



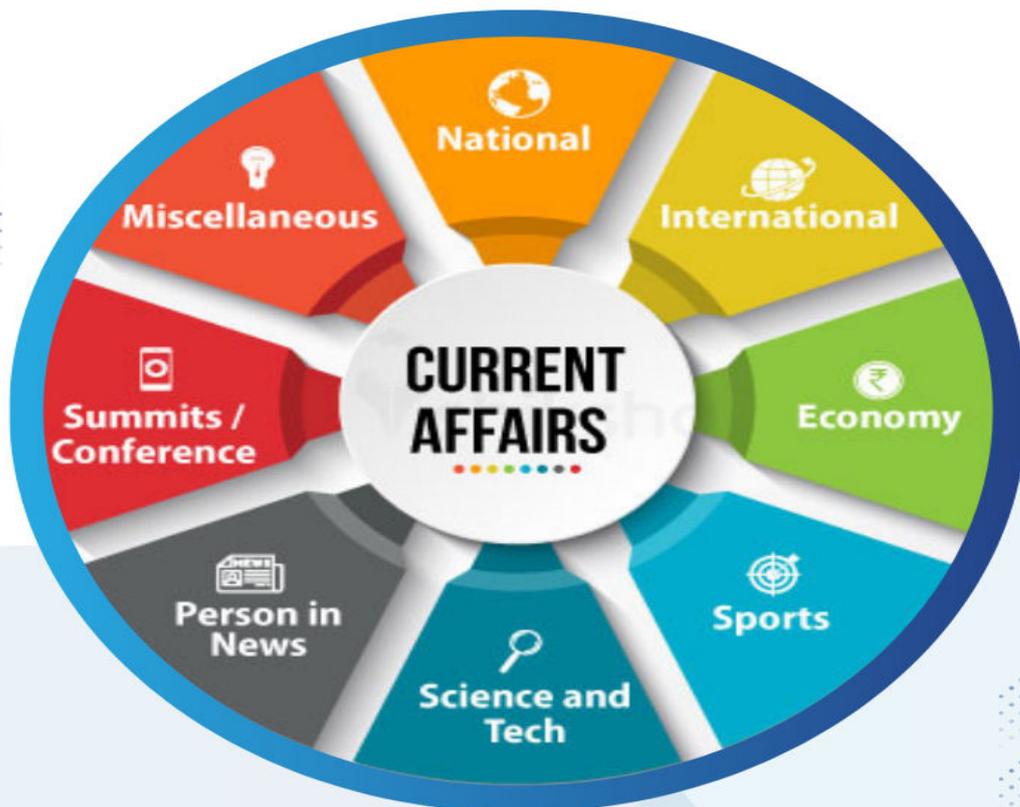
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VIDHVATH IAS KAS ACADEMY & STUDY CENTRE

DAILY CURRENT AFFAIRS

FOR UPSC CIVIL SERVICE EXAMINATION

DATE: 06/01/2026 (TUESDAY)



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1. India-U.S. Relations: Energy Diplomacy and Trade Friction

Context: U.S. President Donald Trump has asserted that India reduced its Russian oil imports to secure a bilateral trade deal and mitigate the impact of U.S.-imposed tariffs. Senator Lindsey Graham corroborated this, suggesting Indian diplomacy actively leveraged these energy shifts to seek relief from a 25% additional tariff.

- **Shift in Energy Procurement:** Recent trends indicate a strategic reduction in India's intake of Russian crude, which the U.S. administration interprets as a direct response to American diplomatic pressure and tariff threats.
- **Transactional Diplomacy:** The U.S. leadership views India's energy choices through a transactional lens, linking oil imports from Russia to the broader 25% reciprocal tariff framework and the pending India-U.S. trade agreement.
- **Tariff Escalation as Leverage:** President Trump emphasized that the threat of rapid tariff hikes remains a primary tool to influence Indian trade policy, labeling current shifts as an effort by Prime Minister Modi to maintain bilateral rapport.
- **Diplomatic Intercession:** Indian Ambassador Vinay Kwatra reportedly engaged in high-level lobbying with U.S. Senators to negotiate "tariff relief," highlighting the intersection of trade penalties and energy security in current bilateral talks.
- **Strategic Autonomy vs. Pressure:** While the U.S. claims credit for India's pivot, New Delhi's silence suggests a complex balancing act between maintaining its "Strategic Autonomy" and managing the economic fallout of U.S. protectionist policies.
- **Impact on Trade Deal:** The reduction in Russian oil dependency is being positioned by the U.S. as a prerequisite for finalizing a trade deal that would stabilize economic relations between the two largest democracies.



Key Definitions

- **Reciprocal Tariffs:** A trade policy where a country imposes tariffs on imports from another country at the same rate that the other country imposes on its own exports.
- **Strategic Autonomy:** The ability of a state to pursue its national interests and adopt its preferred foreign policy without being constrained by other states.
- **Energy Security:** The association between national security and the availability of natural resources for energy consumption at an affordable price.

Constitutional and Legal Provisions

- **Article 51 (Directive Principles):** The Constitution of India enjoins the State to promote international peace and security and maintain just and honorable relations between nations.
- **Entry 10 & 14, Union List (Schedule VII):** The Central Government has exclusive jurisdiction over "Foreign Affairs" and "Entering into treaties and agreements with foreign countries," providing the legal basis for oil procurement and trade negotiations.
- **Foreign Trade (Development and Regulation) Act, 1992:** This legislation empowers the Indian government to regulate imports and exports, serving as the primary tool for responding to international tariff regimes.



UPSC Relevance

- **GS Paper II:** India and its neighborhood- relations; Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.
- **GS Paper III:** Indian Economy (Trade Policy); Effects of liberalization on the economy.
- **Key Themes:** Diplomacy, Trade Wars, Energy Security, and the impact of U.S. domestic politics on Indian foreign policy.

Conclusion

The current friction highlights a shift toward "transactionalism" in India-U.S. ties. While India seeks to protect its economic interests through diplomatic maneuvering and diversified energy sourcing, the U.S. administration is increasingly using market access and tariffs as geopolitical leverage. For India, the challenge remains to balance its historical ties with Russia against the critical necessity of a stable economic partnership with the United States.

2. Gig Economy and Labour Rights: Challenges to Unionization

Context: Recent strikes by gig workers on New Year's Eve have reignited the debate over the legal status of platform-based labor in India. While aggregators highlight the flexibility and value of gig work, workers' unions demand formal recognition and better social security, exposing a significant gap between traditional labor laws and the modern platform economy.

- **Legal Status of Gig Unions:** Under the Trade Unions Act, 1926, registration requires a formal employer-employee relationship; however, the fluid nature of gig work—where workers often operate across multiple platforms like Zomato, Swiggy, and Uber—complicates this traditional classification.
- **Transition from Informal to Gig Sector:** Historical precedents, such as the Mathadi (headloaders) boards in the 1970s and the Building and Other Construction Workers Act (1996), show that India has previously successfully unionized informal workers without permanent contracts.
- **The Code on Social Security (2020):** This code provides the first federal definition of a gig worker, mandating minimum work thresholds (90 days with one aggregator or 120 days across multiple) to qualify for social security benefits, though it stops short of granting full "employee" status.
- **State-Level Legislative Pioneers:** States like Rajasthan and Telangana have introduced dedicated legislation to establish welfare boards and funds for gig workers, providing a template for recognizing representative bodies and ensuring financial safety nets.
- **Protection and Privileges:** Registered trade unions enjoy immunity from certain civil and criminal suits during collective bargaining; gig workers' groups, often being unregistered or merely affiliated, lack these statutory protections, making their strikes legally vulnerable.
- **Bargaining Power vs. Platform Algorithms:** As the gig workforce grows, the perceived marginalization by platform algorithms has strengthened the resolve of these unions, shifting the discourse from mere "flexibility" to a demand for dignity and institutionalized grievance redressal.





Key Definitions

- **Gig Worker:** A person who performs work or participates in a work arrangement and earns from such activities outside of a traditional employer-employee relationship.
- **Aggregator:** A digital intermediary or marketplace for a buyer or user of a service to connect with the seller or the service provider.
- **Collective Bargaining:** The process of negotiation between employers and a group of employees aimed at agreements to regulate working salaries, working conditions, and other aspects of workers' compensation.

Constitutional and Legal Provisions

- **Article 19(1)(c):** Guarantees the fundamental right to all citizens to form associations or unions.
- **Article 43A (DPSP):** Directs the State to take steps to secure the participation of workers in the management of undertakings.
- **Trade Unions Act, 1926:** Provides the mechanism for registration and protection of unions, but currently centers on the "workman" definition which gig workers struggle to satisfy.
- **Code on Social Security, 2020:** Clauses 1(35) and 2(35) define "gig work" and "platform work," creating a legal basis for welfare schemes and the "Social Security Fund."

UPSC Relevance

- **GS Paper II:** Statutory, regulatory, and various quasi-judicial bodies; Welfare schemes for vulnerable sections of the population.
- **GS Paper III:** Indian Economy and issues relating to planning, mobilization of resources, growth, development, and employment; Changes in industrial policy and their effects on industrial growth.
- **Key Themes:** Labour Law Reforms, Gig Economy vs. Traditional Employment, Social Security for the Informal Sector, and Digital Economy Governance.

Conclusion

The rise of gig worker unions represents a critical evolution in India's industrial relations. While the current legal framework is rooted in the 20th-century industrial model, the move toward specialized state laws and the federal Social Security Code suggests a transition toward recognizing the unique needs of platform labor. Ensuring that "flexibility" does not translate into "exploitation" will be the primary challenge for future labor policy and judicial interpretation.

3. Decline in India's ATM Network: Trends and Structural Shifts

Context: Recent data from the Reserve Bank of India (RBI) for FY25 reveals a significant contraction in India's ATM network. After years of expansion, the number of ATMs has declined for two consecutive years, with approximately 4,000 machines removed in the last fiscal year alone. This shift highlights the deep penetration of digital payments and a strategic pivot in the banking sector's operational model.

- **Digital Transformation Over Physical Infrastructure:** The rapid adoption of the Unified Payments Interface (UPI) and mobile banking has fundamentally reduced the frequency of cash withdrawals, rendering many off-site ATMs underutilized and economically unviable.



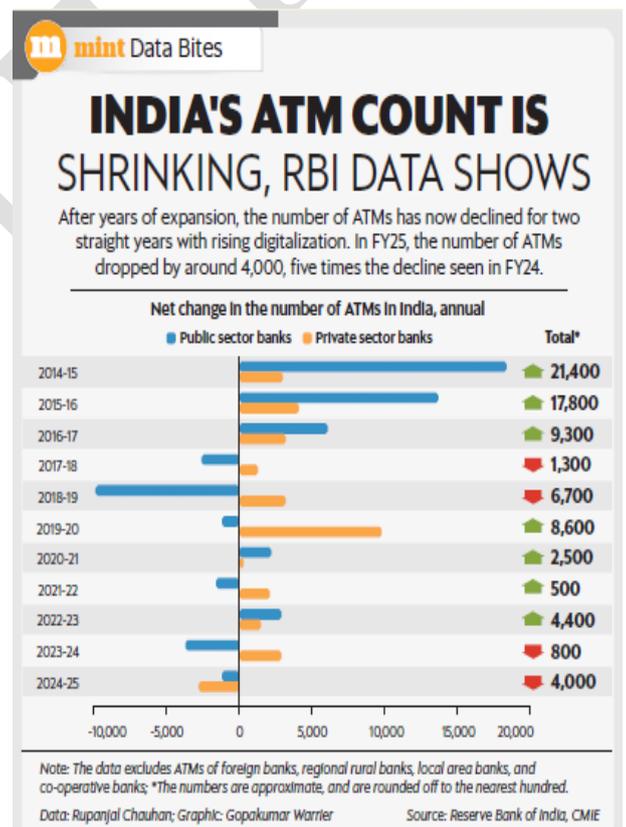
- **Consolidation of Banking Networks:** Public Sector Bank (PSB) mergers and the rationalization of private sector branch networks have led to the removal of overlapping ATM units, with banks now preferring a "hub and spoke" model focused on branch-integrated machines.
- **High Operational and Compliance Costs:** Increased regulatory requirements for ATM security (e.g., cassette swap mandates) and stagnant "interchange fees"—the fee one bank pays another for its customer's transaction—have squeezed the profit margins for ATM operators.
- **Urban-Rural Divergence:** While private and foreign banks are aggressively cutting urban off-site ATMs where digital literacy is highest, public sector banks and "White Label ATM" (WLA) operators are filling the gap in rural and semi-urban areas to support financial inclusion.
- **Resilience of Cash in the Informal Economy:** Despite the shrinking ATM count, Currency in Circulation (CiC) continues to rise, indicating that cash remains a critical store of value and a medium for high-value or informal transactions, even as routine payments turn digital.
- **Rise of White Label ATMs (WLAs):** Unlike traditional bank-owned ATMs, WLAs (operated by non-banking entities) are seeing growth, particularly in "ATM deserts," suggesting a shift from bank-led to third-party-led cash infrastructure.

Key Definitions

- **Off-site ATM:** An ATM located at a place other than the bank's physical branch premises, such as shopping malls, airports, or railway stations.
- **White Label ATM (WLA):** ATMs set up, owned, and operated by non-bank entities authorized under the Payment and Settlement Systems Act, 2007.
- **Interchange Fee:** A transaction fee paid by the card-issuing bank to the bank (or operator) whose ATM was used by the customer.
- **Currency in Circulation (CiC):** The total value of physical currency (notes and coins) that has been issued by the RBI and is held by the public and in bank vaults.

Constitutional and Legal Provisions

- **Payment and Settlement Systems Act, 2007:** The primary legal framework under which the RBI regulates payment systems, including the authorization of WLA operators.
- **RBI Act, 1934:** Grants the RBI the sole right to issue banknotes and manage the currency system (Section 22), providing the basis for ATM cash management.
- **Banking Regulation Act, 1949:** Empowers the RBI to oversee the branch and ATM expansion strategies of scheduled commercial banks.
- **National Strategy for Financial Inclusion (2019-2024):** A policy roadmap that balances the growth of digital payments with the need for physical touchpoints in underserved areas.





UPSC Relevance

- **GS Paper III:** Indian Economy and issues relating to mobilization of resources, growth, development, and employment; Effects of liberalization on the economy; Changes in industrial policy.
- **Key Themes:** Financial Inclusion (Jan Dhan Yojana), the Digital India mission, the transition to a "less-cash" economy, and the evolution of the Payment and Settlement Systems.
- **Economic Geography:** The rural-urban divide in financial infrastructure and its impact on equitable growth.

Conclusion

The shrinking ATM count is not a sign of financial regression but rather a symptom of a structural shift in India's payment landscape. As UPI becomes the primary tool for retail transactions, the role of the ATM is evolving from a daily necessity to a specialized service point for cash-heavy sectors and rural populations. For policymakers, the challenge lies in ensuring that this "digital-first" approach does not leave behind the digitally illiterate or those in remote regions where cash remains the primary lifeline.

4. Aviation Safety in India: Credibility Deficit and Structural Failures

Context: Following the tragic crash of Air India Flight 171 in Ahmedabad on June 12, 2025, serious questions have been raised regarding India's commitment to international safety standards. Discrepancies between the Indian authorities and international bodies like the NTSB, alongside concerns over "political massaging" of accident reports, suggest a deepening crisis in India's aviation regulatory framework.

- **Transparency and International Compliance:** As a signatory to the International Civil Aviation Organization (ICAO), India is mandated to follow Annex 13 standards for accident investigations. However, the current friction with the U.S. National Transportation Safety Board (NTSB) over the AI 171 findings suggests a departure from the "transparency" preached by ICAO.
- **Technical Anomalies in Investigation:** Preliminary findings indicate that fuel control switches—which require mechanical lifting to move—were cut off seconds after takeoff. While digital records (CVR/DFDR) provide clarity, the delay in releasing a definitive report points toward a breakdown in the technical versus political narrative.
- **Regulatory Capture and Diluted Norms:** The Directorate General of Civil Aviation (DGCA) has been criticized for modifying Civil Aviation Requirements (CAR) under pressure from airline operators, often extending deadlines for safety compliance that compromise passenger security.
- **Historical Pattern of Cover-ups:** Previous investigations, such as the 2010 Mangalore crash and the 2020 Kozhikode accident, revealed blatant violations—including rigid structures in safety zones and inadequate fire-fighting responses—that were allegedly suppressed in official reports.
- **Post-Crash Management Failures:** The failure to sanitize the AI 171 crash site allowed unauthorized access to debris, potentially compromising forensic evidence. Furthermore, resuming operations without full Rescue and Fire Fighting (RFF) services highlights a systemic disregard for emergency protocols.





- **Diplomatic and Credibility Risks:** India's reluctance to involve foreign experts fully in the final reporting process risks isolating the country's aviation sector globally. If a technical fault existed in the aircraft (Boeing 787), international regulators like the FAA would have issued a global grounding; their silence points toward local operational or procedural failures.

Key Definitions

- **ICAO Annex 13:** The international standard that provides the protocols for aircraft accident and incident investigations, emphasizing that the objective is the prevention of future accidents, not the apportionment of blame.
- **Black Box (CVR & DFDR):** The Cockpit Voice Recorder (CVR) records radio transmissions and cockpit sounds, while the Digital Flight Data Recorder (DFDR) logs specific aircraft performance parameters.
- **Window of Circadian Low (WOCL):** The period (typically 02:00 to 06:00) when the human body is programmed to sleep and alertness is at its lowest, a critical factor in pilot fatigue analysis.
- **Airworthiness Directive (AD):** A notification to owners and operators of certified aircraft that a known safety deficiency with a particular model must be corrected.

Constitutional and Legal Provisions

- **The Aircraft Act, 1934:** The principal legislation governing the manufacture, possession, use, operation, sale, and import of aircraft in India.
- **The Aircraft (Investigation of Accidents and Incidents) Rules, 2017:** Provides the legal framework for the Air Accident Investigation Bureau (AAIB) to conduct independent probes.
- **Article 21:** The Right to Life and Personal Liberty. The judiciary has often interpreted this to include the right to safe travel and the state's obligation to ensure rigorous safety standards in public utilities.
- **Article 51(c):** Directive Principle that encourages the state to foster respect for international law and treaty obligations (such as ICAO conventions).

UPSC Relevance

- **GS Paper II:** Statutory, regulatory, and various quasi-judicial bodies (DGCA, AAIB); Important aspects of governance, transparency, and accountability.
- **GS Paper III:** Infrastructure (Aviation); Role of external state and non-state actors in creating challenges to internal security (via safety compromises).
- **Ethics (GS Paper IV):** Corporate Governance and Professional Ethics; The conflict between political expediency and the "noble mission" of protecting human lives.

Conclusion

The credibility of India's aviation safety regime is at a crossroads. The transition from a technical investigation to a politically managed narrative not only violates international treaties but also endangers future travelers. For India to remain a global aviation hub, it must insulate its investigative bodies (AAIB) and regulators (DGCA) from political and commercial interference, ensuring that safety reports serve as lessons for prevention rather than tools for image management.



5. India-U.S. Relations: Institutional Resilience Amidst Political Volatility

Context: In 2025, the India-U.S. partnership has evolved into a "dual-track" dynamic. While high-level political engagement has faced headwinds—marked by the postponement of the Quad Summit, trade sanctions, and U.S. rapprochement with Pakistan—the institutional, defense, and technological cooperation between the two bureaucracies has reached unprecedented depth.

- **Resilience of Defense Architecture:** Defense remains the bedrock of the relationship, exemplified by the 10-year Defense Framework Agreement (2025) and major deals like the HAL-General Electric pact for fighter jet engines, ensuring long-term military interoperability.
- **The "Dual-Track" Diplomacy:** A clear distinction has emerged between volatile political signals (trade disputes and tariff regimes) and steady institutional collaboration in areas like maritime security, counter-terrorism, and critical technologies.
- **Strategic Technology Integration:** The successful launch of the NISAR satellite in July 2025 and the Initiative on Critical and Emerging Technologies (iCET) highlight a shift from a buyer-seller relationship to one of co-development and joint technological innovation.
- **Quad's Operational Continuity:** Despite the delayed Leaders' Summit, the Quad remains functionally active through the Foreign Ministers' meetings and the "Ports of the Future" initiative, focusing on resilient infrastructure and Indo-Pacific connectivity.
- **Economic Friction vs. Geopolitical Pragmatism:** While U.S. tariffs on Indian exports and Russian oil purchases have strained trade volumes, Washington's "balance-of-interest" approach ensures that India remains a vital partner in counterbalancing regional shifts.
- **Institutionalization as a Buffer:** The thickening of bureaucratic ties through agreements like SOSA (2024) and foundational pacts (BECA, COMCASA) shields the core strategic partnership from the short-term fluctuations of electoral politics and diplomatic posturing.

Key Definitions

- **Foundational Pacts:** A set of four agreements (GSOMIA, LEMOA, COMCASA, BECA) that the U.S. signs with "Major Defense Partners" to facilitate interoperability and sharing of sensitive technology/logistics.
- **iCET (Initiative on Critical and Emerging Technologies):** A bilateral mechanism to expand cooperation in artificial intelligence, space, and semiconductors, aimed at reducing dependency on autocratic supply chains.
- **SOSA (Security of Supply Arrangement):** A bilateral agreement that allows for the reciprocal priority delivery of goods and services to support national defense requirements.

Constitutional and 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," allowing the Cabinet to sign defense frameworks.
- **Entry 15, Union List (Schedule VII):** Specifically covers "War and Peace," giving the Central Government exclusive authority to negotiate defense pacts and strategic alliances.
- **The Civil Nuclear Reforms:** While not a "law" in the traditional sense, the 123 Agreement (2008) remains the legal cornerstone that enabled the current high-technology trade by removing legacy sanctions.



UPSC Relevance

- **GS Paper II:** India and its neighborhood- relations; Bilateral, regional and global groupings involving India; Effect of policies of developed countries on India's interests.
- **GS Paper III:** Science and Technology- developments and their applications in everyday life; Indigenization of technology and developing new technology (e.g., HAL-GE deal).
- **Key Themes:** Strategic Autonomy, Indo-Pacific Security Architecture, Technology Transfers, and the role of "Track 1.5/Track 2" diplomacy in sustaining state relations.

Conclusion

The 2025 trajectory of India-U.S. ties underscores that the relationship is no longer dependent solely on personal chemistry between leaders. By embedding cooperation into deep-seated institutional frameworks and defense supply chains, both nations have built a "ballast" that can withstand geopolitical storms. However, for 2026 and beyond, the challenge will be to ensure that persistent trade frictions do not eventually hollow out the trust built by the defense and scientific communities.

6. Decline of Maoism in India: Transition from Insurgency to Mainstream

Context: The year 2025 marked a watershed moment in India's fight against Left Wing Extremism (LWE). Strategic military successes, including the elimination of top-tier leaders like General Secretary Nambala Keshava Rao (Basavaraju) and PLGA commander Madvi Hidma, combined with the "Niyad Nellanar" developmental push, have led to mass surrenders and a near-collapse of the Maoist organizational structure in the Dandakaranya region.

- **Decapitation of Leadership:** The elimination of General Secretary Nambala Keshava Rao in May 2025 and the feared commander Madvi Hidma in November 2025 has created an irreversible command-and-control vacuum, forcing the remaining Polit Bureau to adopt a "defensive mode" or split into smaller, vulnerable groups.
- **Mass Surrenders and Disillusionment:** Since October 2025, mass surrenders—including senior cadres like Venugopal and Rupesh—indicate a shift from ideological commitment to a desire for peace. Over 2,100 cadres surrendered in 2025, driven by the government's promise of dignity and rehabilitation.
- **Shrinking Geographical Footprint:** As of late 2025, the Ministry of Home Affairs (MHA) reports that LWE-affected districts have plummeted to just 11, with only 3 districts (Bijapur, Sukma, and Narayanpur) remaining in the "most affected" category, signaling the end of the once-expansive "Red Corridor."
- **Developmental Counter-Offensive:** The "Niyad Nellanar" (Your Good Village) scheme has been instrumental in bridging the trust deficit by establishing security camps that double as development hubs, providing basic amenities like healthcare, education, and Aadhaar services within a 5-km radius.
- **Health and Social Rehabilitation:** The current phase focuses on "human-centric" rehabilitation, addressing critical issues like endemic cerebral malaria and anemia among tribals, and providing specialized medical support such as reverse vasectomy for surrendered cadres forced into the procedure by the movement.
- **Economic Empowerment:** To prevent resurgence, the government is replacing the Maoist parallel economy (e.g., pond construction and tendu-patta regulation) with state-led initiatives including check dams, forest produce processing units, and vocational training for illiterate cadres.

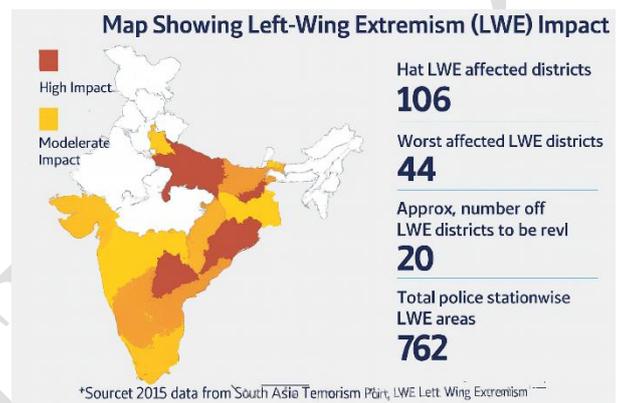


Key Definitions

- **Dandakaranya (DK):** A vast, forested region covering parts of Chhattisgarh, Odisha, Telangana, and Maharashtra; the traditional stronghold and headquarters of the CPI (Maoist).
- **Krantikari Jantana Sarkar:** "Revolutionary People's Council"—the parallel administrative structure formerly run by Maoists in tribal villages to provide "justice," education, and resource management.
- **Niyad Nellanar:** A Gondi term meaning "Your Good Village"; a Chhattisgarh government scheme focused on saturating remote villages with 25+ government welfare services.
- **PLGA (People's Liberation Guerrilla Army):** The armed wing of the CPI (Maoist), responsible for major ambushes against Indian security forces.

Constitutional and Legal Provisions

- **Fifth Schedule:** Provides for the administration and control of Scheduled Areas and Scheduled Tribes, a critical legal framework for addressing tribal land and forest rights that Maoists often exploit.
- **Panchayats (Extension to Scheduled Areas) Act (PESA), 1996:** Aims to empower tribal communities through self-governance; its effective implementation is seen as the ultimate "ideological antidote" to Maoism.
- **Criminal Law Amendment Act, 1908:** Used by state governments to declare the CPI (Maoist) and its frontal organizations as unlawful associations.
- **Surrender and Rehabilitation Policy:** A joint Centre-State framework offering financial stipends (e.g., ₹2,000 monthly), fixed deposits (approx. ₹1.5 lakh), and incentives for weapons to incentivize insurgents to quit.



UPSC Relevance

- **GS Paper III:** Internal Security; Linkages between development and spread of extremism; Role of external state and non-state actors in creating challenges to internal security.
- **GS Paper II:** Welfare schemes for vulnerable sections; Issues relating to the management of Social Sector/Services relating to Health and Education.
- **Ethics (GS Paper IV):** Human values and the psychological impact of conflict; The ethical obligation of the State to rehabilitate and reintegrate former combatants with compassion.

Conclusion

The retreating shadow of Maoism in 2026 offers a historic opportunity for the Indian state to reclaim the "hearts and minds" of its most marginalized citizens. While military dominance has been achieved, the sustainability of this peace depends on converting current security camps into permanent centers of governance and prosperity. The goal of a "Naxal-free Bharat" by March 2026 is no longer just a policy target but a visible reality, provided the focus shifts from "conflict management" to "holistic tribal development."



7. SHANTI Bill 2025: Reforming India's Nuclear Energy Landscape

Context: Parliament recently passed the Sustainable Harnessing and Advancement of Nuclear Energy in India (SHANTI) Bill, 2025. This landmark legislation marks the most significant overhaul of India's nuclear sector since the 1960s, ending the long-standing state monopoly and modernizing regulatory and liability frameworks to meet the ambitious goal of 100 GW nuclear capacity by 2047.

- **End of State Monopoly:** The Bill repeals the Atomic Energy Act, 1962, allowing private Indian companies and joint ventures to own, build, and operate nuclear power plants for the first time, ending the exclusive control of Nuclear Power Corporation of India Limited (NPCIL).
- **Private and Foreign Participation:** It permits up to 49% private/foreign equity in nuclear projects while maintaining 51% government control over strategic "fuel-cycle" activities such as enrichment, reprocessing, and radioactive waste management.
- **Empowered Regulator:** The Atomic Energy Regulatory Board (AERB) has been granted statutory status and is now directly answerable to Parliament. This enhances its independence and expands its mandate to oversee safety and licensing across both public and private installations.
- **Tiered Liability Framework:** Replacing the Civil Liability for Nuclear Damage Act, 2010, the Bill introduces capacity-linked liability caps: ₹3,000 crore for large plants (>3600 MW), ₹1,500 crore for medium plants, and ₹100 crore for Small Modular Reactors (SMRs), with the Union government covering damages exceeding these limits.
- **Support for SMRs and Clean Energy:** A dedicated fund of ₹20,000 crore has been allocated to accelerate the deployment of Small Modular Reactors (SMRs), which are factory-built, safer, and ideal for industrial decarbonization and providing stable baseload power.
- **Controversial Transparency Clauses:** Section 39 of the Bill overrides the RTI Act, 2005, by allowing the government to classify vast categories of nuclear information—including plant designs and safety data—as "restricted," a move heavily criticized by transparency advocates.



Key Definitions

- **Baseload Power:** The minimum amount of electric power a utility must make available to its customers, which nuclear energy provides reliably 24x7, unlike intermittent solar or wind.
- **Small Modular Reactor (SMR):** Advanced nuclear reactors with a power capacity of up to 300 MW per unit, designed to be built in factories and transported to sites for quicker installation.
- **Right of Recourse:** The legal right of an operator to seek compensation from a supplier in the event of an accident caused by defective equipment; the SHANTI Bill narrows this to cases of explicit contract or intentional harm.
- **Nuclear Liability Fund:** A state-managed fund established under the Bill to meet compensation requirements in cases of severe nuclear incidents where damages exceed the operator's liability cap.



Constitutional and Legal Provisions

- **Seventh Schedule (Union List):** Entry 6 gives the Union Parliament exclusive power over "Atomic Energy and mineral resources necessary for its production," providing the constitutional basis for the SHANTI Bill.
- **Article 21:** The Right to Life and a Clean Environment. Critics argue that capping liability and removing supplier accountability may dilute the protections guaranteed under this Article.
- **Section 39 (SHANTI Bill):** Provides an "overriding effect" over the RTI Act, 2005, for information deemed sensitive to national security or commercial secrecy in the nuclear sector.
- **Factories Act, 1948:** While Section 42 of the Bill modifies its application, the AERB remains responsible for enforcing industrial safety standards within nuclear facilities.

UPSC Relevance

- **GS Paper II:** Government policies and interventions for development; Statutory, regulatory, and various quasi-judicial bodies (AERB).
- **GS Paper III:** Infrastructure: Energy; Science and Technology- developments and their applications (SMRs, Thorium cycle); Security challenges and their management.
- **Key Themes:** Energy Security vs. Environmental Safety, Public-Private Partnership (PPP) in strategic sectors, and the evolution of India's "Three-Stage Nuclear Power Programme."

Conclusion

The SHANTI Bill 2025 transitions India from a "state-monopoly" to a "regulated-participation" model. While it addresses the critical need for private capital and advanced technology (like SMRs) to meet net-zero targets by 2070, the dilution of supplier liability and the shielding of information from public scrutiny remain significant points of contention. The success of this reset will depend on the AERB's ability to maintain rigorous, independent safety oversight in an increasingly profit-driven landscape.

8. Remote Sensing Technology: Mapping Earth's Resources from Space

Context: Remote-sensing technology has emerged as a cornerstone of modern planetary science. By utilizing the electromagnetic spectrum, satellites and drones can identify natural resources, monitor environmental health, and map subsurface minerals without physical contact. As of 2026, missions like the NASA-ISRO SAR (NISAR) are pushing the boundaries of what can be detected through cloud cover and dense vegetation.

- **Spectral Signatures as Fingerprints:** Every material—water, rock, or vegetation—reflects and absorbs electromagnetic energy uniquely. These "spectral signatures" act as digital fingerprints, allowing sensors to identify healthy crops (which reflect near-infrared light) from stressed ones.
- **Vegetation and Biomass Assessment:** Using the Normalized Difference Vegetation Index (NDVI), scientists calculate forest biomass and carbon storage. Hyperspectral sensors can go further, identifying specific tree species (e.g., Banyan vs. Teak) and nutrient deficiencies (like nitrogen) from hundreds of kilometers above.





- **Water Resource Mapping:** Scientists use optical indexing (NDWI) for clear water and Synthetic Aperture Radar (SAR) for mapping floods. SAR is particularly vital during disasters because its radio waves penetrate clouds and smoke, rendering smooth water surfaces as "pitch black" against bright land features.
- **Subsurface Mineral Exploration:** Geologists use hyperspectral sensors to detect "alteration zones" where heat and fluids have changed surface chemistry. Even deep-seated oil and gas can be detected through "micro-seepage," which subtly alters soil color and stresses surface plants.
- **Gravitational Weighing of Groundwater:** Advanced missions like GRACE use "gravity anomalies" to measure the weight of underground aquifers. Changes in the distance between twin satellites reveal where groundwater is being depleted, a technique famously used to track the decline of the water table in North India.
- **Structural Geology and Traps:** Satellites like Landsat and ASTER map "anticlines" (dome-like rock folds) that act as containers for oil and gas. In the oceans, satellite altimetry measures sea-surface "bumps" caused by the gravitational pull of massive underwater geological structures.

Key Definitions

- **Remote Sensing:** The process of acquiring information about an object or phenomenon without making physical contact with it, typically via satellite or aircraft.
- **Hyperspectral Imaging:** A technique that collects and processes information from across the electromagnetic spectrum to find objects, identify materials, or detect processes.
- **Synthetic Aperture Radar (SAR):** An active sensing system that transmits its own radio waves to map the Earth's surface, functioning regardless of light or weather conditions.
- **Spectral Signature:** The specific combination of reflected and absorbed electromagnetic radiation at varying wavelengths which can uniquely identify an object.

Constitutional and Legal Provisions

- **Article 51A (g):** Part of the Fundamental Duties, it mandates citizens to protect and improve the natural environment, including forests, lakes, and rivers; remote sensing is the primary tool for the State to monitor this.
- **The Indian Space Policy (2023):** Provides the framework for private and public participation in space-based remote sensing and data dissemination.
- **Geospatial Data Guidelines (2021):** Liberalized the acquisition and production of geospatial data and maps in India, enabling startups to use remote-sensing data for agriculture and mining.
- **National Remote Sensing Centre (NRSC):** Operating under ISRO, it has the legal mandate for the acquisition and processing of satellite data for the Indian landmass.

UPSC Relevance

- **GS Paper I:** Distribution of key natural resources across the world; Salient features of world's physical geography.
- **GS Paper III:** Science and Technology- developments and their applications in everyday life; Awareness in the fields of Space; Conservation, environmental pollution, and degradation.
- **Key Themes:** Precision Agriculture (NDVI), Disaster Management (SAR for floods), India's Groundwater Crisis (GRACE data), and Mineral Security (Lithium/Copper exploration).



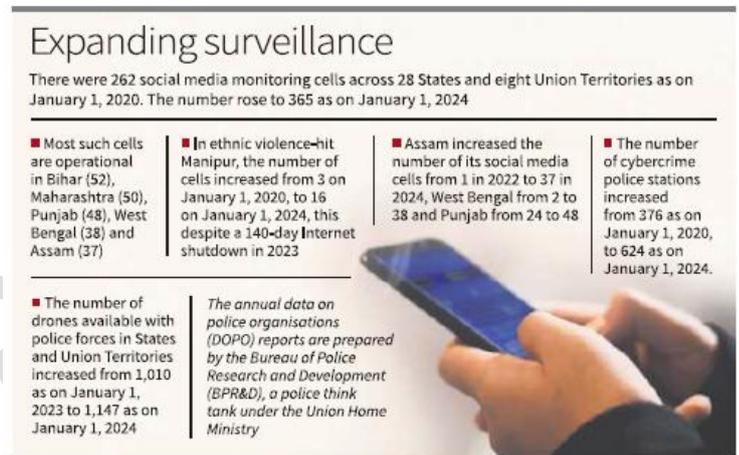
Conclusion

Remote sensing has transformed the "search and find" model of resource management into a "monitor and manage" system. By providing a macro-view of the Earth's vital signs, it bridges the gap between economic development and environmental conservation. For a country like India, which faces acute groundwater depletion and climate-induced disasters, the integration of high-resolution hyperspectral and SAR data is no longer a luxury but a strategic necessity for national security and resource sovereignty.

9. Digital Policing: The Rise of Social Media Monitoring Cells in India

Context: According to the latest "Data on Police Organisations" (DoPO) report by the Bureau of Police Research and Development (BPR&D), Indian states have significantly scaled up their digital surveillance infrastructure. Dedicated social media monitoring cells have increased by approximately 39% between 2020 and 2024 to tackle evolving cybercrime and maintain law and order.

- **Rapid Institutional Expansion:** The number of dedicated social media monitoring cells rose from 262 in 2020 to 365 in 2024. These units, which previously functioned under cybercrime stations, are now increasingly operated as distinct specialized entities.
- **Geographical Concentration:** Bihar (52), Maharashtra (50), and Punjab (48) lead the country in the number of monitoring cells. Notably, West Bengal and Assam saw explosive growth, with Assam moving from a single cell in 2022 to 37 by 2024.
- **Conflict-Zone Monitoring:** In Manipur, monitoring units increased from 3 to 16 between 2020 and 2024. This growth occurred despite prolonged internet shutdowns, highlighting the state's focus on tracking digital narratives that fuel ethnic violence.
- **Diversified Surveillance Infrastructure:** Beyond social media, police forces are adopting advanced hardware. The number of drones available to state police forces reached 1,147 in 2024, signaling a shift toward hybrid (physical and digital) surveillance.
- **Human Resource Deficit:** Despite the technical expansion, the Indian police force faces a chronic vacancy crisis. Against a sanctioned strength of 27.55 lakh personnel, nearly 5.93 lakh posts (approx. 21.5%) remain vacant, impacting the efficiency of ground policing.
- **Representational Statistics:** Out of the 27.55 lakh sanctioned posts, the actual working strength includes 3,30,621 SC (12%), 2,31,928 ST (8.4%), and 6,37,774 OBC (23.1%) personnel, reflecting the current socio-demographic composition of the forces.



Key Definitions

- **Social Media Monitoring Cells:** Specialized police units tasked with scanning public platforms (X, Facebook, WhatsApp, etc.) to identify inflammatory content, fake news, and criminal coordination.
- **Cybercrime Police Stations:** Dedicated police facilities equipped with digital forensic tools to investigate crimes committed via the internet or computer networks.



- **Sanctioned vs. Actual Strength:** "Sanctioned strength" refers to the total number of personnel permitted by law, while "actual strength" is the number of personnel currently in service.

Constitutional and Legal Provisions

- **Police (State List):** Under the Seventh Schedule (List II, Entry 2), "Police" and "Public Order" are state subjects, giving states the primary authority to set up monitoring cells.
- **Information Technology (IT) Act, 2000:** Section 69A empowers the government to issue directions for blocking public access to information, while Section 79 governs the liability of intermediaries (social media companies).
- **Right to Privacy (Article 21):** The Supreme Court's *Puttaswamy* judgment establishes privacy as a fundamental right. Monitoring must meet the three-fold test of legality, necessity, and proportionality.
- **Rule of Law and Free Speech:** Article 19(1)(a) protects freedom of expression, which can only be restricted on specific grounds like public order, security of the state, or incitement to an offense (Article 19(2)).

UPSC Relevance

- **GS Paper II:** Statutory, regulatory and various quasi-judicial bodies; Governance; Challenges to internal security through communication networks.
- **GS Paper III:** Role of media and social networking sites in internal security challenges; Basics of cyber security; Police reforms.
- **Key Themes:** The tension between state surveillance and individual privacy; The efficacy of "tech-heavy" policing vs. "manpower-heavy" traditional policing; Data-driven internal security management.

Conclusion

The proliferation of social media monitoring cells underscores a structural shift in Indian policing from reactive to proactive digital surveillance. While these cells are vital for curbing fake news and communal incitement, the concurrent rise in police vacancies suggests that technology is being used to bridge the gap left by a shortage of personnel. For a robust security apparatus, India must balance the expansion of digital monitoring with systemic police reforms and a transparent legal framework that protects citizens' fundamental right to privacy.

10. Indigenous Maritime Power: Commissioning of ICGS Samudra Pratap

Context: Defence Minister Rajnath Singh commissioned ICGS Samudra Pratap in Goa, marking a significant milestone in India's maritime environmental security. As the first indigenously designed Pollution Control Vessel (PCV), it reflects India's growing "Aatmanirbhar Bharat" initiative in the defence sector and strengthens the Indian Coast Guard's (ICG) capacity to manage ecological threats in the Indian Ocean Region.



- **Strategic Indigenous Milestone:** Built by Goa Shipyard Limited (GSL) with over 60% indigenous content, the vessel is the first of its kind to be homegrown, symbolizing the transition from a "buyer's navy" to a "builder's navy."



- **Multi-Role Capability:** Beyond its primary function of oil spill response and pollution control, the ship is equipped for advanced fire-fighting, coastal patrolling, maritime surveillance, and search and rescue (SAR) operations.
- **Environmental Safeguards:** The vessel is specifically designed to protect sensitive ecosystems like coral reefs, mangroves, and marine biodiversity, which are critical to India's Blue Economy and the livelihood of coastal communities.
- **Advanced Technical Infrastructure:** ICGS Samudra Pratap is the largest ship in the ICG fleet, featuring specialized pollution response boats, sophisticated detection systems, and a helicopter hangar for extended operational reach in rough seas.
- **Inclusivity in Frontline Operations:** The induction is notable for the deployment of two women officers aboard, marking a shift toward gender-neutral frontline maritime operations and an inclusive military culture.
- **Regional Maritime Governance:** The ship enhances India's status as a "Preferred Security Partner" in the Indo-Pacific, capable of leading regional responses to maritime disasters and environmental hazards.

Key Definitions

- **Pollution Control Vessel (PCV):** A specialized ship equipped to contain and recover oil spills, treat chemical leaks, and mitigate environmental damage at sea.
- **Blue Economy:** The sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of the ocean ecosystem.
- **Exclusive Economic Zone (EEZ):** An area of the sea in which a sovereign state has special rights regarding the exploration and use of marine resources, extending 200 nautical miles from the coast.
- **Indigenous Content:** The percentage of a product's value that is created within the domestic economy, reflecting self-reliance in manufacturing and technology.

Constitutional and Legal Provisions

- **Article 48A (DPSP):** Directs the State to protect and improve the environment and to safeguard the forests and wildlife of the country, providing the constitutional mandate for marine protection.
- **Article 51A (g):** Establishes the Fundamental Duty of every citizen to protect and improve the natural environment, including lakes and rivers (and by extension, the marine environment).
- **Territorial Waters, Continental Shelf, EEZ and Other Maritime Zones Act, 1976:** Provides the legal framework for India's sovereignty and jurisdiction over its maritime boundaries.
- **National Oil Spill Disaster Contingency Plan (NOS-DCP):** The Indian Coast Guard is the central coordinating authority under this plan for responding to oil spills in Indian waters.

UPSC Relevance

- **GS Paper III:** Security challenges and their management in border areas; Infrastructure (Ports/Shipping); Conservation, environmental pollution, and degradation.
- **GS Paper II:** Government policies and interventions for development in various sectors and issues arising out of their design and implementation.



- **Key Themes:** Indigenization of Technology (Defence), Maritime Security (SAGAR - Security and Growth for All in the Region), Blue Economy, and Gender Equality in Armed Forces.

Conclusion

The commissioning of ICGS Samudra Pratap represents a fusion of India's environmental and strategic priorities. By achieving over 60% indigenization, India has demonstrated its capability to build complex, specialized platforms that secure the maritime environment. This vessel is not merely a tool for pollution response but a pillar of India's broader maritime governance, ensuring that the economic potential of the oceans is protected against ecological catastrophes.

11. RBI Monetary Policy Framework: Retaining the 4% Inflation Target

Context: As of January 2026, the Government of India is poised to retain the existing 4% inflation target for the Reserve Bank of India (RBI) for the upcoming five-year cycle (2026–2031). This decision, expected to be formalized in March 2026, reinforces the effectiveness of the Flexible Inflation Targeting (FIT) framework in anchoring price expectations and maintaining macroeconomic stability despite global supply-side shocks.

- **Stability and Continuity:** The retention of the 4% target (with a +/-2% tolerance band) reflects the government's confidence in the 2016 framework. By maintaining the mid-point at 4%, the RBI ensures policy credibility and avoids "creeping inflation" that could arise from raising the target.
- **Effective Price Anchoring:** Since the adoption of FIT, average inflation has moderated significantly compared to the pre-2016 era. Even during the volatile 2024–2025 period, the framework helped the Monetary Policy Committee (MPC) navigate through geopolitical uncertainties and food price fluctuations.
- **The Growth-Inflation Balance:** An inflation rate of 4% is considered the "inflection point" for India; levels significantly higher tend to hurt long-term growth by eroding purchasing power, while levels below 2% risk deflationary pressures and reduced producer incentives.
- **Headline vs. Core Inflation:** Despite debates about focusing solely on "Core Inflation" (excluding food and fuel), the RBI continues to target "Headline CPI" because food constitutes nearly 46% of the Indian consumer basket and persistent food inflation eventually spills over into wages and services.
- **MPC Autonomy and Accountability:** The framework provides operational independence to the MPC to set the repo rate. However, a failure to stay within the 2–6% band for three consecutive quarters mandates the RBI to issue an "open letter" to the government explaining the failure and remedial steps.
- **Global Signaling:** In an era of global economic shifts, sticking to the 4% target signals to international investors that India remains committed to a rule-based, transparent monetary policy, supporting the stability of the Rupee and domestic bond yields.



Key Definitions

- **Flexible Inflation Targeting (FIT):** A monetary policy strategy where the central bank has a specific target for inflation but also considers the objective of economic growth.
- **Headline CPI:** The total inflation measure based on the Consumer Price Index, including volatile components like food and fuel.



- **Monetary Policy Committee (MPC):** A six-member statutory committee (3 from RBI, 3 nominated by the Government) responsible for fixing the benchmark interest rate (repo rate).
- **Tolerance Band:** The permissible deviation from the target. In India, it is 4% +/-2%, meaning a range of 2% to 6%.

Constitutional and Legal Provisions

- **Reserve Bank of India Act, 1934:** Specifically amended via the **Finance Act, 2016**, to provide a statutory basis for the FIT framework (Sections 45ZA to 45ZN).
- **Section 45ZA:** Empowers the Central Government, in consultation with the RBI, to determine the inflation target once every five years.
- **Section 45ZN:** Outlines the "Failure to maintain inflation target" clause, requiring a report to the government if the target is breached for three consecutive quarters.
- **Fiscal Responsibility and Budget Management (FRBM) Act:** While primarily for fiscal policy, it works in tandem with monetary policy to ensure overall macroeconomic balance.

UPSC Relevance

- **GS Paper III:** Indian Economy and issues relating to planning, mobilization of resources, growth, development, and employment; Monetary Policy and its instruments.
- **Prelims Factor:** Statutory composition of the MPC, the specific index used (CPI-Combined), and the legal mandate under the RBI Act.
- **Mains Perspective:** Analyzing the "Growth vs. Inflation" trade-off and the efficacy of supply-side measures vs. interest rate hikes in a consumption-heavy economy like India.

Conclusion

The decision to retain the 4% inflation target in 2026 is a testament to the institutional maturation of India's monetary policy. While supply-side disruptions (especially in food and energy) remain a challenge, the fixed 4% anchor provides the necessary "nominal anchor" for the economy. For India to remain the world's fastest-growing major economy, price stability is not just a secondary goal but a prerequisite for sustainable investment and the protection of the poor against the regressive tax of high inflation.

12. Operation Absolute Resolve: The U.S. Military Ouster of Nicolás Maduro

Context: On January 3, 2026, the United States executed a historic military operation, "Operation Absolute Resolve," to forcibly remove and capture Venezuelan President Nicolás Maduro and his wife, Cilia Flores. This event marks a radical departure from traditional diplomacy, shifting from a transactional "America First" negotiation to a high-stakes "Peace through Strength" intervention. As of January 5, 2026, Maduro is in U.S. custody in New York, awaiting trial on narco-terrorism charges.

- **From Negotiation to Extraction:** In mid-2025, President Trump initially sought a deal with the Maduro regime to prioritize U.S. oil companies and secure deportation cooperation. However, persistent rejection of amnesty offers and Maduro's perceived "unserious" attitude led to a pivot toward a military solution by December 2025.





- **Operation Absolute Resolve:** A massive joint military and law enforcement raid involving over 150 aircraft (including F-22s and B-1B Lancers) and Army Delta Force operators. The mission utilized advanced technology, including one-way attack drones and specialized extraction helicopters, to seize Maduro from his compound in Caracas without any U.S. casualties.
- **The Narco-Terrorism Rationale:** The U.S. justified the breach of sovereignty as a law enforcement action rather than "regime change." Indictments unsealed by Attorney General Pam Bondi allege Maduro headed the "Cartel de los Soles," a state-embedded criminal network that flooded the U.S. with cocaine.
- **Energy and Resource Sovereignty:** A primary driver of the intervention was the revitalization of Venezuela's oil industry. Trump has signaled that U.S. oil majors will enter to rebuild broken infrastructure, aiming to reclaim assets he claims were "stolen" in previous nationalizations (1976 and 2007).
- **Geopolitical Vacuum and Transition:** Following the ouster, Vice President Delcy Rodríguez was sworn in as President. While Trump initially suggested the U.S. would "run" the country, Secretary of State Marco Rubio has indicated a preference for a managed transition toward a democratic settlement, potentially involving opposition figure María Corina Machado.
- **Global Deterrence:** The operation serves as a "Trump Corollary" to the Monroe Doctrine, signaling to extra-hemispheric powers like Russia and China that the U.S. will maintain strategic predominance in the Western Hemisphere.

Key Definitions

- **Operation Absolute Resolve:** The codename for the January 2026 U.S. military-led mission to capture Nicolás Maduro.
- **Narco-Terrorism:** The use of drug trafficking to fund and support terrorist activities or the use of terrorist tactics by drug traffickers to protect their criminal enterprise.
- **America First Agenda:** A foreign policy doctrine prioritizing U.S. national interests, bilateralism over multilateralism, and economic benefit (specifically oil and minerals) in international engagements.
- **Extradition vs. Extraction:** While extradition is a formal legal process between states, the U.S. labeled this as an "extraction mission" to bypass the lack of a cooperative government in Caracas.

Constitutional and Legal Provisions

- **U.S. Inherent Constitutional Authority:** The Trump administration cited Article II of the U.S. Constitution, arguing the President has inherent power as Commander-in-Chief to conduct "law enforcement extractions" to protect national security (specifically against drug flows).
- **UN Charter (Article 2(4)):** Prohibits the "use of force" against the territorial integrity or political independence of any state. Critics and international bodies have labeled the raid a "gross violation" of this principle.
- **Ker-Frisbie Doctrine:** A U.S. legal principle holding that a defendant can be tried in U.S. courts regardless of whether their presence was procured through illegal abduction or "irregular" means.
- **Monroe Doctrine (Modern Context):** A 19th-century U.S. policy opposing European interference in the Americas, now revived to limit Russian and Chinese influence in Venezuela.



UPSC Relevance

- **GS Paper II:** Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests; Effect of policies and politics of developed and developing countries on India's interests.
- **GS Paper III:** Challenges to internal security (Drug trafficking/Narco-terrorism); Energy security and the Global Oil Market.
- **Key Themes:** The erosion of the "Westphalian Sovereignty" model; The impact of U.S. unilateralism on the UN-led international order; Global energy shifts following the potential re-entry of Venezuelan oil.

Conclusion

The capture of Nicolás Maduro represents the most aggressive application of U.S. power in Latin America in decades. While the move aims to dismantle a "narco-state" and secure vast energy reserves, it raises profound questions about the future of international law and sovereign immunity. For the global community, the "Absolute Resolve" model creates a precedent where judicial indictments can serve as the trigger for kinetic military operations, fundamentally altering the landscape of 21st-century geopolitics.
