



Dr. SURESH KUMAR GINDI SIR

Dr. GINDI'S IAS ACADEMY

DAILY CURRENT AFFAIRS

COVER ALL IMPORTANT CURRENT UPDATES
FROM TH, IE, PIB, MINT

JUNE 11, 2026



Dr. GINDI'S I.A.S. ACADEMY
Civils & Competitive Careers
TRANSFORMING ASPIRANTS INTO ACHIEVERS

A/C CAMPUS

Table of Contents

DAILY CURRENT AFFAIRS	2	7. Institutional Gaps in Reporting Industrial Accidents	8
1. Taiwan Tests HIMARS Rockets	2	8. Structural Shifts and Realities of India's Net FDI Decline	9
2. US-backed Ebola Facility Triggers Crisis in Kenya	3	9. Targeted Splitting Formula for Next Delimitation Exercise	11
3. Zojila Tunnel: Overcoming Himalayan Geotech Challenges	4	10. Floating Solar Potential in India: Bypassing the Land Constraint	12
4. Birsa Munda: Defining Adivasi Identity and Rights	5	11. US Judicial Intervention in H-1B Visa Pricing and Skilled Migration	13
5. Rising C-Section Rates in Urban India: Medicalization of Childbirth	6	12. Anthropogenic Climate Change & Global Energy Transition	14
6. Federalism and Higher Education Governance in India	7		

DAILY CURRENT AFFAIRS

1. Taiwan Tests HIMARS Rockets

- **Context of the Drill:** Taiwan's military recently conducted a live-fire military exercise in Taichung, simulating an attack by an invading Chinese force to test its newly acquired U.S.-made High Mobility Artillery Rocket Systems (HIMARS).
- **Tactical Capability & Survivability:** The exercise successfully demonstrated the system's "shoot-and-scoot" capability, which allows the launcher to fire and immediately withdraw from the position to evade enemy radar detection and subsequent counterstrikes, maximizing battlefield survivability.
- **Strategic Range & Deterrence:** Boasting an operational range of up to 300km, the HIMARS units deployed by Taiwan possess the capability to strike cross-strait military targets situated within China's southeastern coastal provinces, serving as a significant conventional deterrent against amphibious invasion forces.
- **Global Combat Precedent:** Developed by the United States, HIMARS has emerged as a cornerstone strike system in contemporary asymmetric warfare, heavily utilized by Ukrainian forces to disrupt logistics, command nodes, and heavily fortified Russian military positions.
- **Cross-Strait Geopolitics & Legal Frameworks:** The arms transfer aligns with the United States' domestic legislation under the Taiwan Relations Act (TRA) of 1979, which mandates Washington to provide Taipei with defensive arms necessary to maintain a sufficient self-defense capability, contrasting sharply with Beijing's "One China" principle.



Key Definitions & Legal Provisions

- **HIMARS:** High Mobility Artillery Rocket System; a light multiple rocket launcher developed in the late 1990s for the United States Army, mounted on a standard Army medium tactical vehicle truck frame, capable of firing guided munitions.
- **Shoot-and-Scoot:** An artillery tactic of firing at a target and then immediately moving away from the firing location to avoid counter-battery fire from the enemy.
- **Taiwan Relations Act, 1979:** A U.S. domestic law that defines the non-diplomatic relations between the U.S. and Taiwan, legally binding the U.S. to supply Taiwan with defensive weapons and maintain the capacity to resist any resort to force that jeopardizes Taiwan's security.

Conclusion: The deployment of HIMARS by Taiwan marks a significant upgrade in its asymmetric warfare capabilities, changing the tactical calculus of a cross-strait conflict. This development underscores the shifting dynamics of global security, highlighting how precision, mobile artillery can balance conventional military asymmetries.

UPSC Relevance: This topic is highly relevant for **GS Paper II (International Relations)** under bilateral, regional, and global groupings and agreements involving India or affecting India's interests, and **GS Paper III (Security)** concerning security challenges and their management in border areas, specifically regarding Indo-Pacific maritime security and India's nuanced diplomatic stance on the "One China" policy versus strategic stability.

2. US-backed Ebola Facility Triggers Crisis in Kenya

- **Geopolitical Controversy:** A diplomatic and political crisis has erupted in Kenya over a United States-backed plan to establish a 50-bed Ebola quarantine facility at the Laikipia Air Base in central Kenya, exclusively designated for isolating and observing American citizens exposed to the virus.
- **Public Backlash and Protests:** The announcement has sparked violent public demonstrations in Nanyuki, leading to clashes between citizens and law enforcement. Critics accuse Kenyan President William Ruto of bowing to Western dictates and externalizing infectious disease risks to African soil.
- **Judicial Intervention:** In response to petitions filed by civil society organizations like the Katiba Institute citing "constitutional recklessness" and a lack of public participation, Kenya's High Court temporarily suspended the facility's operationalization, ordering the government to fully disclose the bilateral agreement's terms.
- **Asymmetric Risk Management:** The crisis underscores a major policy shift by the U.S. administration, which seeks to prevent any potential Ebola cases from entering domestic U.S. territory, contrasted sharply with past outbreaks where infected American humanitarian workers were flown home for treatment.
- **Transnational Health Security Linkages:** The facility is strategically linked to the containment efforts of a critical Ebola outbreak in the Democratic Republic of Congo (DRC) and Uganda, illustrating the friction between national sovereignty, domestic biosecurity, and international health cooperation.



Key Definitions & Legal Provisions

- **Asymptomatic Quarantine:** The separation and restriction of movement of individuals who were exposed to a contagious disease but do not yet display clinical symptoms, ensuring they do not transmit the pathogen during the incubation period.
- **Biosecurity:** A strategic and integrated approach to analyzing and managing relevant risks to human, animal, and plant life and health, encompassing frameworks to counter biological threats and pandemics.

- **Public Participation (Constitutional Mandate):** A core governance principle under Article 10 of the Constitution of Kenya (2010), which legally binds the state to involve citizens in major policy decisions, especially those impacting public health and national sovereignty.

Conclusion: The controversy highlights the complex interplay of asymmetric diplomacy, global health security, and constitutional sovereignty, emphasizing that public health initiatives cannot succeed without local transparency, public trust, and strict adherence to the rule of law.

UPSC Relevance: This topic is highly significant for **GS Paper II (International Relations & Governance)** under bilateral agreements involving global powers, issues relating to the management of social sectors/Public Health, and the role of civil society and the judiciary in keeping executive overreach in check. It is also relevant for **GS Paper III (Security & Science)** regarding international biosecurity frameworks, pandemic management, and transboundary health risks affecting global stability.

3. Zojila Tunnel: Overcoming Himalayan Geotech Challenges

- **Historic Milestone & Timeline:** The strategic Zojila Tunnel achieved its final structural breakthrough on June 9, 2026, linking Kashmir's Sonamarg with Ladakh's Minamarg. Executed by NHIDCL and MEIL, the project has completed roughly 85% of its total scope and is on track for operational commissioning by February 2028.
- **Geographical and High-Altitude Scale:** Positioned at an elevation of 11578 feet above sea level, the 13.15km passage will become Asia's longest bi-directional, single-tube road tunnel. It effectively bypasses the perilous Zojila Pass on National Highway-1, drastically slashing cross-pass transit times from over 3 hours to just 15 minutes.
- **Complex Tectonic Risks:** Unlike stable rock formations elsewhere, excavation through the young, tectonically active Greater Himalayas exposes engineers to severe structural anomalies. Risks include shifting fault lines, shear zones under high stress, loose boulders, and hidden cavities filled with water from ancient ocean-floor strata forced upward.
- **Sub-Zero Logistics and Hydrological Hazards:** Construction teams faced extreme conditions with winter temperatures plunging to -30°C , inducing mechanical failure and avalanche hazards. Additionally, melting snow and massive internal water ingress required the installation of specialized drainage pipes to relieve internal mountain pressure and avoid structural collapses.
- **Advanced Engineering Methodology:** To navigate this fragile topography safely, engineers deployed the New Austrian Tunnelling Method (NATM). This approach utilizes controlled, sequential blasting, immediate structural reinforcement using shotcrete and rock bolts, and continuous geotechnical monitoring to flexibly adapt to varying rock integrity.



Key Definitions & Legal Provisions

- **New Austrian Tunnelling Method (NATM):** A modern tunneling approach where the surrounding rock mass acts as a support structure through sequential excavation,

immediate application of sprayed concrete (shotcrete), rock bolting, and real-time instrumentation.

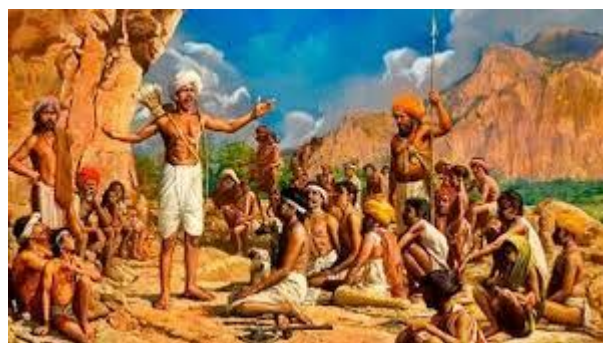
- **Shoot-and-Stabilize (Shotcrete):** A process where concrete is projected pneumatically at high velocity onto a surface to dynamically stabilize an excavated rock face.
- **Border National Highway Standards:** Legal mandates governed under the National Highways Act, 1956, and managed by NHIDCL to build, maintain, and manage socio-economically and strategically vital national highways in border terrain.

Conclusion : The breakthrough of the Zojila Tunnel represents an engineering marvel that resolves a decades-old logistical bottleneck, shifting Northern India's connectivity paradigm from seasonal accessibility to perennial integration.

UPSC Relevance: Highly critical for **GS Paper III (Infrastructure & Security)** regarding border infrastructure development, technological innovation, and its massive strategic utility for Indian Army logistics along the LAC and LoC. It is equally important for **GS Paper I (Geography)** concerning the geomorphology, fragility, and tectonic active nature of the Himalayan mountain system.

4. Birsa Munda: Defining Adivasi Identity and Rights

- **Context and Contemporary Debate:** On June 9, the death anniversary of iconic tribal leader Birsa Munda, tribal organizations in Jharkhand pledged to protect his legacy. This event coincided with contemporary political demands regarding "delisting"—the controversial proposal to remove tribal individuals who convert to Christianity or Islam from the Scheduled Tribes (ST) list.
- **The Ulgulan Movement:** Birsa Munda spearheaded the "Ulgulan" (The Great Tumult) in the late 1890s across the Chotanagpur plateau. This massive agrarian and political uprising targeted British colonial authorities and predatory "dikus" (non-tribal outsider landlords/moneylenders) who were aggressively encroaching upon traditional tribal lands and socio-cultural institutions.
- **Battle of Dombari Buru:** The rebellion reached its tragic climax in January 1899 at Dombari Buru hill in Khunti, where British forces surrounded and opened fire on thousands of Munda followers. Although the uprising was suppressed and Birsa Munda died in Ranchi Jail on June 9, 1900, Dombari Buru permanently endured as an iconic symbol of Adivasi structural resistance.
- **Legislative Aftermath:** The immense pressure generated by the Ulgulan forced the British administration to initiate critical land reforms. This culminated in the enactment of the Chotanagpur Tenancy (CNT) Act in 1908, which legally recognized traditional land tenure systems and strictly prohibited the transfer of tribal lands to non-tribals.
- **Socio-Religious Synthesis:** Revering him as "Dharti Aba" (Father of the Earth), his followers founded the "Birsait" faith. This unique movement blended elements of traditional tribal Sarnaism, Hinduism (Vaishnavism), and critique of Christian missionary exploitation,



emphasizing that true Adivasi identity is rooted deeply in community, nature, and ancestral land heritage rather than institutional religion.

Key Definitions & Legal Provisions

- **Diku:** A term utilized by the indigenous tribal communities of the Chotanagpur region to designate exploitative non-tribal outsiders, particularly landlords, traders, and moneylenders.
- **Khuntkatti System:** The traditional Munda system of joint, collective land ownership and local governance, where land cleared by the original settlers belonged to the entire clan rather than an individual.
- **Chotanagpur Tenancy (CNT) Act, 1908:** A landmark agrarian protective legislation enacted under British rule that restricts the sale and transfer of tribal lands to non-tribal entities, safeguarding indigenous land rights.
- **Constitutional Safeguards:** Article 342 governs the specification of Scheduled Tribes, while the Fifth Schedule of the Constitution provides for the administration and control of Scheduled Areas and Scheduled Tribes to prevent alienation of land.

Conclusion: The enduring legacy of Birsa Munda highlights that tribal rights are inextricably linked to autonomy, land ownership, and cultural preservation. His life underscores the historical depth of indigenous resistance against systemic marginalization, serving as a foundational blueprint for modern tribal rights movements in India.

UPSC Relevance: This topic holds immense significance for **GS Paper I (Modern Indian History & Tribal Culture)** under the sub-themes of tribal uprisings and prominent freedom fighters. It is equally vital for **GS Paper II (Polity & Governance)** concerning constitutional provisions for vulnerable sections, Scheduled Areas under the Fifth Schedule, and the evolving socio-legal debates surrounding the criteria for Scheduled Tribe status.

5. Rising C-Section Rates in Urban India: Medicalization of Childbirth

- **Alarming Statistical Surge:** According to recent National Family Health Survey (NFHS) data, Delhi witnessed a sharp increase in Caesarean section (C-section) deliveries from 23.6% in 2019-21 to 27.4% in 2023-24. This trajectory directly mirrors a growing national pattern, where the overall C-section rate climbed from 21.5% to 27.2% within the same period.
- **Public versus Private Sector Disparity:** The epidemiological data highlights a stark commercial divide in healthcare delivery. In Delhi, an overwhelming 50.9% of childbirths in private medical facilities were conducted via surgical C-sections, contrasting sharply with a more modest 19.6% recorded across public healthcare institutions.
- **Complex Socio-Medical Drivers:** Health experts attribute this structural shift to a combination of maternal age and lifestyle factors. Delayed pregnancies, with more women conceiving in their 30s, have increased the clinical incidence of gestational diabetes,



obesity, and hypertension, making surgical intervention a medical necessity in high-risk cases.

- **Patient Preferences and Defensive Medicine:** Beyond physiological indications, defensive clinical practices and social factors heavily drive the trend. There is a rising maternal demand for elective C-sections to ensure a painless, planned delivery, which physicians frequently accommodate due to commercial incentives, liability fears, or a lack of robust mid-level obstetric support.
- **Environmental and Public Health Risks:** Emergencies are also compounded by chronic environmental stressors, as prolonged exposure to poor ambient air quality is linked to preterm births and fetal growth restrictions. Public health researchers warn that arbitrary over-medicalization introduces preventable maternal risks, particularly when these practices spread to rural areas with weaker health infrastructure.

Key Definitions & Legal Provisions

- **Caesarean Section (C-Section):** A major surgical procedure where one or more incisions are made through a mother's abdomen and uterus to deliver one or more babies, ideally performed only when vaginal delivery poses a clinical risk.
- **WHO Threshold Recommendation:** The World Health Organization (WHO) advocates that ideal C-section rates should strictly range between 10% and 15% of all births at the population level, noting that rates above 10% show no statistical correlation with reduced maternal or neonatal mortality.
- **Robson Classification System:** A globally standardized clinical audit framework endorsed by the WHO that classifies all deliveries into 10 distinct groups based on obstetric characteristics to scientifically monitor, justify, and compare C-section rates.

Conclusion: The systemic escalation of non-clinical C-sections highlights critical gaps in healthcare accountability and patient awareness. Addressing this public health challenge demands immediate policy interventions, including standardized medical audits, transparent institutional disclosures, and improved midwifery models to restore the balance between medical necessity and commercial practices.

UPSC Relevance: This issue is highly significant for **GS Paper II (Governance & Public Health)** under policies concerning the management of the social sector, regulatory oversight of private healthcare institutions, and maternal health indicators. It is equally important for **GS Paper III (Economy & Science)** regarding the socio-economic implications of out-of-pocket health expenditures, medical ethics, and the systemic challenges within India's biosecurity and healthcare infrastructure.

6. Federalism and Higher Education Governance in India

- **Expressive Site of Federalism:** Higher education has transformed into a critical arena where the competing visions of the Union and State governments intersect, reflecting deeper shifts in the power distribution within Indian federalism.

- **Centralizing Trends via Policy:** The implementation of the National Education Policy (NEP) 2020, through structural reforms like four-year undergraduate programmes and the Academic Bank of Credits (ABC), represents an expansion of central influence into domains historically managed by States.
- **Financial and Regulatory Leverage:** The Union government increasingly conditions access to public funding on compliance with national agendas like the Institutions of Eminence scheme, while new frameworks under the proposed Viksit Bharat Shiksha Adhishthan Bill, 2025, raise concerns over the erosion of provincial autonomy.
- **Flashpoints of Executive Friction:** Major administrative conflicts have emerged regarding the appointment of Vice-Chancellors and the overreaching powers of Governors in Opposition-ruled states like Tamil Nadu, Kerala, Karnataka, and West Bengal.
- **Strategic and Negotiated Adaptation:** Rather than outright resistance, the federal dynamic exhibits "strategic adaptation," where States selectively implement central reforms, such as internationalization and foreign campus partnerships, to suit local political and development priorities.



Key Definitions & Legal Provisions

- **Concurrent List (Entry 25):** Inserted via the 42nd Constitutional Amendment Act, 1976, Entry 25 of List III places "Education, including technical education, medical education and universities" under the joint jurisdiction of both the Centre and States.
- **Article 254 (Repugnancy):** A constitutional provision stipulating that if a State law on a Concurrent subject conflicts with a Central law, the Central law prevails, unless the State law has received the President's assent.
- **Academic Bank of Credits (ABC):** A digital repository established to facilitate student mobility by letting them store, verify, and transfer academic credits earned across different higher education institutions nationwide.

Conclusion : The governance of higher education can no longer be evaluated merely as a sectoral policy issue; it is a fundamental pillar of India's cooperative federal architecture. Resolving these institutional frictions requires institutionalized dialogue, honoring regional socio-cultural diversity while maintaining national standards.

UPSC Relevance: This topic is highly critical for **GS Paper II (Polity & Governance)** under the headings of functions and responsibilities of the Union and the States, issues and challenges pertaining to the federal structure, and the role of statutory regulatory bodies. It also holds relevance for **GS Paper II (Social Justice)** concerning policies and interventions for development in the Education sector.

7. Institutional Gaps in Reporting Industrial Accidents

- **Recent Catalyst:** A major explosion at the Rashtriya Ispat Nigam Limited-Visakhapatnam Steel Plant (RINL-VSP) on June 8, 2026, resulted in nine fatalities, triggering standard

reactive state protocols such as ex-gratia payments and high-level probe committees rather than proactive structural safety reforms.

- **Severe Statistical Divergence:** The annual Standard Reference Notes (SRNs) reveal massive inconsistencies between data compiled by the Labour Bureau and the Directorate General Factory Advice Service and Labour Institutes (DGFASLI), indicating severe underreporting and coordination failure in workplace safety tracking.
- **Chronic Inspectorate Vacancies:** DGFASLI and state-level enforcement bodies are severely hampered by administrative shortages. Even highly industrialized provinces like Tamil Nadu lack sufficient factory inspectors to enforce basic safety compliance.
- **Low Inspection Rates:** Due to acute manpower deficits, only a small fraction of registered factories undergo safety inspections each year, creating a regulatory vacuum where hazardous operational violations go entirely undetected until a disaster occurs.
- **State-Level Reporting Lapses:** The federal data collection mechanism is broken, as multiple State governments consistently fail to submit required workplace accident details, thereby undermining national risk assessment frameworks.

Key Definitions & Legal Provisions

- **DGFASLI:** Directorate General Factory Advice Service and Labour Institutes; the technical arm of the Ministry of Labour and Employment that advises government, industry, and trade unions on matters relating to safety, health, and welfare of workers in factories.
- **OSH Code, 2020:** The Occupational Safety, Health and Working Conditions Code, 2020; a legislative code consolidating 13 central labour laws to reform workplace safety, which recently renamed DGFASLI as the Directorate General of Occupational Safety and Health.
- **Article 24 Union List Entry 55:** Governs regulation of labour and safety in mines and oilfields, while Entry 24 of the Concurrent List covers welfare of labour including conditions of work, giving both Centre and States jurisdiction.
- **Article 39(e) & (f):** Directive Principles of State Policy directing the State to ensure that the health and strength of workers are not abused and that citizens are not forced by economic necessity to enter avocations unsuited to their age or strength.

Conclusion : The repetitive cycle of industrial disasters highlights that safety audits cannot be effective without structural transparency, filled vacancies, and unified data compilation. India must shift from reactive compensation to rigorous, preventive enforcement of the OSH Code to safeguard its industrial workforce.

UPSC Relevance: Highly relevant for **GS Paper II (Governance & Social Justice)** under welfare schemes for vulnerable sections, mechanisms, laws, and institutions constituted for the protection of labour. It is equally important for **GS Paper III (Economy & Disaster Management)** regarding industrial safety, infrastructure vulnerabilities, and regulatory reforms in the manufacturing sector.

8. Structural Shifts and Realities of India's Net FDI Decline



- **Sharp Contraction in Net Flows:** India's net Foreign Direct Investment (FDI) plummeted from a peak of \$44.0 billion in 2020-21 to less than \$1 billion in 2024-25, before showing a modest recovery to \$7.6 billion in 2025-26, despite consistently robust gross inflows.
- **Misconception of Profit Repatriation:** The official narrative attributing weak net FDI to profit repatriation is structurally flawed; under Balance of Payments (BoP) conventions, profit/dividend remittances are recorded under the Current Account (increasing the Current Account Deficit) and do not alter Net FDI, which is strictly depressed by Capital Account disinvestments.
- **Dominance of Financial Investors:** The composition of incoming capital has fundamentally shifted, with Real FDI (long-term multinational commitments) comprising 41.9% of effective inflows, while short-to-medium-term financial investors (Private Equity, Venture Capital, and Sovereign Wealth Funds) account for 40.5%, driving large-scale capital repatriation during strategic exits.
- **Stagnation in Manufacturing:** Real FDI into the manufacturing sector has witnessed a structural decline over three consecutive four-year periods, accounting for a meager 10.6% of total effective inflows in the recent cycle, undermining the core objective of technology transfer and industrial expansion.
- **Accounting Alterations Over Fresh Capital:** Gross FDI data is significantly inflated by non-cash corporate restructurings—such as intra-group reorganizations, share swaps, and the conversion of External Commercial Borrowings (ECBs) into equity—accounting for \$40 billion since 2014-15 without injecting fresh external capital.
- **Negative Outflow-to-Inflow Ratio:** For every dollar of fresh equity capital entering India (excluding reinvested earnings) between 2022-23 and 2025-26, approximately \$1.50 flowed out via capital disinvestment, dividends, and Intellectual Property Rights (IPR) royalties, indicating a worsening trend of external payment obligations.



Key Definitions & Legal Provisions

- **Net FDI vs. Gross FDI:** Gross FDI measures total capital entering an economy, whereas Net FDI adjusts this figure by deducting outward foreign direct investments (OFDI) by domestic companies and the repatriation/disinvestment of capital by foreign entities.
- **Real FDI (RFDI):** Long-term capital investments made by traditional multinational enterprises to establish greenfield production facilities, build domestic capacity, and transfer core industrial technology.
- **Round-Tripping:** A financial practice where domestic funds are routed through offshore tax havens (like Mauritius, Singapore, or UAE) and re-enter the home country disguised as foreign direct investment to evade taxes or launder capital.

Conclusion: The divergence between India's gross and net FDI highlights a qualitative deterioration in capital inflows, shifting away from long-term manufacturing assets toward volatile financial investments. Enhancing external sustainability requires policy calibrations that actively incentivize greenfield Real FDI over short-term private equity asset flips.

UPSC Relevance: This topic is highly significant for **GS Paper III (Indian Economy & Mobilization of Resources)** concerning the Balance of Payments (BoP) framework, investment models, and the manufacturing sector. It is equally relevant for **GS Paper II (Governance &**

Policy Formulation) regarding the evaluation of post-1991 industrial policies and the strategic role of international financial hubs like GIFT City.

9. Targeted Splitting Formula for Next Delimitation Exercise

- **EAC-PM Working Paper Framework:** The Economic Advisory Council to the Prime Minister (EAC-PM) released a working paper proposing a "targeted criterion" for Lok Sabha delimitation. This model shifts from traditional, purely size-based modifications to a multi-factor compositional approach.
- **Preserving Inter-State Seat Proportions:** The proposed model allows a 50% seat expansion for all large States based on a uniform scaling law. By applying this specific structural safeguard, the model ensures that the relative legislative weight of southern States (23.6%) and northern States (45.2%) remains virtually identical to their current distribution ratios.
- **Targeted Constituency Splitting:** Out of the existing 543 Lok Sabha seats, the counterfactual model identifies 170 large, turnout-responsive constituencies for structural division. This includes a two-way split for 59 constituencies and a three-way split for 111 constituencies, scaling the lower house to a total of 824 seats.
- **Turnout-Maximizing Multi-Factor Criteria:** The dataset analyzes general election cycles from 2009 to 2024 to establish an empirical relationship between voter turnout and five distinct compositional variables: urban share, Scheduled Caste (SC) share, Scheduled Tribe (ST) share, linguistic polarization, and linguistic diversity.
- **Addressing the Urban Gender Turnout Gap:** The working paper highlights a persistent, residual gap in female voter turnout across urban centers even after constituency boundaries are altered. To remedy this, the panel advises implementing targeted administrative measures such as women-only polling booths and gender-focused voter roll drives.



Key Definitions & Legal Provisions

- **Delimitation:** The statutory act of redrawing boundaries of Lok Sabha and State Legislative Assembly seats based on recent demographic data to ensure equal voter representation.
- **Constitutional Freeze (Articles 81 & 82):** The 42nd Amendment Act, 1976 froze the inter-state allocation of Lok Sabha seats based on the 1971 Census. The 84th Amendment Act, 2001 extended this freeze until the relevant figures of the first census conducted after the year 2026 are published.
- **Linguistic Polarization vs. Diversity:** Diversity measures the sheer multiplicity of linguistic groups within an area; polarization quantifies the structural division of an electorate into a few large, competing linguistic blocs.

Conclusion: The EAC-PM's multi-factor model presents a mathematical resolution to the federal impasse surrounding delimitation, balancing democratic parity with demographic performance. By utilizing micro-demographic traits to maximize turnout, it transitions delimitation from a contentious arithmetic exercise into a tool for inclusive electoral governance.

UPSC Relevance: Highly critical for **GS Paper II (Polity & Constitutional Governance)** regarding federalism, the structure and functioning of Parliament, the role of the Delimitation Commission, and statutory advisory bodies. It is equally important for **GS Paper I (Society & Geography)** concerning urbanization trends, demographic transitions, and linguistic diversity.

10. Floating Solar Potential in India: Bypassing the Land Constraint

- **National Potential Assessment:** A report titled "Solar PV Potential of India (Floating Solar)" by the National Institute of Solar Energy (NISE) reveals that India's inland reservoirs can host approximately 102.18GW of floating solar capacity, offering a strategic alternative to land-intensive green energy projects.
- **Geospatial Filtering Criteria:** NISE identified this potential by applying six strict technical and logistical filters across domestic water bodies: surface area greater than 10 hectares, water availability for at least 11 months a year, depths between 3-30 meters, solar irradiance above 4.5kWh/m²/day, and a maximum surface coverage cap of 20% per reservoir to preserve aquatic ecosystems.
- **Geographical Distribution:** The viable surface area spans 1946 square kilometers, with five states accounting for the vast bulk of this capacity: Maharashtra (16.28GW), Madhya Pradesh (14.89GW), Karnataka (13.69GW), Odisha (12.81GW), and Telangana (10.72GW).
- **Overcoming the Land Chokepoint:** Standard ground-mounted solar installations require 3-4 times more land area per megawatt than the panels occupy, causing delays due to costly and slow land acquisition. Floating solar bypasses these structural conflicts with agriculture and local habitats as India pursues its target of 500GW non-fossil capacity by 2030.
- **Financial and Structural Challenges:** Floating systems involve a 25% higher upfront capital cost than ground-mounted alternatives. Furthermore, field observations at India's largest operational facility—the 278MW Omkareshwar floating solar park on the Narmada River—revealed distinct engineering vulnerabilities, including loosening float joints, platform misalignment, uneven buoyancy, and cable snapping.



Key Definitions & Legal Provisions

- **Floating Solar (Floatovoltaics):** An innovative solar power production installation where photovoltaic panels are mounted on a buoyant structure that floats on a water body, such as a reservoir, lake, or quarry.
- **Agri-photovoltaics (Agri-PV):** A co-redevelopment model where agricultural land is simultaneously utilized for both generating solar power and farming, with panels mounted above sheltered crop beds.
- **National Programme on High-Efficiency Solar PV Modules:** A production-linked incentive (PLI) scheme introduced under the dynamic targets of the National Solar Mission to strengthen domestic manufacturing and reduce supply chain dependencies.

Conclusion: Floating solar technology offers a viable solution to India's land acquisition dilemmas, pairing renewable energy generation with reduced water evaporation. However, scaling this technology requires targeted financial mechanisms, grid-proximity optimization, and robust engineering standards to withstand aquatic degradation.

UPSC Relevance: This topic is highly significant for **GS Paper III (Infrastructure, Energy, & Environment)** regarding renewable energy targets, scientific innovations in climate change mitigation, and conservation of water resources. It is also relevant for **GS Paper II (Governance & Institutional Frameworks)** concerning the policies of the Ministry of New and Renewable Energy (MNRE) and autonomous scientific assessments.

11. US Judicial Intervention in H-1B Visa Pricing and Skilled Migration

- **Striking Down of Extravagant Levies:** A United States Federal District Judge in Massachusetts struck down a controversial \$100,000 fee imposed on new H-1B visas by the administration. The court ruled the astronomical fee increase unlawful, stating it overstepped executive boundaries.
- **Separation of Powers and Taxation Limits:** The judiciary concluded that the executive branch lacked the authority to independently implement the fee without explicit Congressional approval. The ruling established that because the fee functioned primarily to raise state revenue rather than act as a regulatory penalty, it constituted an unauthorized tax.
- **Protection of the Global STEM Pipeline:** The executive policy had initially been defended as a protectionist measure to prevent foreign tech professionals from undercutting domestic wages in STEM fields. However, the legal challenge effectively preserves access for international talent within highly specialized economic sectors.
- **Disproportionate Impact on Indian Professionals:** Indian citizens remain the primary stakeholders of this immigration corridor, securing more than 70% of the 65,000 standard and 20,000 advanced-degree H-1B visas issued annually by the US Congress. Consequently, Indian IT, healthcare, and engineering professionals bore the direct brunt of the market instability caused by the short-lived fee.
- **Severe Labor Market Disruptions:** Prior to the judicial reversal, the policy caused immediate distress, leading to a visible contraction in foreign corporate sponsorships, reduced hiring mobility, and increased termination vulnerabilities for high-skilled tech workers already navigating automated labor transitions.



Key Definitions & Legal Provisions

- **H-1B Visa:** A non-immigrant visa category in the United States that permits domestic employers to temporarily hire foreign professionals in specialty occupations requiring theoretical or technical expertise and a bachelor's degree.

- **Optional Practical Training (OPT):** A specialized program allowing international students on F-1 visas to gain up to 36 months of real-world employment experience in the United States following graduation in a certified STEM field.
- **Non-Tax Executive Mandates:** A legal doctrine clarifying that executive agencies can only collect fees to offset administrative costs; any levy designed to suppress demand or generate general state revenue is legally classified as a tax and requires legislative enactment.

Conclusion: The striking down of the H-1B tariff provides vital relief to Indian knowledge professionals and major technology conglomerates, restoring systemic predictability to bilateral labor migration channels. It reinforces the limits of unilateral executive protectionism in an interconnected global economy dependent on seamless, cross-border human capital exchange.

UPSC Relevance: This development is highly important for **GS Paper II (International Relations)** under the sub-themes of the effect of policies and politics of developed countries on India's interests, and the Indian diaspora. It is also highly relevant for **GS Paper III (Indian Economy)** concerning the service sector's export dynamics, global labor mobility, and its cascading effect on national remittance inflows.

12. Anthropogenic Climate Change & Global Energy Transition

- **Unprecedented Human-Induced Warming:** The Indicators of Global Climate Change (IGCC) study—an initiative by an independent international group of climate scientists established in 2023—confirms that the human contribution to overall global warming hit an all-time high in 2025, even as 2025 ranked as the third warmest year on record.
- **The '35% by 2035' Electricity Target:** At an ongoing global climate meet in Germany, a new target has been proposed mandating a global commitment to ensure electricity accounts for at least 35% of final energy consumption by 2035, up from the current 20%, serving as a critical milestone for transitioning away from fossil fuels.
- **Key Conceptual Definitions:**
 - * **Anthropogenic Warming:** Climate change driven by greenhouse gas (GHG) emissions, deforestation, and industrial activities resulting directly from human actions rather than natural climate variability.
 - **Final Energy Consumption:** The total energy consumed by end-users (households, industry, and transport) in its final usable form, distinct from primary energy before transformation.
- **Constitutional & Legal Framework (India):**
 - * **Article 48A (DPSP):** Directs the State to protect and improve the environment and safeguard forests and wildlife.
 - **Article 51A(g) (Fundamental Duties):** Mandates every citizen to protect and improve the natural environment.



- **Statutory Backing:** The Environment (Protection) Act, 1986 and the Energy Conservation (Amendment) Act, 2022, which provides a regulatory framework for carbon markets and renewable energy mandates in India.
- **Global Institutional Mechanisms:** These findings align with the mandate of the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement goals to limit global warming to well below 2°C, preferably 1.5°C, above pre-industrial levels through Nationally Determined Contributions (NDCs).
- **Conclusion:** The IGCC findings underscore a widening gap between receding political attention and accelerating climate degradation, emphasizing that structural energy transitions (like electrification) are non-negotiable.
- **UPSC Relevance:** This topic directly connects to **UPSC GS Paper III (Environment & Ecology, Climate Change, Infrastructure: Energy)**. It highlights critical dynamics for analytical questions on global climate governance, net-zero pathways, the geopolitical challenges of renewable energy scaling, and the socio-economic implications of transitioning from fossil fuels to high-share electricity grids.