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VIDHVATH IAS KAS ACADEMY & STUDY CENTRE

DAILY CURRENT AFFAIRS

FOR UPSC CIVIL SERVICE EXAMINATION

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Table of Contents

1. Data Centres and Water Crisis in India: Balancing Growth and Sustainability	2
2. Macro-Economic Indicators and Future Skills Readiness (June 2026)	3
3. Road Safety and Trauma Care Infrastructure in India.....	4
4. Jurisdictional Evolution of Reproductive Rights and the MTP Act	5
5. AI-Driven Decision Support System for Delhi's Air Quality Management	7
6. Restructuring Institutional Governance: Proposed Disbandment of the Digital Communications Commission	8
7. Financial Inclusion: Strengthening Rural Footprint of Public Sector Banks.....	9
8. Geopolitical Realignment: Easing Sanctions and India-Iran Energy Dynamics	10
9. India's Anti-Dumping Probe Against Chinese Imports: Protecting Domestic Industry	12
10. Indigenization of Defence: Netra AEW&C Achieves Final Operational Clearance.....	13
11. Cooperative Federalism: Proposed Tri-State Committee for Tungabhadra River Resolution.....	14
12. Balancing Regulation and Access: The Case for Reforming India's PCPNDT Act.....	15



VIDHVATH IAS ACADEMY



1. Data Centres and Water Crisis in India: Balancing Growth and Sustainability

Core Summary

- **Hub Concentration:** Mumbai dominates India's data centre market with a 53% capacity share, driven by subsea cable landing stations, reliable power, financial hub status, and "essential services" classification.
- **Ecological Strain:** Hyperscale AI data centres require millions of litres of water daily for evaporative cooling. This intensifies regional water stress, as highlighted by Moody's and Mumbai's reservoir capacities dropping below 10%.
- **Socio-Economic Risks:** With agriculture utilizing 80% of India's freshwater, the soaring water demand for advanced AI workloads risks community backlash, regulatory hurdles, and direct competition with local resources.
- **Technological Solutions:** Transitioning from water-intensive evaporative towers to closed-loop liquid cooling, immersion cooling, and Nvidia-recommended 45°C liquid cooling in dry systems can reduce data centre water consumption to near zero.
- **Investment Surge:** Driven by cloud adoption, AI workloads, and government tax holidays until 2047, global tech giants (AWS, Google, Microsoft) and domestic conglomerates (Adani, Reliance) are deploying multi-billion dollar expansions.

Key Definitions

- **Hyperscale Data Centre:** A massive-scale facility engineered to support robust, scalable applications, typically housing thousands of networked servers optimized for AI and cloud workloads.
- **Immersion Cooling:** An advanced thermal management practice where computer components or full servers are submerged in a thermally conductive, non-conductive dielectric fluid to eliminate evaporation loss.

Constitutional & Legal Provisions

- **Article 21:** Right to clean drinking water is recognized as part of the fundamental Right to Life under the Indian Constitution (*Subhash Kumar v. State of Bihar*).
- **Article 48A & 51A(g):** Directive Principles and Fundamental Duties mandating the State and citizens to protect and improve the natural environment, including lakes and rivers.
- **Seventh Schedule:** Water is primarily a State subject (Entry 17 of State List), while the regulation of inter-state rivers falls under the Union List (Entry 56).



Additional Keypoints

- **Geographic Diversification:** Regulators must incentivize shifting upcoming data infrastructure from water-stressed zones (Maharashtra, Karnataka, Tamil Nadu) to water-surplus or cooler regions.
- **Policy Mandates:** Compulsory national water audits and mandatory utilization of recycled/treated sewage water for industrial cooling rather than freshwater.



Conclusion India's digital and AI ambitions must not come at the cost of ecological bankruptcy. Mitigating the water footprint of data hubs through mandatory closed-loop tech and strict environmental zoning is critical to balancing economic digital leadership with long-term climate resilience.

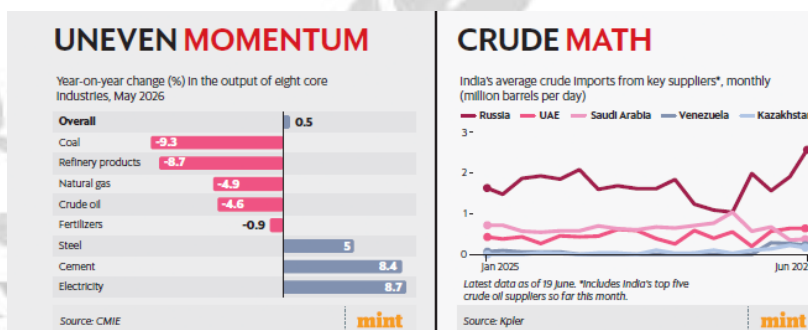
UPSC Relevance

- **GS Paper II:** Statutory, regulatory and various quasi-judicial bodies; Government policies and interventions for development.
- **GS Paper III:** Infrastructure (Energy, Digital); Conservation, environmental pollution, and degradation.

2. Macro-Economic Indicators and Future Skills Readiness (June 2026)

Core Summary

- **Infrastructure Deceleration:** India's eight core industries recorded a seven-month low growth of 0.5% year-on-year in May 2026, dragged down by contractions in five sectors led by coal (-9.3%) and refinery products (-8.7%).
- **Crude Import Shifts:** Driven by discounted barrels, Russia's share in India's crude oil imports crossed 50% (2.66 mbpd) in June 2026, while LPG imports from the US are projected to reach a record 1 million tonnes.
- **Monsoon Contingency:** To safeguard agricultural output against a deficient southwest monsoon, the agriculture ministry deployed contingency plans across 111 vulnerable districts with under 25% irrigation coverage.
- **Capital Market Trends:** Primary markets remain heavily dominated by Offers for Sale (OFS), though large-scale fresh issue capital infusions like Jio Platforms are temporarily lowering the OFS fundraising share below 50%.
- **Global AI Leadership:** India secured the 13th position globally in the QS World Future Skills Index 2027, leading all lower-middle-income economies with a score of 89.42, reflecting robust readiness for an AI-driven future.



Key Definitions

- **Core Industries:** The eight strategic sectors (Coal, Crude Oil, Natural Gas, Refinery Products, Fertilizers, Steel, Cement, Electricity) that constitute nearly 40.27% of the weight of items included in the Index of Industrial Production (IIP).
- **Offer for Sale (OFS):** A public market mechanism where existing shareholders (promoters or institutional investors) dilute their stakes, meaning proceeds flow to sellers rather than into the company's operational capital.

Constitutional & Legal Provisions

- **Article 39(b):** Directive Principle of State Policy directing the State to secure ownership and control of material resources to best subserve the common good, linking to resource security like crude oil and agriculture.



- **Essential Commodities Act, 1955:** Empowers the central government to regulate the production, supply, and distribution of essential commodities like fertilizers and petroleum products to prevent market disruptions.

Additional Keypoints

- **Fiscal Support:** The government allocated ₹7,100 crore in incentives for FY27 to fortify semiconductor fabrication, manufacturing, and indigenous design ecosystems.
- **Infrastructure Pipeline:** Driven by enterprise cloud and AI demands, India's data centre pipeline is projected to scale up to an estimated 8.33GW capacity.

Conclusion While structural strengths in digital skills and semiconductor policy position India as a global tech frontier, near-term headwinds like industrial core stagnation and monsoon deficits underscore the critical need for resilient infrastructure pipelines and diversified energy strategies.

UPSC Relevance

- **GS Paper III:** Indian Economy and issues relating to planning, mobilization of resources, growth, development, and employment; Major crops-cropping patterns; Science and Technology-developments.

3. Road Safety and Trauma Care Infrastructure in India

Core Summary

- **Stagnant Implementation:** According to court data from the file AdobeExpressPhotos_e3c6fbb404004ec48a0b99a8d377dcee_CopyEdited.jpg, not a single Indian state has fully implemented the five directive road safety measures ordered by the Supreme Court, which include 112 NERS integration, GPS-equipped ambulances, Good Samaritan grievance mechanisms, a trauma registry, and rescue protocols.
- **High Casualty Concentration:** India records 1.77 lakh annual road fatalities, with nearly 2/3 (65%) of these deaths concentrated across just eight states, led by Uttar Pradesh, Tamil Nadu, and Maharashtra.
- **Systemic Inter-Agency Bottlenecks:** Establishing a functional trauma response system is severely hindered by poor inter-departmental coordination, multiplicity of agencies (police, health, transport, insurance), and a lack of unified standard operating procedures.
- **Emergency Number Fragmentation:** Despite the conceptualization of a unified '112' emergency hotline, seven out of the top eight high-casualty states have failed to fully merge disparate helpline numbers into a single operational command centre.
- **Deficient Tracking Infrastructure:** Most states fail to provide real-time GPS tracking data for private ambulances, and only 1/8 states has actively linked its public GPS dashboard with the National Emergency Response System.
- **Golden Hour:** The critical first 60 minutes following a traumatic road accident during which prompt medical intervention offers the highest likelihood of preventing mortality.

• TWO-THIRDS OF DEATHS IN 8 STATES ALONE					
State	Road Deaths (2024)	112 NERS Integration	Good Samaritan Grievance	Trauma Registry	Ambulance: Public GPS Dashboard
Uttar Pradesh	24,118	Partial	No	No	Yes
Tamil Nadu	18,449	Partial	NA	Yes	Yes
Maharashtra	15,715	Partial	Yes	Yes	No
Madhya Pradesh	14,791	Partial	No	Yes	No
Karnataka	12,390	NA	Yes	No	No
Rajasthan	11,790	Partial	No	No	No
Bihar	9,347	Partial	No	No	No
Andhra Pradesh	8,346	No	NA	No	No

Total deaths 1,77,175

Total deaths in top 8 states **1,14,946 (65%)**

- Most of the states did not provide GPS device data on private ambulances
- Only 1 of 8 states has linked GPS dashboard with 112 NERS
- Except Karnataka, seven states have their own rescue protocol

SOURCE: STATES' SUBMISSIONS IN SUPREME COURT



- **Trauma Registry:** A comprehensive database documenting the clinical details and care timelines of trauma patients to evaluate and optimize emergency medical response. **Constitutional & Legal Provisions**
- **Article 21:** The Right to Life encompasses the right to timely medical treatment during emergencies, making inadequate state trauma care a constitutional lapse.
- **Motor Vehicles (Amendment) Act, 2019:** Section 134A provides statutory protection to "Good Samaritans" from any civil or criminal liability when assisting road crash victims.
- **Seventh Schedule:** Policy execution faces friction as 'Public Health' falls under the State List (Entry 6), while 'Mechanically Propelled Vehicles' is a Concurrent List subject (Entry 35). **Additional Keypoints**
- **SaveLIFE Foundation Petition:** The Supreme Court directives emerged from litigation seeking a uniform, pan-India trauma care architecture to streamline emergency workflows.
- **API-Level Integration:** Transitioning to an effective 112 system requires deep API-level software synchronization between distinct departmental ecosystems rather than superficial hardware connections.

Conclusion India's high road fatality rate cannot be curtailed without bridging the execution gap in regional trauma infrastructure. States must overcome administrative inertia to enforce structural mandates like API-integrated emergency grids and GPS-mapped response units to safeguard the Golden Hour.

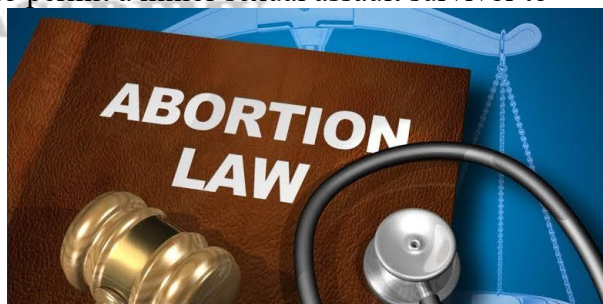
UPSC Relevance

- **GS Paper II:** Governance; Government policies and interventions for development in crucial sectors.
- **GS Paper III:** Infrastructure; Disaster and emergency management systems.

4. Jurisdictional Evolution of Reproductive Rights and the MTP Act

Core Summary

- **Judicial Intervention:** As reported in the file [AdobeExpressPhotos_f556c8c8da3b42ce873be0f71787fed3_CopyEdited.jpg](#), the Delhi High Court exercised its extraordinary constitutional jurisdiction to permit a minor sexual assault survivor to medically terminate her 28-week pregnancy.
- **Statutory Limitations:** The Medical Termination of Pregnancy (MTP) Act does not structurally provide for the abortion of a fetus beyond the 24-week gestational timeline, except in specialized cases concerning diagnosed substantial fetal abnormalities.
- **Grave Mental Injury:** The High Court underscored that forcing a minor rape survivor to carry an unwanted pregnancy to term inflicts severe psychological trauma, which legally constitutes a "grave injury to mental health".
- **Clinical Assessments:** The decision was anchored by an All India Institute of Medical Sciences (AIIMS) Medical Board report confirming that continuation would adversely affect the minor's well-being and validating her medical fitness for the procedure.





- **State Accountability:** The ruling mandated comprehensive operational protocols, directing the Delhi government to fully bear the medical expenses and ordering AIIMS to preserve fetal tissue for forensic DNA testing in the criminal trial.

Key Definitions

- **Extraordinary Jurisdiction:** The discretionary power vested in constitutional courts (High Courts under Article 226) to issue directions, orders, or writs to enforce fundamental rights beyond strict statutory barriers.
- **Gestational Age:** The measure of the age of a pregnancy, calculated in weeks from the first day of the woman's last normal menstrual period to determine legal abortion thresholds.

Constitutional & Legal Provisions

- **Article 21:** The Supreme Court recognizes reproductive autonomy, bodily integrity, and the right to make decisional choices about reproduction as intrinsic facets of the fundamental Right to Life and Personal Liberty.
- **MTP (Amendment) Act, 2021:** Section 3(2)(b) caps the upper limit for legal termination at 24 weeks for vulnerable categories (including minors and rape survivors), necessitating judicial writs for delayed requests.
- **POCSO Act, 2012:** Mandates strict reporting protocols for sexual offenses against minors (under 18 years), interacting directly with the medical frameworks governing minor pregnancies.

Additional Keypoints

- **Foetal Viability Protocols:** The court ordered that if a child is born alive during the late-stage procedure, authorities must provide immediate incubator support and coordinate with the Child Welfare Committee.
- **Provider-Centric Bottlenecks:** Experts note that the current statutory framework places medical practitioners as legal gatekeepers, which frequently forces vulnerable patients to seek direct judicial remedies.

Conclusion

The judicial authorization of a 28-week abortion highlights a critical rights-based paradigm where constitutional courts prioritize human dignity and mental health over rigid statutory caps. Moving forward, balancing legislative parameters with immediate healthcare relief is essential to secure absolute reproductive justice for vulnerable minors.

UPSC Relevance

- **GS Paper II:** Mechanisms, laws, institutions and Bodies constituted for the protection and betterment of vulnerable sections; Judiciary structure and functioning.
- **GS Paper III:** Bio-medical ethics; Issues related to internal security and criminal evidence management.



5. AI-Driven Decision Support System for Delhi's Air Quality Management

Core Summary

- **Technological Modernization:** IIT-Kanpur's Airawat Research Foundation (ARF) is piloting an artificial intelligence (AI)-based Decision Support System (DSS) to modernize Delhi's air quality forecasting infrastructure.
- **Current Systemic Lacunae:** The existing framework relies on fixed daily models and an ageing emissions database, leading to uneven accuracy and a lack of rigorous verification outside peak winter months.
- **Predictive Capability:** Utilizing machine learning (ML) and continuous pattern recognition, the new platform will detect worsening pollution episodes early, delivering granular advisories 48 to 72 hours in advance.
- **Granular Interventions:** The AI system focuses on predictive dashboards, hotspot detection, and hyperlocal source apportionment to allow year-round environmental monitoring rather than seasonal panic reactions.
- **Policy Alignment:** Part of the Centre's AI Centre of Excellence for Sustainable Cities, this initiative will refine standard operating procedures aligned with the Graded Response Action Plan (GRAP).

Key Definitions

- **Source Apportionment:** The analytical practice of identifying and quantifying the specific pollution sources contributing to ambient air degradation.
- **Graded Response Action Plan (GRAP):** An emergency institutional framework implemented in Delhi-NCR that triggers specific anti-pollution measures depending on the severity of the Air Quality Index.

Constitutional & Legal Provisions

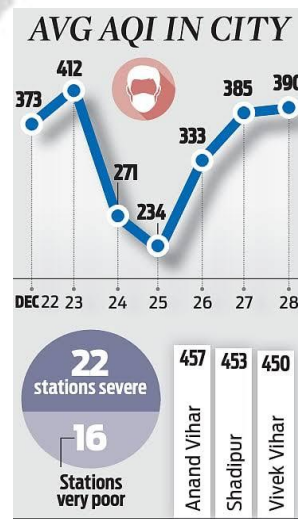
- **Article 21:** The Right to Life encompasses the right to breathe clean, pollution-free air as upheld by various Supreme Court judgements.
- **Article 48A:** A Directive Principle mandating that the State shall endeavor to protect and improve the environment.
- **Air (Prevention and Control of Pollution) Act, 1981:** Provides the statutory basis for monitoring ambient air quality and regulating emissions through pollution control boards.

Additional Keypoints

- **Inventory Updates:** The Council on Energy, Environment and Water (CEEW) flagged a 2-to-3-year refresh cycle for the underlying emission inventory as vital to sustain baseline forecast precision.
- **Data Integration:** The project expands Delhi's monitoring architecture by integrating low-cost sensors, mobile laboratories, and real-time satellite data streams.

Conclusion

Transitioning to AI-driven, predictive environmental systems marks a critical paradigm shift from reactive emergency response to proactive, year-round preventive ecological mitigation within India's urban governance.





UPSC Relevance

- **GS Paper II:** Governance; E-governance applications, models, successes, and limitations.
- **GS Paper III:** Environmental conservation, pollution, and degradation; Science and Technology developments and applications.

6. Restructuring Institutional Governance: Proposed Disbandment of the Digital Communications Commission

Core Summary

- **Structural Reform:** The central government is actively considering disbanding the 37-year-old Digital Communications Commission (DCC), which was originally established in 1989 as the Telecom Commission to formulate national communication policies and budgets.
- **Administrative Bottlenecks:** The proposal stems from significant operational overlaps between Department of Telecommunications (DoT) members and advisors, alongside chronic policy delays caused by the frequent unavailability of its multi-departmental panel members.
- **Financial Decentralization:** The core fiscal responsibilities of the DCC have diminished, with the Ministry of Finance already assuming direct control over the budget approval process for the telecom department's projects and schemes.
- **Phased Transition:** To enable immediate operational agility without disruptive legislative gaps, the government plans a phased winding down by leaving upcoming vacancies unfulfilled and passing interim vertical charges to internal DoT advisors.
- **Composition Deficiencies:** The current heavy bureaucratic composition—comprising a Telecom Secretary chairman, three full-time ex-officio secretaries, and four part-time secretaries from NITI Aayog, MeitY, DEA, and DPIIT—has struggled with functional agility.

Key Definitions

- **Digital Communications Commission (DCC):** The apex body within the Department of Telecommunications vested with executive and financial powers to implement policies, prepare annual budgets, and regulate India's telecommunication sector.
- **Ex-Officio Member:** A government official who automatically holds a secondary institutional seat or title by virtue of holding their primary corporate or ministerial office.



Constitutional & Legal Provisions

- **Article 77:** Conduct of Business of the Government of India, under which the President makes rules for the more convenient transaction of business and allocation of work among ministries, providing the baseline for restructuring departments.
- **Telecommunications Act, 2023:** Regulates the structural governance, spectrum management, and licensing regimes, superseding older colonial laws and anchoring modern digital infrastructure frameworks.



Additional Keypoints

- **Agility vs. Inter-Departmental Deliberation:** While the dissolution promotes swift decision-making, it eliminates a centralized inter-ministerial platform that balanced finance, industrial policy, and electronics manufacturing.
- **Human Resource Transition:** The deliberate decision not to advertise upcoming vacancies in the technology and services verticals indicates an administrative shift toward a streamlined, flattened ministerial hierarchy.

Conclusion

The proposed dissolution of the DCC represents a broader shift toward functional agility and minimum government, maximum governance. Removing obsolete administrative layers helps India eliminate policy paralysis, aligning regulatory frameworks with the fast-evolving digital communications architecture.

UPSC Relevance

- **GS Paper II:** Statutory, regulatory and various quasi-judicial bodies; Government policies and interventions for development in various sectors and issues arising out of their design and implementation.
- **GS Paper III:** Infrastructure (Telecommunications); Mobilization of resources; Effects of liberalization on the economy.

7. Financial Inclusion: Strengthening Rural Footprint of Public Sector Banks

Core Summary

- **Rural Mandate:** The Union Finance Ministry has directed public sector banks (PSBs) to accelerate rural expansion, specifically targeting unbanked villages with populations exceeding 3,000 to defend their rural market share from private and digital competitors.
- **Target-Driven Expansion:** Out of a targeted 576 physical bank branches mandated for large rural habitations in FY26, PSBs have successfully operationalized 511 branches, with 65 remaining in the pipeline.
- **Economic Lifelines:** Large villages act as critical regional economic hubs; physical branches remain vital in these zones for direct deposit mobilization, retail lending, and implementing Central welfare programs.
- **Low-Cost Resource Capital:** Rural markets serve as the primary source of low-cost current and savings account (CASA) deposits for state-owned lenders, while driving mandatory priority sector lending (PSL) quotas.
- **Rural Prosperity Synergy:** Rising rural income—fueled by higher Minimum Support Prices (MSP) and direct benefit transfers—creates robust structural demand for physical banking hubs to handle credit, KYC compliance, and account management.



Key Definitions

- **Financial Inclusion:** The structural process of ensuring frictionless, timely, and affordable access to formal financial products and regulated credit services for vulnerable and low-income segments of society.



- **Priority Sector Lending (PSL):** A mandatory regulatory framework prescribed by the Reserve Bank of India requiring commercial banks to allocate a specified percentage of their credit to structurally vital sectors like agriculture and MSMEs.

Constitutional & Legal Provisions

- **Article 38 & 39:** Directive Principles of State Policy directing the State to minimize income inequalities and ensure that the ownership and control of material resources subserve the common good via democratic financial access.
- **Banking Regulation Act, 1949:** Empowers the RBI and Central Government to direct commercial banking priorities, branch licensing policies, and operational mandates to meet national socioeconomic goals.

Additional Keypoints

- **Digital-Physical Hybridization:** Despite the rapid pan-India adoption of the Unified Payments Interface (UPI), physical brick-and-mortar branches remain indispensable for complex credit onboarding and direct public grievances.
- **Convergence with Rural Schemes:** Expanded banking touchpoints directly enhance the efficiency and capital absorptive capacity of welfare programs like the PM Gramin Awas Yojana and specialized livestock development missions.

Conclusion Deepening the brick-and-mortar presence of PSBs in large rural habitations forms the bedrock of sustainable financial inclusion. By bridging the digital-physical divide, state lenders can secure low-cost capital while transforming rural economic centers into self-sustaining nodes of formal credit and financial security.

UPSC Relevance

- **GS Paper II:** Government policies and interventions for development in various sectors; Welfare schemes for vulnerable sections.
- **GS Paper III:** Indian Economy and issues relating to planning, mobilization of resources, growth, and development; Inclusive growth and issues arising from it.

8. Geopolitical Realignment: Easing Sanctions and India-Iran Energy Dynamics

Core Summary

- **Bilateral Engagement:** On the sidelines of the 11th BRICS Energy Ministers' meeting held under India's 2026 chairship, the oil ministers of India and Iran held high-level talks to strengthen bilateral energy trade and expand cooperation in the strategic hydrocarbon sector.
- **Sanctions Easing:** The discussion immediately follows a breakthrough diplomatic development where the United States issued a temporary 60-day general license waiving secondary sanctions on Iranian crude oil, petrochemicals, and petroleum products.
- **Strategic Geopolitics:** The temporary relief stems from an interim peace agreement mediated by Qatar and Pakistan in Switzerland, under which Iran committed to keeping the strategic transit lines of the Strait of Hormuz free and open.
- **Energy Security:** India, which meets nearly 88% of its domestic crude oil demand via imports, is exploring the revival of imports from Iran—historically its second-largest supplier before the reimposition of comprehensive US sanctions in 2018–19.



- **Operational Hurdles:** Despite commercial interest from Indian refiners due to favorable freight economics and historical technical compliance, the short duration of the 60-day waiver and lack of permanent currency payment mechanisms present severe operational friction.

Key Definitions

- **Hydrocarbon Sector:** An economic classification encompassing industries involved in the exploration, extraction, refining, and distribution of petroleum and natural gas resources.
- **Secondary Sanctions:** Extraterritorial legal restrictions imposed by a nation targeting non-citizens and foreign companies from engaging in trade with a sanctioned sovereign state, effectively threatening disconnection from the global financial system.

Constitutional & Legal Provisions

- **Article 73:** Specifies that the executive power of the Union of India extends to all international matters and treaty implementations, anchoring the central government's exclusive domain over foreign oil procurement and diplomatic strategy.
- **Seventh Schedule (List I, Entry 14 & 25):** Vests the sovereign authority over foreign affairs, entering into treaties, and controlling regulation of strategic mineral and petroleum resources exclusively with the Parliament of India.



Additional Keypoints

- **Chabahar Port Integration:** Beyond direct energy trade, the expansion of ties with Iran is fundamentally tied to securing India's transit corridors to Central Asia and validating long-term infrastructure investments.
- **BRICS Integration:** Iran's integration into the expanded 11-member BRICS grouping alters collective bargaining paradigms, offering a structured multilateral framework to push for local-currency-based alternative trading architectures.

Conclusion

The temporary relaxation of US sanctions presents India with a brief tactical window to diversify its energy basket. However, establishing sustainable, long-term trade with Iran requires moving beyond short-term waivers toward resilient, non-dollar payment corridors that can withstand erratic shifts in global geopolitical alignments.

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:** Infrastructure (Energy security); Growth, development, and resource mobilization.



9. India's Anti-Dumping Probe Against Chinese Imports: Protecting Domestic Industry

Core Summary

- **Investigation Initiation:** India has officially initiated quasi-judicial anti-dumping investigations into the imports of three distinct products originating in China: thermal paper, Biaxially Oriented Polyamide (BOPA) film, and certain specific antioxidants.
- **Multilateral Scope:** Beyond China, the Directorate General of Trade Remedies (DGTR) has expanded the footprint of these specific product probes to include inputs arriving from South Korea, Singapore, the United States, and Thailand.
- **Industrial Overcapacity Risk:** The strategic regulatory intervention is catalyzed by mounting US-China trade tensions and massive industrial overcapacity in China, creating a high probability of predatory pricing and market flooding in India.
- **Domestic Injury Claims:** Separate complaints filed by domestic manufacturers—including Vinati Organics and JPFL Films—allege that a surge in under-priced inbound shipments is inflicting severe material injury on local manufacturing margins.
- **Two-Tiered Enforcement:** While the commerce ministry's DGTR holds the statutory authority to investigate and recommend trade defense measures, the final executive implementation of any definitive tariff lies with the Ministry of Finance.

Key Definitions

- **Anti-Dumping Duty:** A protectionist tariff imposed by a domestic government on foreign imports that it believes are priced below fair market value to create an artificial competitive edge.
- **BOPA Film:** Biaxially Oriented Polyamide film; a high-strength, puncture-resistant plastic barrier substrate utilized primarily in specialized commercial packaging industries.



Constitutional & Legal Provisions

- **Customs Tariff Act, 1975:** Section 9A provides the core statutory framework empowering the Central Government to impose anti-dumping duties on dumped articles to offset market distortions.
- **Article 286:** Restricts State taxation capabilities on imports or exports, preserving international trade regulation exclusively as a central government domain.
- **WTO Multilateral Regime:** Investigations operate under Article VI of the General Agreement on Tariffs and Trade (GATT 1994), ensuring international legal alignment.

Additional Keypoints

- **Trade Imbalance Escalation:** The probe unfolds against a skewed trade dynamic where China has emerged as India's largest trading partner in 2025-26, driving the bilateral trade deficit to an all-time high of \$112.6 billion.
- **Level Playing Field:** Trade remedies are structurally designed not as blanket protectionism, but to secure transparent, market-driven parity for local enterprises.



Conclusion

Deploying rigorous trade defense instruments against subsidized imports is crucial for India to withstand global overcapacity. Ensuring swift regulatory resolution via the DGTR allows India to defend its domestic industrial base without subverting its commitments to a rules-based international trade order.

UPSC Relevance

- **GS Paper II:** Effect of policies and politics of developed and developing countries on India's interests; Statutory, regulatory, and quasi-judicial bodies.
- **GS Paper III:** Indian Economy and issues relating to mobilization of resources, growth, development; Changes in industrial policy and their effects on industrial growth.

10. Indigenization of Defence: Netra AEW&C Achieves Final Operational Clearance

Core Summary

- **Milestone Clearance:** India's indigenous "Netra" Airborne Early Warning and Control (AEW&C) system officially received its Final Operational Clearance (FOC) certificate at the Centre for Airborne Systems (CABS) in Bengaluru.
- **Institutional Collaboration:** Developed through a multi-decade trilateral partnership involving the Defence Research and Development Organisation (DRDO), the Indian Air Force (IAF), and domestic industry partners like Bharat Electronics Limited (BEL).
- **Proven Combat Readiness:** The FOC formalizes Netra's evolution into a fully mature, combat-ready military asset; the platform previously demonstrated high operational reliability during the Balakot air strikes and Operation Sindoor.
- **Technical Integration:** Mounted on modified Embraer ERJ-145 jet airframes, the platform integrates complex sub-systems including an Active Electronically Scanned Array (AESA) radar, electronic support measures, and secure data links.
- **Strategic Autonomy:** Achieving FOC gives the IAF critical flexibility to perform software upgrades and hardware modifications locally, bypassing external foreign dependency and advancing "Atmanirbharta" in defense electronics.



Key Definitions

- **Airborne Early Warning and Control (AEW&C):** An airborne radar station and command center designed to provide long-range aerial surveillance, detect incoming missile or aircraft threats, and direct friendly fighter jets.
- **Final Operational Clearance (FOC):** The definitive certification indicating that a weapon system has successfully completed all operational trials, meets all staff qualitative requirements, and is authorized for unrestricted high-intensity combat deployment.

Constitutional & Legal Provisions

- **Seventh Schedule (List I, Entry 1 & 2):** Vests the exclusive statutory jurisdiction over the Defence of India, the armed forces, and military equipment procurement solely with the Union Parliament.



- **Defence Acquisition Procedure (DAP):** The regulatory framework that prioritizes the "Buy (Indian-IDDMM)" category to promote the indigenous design, development, and manufacturing of strategic military hardware.

Additional Keypoints

- **Network-Centric Warfare:** Netra functions as a force multiplier by transmitting real-time situational awareness directly to ground-based command systems and integrated air defense networks.
- **Next-Generation Expansion:** Following the success of Netra Mk 1, the Cabinet Committee on Security has cleared projects to develop the upgraded Netra Mk 2 platform utilizing larger commercial jet platforms.

Conclusion

The grant of FOC to the Netra AEW&C system marks a monumental breakthrough in India's aerospace engineering and defense indigenization. By establishing a robust, indigenous "eye in the sky," India secures long-range surveillance capabilities and strengthens its tactical stance along its borders amid complex regional security environments.

UPSC Relevance

- **GS Paper III:** Security challenges and their management in border areas; Science and Technology-developments and their applications and effects in everyday life; Indigenization of technology and developing new technology.

11. Cooperative Federalism: Proposed Tri-State Committee for Tungabhadra River Resolution

Core Summary

- **Institutional Arbitration:** The Union Government has proposed the constitution of a high-level committee to resolve long-standing water-sharing and infrastructure disputes among three major southern riparian states: Telangana, Andhra Pradesh, and Karnataka.
- **Riparian Consensus:** Announced during the joint inauguration of 33 newly replaced spillway crest gates of the Tungabhadra Dam, the Chief Ministers of all three states pledged executive cooperation to find a permanent solution.
- **Deficit Allocations:** Telangana highlighted a severe operational gap, revealing that despite an official allocation of 15.9 TMCFT via the Rajolibanda Diversion Scheme (RDS), structural inefficiencies restrict its actual draw to just 5 to 6 TMCFT.
- **Siltation Bottlenecks:** Heavy sediment and silt accumulation on the riverbed have significantly compromised reservoir storage and canal diversion capacity, prompting calls to enforce dormant 2004 Expert Committee recommendations.
- **Infrastructure Modernization:** While states have deposited dedicated funds (such as Telangana's ₹59 crore for RDS canal modernization), administrative delays in launching essential construction phases require active central intervention.

Key Definitions

- **Riparian State:** A sovereign state whose territory is situated adjacent to or is intersected by a natural river or watercourse, granting it legal rights to utilize its waters.



- **TMCFT (Thousand Million Cubic Feet):** A standard unit of measurement used in India to quantify large volumes of water stored in reservoirs or managed in river basins.

Constitutional & Legal Provisions

- **Article 262:** Vests exclusive power in Parliament to adjudicate disputes relating to the waters of inter-state rivers or river valleys, explicitly barring the jurisdiction of the Supreme Court if mandated by law.
- **Inter-State River Water Disputes Act, 1956:** The statutory framework enabling the Centre to constitute tribunals and high-level committees to adjudicate water conflicts when requested by state governments.
- **Seventh Schedule (List I, Entry 56):** Empowers the Union to regulate and develop inter-state rivers to the extent declared by Parliament to be expedient in the public interest.

Additional Keypoints

- **Strengthening the Tungabhadra Board:** States have formally requested that the existing Tungabhadra Board be structurally empowered under the Central Water Commission (CWC) to ensure neutral monitoring and data collection.
- **National Desilting Policy:** The Ministry of Jal Shakti indicated that resolving the Tungabhadra crisis aligns with plans to develop a nationwide framework for desilting major domestic reservoirs to restore lost capacities.

Conclusion

The proposal for a high-level tri-state committee exemplifies the application of cooperative federalism in managing natural resources. By addressing technical vulnerabilities like siltation alongside legal entitlements, the Centre can transform volatile political disputes into managed, sustainable engineering solutions.

UPSC Relevance

- **GS Paper II:** Functions and responsibilities of the Union and the States, issues and challenges pertaining to the federal structure; Statutory, regulatory, and quasi-judicial bodies.
- **GS Paper III:** Infrastructure (Water Resources); Conservation, environmental degradation, and resource management.

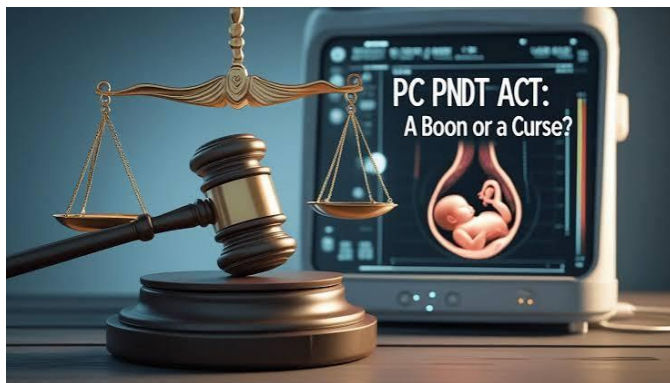
12. Balancing Regulation and Access: The Case for Reforming India's PCPNDT Act

Core Summary

- **Statutory Rigidity:** The Pre-Conception and Pre-Natal Diagnostic Techniques (PCPNDT) Act, 1994, penalizes moving ultrasound devices outside registered facilities with non-bailable imprisonment. This prevents the deployment of portable machines for doorstep cancer screenings.
- **Unintended Consequences:** While introduced to curb female foeticide and declining child sex ratios, restrictions have inadvertently caused families to experience a 25% higher mortality rate among firstborn girls due to deflated parental health investment.
- **Persistent Misuse:** Despite decades of strict legal prohibition, covert sex-selective practices persist. This was underscored by the discovery of an organized cross-state illegal prenatal sex determination network in Karnataka in October 2025.



- **Technological Mismatch:** The Act fails to distinguish between different use cases of ultrasound. Modern high-frequency linear probes used for breast cancer detection cannot be technically utilized for fetal sex determination, yet face identical bans.
- **Artificial Intelligence Synergy:** Integrating AI with handheld ultrasound systems enables automated pattern recognition for detecting suspicious lesions with high accuracy. This allows frontline workers to execute safe, purpose-specific imaging without risk of fetal misuse.



Key Definitions

- **PCPNDT Act:** A stringent regulatory framework enacted to prohibit prenatal sex selection and regulate genetic clinics or ultrasound centers to stop the selective abortion of female fetuses.
- **High-Frequency Linear Probe:** A specialized medical imaging transducer optimized for high-resolution evaluation of superficial structures like breast lumps, incapable of obstetric sex determination.

Constitutional & Legal Provisions

- **Article 21:** Implies the Right to Health and timely diagnostic care. The current restrictions under the PCPNDT Act create a barrier to early cancer diagnosis for rural women, impacting their fundamental right to life.
- **Article 15(3):** Empowers the State to make special provisions for women and children, anchoring the original welfare spirit of the PCPNDT Act against gender discrimination.

Additional Keypoints

- **Rural Diagnostics Deficit:** Nearly 70% of India's population resides in rural areas where access to specialist radiologists and diagnostic infrastructure remains heavily skewed and uneven.
- **Chilling Effect:** The fear of criminal prosecution for minor administrative errors has created a chilling effect on legitimate medical service provisions and healthcare outreach.

Conclusion

The PCPNDT Act requires a urgent, nuanced amendment to differentiate between obstetric imaging and non-fetal diagnostic probes. Safeguarding legal frameworks with AI-enabled restrictions will expand community-based oncology screenings without compromising the fight against gender discrimination.

UPSC Relevance

- **GS Paper II:** Government policies and interventions for development in various sectors and issues arising out of their design and implementation; Welfare schemes for vulnerable sections.
- **GS Paper III:** Science and Technology-developments and their applications in everyday life and healthcare; Issues related to growth and development.