze seal showcases the Chola imperial emblem where the central Chola tiger is placed flanked by the Chera bow and Pandya fish. This arrangement visually symbolizes the political supremacy of the Chola state over the competing regional powers of the deep South.
- **Land Revenue and Irrigation Protocols:** The Tamil inscriptions provide a detailed look into localized governance, delineating village boundaries, tax-free statuses (Devadana/Palli-chandam properties), and local water-management codes required to sustain agricultural yields.
- **Successive Imperial Endorsements:** The text notes that while Emperor Rajaraja Chola I originally conceptualized the village grant, it was his son Rajendra Chola I who formally executed the order. Decades later, Emperor Kulottunga Chola I renewed the charter, adding a grant of 4,500 kalam (a traditional unit of volume measurement) of paddy to the monastic sangha.

Conclusion

The restitution of the Chola copper plates from Leiden University goes far beyond the recovery of an antique object; it represents the reclamation of a vital historical archive that charts India's medieval global influence. These charters stand as living proof of a sophisticated civilization that balanced complex internal land administration with expansive oceanic commerce and diplomacy. By successfully utilizing modern cultural diplomacy to recover these pieces, India reinforces its national identity and preserves its civilizational heritage for generations to come.

EDITORIALS & OPINION

1. Artificial Intelligence and Global Security: The Gathering Storm of Unchecked Power

The rapid integration of Artificial Intelligence (AI) into warfare, surveillance, and economic structures has triggered a global debate on the erosion of democratic safeguards. As tech giants prioritize "hard power" and autonomous weaponization, the lack of binding international regulation poses a fundamental threat to human rights and national sovereignty.

- **Shift to Hard Power:** Leading tech firms like Palantir now argue that the survival of democratic societies depends on "hard power" built on software rather than moral appeal. This philosophy shifts the focus from "whether" AI will be used for weaponry to "who" will control these tools and for what purpose.
- **AI in Modern Warfare:** The deployment of AI-powered systems, such as the Maven Smart System, has already led to devastating consequences. Reports indicate its use in target selection for military strikes, including an incident in Iran resulting in significant civilian casualties, underscoring the lethal risks of algorithmic warfare.
- **The "Constitutional" Mirage:** Some AI developers, like Anthropic, have implemented internal "constitutions" or moral precepts for their models (e.g., Claude). However, critics remain skeptical, viewing these as private attempts to bypass public accountability and state-led regulation.
- **Surveillance and Civil Liberties:** Beyond the battlefield, AI software is increasingly utilized for predictive policing and mass surveillance. These tools often rely on biased profiling and the exploitation of personal data, leading to a breach of privacy and the erosion of fundamental civil liberties.
- **The Regulatory Gap:** While the United States has been slow to legislate, international figures like Brazil's President Lula da Silva have called for mandatory regulation to protect human rights and creative industries. Current frameworks, such as the EU AI Act and India's 2025 Governance Guidelines, represent steps toward oversight but often lack binding multilateral enforcement.
- **Economic and Social Disruption:** The "Intelligence Age" is expected to fundamentally reshape work, knowledge, and production. Unchecked expansion threatens to deepen global inequalities by concentrating power within a few corporations and nations, further marginalizing the Global South.



Key Definitions

- **Hard Power:** The use of military or economic might to influence the behavior of other political bodies, now increasingly defined by superior software and AI capabilities.
- **Large Language Models (LLMs):** Advanced AI systems trained on vast datasets of human writing to generate text, perform coding, and simulate human reasoning, raising significant copyright and ethical concerns.
- **Predictive Policing:** The use of mathematical and analytical techniques by law enforcement to identify potential criminal activity, which has faced criticism for inherent racial and social biases.



Constitutional & Legal Provisions

- **Article 21 (Right to Life and Privacy):** In the Indian context, the Supreme Court has recognized privacy as a fundamental right. AI-driven surveillance and data exploitation directly challenge this constitutional protection.
- **EU Artificial Intelligence Act:** The world's first comprehensive legal framework for AI, which categorizes AI systems by risk level and prohibits certain intrusive practices, serving as a global regulatory template.
- **India's AI Governance Guidelines (2025):** A policy document recognizing AI-related risks but currently stopping short of legislative intervention, focusing instead on ethical voluntary adoption.

Important Key Points

- **The "Thatcherite Trap":** The dangerous societal assumption that "there is no alternative" to the current trajectory of AI development, which frames ideological corporate choices as historical inevitabilities.
- **Digital Sovereignty:** The imperative for nations to regulate big tech to prevent the erosion of national information integrity and the exploitation of domestic data by foreign corporations.

Conclusion: The rise of AI as a tool for warfare and surveillance represents a pivot point in human history. Relying on the "moral soul" of private corporations to regulate a technology that reshapes work and knowledge is a gamble with democratic accountability. A just future requires moving beyond "soft" guidelines toward binding, multilateral frameworks that prioritize human rights over technological expansion.

2. EU's CBAM and India's Strategic Response: Navigating Carbon Diplomacy

On January 1, 2026, the European Union's Carbon Border Adjustment Mechanism (CBAM) became fully operational, imposing carbon-based charges on energy-intensive imports like steel, aluminum, and cement. While framed as a measure for "fair competition," the mechanism creates a significant disadvantage for Indian exporters who lack the heavy decarbonization subsidies and free allowances enjoyed by their European counterparts.

- **The "Level Playing Field" Imbalance:** European producers benefit from subsidized public finance and free emission allowances under the EU Emissions Trading System (ETS) until 2034. In contrast, Indian exporters face the full weight of CBAM charges, a tilt that challenges the spirit of GATT Article III, which prohibits using internal charges to protect domestic industries.
- **India-EU FTA and Annex 14-A:** The India-EU Free Trade Agreement, concluded on January 27, 2026, provides no specific exemption for India from CBAM. However, "Annex 14-A" establishes a formal technical dialogue to determine how carbon prices paid in India can be credited at the EU border, alongside a "Most-Favoured-Nation" commitment regarding any future flexibilities.
- **Climate Justice and Revenue Sovereignty:** A core concern is that CBAM shifts the burden of Europe's decarbonization onto developing nations while keeping the collected revenue in European hands. This risks turning India into a "rule-taker" in the global green transition rather than a sovereign "rule-maker" that directs its own carbon revenues.
- **Leveraging CCTS and CBAM Article 9:** India's Carbon Credit Trading Scheme (CCTS), notified in 2023, provides the legal basis for offsetting CBAM charges. Under Article 9 of the CBAM



Regulation, EU importers can deduct carbon prices already paid in the country of origin, making India's domestic carbon market a critical tool for international compliance.

- **The "IBAM the CBAM" Strategy:** India is exploring an "India Border Adjustment Mechanism" (IBAM) to collect carbon charges at the point of export. By coordinating this through the FTA's technical dialogue, India can ensure these domestic payments are recognized as offsets by the EU, effectively keeping carbon tax revenues at home to fund indigenous green projects.

Key Definitions

- **Carbon Border Adjustment Mechanism (CBAM):** A landmark EU tool that puts a fair price on the carbon emitted during the production of carbon-intensive goods entering the EU, encouraged to prevent "carbon leakage".
- **Carbon Credit Trading Scheme (CCTS):** India's domestic compliance-grade market where industries hold tradable certificates against measured emissions, establishing a rupee-denominated carbon price.

Constitutional & Legal Provisions

- **GATT Article III:** A foundational principle of international trade law that requires "National Treatment," barring countries from applying internal taxes or regulations to imports in a way that protects domestic production.
- **CBAM Regulation Article 9:** A legal provision allowing for the reduction of CBAM certificates based on the carbon price already effectively paid in the country of origin.
- **Article 253 of the Indian Constitution:** Empowers Parliament to make any law for the whole or any part of India for implementing any treaty, agreement, or convention with any other country, which would govern the implementation of the India-EU FTA and any reciprocal carbon measures.

Important Key Points

- **Ring-fenced Revenues:** Any funds raised through an Indian counter-adjustment (IBAM) would be restricted to green projects, such as modernizing blast furnaces and scaling hydrogen-based steelmaking.
- **Technical Dialogue:** Annex 14-A is the primary lever for India to negotiate the monitoring, verification, and exchange-rate conversion of its domestic carbon prices to ensure they are fully credited by the EU.

Conclusion: India's strategy must evolve from protesting CBAM to constructively "internalizing" it through domestic mechanisms like IBAM and CCTS. By ensuring that carbon payments made by Indian producers stay within the country to finance its own green transition, India can maintain its economic sovereignty and climate justice principles while engaging with a carbon-priced global trade order.

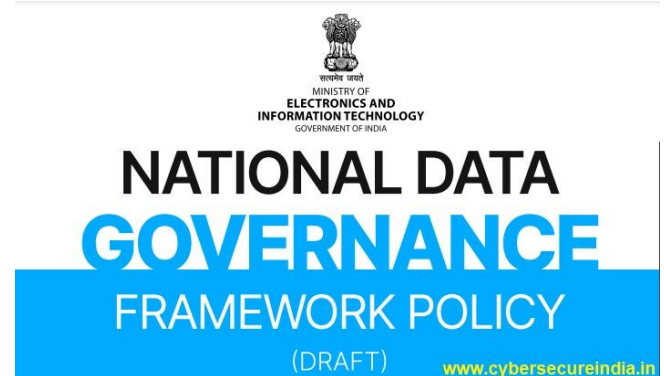
3. Data Standardisation: The Grammar of Indian Governance

As India aspires to become a \$5 trillion economy, the fragmentation and lack of interoperability in its data systems have emerged as significant impediments to effective governance. While India generates vast amounts of data, the absence of shared standards among Ministries and Departments leads to administrative inefficiencies, fiscal leakages, and misinformed policy decisions. Strengthening data governance through standardisation is no longer a technical choice but a strategic necessity for a "Viksit Bharat."



Key Challenges in India's Data Ecosystem

- **Lack of Interoperability:** India's data system is currently fragmented, with various Ministries failing to use shared standards for common indicators, which prevents seamless data integration.
- **Fiscal Leakages:** Incoherent welfare databases often list the same beneficiary multiple times; a June 2025 NITI Aayog report indicates this inflates annual spending by 4%-7% due to duplication.
- **Policy Inefficiency:** In sectors like health, the same patient (e.g., childhood tuberculosis cases) is often counted multiple times across different registries, leading to conflicting estimates and making data-driven decision-making difficult.
- **Impact on Global Rankings:** Poor data coordination affects India's standing in indices like the Global Innovation Index, where missing or outdated data can mask actual performance.
- **Economic Costs:** Improving public-sector data availability and sharing is estimated by the OECD to potentially add up to 1.5% to the GDP, reflecting the high cost of squandered economic potential.
- **Parliamentary Accountability:** A large share of parliamentary questions seek basic facts that should already be in the public domain in a standardised format, diverting time from deeper accountability functions.



Definitions of Key Terms

- **Data Standardisation:** The process of bringing data into a common format that allows for consistent definitions, methodologies, and attributes across different platforms.
- **Interoperability:** The ability of different information systems and software applications to communicate, exchange data, and use the information that has been exchanged.
- **IDMO (India Data Management Office):** A proposed central body under the National Data Governance Framework Policy responsible for enforcing data rules and protocols.
- **Schema-Consistent Repository:** A centralised data storage system where all datasets follow the same structured blueprint, ensuring they can be compared and integrated easily.

Constitutional and Legal Provisions

- **Article 75:** Establishes the principle of collective responsibility of the Council of Ministers to the Lok Sabha; efficient data governance is essential for Parliament to exercise this oversight effectively.
- **Right to Information (RTI) Act, 2005:** Section 4 mandates proactive disclosure of information by public authorities; standardisation ensures this disclosed data is actually usable by citizens.
- **National Data Governance Framework Policy (NDGFP):** The primary policy framework aimed at transforming the data ecosystem to enhance service delivery and promote research and innovation.
- **Digital Personal Data Protection (DPDP) Act, 2023:** Provides the legal basis for processing digital personal data while ensuring individual privacy, which must be balanced with data standardisation efforts.



Additional Important Key Points

- **Potential Savings:** Data clean-ups have shown immense value, such as removing 35 million bogus LPG connections to save ₹210 billion and 16 million fake ration cards to save ₹100 billion annually.
- **Global Benchmarking:** Aligning with international frameworks, such as the UN's System of National Accounts, can unify definitions and practices nationwide.
- **Data.gov.in:** India's open data platform needs to be scaled into a centralised repository where Ministries regularly upload standardised, real-time datasets.
- **Incentivising Quality:** NITI Aayog's Data Governance Quality Index should be used as an annual benchmark to drive healthy competition among Ministries and States.

Conclusion Data standardisation is the foundational "grammar" of modern governance. To overcome the "elephant in the room"—data fragmentation—India must empower the India Data Management Office (IDMO) with the authority to audit and enforce binding standards. By committing to robust stewardship and shared protocols, India can transform its vast data abundance into a high-utility asset that informs policy, prevents fiscal waste, and fuels economic growth.

ETHICS

1. Crisis in Public International Law

- **Erosion of Rules-Based Order:** The global legal architecture—built on foundational pillars like the UN Charter, Geneva Conventions, and UNCLOS—is rapidly fraying due to structural impunity and systematic norm violations by major powers.
- **Violations of Territorial Sovereignty:** Foundational principles prohibiting the unilateral use of force have been severely compromised by high-profile actions, including the 2003 Iraq invasion, the 2022 invasion of Ukraine, and the 2026 U.S.-Israeli military operations against Iran.
- **Maritime Law and Commons Defiance:** Global maritime stability is under threat through continuous violations of UNCLOS, exemplified by China's enforcement of its rejected "nine-dash line" in the South China Sea and unilateral blockades in the Strait of Hormuz.
- **Humanitarian and Arms-Control Collapse:** International humanitarian law is being compromised across conflict zones like Gaza, Syria, and Tigray, while the termination of key arms-control treaties (INF, Open Skies) has renewed the threat of unrestricted nuclear proliferation.
- **Institutional Enforcement Vacuum:** The international legal framework is crippled by a systemic enforcement deficit, driven by geopolitical paralysis within the UN Security Council, jurisdiction limits of the International Criminal Court, and an over-reliance on voluntary compliance.





Key Terms, Constitutional Framework, and Institutional Mechanics

Key Definitions

- **Public International Law:** A body of rules, norms, and legal principles that govern the rights, duties, and operational conduct of sovereign states and international organizations in their mutual interactions.
- **Rules-Based Order:** A global governance paradigm where international relations are regulated by transparent, shared legal agreements and multilateral institutions rather than by raw military or economic dominance.

Constitutional & Legal Provisions

- **Article 51 (Directive Principles of State Policy):** Explicitly obligates the Indian State to promote international peace and security, maintain just and honorable relations between nations, and foster respect for international law and treaty obligations.
- **Article 2(4) of the UN Charter:** Standard international law prohibiting the threat or use of force against the territorial integrity or political independence of any state.
- **Seventh Schedule (List I - Union List), Entry 13:** Grants the Parliament of India exclusive legislative competence over participation in international conferences, associations, and implementation of decisions made thereat.

Conclusion

The degradation of international law from a binding obligation into an optional framework signals a dangerous return to geopolitical anarchy. Preserving global stability demands revitalizing multilateral accountability mechanisms, enforcing treaty compliance symmetrically, and reforming deadlocked collective institutions to ensure that principle, rather than power, dictates international legality.

2. Declining Academic Freedom and Democratic Erosion in India

Key Highlights and Summary

- **Global Classification as "Electoral Autocracy":** The Varieties of Democracy (V-Dem) Institute 2026 report classifies India as an "electoral autocracy," noting a steady decline in free expression and media independence.
- **Restriction of Academic Freedom:** The Scholars at Risk *Free to Think 2024* report categorizes India's academic freedom as "completely restricted," citing rising political interference and university autonomy loss.
- **Systematic Ideological Enforcement:** Reports indicate the enforcement of a Hindu nationalist agenda within higher education through curricula changes and the reduction of space for intellectual dissent.
- **Punitive Actions Against Academics:** Data from 2014–26 shows that 62 academics faced punitive actions for their political stances, often penalized under service rules that define faculty as "government servants".
- **Centralization of Control:** The proposed Viksit Bharat Shiksha Adhishthan Bill is viewed as a mechanism to further centralize institutional control, prioritizing conformity over free scholarly inquiry.



- **International Human Rights Stance:** While a party to the ICCPR since 1979, India's refusal to sign the First Optional Protocol prevents citizens from seeking international redress for rights violations.

Conceptual Definitions

- **Electoral Autocracy:** A regime type where elections are held but fundamental democratic standards, such as freedom of expression and institutional accountability, are systematically undermined.
- **Academic Freedom:** The freedom of teachers and students to teach, study, and pursue knowledge and research without unreasonable interference or restriction from law, institutional regulations, or public pressure.
- **V-Dem Institute:** A research organization that conceptualizes and measures democracy through a multidimensional and disaggregated dataset.

Constitutional and Legal Provisions

- **Article 19(1)(a):** Guarantees the fundamental right to freedom of speech and expression, which forms the legal basis for academic dissent.
- **Article 14 and 21:** Ensure equality before the law and the right to life and personal liberty; the Supreme Court has used these to expand human rights interpretations.
- **ICCPR Treaty (1979):** The International Covenant on Civil and Political Rights, which India joined, though it remains a non-signatory to the protocol allowing individual complaints to the UN.

Additional Important Keypoints

- **Institutional Complicity:** Internal complaints committees are described by critics as "ornamental," failing to provide substantive accountability or protection for faculty and students.
- **Asymmetry in Justice:** High-profile figures accused of crimes have secured repeated parole, while young scholars like Umar Khalid and Sharjeel Imam remain under trials for five years.
- **Shrinking Public Debate:** A healthy democracy relies on a strong civil society and access to evidence-based information, both of which are under strain due to campus restrictions.
- **Self-Censorship:** Regulatory pressure and funding cuts are fostering an environment of self-censorship, eroding the university's role as an arena for pluralistic debate.

Conclusion

The documented decline in academic freedom is not merely an institutional issue but a barometer for the health of Indian democracy. When universities—historically the refuges for challenging orthodox thinking—are silenced through punitive measures and regulatory centralization, the foundation of democratic accountability is dismantled. Reclaiming the purpose of these institutions is essential for sustaining a pluralistic society capable of critical thought and meaningful engagement with governance.

3. Grievance Redressal Assessment and Index (GRAI) Rankings: March 2026

The Department of Financial Services (DFS), specifically the Insurance and Banking divisions, has demonstrated exceptional performance in public service delivery according to the latest rankings released by the Department of Administrative Reforms and Public Grievances (DARPG). This success highlights the effectiveness of the Centralized Public Grievance Redress and Monitoring System (CPGRAMS) in managing high-volume public concerns. **Key Highlights of the GRAI Performance**



- **Insurance Division Leadership:** The Insurance Division of the DFS secured the 1st rank in the "Group A" category (departments receiving ≥ 500 grievances) for March 2026, marking a peak in service efficiency.
 - **Sustained Banking Performance:** The Banking Division retained the 5th position for the second consecutive month, indicating a consistent and stable mechanism for handling financial sector complaints.
 - **Institutional Monitoring:** Success is attributed to a multi-tiered review system where Joint Secretaries review 20 grievances monthly, and the Secretary (FS) personally audits 20 randomly selected closed cases each month to ensure quality.
 - **Volume Management:** The DFS manages a significant load of over 2.50 lakh grievances annually, maintaining a top-10 presence in GRAI rankings consistently since November 2025.
 - **Core Objectives:** The department operates on the principles of "Seamless, Time-bound, and Empathetic Resolution," focusing on reducing pendency and improving the qualitative aspect of responses.
 - **Global Benchmark:** The structured review of closed grievances (400 cases reviewed by the Secretary to date) serves as a model for "feedback-loop" governance in the public sector.
- Definitions of Key Terms**
- **CPGRAMS:** An online platform available 24/7 for citizens to lodge grievances to public authorities on any subject related to service delivery.
 - **GRAI (Grievance Redressal Assessment and Index):** A framework used to rank Central Ministries and Departments based on their efficiency, depth, and quality of grievance disposal.
 - **Group A Category:** A classification in the GRAI ranking for entities that receive a high volume of complaints, typically defined as 500 or more grievances in a reporting period.
 - **Pendency:** The state of being undecided or unsettled; in this context, it refers to the backlog of unresolved public complaints.
- Constitutional and Legal Provisions**
- **Article 19:** While primarily about freedom of speech, the right to information and to seek redressal from the state is increasingly viewed as a corollary to a functional democracy.
 - **Article 21:** The judiciary has often interpreted the right to a dignified life to include the right to efficient and timely public services and grievance redressal.
 - **Citizen's Charters:** Although not legally enforceable in all sectors, they represent the "Moral Obligation" of the state to provide services within a specified timeframe.
 - **Sevottam Model:** A service delivery excellence model that includes Citizen's Charters, Public Grievance Mechanisms, and Service Delivery Capability.
- Additional Important Key Points**
- **Department of Administrative Reforms and Public Grievances (DARPG):** The nodal agency for formulating policy for the redressal of public grievances in the Government of India.
 - **Feedback Mechanism:** The inclusion of "randomly selected closed grievances" for review by senior leadership prevents the "mechanical disposal" of complaints where issues are closed without actual resolution.

Technology in Governance: The use of AI-enabled analytics in CPGRAMS (version 7.0) has helped in categorizing grievances and identifying recurring "pain points" for systemic reform.

Conclusion The top



ranking of the Insurance Division and the steady performance of the Banking Division underscore a shift toward a "Pro-People, Pro-Active Governance" (P2G2) model. By institutionalizing high-level oversight and utilizing the GRAI framework, the Department of Financial Services has transitioned from mere complaint handling to a focus on the quality and empathy of the resolution. This builds public trust in the financial ecosystem, which is vital for economic stability.

YOJANA & KURUKSHETRA

1. India's New Sports Policy Toward Pakistan: Bifurcating Bilateral and Multilateral Ties

Core Summary

- **Policy Shift:** The Union Sports Ministry has formalized a new policy that explicitly separates bilateral sporting engagements from participation in global or multilateral events held in India.
- **Open Door for Multilateralism:** Pakistani athletes and teams are now permitted to compete on Indian soil for international tournaments, accompanied by a more supportive visa regime for players and officials.
- **Bilateral Prohibition:** The policy maintains a strict "no" to bilateral series; Indian teams will not travel to Pakistan for head-to-head matches, and Pakistani teams remain barred from playing bilateral matches in India.
- **Strategic Intent:** The move seeks to align with international sporting federations' practices and protect the interests of Indian sportspersons who might otherwise face sanctions for non-participation in global events.
- **Geopolitical Conditionality:** While India will host Pakistani athletes, Indian participation in events hosted *within* Pakistan remains uncertain and contingent upon the prevailing security and geopolitical climate.
- **Upcoming Calendar:** This policy provides clarity for several high-profile events scheduled in India, including the 2026 World Badminton Championships, the 2029 ICC Champions Trophy, and the 2031 ODI World Cup.



Key Definitions

- **Bilateral Ties:** Political, economic, or cultural relations conducted between two sovereign states directly (e.g., an India vs. Pakistan cricket series).
- **Multilateral Events:** International competitions involving more than two nations, usually organized by global governing bodies like the IOC, FIFA, or ICC (e.g., Olympics or World Cups).
- **Office Memorandum (OM):** A common form of written communication within government departments, used to convey executive decisions or policy directives.



Constitutional & Legal Provisions

- **Entry 10 & 13, Union List (Seventh Schedule):** The Constitution grants the Central Government exclusive power over "Foreign Affairs" and "Participation in international conferences, associations and other bodies," which includes international sports.
- **Passport Act, 1967:** Governs the issuance of passports and travel documents; the "supportive visa regime" mentioned in the policy falls under the executive discretion provided by this Act and the Foreigners Act, 1946.
- **Article 19(1)(g):** While citizens have the right to practice any profession, the state can impose "reasonable restrictions" in the interests of the sovereignty and integrity of India, often cited in the context of sports diplomacy.
- **National Sports Development Code of India, 2011:** A set of regulations that governs the functioning of National Sports Federations (NSFs) and their alignment with government policy.

Additional Key Insights

- **Post-Crisis Normalization:** The policy comes a year after significant security incidents (Pahalgam attacks and Operation Sindoor), indicating a shift toward "nuanced engagement" rather than total isolation.
- **International Pressure:** Global sporting bodies (like the IOC) have previously threatened to revoke India's hosting rights if visas were denied to specific nationalities; this policy preemptively secures India's status as a global sporting hub.
- **The "Grey Zone":** The policy removes ambiguity for events *in* India but retains strategic flexibility regarding Indian movement *into* Pakistan, keeping the "Security First" approach intact.

Conclusion

The new sports policy represents a pragmatic evolution in India's neighborhood diplomacy. By decoupling global commitments from bilateral grievances, India maintains its standing as a reliable host for international tournaments without compromising its principled stance on cross-border issues. This "de-hyphenation" allows Indian athletes to compete for world titles on home soil while ensuring that the resumption of direct bilateral ties remains a lever of formal foreign policy rather than a sporting casualty.

2. Mitigating SO₂ Emissions from Thermal Plants: Health and Policy Imperatives

Core Summary

- **Health Impact:** A recent IIT Delhi study published in *Nature* reveals that India could prevent approximately 1,24,564 premature deaths annually by fully mitigating Sulphur Dioxide (SO₂) emissions from coal-fired thermal power plants (CFPPs).
- **PM2.5 Correlation:** CFPPs emit SO₂ which reacts in the atmosphere to form secondary inorganic aerosols like sulfates and nitrates; these are major precursors to fine particulate matter (PM2.5) linked to cardiovascular and respiratory diseases.
- **Geographic Sensitivity:** Maharashtra, Tamil Nadu, and Karnataka are estimated to have the highest number of avoidable deaths due to high population density, while Chhattisgarh and Odisha would see the most significant air quality improvements.



- **Economic Viability:** The study argues that the health-related monetary gains and lives saved would significantly outweigh the high costs associated with installing emission-control technologies like Flue Gas Desulphurization (FGD).
- **Environmental Equity:** Vulnerable groups, including Scheduled Castes (SC), Scheduled Tribes (ST), and lower-income brackets, are disproportionately affected by pollution, making SO₂ mitigation a critical issue of environmental justice.
- **Policy Relaxation:** Despite rising emissions (India's SO₂ increased from 2.36 million tonnes in 2005 to 5.05 million tonnes in 2021), the Centre recently relaxed 2015 norms, exempting nearly 79% of coal-fired units from immediate FGD installation.



Key Definitions

- **Flue Gas Desulphurization (FGD):** A set of technologies used to remove sulphur dioxide (SO₂) from exhaust flue gases of fossil-fuel power plants and from the processes of other sulphur oxide emitting processes.
- **Secondary Aerosols:** Particles formed in the atmosphere through chemical reactions of gaseous precursors (like SO₂ and NO_x) rather than being emitted directly from a source.
- **Ammonium Aerosols:** Chemical compounds formed when ammonia reacts with acidic gases like sulfuric acid or nitric acid, contributing to atmospheric haze and PM_{2.5}.

Constitutional & Legal Provisions

- **Article 21:** The Right to Life includes the right to a healthy environment and clean air, as interpreted by the Supreme Court in various landmark judgments.
- **Article 48A:** A Directive Principle mandate stating that the State shall endeavor to protect and improve the environment and safeguard forests and wildlife.
- **Article 51A(g):** A Fundamental Duty of every citizen to protect and improve the natural environment.
- **The Air (Prevention and Control of Pollution) Act, 1981:** The primary legal framework under which the Central Pollution Control Board (CPCB) sets emission standards for thermal power plants.
- **Environment (Protection) Rules, 1986:** The source of the 2015 emission norms which introduced mandatory limits for SO₂, NO_x, and mercury for the first time in India.

Additional Key Insights

- **The Coal Dilemma:** Indian coal has relatively low sulphur content (approx. 0.5%), which was historically used as an argument against expensive FGD systems; however, the sheer volume of coal burnt compensates for low concentration, leading to high total emissions.
- **Hotspot Prioritization:** Experts suggest that instead of a blanket relaxation, the government should prioritize FGD installation in "hotspot sub-regions" where population exposure and emission density are highest.



- **Global Trend:** While global SO₂ emissions from CFPPs declined between 2005 and 2021, India's emissions moved in the opposite direction, increasing by nearly 30% even as recently as 2023.

Conclusion

The IIT Delhi study underscores that the "cost of compliance" for thermal power plants is a secondary concern compared to the "cost of inaction" regarding public health. While energy security remains a priority, the persistent delays in implementing FGD technology represent a significant public health risk. Bridging the gap between energy production and environmental safety requires a renewed commitment to the 2015 emission standards and a shift toward cleaner coal technologies alongside renewable integration.

3. INSTITUTIONAL BALANCE AND DEMOCRATIC STRENGTH: KEY PERSPECTIVES

- **Core of Democratic Strength:** The strength of a democracy is rooted in institutional balance and mutual respect for constitutional propriety between different wings of the state, rather than in confrontation.
- **Separation of Functions:** The executive is empowered to take decisions for the nation's governance, while the judiciary maintains the equilibrium through the constitutional review of those decisions, ensuring they align with the rule of law.
- **Spirit of the Constitution:** The makers of the Indian Constitution envisioned a system where institutions are not designed to oppose one another but to maintain a harmonious balance through dialogue and propriety.
- **Role of Constitutional Conventions:** Over 76 years, India's democracy has stayed intact through the preservation of constitutional conventions and values that have evolved into a well-balanced relationship between the executive and the judiciary.
- **Judicial Vigilance and Public Faith:** The judiciary plays a significant role in sustaining the roots of democracy; the public's faith remains strong because the courts act as a protector of rights when individuals feel suppressed or violated.
- **Parliamentary Reinforcement:** Every legislative change brought about through Parliament and state legislatures since 1947 has further reinforced India's multi-party democratic parliamentary system and the character of the nation.

KEY DEFINITIONS

- **Constitutional Propriety:** Adherence to the standards of behavior and protocols that are expected within the framework of the Constitution, ensuring that no branch of government oversteps its bounds.
- **Judicial Review:** The power of the judiciary to examine the actions of the legislative, executive, and administrative arms of the government and to determine whether such actions are consistent with the Constitution.
- **Institutional Balance:** A political doctrine where the powers of government are distributed among different institutions so that they act as checks and balances on each other.



CONSTITUTIONAL & LEGAL PROVISIONS

- **Article 50:** A Directive Principle of State Policy (DPSP) that directs the State to take steps to separate the judiciary from the executive in the public services of the State.
- **Article 13:** Provides the basis for Judicial Review, stating that the State shall not make any law that takes away or abridges the rights conferred by Part III (Fundamental Rights).
- **Basic Structure Doctrine:** Established by the Supreme Court in the *Kesavananda Bharati* case (1973), it maintains that certain features of the Constitution, including the separation of powers and the rule of law, cannot be altered by Parliament.
- **Articles 124 to 147:** Deal with the establishment, powers, and jurisdiction of the Supreme Court, ensuring its independence as the final arbiter of the Constitution.

CONCLUSION

The discourse on institutional balance underscores that the survival of a diverse democracy like India depends on the "spirit of dialogue" between the organs of the state. While the executive's role is to drive development and policy, the judiciary's role as a watchdog ensures that this progress does not come at the cost of individual liberty or constitutional mandates. Ultimately, democracy is not merely a set of rules but a reflection of social balance where the common citizen's hope for justice remains the final benchmark of success.

PIB & PARLIAMENTARY RESEARCH STUDIES (PRS)

1. Democratic Representation Versus Administrative Decentralization in Ladakh

Key Summary Points

- **The Core Debate:** The Union Ministry of Home Affairs argues that administrative decentralization through five new districts—Nubra, Changthang, Sham, Zaskar, and Drass—is a practical alternative for Ladakh, whereas local aspirations demand a full legislature and constitutional protections under the Sixth Schedule.
- **Flawed Official Justifications:** The Centre's reluctance to grant a legislature is based on Ladakh's sparse population, fiscal dependence on federal transfers, and strategic border sensitivity. Critics argue this logic mirrors a paternalistic, colonial-era mindset that measures democratic eligibility by profitability and demographic scale.
- **The Northeast Precedent:** Strategic sensitivity and financial dependence have historically not disqualified frontier regions from self-governance. States like Arunachal Pradesh, Nagaland, Mizoram, and Sikkim were granted full statehood and legislatures despite small populations, harsh terrains, and high reliance on central funding.
- **Administration versus Representation:** While additional districts improve localized administrative accessibility across Ladakh's 59,000 square kilometers, bureaucratic instruments cannot substitute for political agency. District magistrates implement policy upward to the bureaucracy, whereas a legislature shapes policy downward and remains directly accountable to the citizens.



- **Energy Infrastructure and Resource Negotiation:** Ladakh is central to India's clean energy goals, hosting mega projects like the 13-gigawatt renewable energy framework in the Pang region of Changthang. Without a local legislature, residents lack a statutory representative body to negotiate land rights, grazing protections for indigenous Changpa herders, and ecological safeguards against large-scale industrial intervention.

Definitions of Key Terms

- **Sixth Schedule:** A constitutional provision that allows for the creation of Autonomous District Councils (ADCs) with legislative, judicial, and administrative powers to protect tribal cultures, land, and local customs.
- **Purna Swaraj:** A concept of absolute self-governance and sovereignty championed during the Indian national movement, emphasizing that political freedom is a matter of inherent dignity and national selfhood.
- **Fiscal Solvency:** The ability of a state or region to generate enough internal revenue to meet its financial trajectories and operational expenditures without relying heavily on external subsidies or federal debt.
- **Administrative Decentralization:** The transfer of operational responsibilities and central bureaucratic functions to lower-level field offices, distinct from political decentralization which transfers decision-making power to elected representatives.

Key Constitutional and Legal Provisions

- **Article 239A of the Constitution:** The provision under which Parliament can create a legislature or a Council of Ministers for a Union Territory (as done for Puducherry and Jammu and Kashmir), which forms the core of Ladakh's political demands.
- **The Sixth Schedule (Articles 244(2) and 275(1)):** Provides special institutional safeguards for tribal-dominated areas. Extending this to Ladakh would empower local councils to frame laws regarding land use, marriage, inheritance, and forest management.
- **Article 280 of the Constitution:** Establishes the Finance Commission of India, a body designed to manage fiscal federalism by distributing tax revenues from the central pool to the states based on equity rather than a region's internal revenue-generating capacity.
- **The Jammu and Kashmir Reorganisation Act, 2019:** The parliamentary act that bifurcated the former state into two distinct Union Territories: Jammu and Kashmir (with a legislature) and Ladakh (without a legislature), altering the region's geopolitical framework.

Comparative Federalism Analysis

- **Asymmetrical Federalism:** A structural characteristic of Indian federalism where different states enjoy different relationships with the Union. This is visible in special provisions under Article 371 (A to J) granted to Northeastern states to protect their distinct cultural and tribal identities, proving that uniformity is not equity.
- **Horizontal Devolution:** The mechanism used by the Finance Commission to allocate funds among states based on fiscal capacity, demographic indicators, and geographical terrain, ensuring that resource-starved frontier states are supported by the wider national economy.



Conclusion

The political deadlock in Ladakh highlights a critical tension within Indian federalism between centralized security management and regional democratic enfranchisement. While administrative expansion through new districts resolves logistical bottlenecks in high-altitude terrains, it cannot replace the constitutional dignity of self-governance. Integrating a frontier region relies on building a deep sense of democratic belonging rather than relying solely on fiscal subsidies and military presence. Granting legislative representation and Sixth Schedule protections will align Ladakh's strategic security with its democratic aspirations, allowing its people to actively negotiate their ecological and economic future.

2. Sabarimala and Dawoodi Bohra Review: Judicial Scrutiny of Essential Religious Practices

Core Summary

- **Maintainability Questioned:** The Supreme Court's nine-judge Bench questioned whether decades-old Constitution Bench judgments can be challenged via Public Interest Litigations (PILs), even those seeking social reform.
- **Excommunication Issue:** The core controversy involves the Dawoodi Bohra community's practice of excommunication, which was protected by a 1962 SC ruling (*Sardar Syedna Saifuddin v. State of Bombay*).
- **Tagging with Sabarimala:** The Dawoodi Bohra case was tagged with the Sabarimala review (*Kantaru Rajeevaru v. Indian Young Lawyers Association*) to address larger questions on the intersection of religious freedom and individual rights.
- **Legal Clash:** The court is examining if excommunication can survive as a "protected practice" despite modern laws like the Maharashtra Protection of People from Social Boycott Act, 2016.
- **Scope of Judicial Review:** The Bench is deliberating whether the judiciary should intervene in internal religious matters to ensure "constitutional morality" or uphold the autonomy of religious denominations.
- **Nine-Judge Reference:** This larger Bench was necessitated to provide an authoritative pronouncement on Article 25 and 26, specifically concerning practices that potentially violate the right to dignity and social inclusion.

Key Definitions

- **Excommunication:** A formal action by a religious community to exclude a member from its rights, privileges, and social interactions, often leading to social boycott.
- **Maintainability:** The legal requirement that a petition must satisfy certain criteria (such as standing or jurisdiction) before a court can hear the merits of the case.
- **Constitutional Morality:** A judicial concept emphasizing that the values of the Constitution (liberty, equality, fraternity) should override traditional or religious norms that are discriminatory.
- **Public Interest Litigation (PIL):** Litigation filed in a court of law for the protection of "Public Interest", such as pollution, terrorism, road safety, or fundamental rights of the marginalized.



Constitutional & Legal Provisions

- **Article 25:** Guarantees freedom of conscience and the right to freely profess, practice, and propagate religion, subject to public order, morality, and health.
- **Article 26:** Grants religious denominations the right to manage their own affairs in matters of religion; this is the primary defense used by the Dawoodi Bohra leadership.
- **Article 13:** Mandates that all laws in force before the commencement of the Constitution, if inconsistent with Fundamental Rights, shall be void to the extent of such inconsistency.
- **Maharashtra Protection of People from Social Boycott Act, 2016:** A state law that criminalizes social boycott and excommunication as being against human dignity and social integration.
- **Essential Religious Practices (ERP) Doctrine:** A judicial test evolved by the SC to determine which religious practices are integral to a faith and thus eligible for protection under Articles 25 and 26.

Additional Key Insights

- **The 1962 Precedent:** In the original Sardar Syedna case, the SC struck down a law banning excommunication, viewing the practice as an essential part of the denomination's management rights.
- **Reformist Intent vs. Procedure:** Justice Nagarathna's query highlights a procedural tension: can a "reformist" PIL overturn a specific 60-year-old judgment, or must such changes come through legislative action or specific appeals?
- **Individual vs. Group Rights:** The case represents a fundamental struggle between the "Right of the Denomination" (Art 26) and the "Right of the Individual member" to be free from social ostracization (Art 21 and 25).

Conclusion

The Supreme Court's focus on the maintainability of these petitions indicates a cautious approach toward judicial overreach into settled religious precedents. While the court recognizes the need for social reform, it is grappling with the procedural sanctity of Constitution Bench rulings. The final outcome from the nine-judge Bench will define the limits of religious autonomy in India and determine if "Social Boycott" laws can constitutionally override the traditional powers of religious heads.

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