



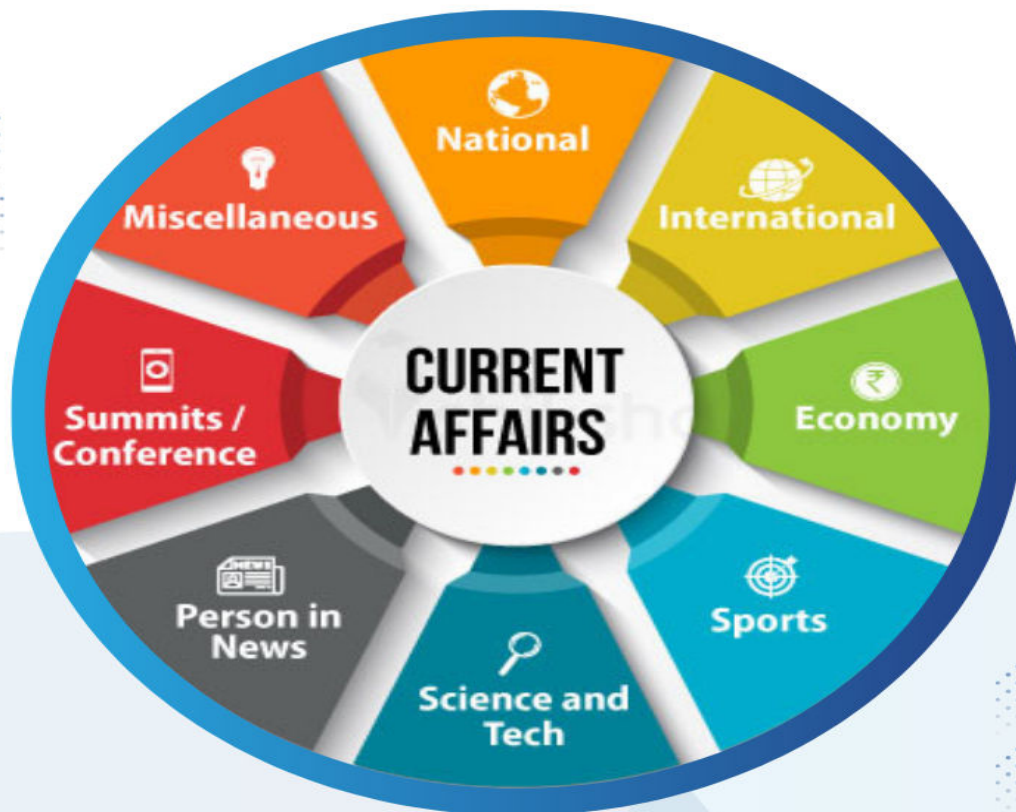
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VIDHVATH IAS KAS ACADEMY & STUDY CENTRE

DAILY CURRENT AFFAIRS

FOR UPSC CIVIL SERVICE EXAMINATION

DATE: 24/06/2026 (WEDNESDAY)



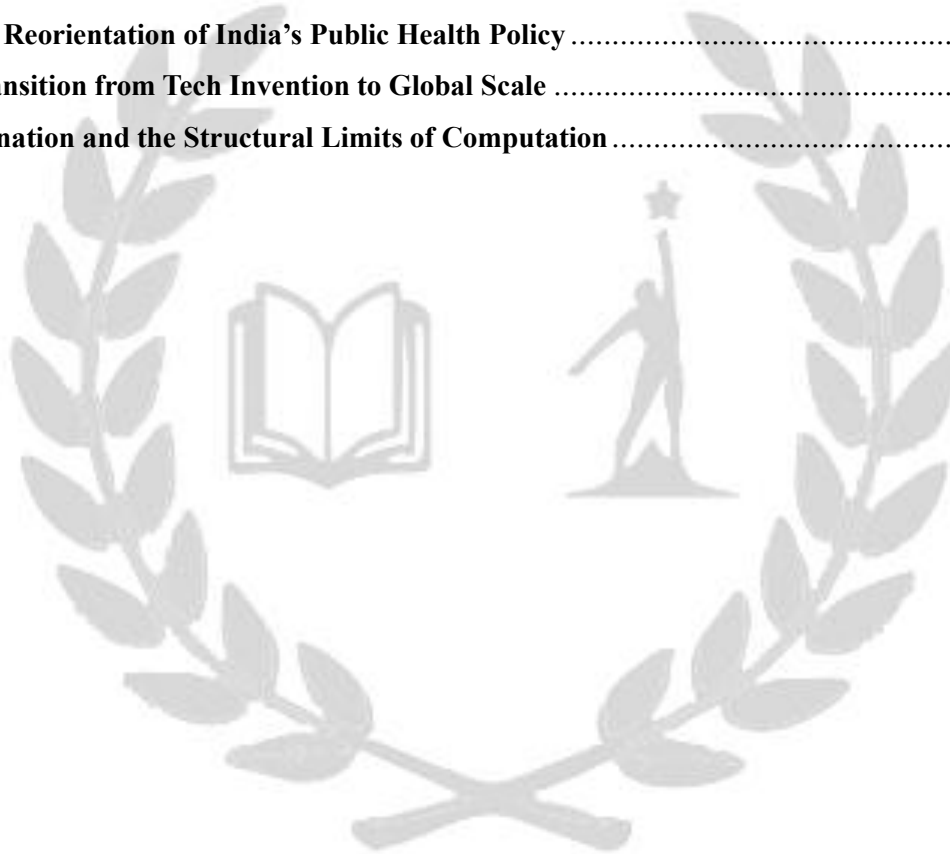
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VIDHVATH IAS ACADEMY



1. Strict FCRA Norms for Foreign Contributions

- **Targeted Restrictions:** NGOs must strictly adhere to specific activity lists laid down for five categories: social, economic, educational, cultural, and religious.
- **Geographical & Financial Segmentation:** Organizations must pay separate fees for each category and State/UT of operation, moving away from a single, unified FCRA registration fee.
- **Enhanced Disclosure Mandates:** Mandatory disclosure of websites, social media accounts, publications (books, magazines, articles), and precise geographical program scopes has been instituted.
- **Expanded Accountability:** The definition of a "key functionary" now extends beyond directors to include trustees, partners, governing body members, and the *Karta* of a Hindu Undivided Family.
- **Foreign National Restrictions:** Associations with foreign nationals (excluding PIOs) as key functionaries are ordinarily ineligible for registration without specific Central government approval.
- **Compliance Timeline & Penalty:** Existing registrations must comply within one year, and non-compliance attracts a minimum penalty of ₹1 lakh.

Key Terms & Legal Provisions

- **FCRA, 2010:** Enacted to regulate the acceptance and utilization of foreign hospitality or funds by individuals or associations to safeguard national interest.
- **Key Functionary:** Broadened definition encompassing anyone exercising management control, ensuring granular liability for organizational actions.
- **Article 19(1)(c):** Constitutional right to form associations, subject to "reasonable restrictions" under Article 19(4) like public order and the sovereignty of India.

UPSC Relevance

- **GS Paper II:** Governance, Role of NGOs, SHGs, various groups and associations, and Statutory, Regulatory, and quasi-judicial bodies.
- **GS Paper III:** Internal Security, challenges to internal security through communication networks, and the role of external state and non-state actors.

Funding check

Under the fresh changes to Rules of the Foreign Contribution Regulation Act, all NGOs are required to disclose specific activities and geographical scope of their programmes to receive contributions under 5 permitted categories:



 EDUCATIONAL ■ Schools, colleges, and libraries ■ Scholarships ■ Research institutions and think tanks ■ Civic-awareness and constitutional-rights programmes	 ECONOMIC ■ Livelihood generation ■ Skill development ■ Agricultural sectors ■ Entrepreneurship and micro-enterprises ■ Financial and digital inclusion	 RELIGIOUS ■ Places of worship ■ Religious education ■ Pilgrim services ■ Meditation programmes ■ Preservation of religious traditions
 SOCIAL ■ Public health ■ Rehabilitation ■ Sanitation and nutrition ■ Disaster relief	 CULTURAL ■ Preservation of Indian arts and languages ■ Museums, archives, and cultural festivals ■ Heritage conservation	

Conclusion

The structural tightening of the FCRA framework reflects the state's proactive stance on financial transparency and internal security. While these rules prevent the diversion of foreign funds into unauthorized or anti-national activities, they demand enhanced compliance capabilities from the civil society sector, shifting the operational landscape toward absolute transparency and localized accountability.

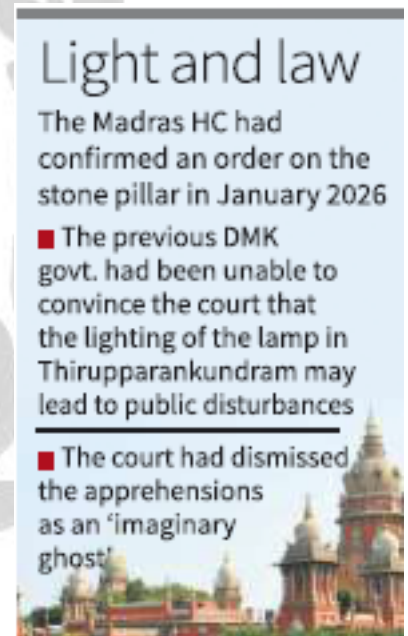


2. Thirupparankundram Hill Lamp Lighting Dispute

- **State vs. Judiciary Appeal:** The Tamil Nadu government led by Chief Minister C. Joseph Vijay has approached the Supreme Court against a Madras High Court directive concerning the lighting of a lamp on the Thirupparankundram hill in Madurai.
- **Core High Court Order:** A Division Bench confirmed a Single Judge order directing the Subramaniya Swamy Temple management to light the *Karthigai Deepam* at a stone pillar (*deepathoon*) located atop the hill, which happens to be near a local dargah.
- **Law and Order Apprehensions:** The State government argued that lighting the lamp at this specific sensitive location could trigger communal tensions and disrupt public peace in the area.
- **Judicial Rejection of State Fears:** The High Court dismissed the State's security apprehensions as an "imaginary ghost," noting that public disturbances would only occur if sponsored or permitted by the State machinery itself.
- **Duty of administration:** The court maintained that regulating a few individuals to light a lamp and allowing peaceful worship is an eminently manageable administrative task rather than an impossible security threat.

Key Terms & Constitutional Provisions

- **Karthigai Deepam:** A traditional festival of lights celebrated predominantly by Tamil Hindus during the Tamil month of *Karthigai*.
- **Article 25:** Guarantees freedom of conscience and the right to freely profess, practice, and propagate religion, subject to public order, morality, and health.
- **Article 26:** Confers the right to manage religious affairs, including managing properties owned by religious institutions like Devasthanams.
- **Public Order:** A state subject under the Seventh Schedule of the Constitution, placing the primary responsibility of maintaining peace on the State government.



UPSC Relevance

- **GS Paper I:** Indian Culture (Festivals and regional traditions) and Communalism vs Secularism.
- **GS Paper II:** Separation of Powers between the Judiciary and the Executive, and Government policies affecting religious harmony.

Conclusion

The dispute highlights the recurring delicate balance between preserving historical religious practices under Article 25 and the executive's prerogative to maintain public order. While the judiciary emphasizes that administrative capacity must overcome communal sensitivities to protect religious freedoms, the state's appeal to the apex court underscores the complexities of managing shared sacred spaces without triggering societal friction.



3. Transition from MGNREGA to VB-G RAM G Scheme

- **Replacement of MGNREGA:** The Central government has introduced the Viksit Bharat–Guarantee for Rozgar and Ajeevika Mission Gramin (VB-G RAM G) Act, 2025, completely repealing and replacing the two-decade-old MGNREGA framework.
- **Federal Allocation Concerns:** Himachal Pradesh has flagged severe concerns over a significant reduction in allocated person-days, dropping from approximately 395 lakh person-days in 2024-25 to 250 lakh person-days for 2025-26 under the new normative allocation system.
- **Inadequate Wage Structure:** The proposed daily wage rates of ₹247 for non-tribal areas and ₹309 for tribal regions have been deemed insufficient by the State given its high cost of living, inflation, and challenging hilly terrain.
- **Mandatory State Notification:** The Centre has mandated that all States notify the VB-G RAM G scheme within a strict timeframe to remain eligible for subsequent central budgetary provisions.
- **Shift to Predetermined Ceilings:** The state administration has strongly cautioned against restricting rural employment through pre-determined funding limits, emphasizing that work allotment must remain dynamic and strictly need-based.
- **Socio-Economic Threat:** The state estimates that the transition could jeopardize the livelihood and income stability of nearly 12 lakh rural workers across Himachal Pradesh due to restricted person-day targets.

Key Terms & Constitutional Provisions

- **VB-G RAM G Act, 2025:** A statutory welfare framework that raises the employment guarantee from 100 to 125 days per household, but replaces the demand-driven funding model with pre-calculated "normative allocations."
- **Normative Allocation:** A central funding mechanism where financial resources are capped beforehand based on a composite development index, leaving any expenditure overruns to be borne entirely by the State.
- **Article 21 & Article 41:** The right to livelihood as part of the Right to Life, and the Directive Principle of State Policy directing the State to secure the right to work within its economic capacity.



UPSC Relevance

- **GS Paper II:** Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes; issues relating to development and management of Social Sector/Services.
- **GS Paper III:** Issues related to direct and indirect farm subsidies and minimum support prices; Public Distribution System; Indian Economy and issues relating to planning, mobilization of resources, growth, development, and employment.



Conclusion

The shift toward the VB-G RAM G architecture underlines a policy pivot from open-ended, demand-driven welfare toward centralized, asset-driven normative spending. While the statutory increase to 125 days strengthens the socio-economic safety net on paper, the introduction of fiscal caps poses structural challenges for states with unique geographical constraints, highlighting the critical need for cooperative federalism in fine-tuning grassroots economic security.

4. CAG Report on Kerala State Finances (2024-25)

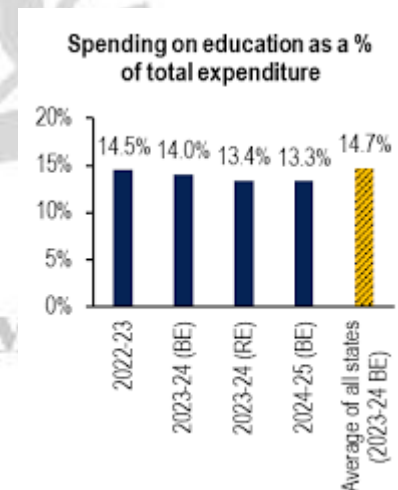
- **Divergent Growth and Revenue:** Kerala's nominal Gross State Domestic Product (GSDP) expanded by 9.97% in 2024-25, yet this economic growth failed to translate into proportional tax collections, leaving revenue receipts at a decadal low growth of just 0.30%.
- **Stagnant Tax Buoyancy:** The state's financial health suffered due to a steep deceleration in the growth of its revenue receipts, plunging systematically from 19.49% in 2021-22 to a negative decline of 6.21% in 2023-24 before flattening out.
- **Inordinate Committed Expenditure:** Rigid administrative overheads—comprising salaries, state pensions, and mandatory interest payments—consumed ₹98,563.59 crore, locking up nearly 79% of the state's total revenue receipts and crippling developmental fiscal flexibility.
- **Irregular Treasury Resumptions:** The report severely admonishes the executive practice of temporarily transferring public monies parked in Treasury Savings Bank (TSB) accounts, including ₹262.06 crore from the Chief Minister's Disaster Relief Fund (CMDRF), into the Consolidated Fund.
- **Understatement of Fiscal Deficits:** The temporary diversion of non-government public donations and public utility funds into the state's main operational account acted as an accounting window-dressing that artificially understated the true scale of the state's revenue and fiscal deficits.
- **Call for Expenditure Rationalization:** The federal auditor has stressed the urgent implementation of strategic expenditure reforms, including prudent management of public pay structures and refined welfare targeting, to avoid structural fiscal stress.

Key Terms & Constitutional Provisions

- **Comptroller and Auditor General (CAG):** A constitutional authority appointed under Article 148, responsible for auditing all receipts and expenditures of the Central and State governments.
- **Article 151:** Mandates that the CAG reports relating to the accounts of a State must be submitted to the Governor, who causes them to be laid before the State Legislature.
- **Consolidated Fund of the State:** Constituted under Article 266(1), it accumulates all revenues received, loans raised, and monies received by the state government; no appropriation can be made out of it without legislative sanction.
- **Committed Expenditure:** Unavoidable, non-discretionary operational commitments of a government that cannot be easily scaled down in the short term.

UPSC Relevance

- **GS Paper II:** Constitutional Bodies (Appointment, powers, functions, and responsibilities of CAG); Governance and transparency in state financial administration.





- **GS Paper III:** Indian Economy and issues relating to planning, mobilization of resources, growth, development, and fiscal policy; budgeting systems and federal fiscal discipline.

Conclusion

The CAG's diagnostic assessment of Kerala's budget management emphasizes the limits of a high-consumption development model unmatched by dynamic tax buoyancy. The irregular routing of public funds to manage budgetary margins compromises accountability. To secure long-term fiscal stability, structural correctives must reorient spending away from rigid committed expenditures toward asset-creating capital investments.

5. Judicial Scrutiny of MSC Elsa 3 Marine Pollution

- **Judicial Reprimand on Inaction:** The Kerala High Court has strongly questioned central and state agencies for the lack of tangible containment measures over the past year regarding the environmental and safety risks of the sunken cargo vessel MSC Elsa 3.
- **Scale of Seabed Debris:** Out of over 600 containers originally onboard, approximately 475 containers remain trapped inside the wreck, 96 are scattered across a 1.5-mile radius on the seabed, and 72 have washed ashore across Kerala and Tamil Nadu.
- **Severe Ecological and Export Risk:** The court highlighted the catastrophic threat of marine plastic pollution from microplastic nurdles. Marine life ingesting these toxins could severely damage local food chains and collapse regional seafood exports.
- **Hazardous Cargo Exposure:** Serious alarms were raised over specific containers carrying dangerous goods like calcium carbide, sulfur, and fuel oil. Loose containers, held only by cargo straps, are vulnerable to being dislodged by strong monsoon waves.
- **Discrepancy in Technical Reporting:** The Division Bench pointed out a significant mismatch between the official environmental status reports and the claims made by the shipping company, indicating structural gaps in monitoring.
- **Demand for Central Intervention:** The High Court has mandated that the Ministry of Environment, Forest and Climate Change (MoEFCC) and the Directorate General of Shipping submit a comprehensive, deep-sea assessment and an actionable intervention blueprint.



Key Terms & Legal Provisions

- **Plastic Nurdles:** Pre-production plastic pellets that act as toxic vectors in marine environments, bioaccumulating pollutants when ingested by aquatic organisms.
- **Admiralty (Jurisdiction and Settlement of Maritime Claims) Act, 2017:** Empowers designated coastal High Courts to adjudicate maritime claims, arrest vessels, and settle liabilities arising from marine pollution and wreck removal.
- **UNCLOS (United Nations Convention on the Law of the Sea):** International framework governing maritime zones. Under Article 58(3), foreign vessels within a coastal state's Exclusive Economic Zone (EEZ) must strictly comply with its environmental laws.



UPSC Relevance

- **GS Paper II:** Statutory, regulatory, and various quasi-judicial bodies (DGS, State Pollution Control Boards); Judicial activism in environmental governance.
- **GS Paper III:** Conservation, environmental pollution, and degradation (Marine/Plastic pollution); Disaster Management (State-specific maritime disasters).

Conclusion

The MSC Elsa 3 crisis underscores India's logistical and administrative vulnerability in managing large-scale maritime ecological disasters within its EEZ. The judiciary's proactive intervention emphasizes that protecting coastal ecosystems cannot be subordinated to bureaucratic delay or corporate negligence, underscoring the urgent need for a dedicated, institutionalized national maritime disaster response mechanism.

6. Monsoon Deficit and Kharif Crop Contingency Plan

- **Severe Rainfall Deficit:** India is experiencing a significant 43% monsoon rainfall deficit in the early phase, threatening the sowing cycle and yield of crucial Kharif crops across the nation.
- **Tiered District Classification:** The Agriculture Ministry has mapped 315 vulnerable districts based on drought susceptibility; this includes 111 high priority districts (irrigation cover $\leq 25\%$), 76 medium priority districts (25-50% irrigation), and 128 low priority districts.
- **Formulation of Contingency Plans:** The Union Agriculture Ministry, under Shivraj Singh Chouhan, has instituted localized climate-resilient agricultural contingency interventions across states to mitigate production losses.
- **Climate Driver:** The dry spell in June (which typically accounts for 19% of total monsoon precipitation) is driven by a strengthening El Niño phenomenon, casting a shadow over subsequent peak monsoon months like July.
- **Shift to Resilient Millets:** To counter moisture stress, agricultural advisories are promoting short-maturity, low-water, and low-input alternative crops like Bajra (pearl millet) over water-intensive traditional crops.



Key Terms & Legal Framework

- **Kharif Crops:** Domestically cultivated crops sown during the onset of the southwest monsoon (June-July) and harvested in autumn (September-October), such as paddy, maize, and bajra.
- **El Niño:** A climate pattern characterized by the unusual warming of surface waters in the eastern tropical Pacific Ocean, which historically disrupts and weakens the Indian southwest monsoon.
- **Disaster Management Act, 2005:** Provides the statutory framework for drought management, declaration, and financial relief allocation via the National Disaster Response Fund (NDRF).

UPSC Relevance

- **GS Paper I:** Geographical features and their location-changes in critical geographical features (including water-bodies and ice-caps) and in flora and fauna and the effects of such changes (Monsoon mechanisms, El Niño).



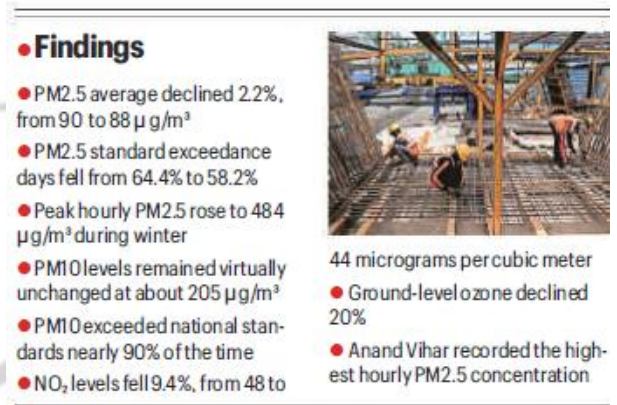
- **GS Paper III:** Major crops cropping patterns in various parts of the country; economics of animal-rearing; Food security and buffer stocks; Disaster and disaster management.

Conclusion

The escalating 43% rainfall deficit underscores the persistent vulnerability of Indian agriculture to climate variability. Transitioning from a reactive drought relief model to proactive agrarian contingency planning—focusing on micro-irrigation expansion and promoting climate-resilient coarse grains like millets—is imperative to secure national food security and sustain rural livelihoods amid intensifying macro-climatic disruptions.

7. Structural Public Health Crisis in Delhi's Air Quality

- **Persistent Baseline Hazard:** An urban air data analysis by the think tank *EnviroCatalysts* (January 1 to June 20, 2026) reveals that while seasonal gases showed minor improvements, particulate matter levels remained critically elevated, defying categorization as a mere winter emergency.
- **Massive WHO Benchmark Breaches:** Delhi failed the strict daily safety criteria established by the World Health Organization (WHO) an astonishing 99.5% of the monitored days for PM_{2.5}, 99.4% for PM₁₀, and 83.4% for Nitrogen Dioxide (NO₂).
- **Proximity Hotspots and 'Red Zones':** Dense transit corridors, commercial construction hubs, and industrial zones have turned into severe pollution hotspots. Areas like Anand Vihar recorded a toxic peak hourly PM_{2.5} level of 876, followed by RK Puram and Ashok Vihar.
- **Contrasting Pollutant Trends:** Average NO₂ concentrations dropped by 9.4% (from 48 to 44 and ground-level ozone fell by 20%, driven primarily by the strategic adoption of BS-VI vehicles and electric public transport.
- **Coarser Particulate Stagnation:** Coarse particulate matter (PM₁₀) remained virtually unchanged, averaging a high 205—more than double the national standard of 100—and exceeded permissible safety limits nearly 90% of the time due to construction dust and regional wind-driven sand.
- **Diurnal Inversion Spikes:** Hourly analysis showed the highest pollution spikes occurring between midnight and 9:00 AM, when heavy nighttime commercial transit emissions mix with ambient pollutants trapped close to the ground by atmospheric thermal inversion.



Key Terms & Regulatory Framework

- **PM_{2.5} and PM₁₀:** Fine and coarse inhalable particulate matter measuring less than 2.5 and 10 micrometers in diameter, respectively, capable of penetrating deep into human respiratory systems and bloodstreams.
- **Ground-Level Ozone (SO₃):** A secondary pollutant formed when Nitrogen Oxides (NO_x) and Volatile Organic Compounds (VOCs) chemically react in the presence of intense sunlight and heat.
- **National Ambient Air Quality Standards (NAAQS):** Regulatory limits set by the Central Pollution Control Board (CPCB) under the Air Act, 1981, prescribing safe limits for 12 key ambient pollutants (including 60 µg/m³ for PM_{2.5} and 100 µg/m³ for PM₁₀ over 24 hours).



UPSC Relevance

- **GS Paper II:** Government policies and interventions for development in various sectors and issues arising out of their design and implementation; Issues relating to development and management of Social Sector/Services relating to Health.
- **GS Paper III:** Conservation, environmental pollution, and degradation; Environmental Impact Assessment.

Conclusion

The localized data demonstrates that vehicular emission standards like BS-VI and electric vehicle deployment are successfully lowering gaseous precursors like NO₂. However, the near-total failure to meet global WHO health guidelines underscores that Delhi's air quality crisis cannot be solved through emergency winter curbs alone. Addressing it requires year-round, structural enforcement targeting dust suppression, nighttime transport logistics, and airshed-level urban planning.

8. 16th BRICS NSAs' Meeting and West Asian Geopolitics

- **Cautious Optimism on US-Iran MoU:** India's National Security Advisor (NSA) Ajit Doval welcomed the recent Memorandum of Understanding (MoU) between the United States and Iran, stating it would significantly stabilize global energy security.
- **Strategic Reopening of the Strait of Hormuz:** The pact facilitates the operational opening of the vital Strait of Hormuz, a critical global maritime chokepoint essential for unhindered oil and gas transit to energy-dependent nations like India.
- **Intra-BRICS Geopolitical Tensions:** The summit in New Delhi witnessed a heated diplomatic exchange between Iran and the UAE, with Tehran accusing Abu Dhabi of allowing its territory to be used as a platform for US and Israeli military strikes against Iranian infrastructure.
- **Call for Reformed Multilateralism:** Chinese Foreign Minister Wang Yi and other delegates emphasized upholding the "banner of multilateralism," firmly opposing unilateral sanctions and protectionism amid weakening global conflict-resolution instruments.
- **Focus on Non-Traditional Security Threats:** Deliberations shifted toward transnational risks, highlighting how cyber threats, weaponized artificial intelligence, and innovative disruptive technologies are outpacing conventional state defense systems.
- **Deepening BRICS Security Architecture:** Prime Minister Narendra Modi emphasized that in a fractured global landscape, BRICS holds a pivotal role in institutionalizing intelligence sharing to counter terrorism, secure supply chains, and mitigate climate-induced instability.



Key Terms & Strategic Concepts

- **BRICS:** A major plurilateral grouping comprising Brazil, Russia, India, China, and South Africa, which has expanded to include key West Asian powers like Iran and the UAE, representing emerging global economies.



- **Strait of Hormuz:** A narrow, strategically vital waterway connecting the Persian Gulf with the Gulf of Oman and the Arabian Sea, through which approximately one-fifth of the world's total petroleum consumption passes.
- **Non-Traditional Security:** Challenges to the survival and well-being of peoples and states that arise primarily out of non-military sources, such as climate change, cyber warfare, resource scarcity, and transnational terrorism.

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 (West Asian geopolitics, US-Iran relations).
- **GS Paper III:** Security challenges and their management in border areas; Linkages of organized crime with terrorism; Cyber security.

Conclusion

The 16th BRICS NSAs' meeting highlights India's delicate balancing act within an expanding bloc that now contains competing West Asian rivals. While the diplomatic opening of the Strait of Hormuz directly advances India's macroeconomic interests by stabilizing oil supply lines, the persistent friction between members like Iran and the UAE underlines the structural challenges BRICS faces in forging a unified security architecture without getting bogged down by internal regional rivalries.

9. Lipulekh Pass for Cross-Border Trade

- **Strategic Reopening after Seven Years:** The historic Lipulekh Pass, a vital cross-border trade route situated at an altitude of 17,000 feet, has officially set to reopen for trade after remaining suspended since 2019 due to the pandemic and bilateral military standoffs.
- **Geopolitical Trijunction:** Located at the strategic trijunction of India, Nepal, and China (Tibet Autonomous Region), the pass serves as a crucial transit corridor and the primary route for the annual Kailash Mansarovar Yatra.
- **Historical Trade Evolution:** Formalized under the 1954 Panchsheel Agreement, trade via Lipulekh was shut after the 1962 war, resumed through a bilateral protocol in 1992, and faced another closure in 2019 following regional border skirmishes.
- **Socio-Economic Lifeline:** The revival of this border trade acts as an economic lifeline for remote tribal communities in Uttarakhand's Pithoragarh district, particularly villages like Gunji and Dharchula, who rely on exporting indigenous goods like pashmina, carpets, and jaggery.
- **Territorial Disputed Context:** The region surrounding the pass is a subject of a sensitive border dispute, with Nepal claiming sovereignty over the Lipulekh, Kalapani, and Limpiyadhura enclaves under its revised political maps.

Key Terms & Treaty Frameworks

- **Lipulekh Pass:** A Himalayan pass connecting the Kumaon region of Uttarakhand, India, with the old trading town of Taklakot (Purang) in Tibet.
- **Treaty of Sugauli (1816):** An agreement signed between the East India Company and the Kingdom of Nepal establishing the Kali River as Nepal's western boundary; divergent interpretations of the river's origin drive the current Kalapani territorial dispute.



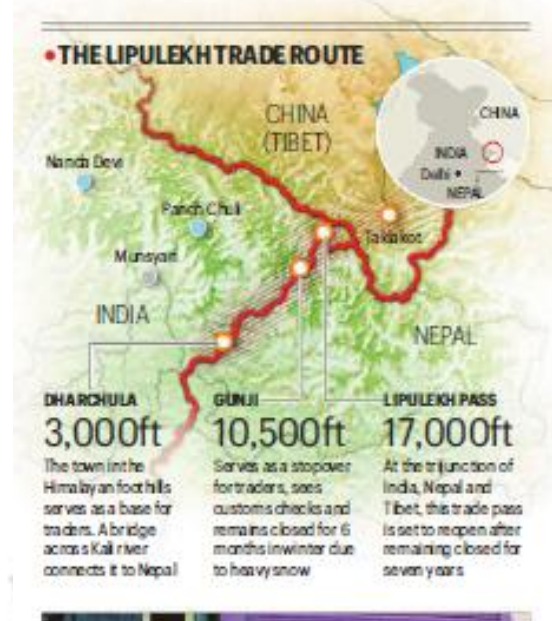
- **Panchsheel Agreement (1954):** The Five Principles of Peaceful Coexistence signed between India and China, which historically regulated border trade, transit routes, and religious pilgrimages across the Tibetan frontier.

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; Border management institutional mechanisms.
- **GS Paper III:** Security challenges and their management in border areas; Economic development of remote border infrastructure.

Conclusion

The reopening of the Lipulekh Pass represents a calculated step toward economic normalization and local livelihood restoration along the Line of Actual Control (LAC). While the resumption of border trade signals functional pragmatism between New Delhi and Beijing, the overlapping territorial claims by Kathmandu underscore the persistent need for institutionalized, trilateral diplomatic engagement to ensure long-term security, border stability, and smooth transit operations in the sensitive central Himalayan sector.



10. Structural Reorientation of India's Public Health Policy

- **Erosion of Institutional Mandate:** The re-branding of primary healthcare tiers (Sub-Centres, PHCs, and CHCs) under the Ayushman Bharat Health and Wellness Centres (HWCs) umbrella has created operational ambiguity, diluting the historically evolved distinct functions of these grassroots delivery institutions.
- **Paradigm Shift in Health Outcomes:** Public health focus has systematically veered away from objective population-level epidemiological outcomes toward the fluid, individualistic, and deeply subjective concept of "personal wellness."
- **Individualization of Structural Flaws:** Unlike traditional health promotion which acknowledges broader social, economic, and environmental determinants, the wellness-centric narrative places primary liability on the individual, over-simplifying systemic infrastructural gaps.
- **Limitations of Digital Fixes:** The Ayushman Bharat Digital Health Mission (ABDM), despite receiving an annual allocation of ₹300 crore, prioritizes data repository creation (ABHA cards) over the expansion of physically accessible and affordable healthcare infrastructure.
- **Inherent Mismatch with Public Needs:** Contemporary public health flagship initiatives focus heavily on information monitoring and lifestyle modifications rather than redressing the immediate, felt needs of the populace—chiefly affordable curative care.

Key Terms & Constitutional Provisions

- **Universal Health Coverage (UHC):** A global healthcare framework ensuring all individuals receive necessary promotive, preventive, curative, and rehabilitative services without suffering catastrophic out-of-pocket financial hardship.



- **Health Promotion vs Wellness:** Health promotion is a structural, community-oriented strategy addressing broader socio-economic conditions, whereas wellness is a subjective, consumer-centric focus centered on individual lifestyle choices.
- **Article 21 and Article 47:** While Article 21 guarantees the Right to Life (encompassing health), Article 47 under the Directive Principles mandates the State to regard the raising of the level of nutrition, standard of living, and the improvement of public health as among its primary duties.

UPSC Relevance

- **GS Paper II:** Issues relating to the development and management of Social Sector/Services relating to Health, Education, Human Resources; Government policies and interventions for development in various sectors.
- **GS Paper III:** Indian Economy and issues relating to planning, mobilization of resources, growth, development, and maximizing the benefits of the demographic dividend.

Conclusion

India's current healthcare policy matrix demonstrates a tendency to substitute structural, physical infrastructure expansion with digital frameworks and individualistic wellness tracking. While digital mapping and preventive awareness are supplementary tools, they cannot act as substitutes for concrete institutional provisioning. To fully capitalize on its demographic dividend, public policy must realign with ground realities by prioritizing equitable, state-backed curative infrastructure over administrative data generation.

11. India's Transition from Tech Invention to Global Scale

- **Historical Scale Deficit:** India historically anticipated transformative technologies early (e.g., Semiconductor Complex Limited in the 1970s and ECIL in 1967) but failed to translate scientific capabilities into globally dominant commercial manufacturing empires like Taiwan or South Korea.
- **Institutional vs Commercial Focus:** Early pioneering innovations, such as the 1998 Simputer, remained institutional prototypes or public-sector strategic achievements rather than scalable consumer products due to a lack of mature venture capital, supply chains, and market integration.
- **Ecosystem Models of Success:** Sectors like pharmaceuticals, the PARAM supercomputing program, and digital public infrastructure (UPI) demonstrate that true technological leadership is achieved when platforms are intentionally designed for nationwide and global scalability.
- **Democratizing Artificial Intelligence:** Following global shifts toward cost efficiency (e.g., DeepSeek), India's AI trajectory must leverage its software prowess to build low-cost, energy-efficient, and ubiquitous language models that democratize access to intelligence.
- **Frontier Frontiers and Frugal Innovation:** Building on the cost-effective successes of Chandrayaan and Mangalyaan, India must lead futuristic paradigms, including space-based solar-powered data centers, orbital computing infrastructure, and practical quantum applications.





Key Terms & Regulatory Frameworks

- **Frugal Innovation:** The process of reducing the complexity and cost of a good and its production while maintaining world-class functional efficiency.
- **Digital Public Infrastructure (DPI):** Open, interoperable, and scalable digital platforms—such as identity systems or payment rails—that drive public and private sector innovation at a societal scale.
- **National Quantum Mission (NQM):** A statutory central initiative targeting the seeding, nurturing, and scaling up of scientific and industrial R&D in quantum technology to create a robust economic ecosystem.

UPSC Relevance

- **GS Paper II:** Government policies and interventions for development in various sectors and issues arising out of their design and implementation; Growth and institutional mechanisms of public sector enterprises.
- **GS Paper III:** Science and Technology-developments and their applications and effects in everyday life; Achievements of Indians in science & technology; Indigenization of technology and developing new technology (Semiconductors, AI, Space).

Conclusion

India's historical tech trajectory proves that invention without industrial scaling limits global competitiveness. As the nation stands at a new technological inflection point spanning AI, quantum computing, and space engineering, policies must pivot from merely celebrating scientific milestones to aggressively financing and nurturing globally viable commercial ecosystems. The future belongs not just to the first to invent, but to the best to scale.

12. AI Hallucination and the Structural Limits of Computation

- **The Hallucination Dilemma:** In Artificial Intelligence (AI), a model "hallucinates" when it generates contextually plausible and fluent responses that are factually incorrect, such as fabricating legal precedents, academic citations, or scientific data.
- **The Temperature Trade-off:** Large Language Models (LLMs) operate on statistical probabilities rather than structured databases. A higher "temperature" setting encourages adventurous, creative word choices, but simultaneously increases the incidence of hallucinations.
- **Statistical and Theoretical Inevitability:** Recent academic research indicates that hallucinations are not temporary software bugs but a structural inevitability of current transformer architectures, where models are optimized to predict the next word rather than admit ignorance.
- **Mathematical Limits of Computation:** Drawing upon Kurt Gödel's Incompleteness Theorems and Alan Turing's Halting Problem, researchers argue that no computable system can ever achieve universal accuracy, proving fundamental boundaries to machine-driven intelligence.





- **The Creativity Link:** A machine completely scrubbed of errors risk being stripped of emergent intelligence and creative surprise. While humans also "hallucinate" via imagination, society manages this through verification mechanisms like scientific experimentation and peer review.

Key Terms & Theoretical Frameworks

- **Large Language Models (LLMs):** Deep learning algorithms trained on massive datasets that utilize probabilistic calculations to predict, generate, and analyze natural language.
- **Gödel's Incompleteness Theorems:** Foundational mathematical logic stating that within any consistent formal system, there are propositions that can neither be proven nor disproven.
- **Turing's Halting Problem:** A proof in computer science demonstrating that a general algorithm cannot exist to determine whether any arbitrary program will finish running or run forever, establishing the limits of computability.

UPSC Relevance

- **GS Paper III:** Science and Technology-developments and their applications and effects in everyday life; Awareness in the fields of IT, Space, Computers, Robotics, and Artificial Intelligence; Ethical and structural challenges of emerging technologies.

Conclusion

The intrinsic link between machine creativity and hallucination redefines the governance framework required for advanced technology. Rather than pursuing an engineering impossibility of zero-error models, state policy and regulatory frameworks must pivot toward building robust external institutions of verification. For India to harness AI safely in governance, law, and healthcare, establishing automated guardrails and multi-tiered human-in-the-loop validation systems is paramount.

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