



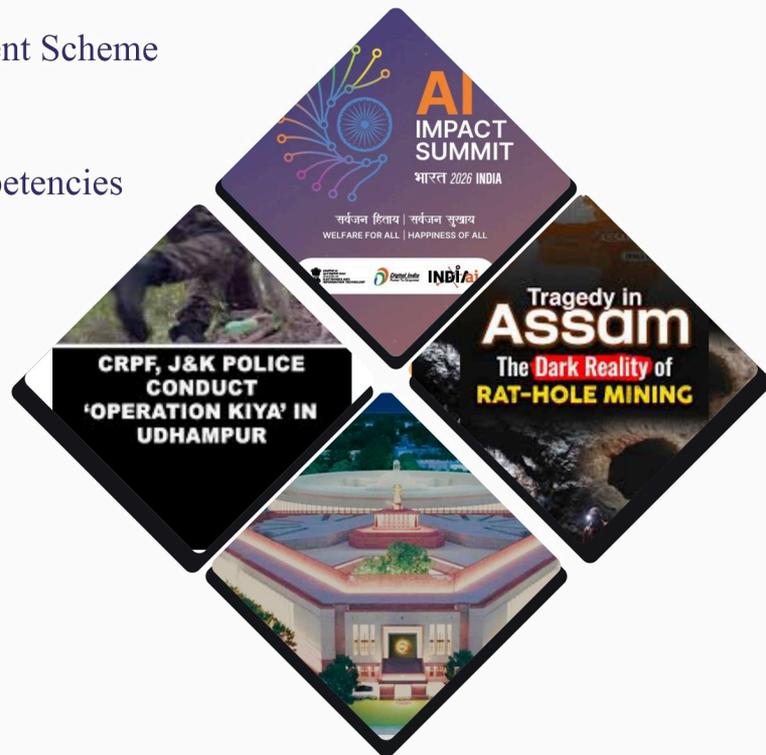
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# Current Affairs

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- ☞ AI Impact Summit 2026
- ☞ IT Rules Amendment & AI Regulation (2026)
- ☞ Vande Mataram
- ☞ Corruption Perceptions Index 2025
- ☞ PAIMANA Web Portal
- ☞ The 16th Finance Commission and the States



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# CURRENT AFFAIRS

## Member of Parliament Local Area Development Scheme (MPLADS)

### Context

With the 18th Lok Sabha (2024–2029) underway, there is renewed focus on the effective utilization of **MPLADS** funds. The scheme remains a critical tool for grassroots development, though it faces ongoing scrutiny regarding implementation efficiency and fund management across different states.

### About the Scheme

- **Launch:** Established in December 1993 under the Ministry of Rural Development; transferred to the **Ministry of Statistics and Programme Implementation (MoSPI)** in 1994.
- **Nature:** A **Central Sector Scheme** fully funded by the Government of India.
- **Annual Entitlement:** Each MP is allocated **₹5 Crore per year** (totaling ₹25 Crore over a five-year term).
- **Non-Lapsable Nature:** Funds are non-lapsable. If an allocation is not used in a specific year, it is carried forward to the subsequent years within the MP's term.

### Implementation Framework

- **Roles & Responsibilities:** \* The **MP** recommends developmental works based on local needs.
  - The **District Authority** (District Collector/Magistrate) is responsible for the technical sanction, identification of the implementing agency, and execution of the work.
- **Jurisdictional Flexibility:**
  - **Lok Sabha MPs:** Recommend works within their respective constituencies.
  - **Rajya Sabha MPs:** Can recommend works in one or more districts within their State of election.

- **Nominated Members:** May select works in any district across the country.

- **National Integration:** MPs have the flexibility to spend up to **₹25 Lakh per year** outside their designated constituency or state to promote national unity and communal harmony.

### Performance and Challenges

- **Utilization Trends:**
  - **High Performers:** States like Telangana, Sikkim, and Kerala have shown robust utilization of funds.
  - **Laggards:** States including Uttarakhand, Tripura, and Jharkhand have historically struggled with lower absorption rates.
- **Key Issues:**
  - **Execution Delays:** Significant gaps exist between the recommendation of work and actual completion, with some regions reporting less than 50% completion rates.
  - **Monitoring Gaps:** A lack of real-time tracking and rigorous impact assessment often leads to suboptimal asset creation.
  - **Administrative Bottlenecks:** Delays at the District Authority level in sanctioning funds often hinder timely progress.

### Way Forward

- **Enhanced Monitoring:** Leverage digital platforms for real-time tracking of project milestones and fund flow to ensure transparency.
- **Capacity Building:** Strengthen the technical wings of District Authorities to expedite the sanctioning process and maintain quality standards.
- **Public Accountability:** Encourage social audits and citizen participation to ensure

that the assets created align with actual community requirements.

- **Timely Fund Release:** Streamline the process between MoSPI and District Authorities to minimize the "wait time" for unspent balances from previous years.

### Conclusion

The MPLADS remains a unique vehicle for localized development, bridging the gap between macro-policy and micro-needs. To realize its full potential, the focus must shift from mere fund allocation to the timely and qualitative execution of projects that directly improve the standard of living for constituents.

## 16th Finance Commission

### Context

Constitutional under **Article 280**, the Finance Commission (FC) is tasked with recommending the distribution of financial resources between the Union and the States. The 16th Finance Commission's recommendations are pivotal in shaping India's fiscal federalism, balancing the needs of a developing economy with the demands of individual states.

### Vertical Devolution

Vertical devolution refers to the share of the **Divisible Pool** of central taxes that is distributed to the states.

- **Current Allocation:** The share remains at **41%**, maintaining the status quo established by the 15th Finance Commission.
- **Effective Share:** Despite the 41% figure, the actual transfer is often lower because the "divisible pool" excludes certain collections like Cess and Surcharges.

### Horizontal Devolution: Distribution Criteria

Horizontal devolution determines how the 41% share is divided among the various states based on specific socioeconomic and geographic metrics.

Criteria	Weightage Change	Rationale
----------	------------------	-----------

<b>Income Distance</b>	Reduced (45% → <b>42.5%</b> )	Encourages states to improve fiscal performance rather than rewarding lower income levels.
<b>Population</b>	<b>Increased</b>	Aims to address the needs of more populous states, shifting away from penalizing those with higher growth.
<b>Area</b>	Reduced (15% → <b>10%</b> )	Minimizes the bias toward geographically large states with low density.
<b>Forest Cover</b>	<b>10%</b> (Unchanged)	Recognizes the ecological contribution and the opportunity cost of maintaining forest land.
<b>GDP Contribution</b>	<b>New Criteria</b>	Replaced "Tax Effort" to reward states with high economic output and productivity.

### Major Concern: Cess and Surcharge

A significant friction point in Center-State relations is the rising reliance on **Cess and Surcharges**.

- **The "Shrinking" Pool:** Currently, the Union government collects approximately **11%** of its total revenue through these instruments.
- **Exclusion from Sharing:** Under **Article 270**, these collections are not part of the divisible pool, meaning they are kept entirely by the Center.

- **Impact:** This effectively reduces the states' actual share to 41% of only about **89%** of the total tax revenue collected.

### Key Financial Concepts

To understand the devolution process, it is essential to distinguish between the types of levies collected by the government:

- **Tax:** General revenue collected for the common good; mandated to be shared with states.
- **Cess (Article 270):** A tax levied for a **specific purpose** (e.g., Krishi Kalyan Cess or Education Cess). The proceeds must be used only for that specified intent.
- **Surcharge (Article 271):** An **additional tax** on top of the existing tax (a "tax on tax"), usually applied to high-income earners.

### Way Forward

- **Widening the Divisible Pool:** There is a growing demand from states to include a portion of Cess and Surcharges in the divisible pool to ensure truer fiscal federalism.
- **Outcome-Based Incentives:** Future commissions may need to further refine the "GDP Contribution" metric to ensure it doesn't lead to widening inequality between industrial and agrarian states.
- **Stability in Transfers:** Ensuring that the Union government minimizes arbitrary changes in tax structures that impact the states' predictable revenue streams.

### Conclusion

The 16th Finance Commission marks a shift toward rewarding economic performance while navigating the complexities of population dynamics. However, the structural issue of Cess and Surcharges remains a hurdle for states seeking a more equitable share of the national revenue pie.

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## India-US Trade & Energy Pivot

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### Context

Following a period of acute diplomatic and trade tension, during which the US imposed cumulative tariffs of **50%** on Indian goods, President Donald Trump and Prime Minister Narendra Modi

announced a landmark trade deal on **February 2, 2026**. This agreement marks a strategic shift in India's energy sourcing and trade positioning.

### Key Outcomes of the 2026 Trade Deal

- **Tariff Reduction:** Reciprocal tariffs on Indian goods have been slashed from a peak of 50% down to **18%**.
  - This includes the removal of the **25% punitive "Russian oil penalty"** imposed in August 2025.
- **Economic Sentiment:** The deal triggered a massive rally in Indian equity markets. **Adani Group stocks** (Enterprises, Ports, and Green Energy) saw surges of **7%–13%** due to their heavy exposure to export-linked infrastructure and the energy supply chain.
- **Commitments:** India has reportedly committed to purchasing over **\$500 billion** in US energy, technology, and defense goods by 2030 (the "Mission 500" initiative).

### Strategic Pivot: The Russian-Venezuelan Shift

A central condition of the US tariff relief is India's agreement to scale down or halt imports of **Russian crude oil**, which had peaked following the Ukraine conflict.

- **The Alternative:** India is encouraged to replace Russian barrels with **American and Venezuelan** crude.
- **Technical Challenges of Venezuelan Oil:**
  - **Viscosity & Density:** Venezuelan crude is "bottom heavy," thick, and semi-solid (tar-like).
  - **Chemical Composition:** It is characterized by high acidity and high metal (vanadium/nickel) and nitrogen content.
  - **Refinery Risk:** Most Indian state-owned refineries are optimized for lighter, sweeter crude. Processing heavy Venezuelan oil without advanced "complex" refining or precise blending can lead to **equipment corrosion** and catalyst poisoning.
- **Refining Advantage:** Large private refiners like **Reliance Industries** and

**Nayara Energy** are among the few globally capable of processing these heavy grades efficiently.

### Political Allegations & Controversies

The deal has faced sharp criticism from domestic opposition parties, led by the Congress party:

- **The "Compromise" Allegation:** Opposition leaders claim the Prime Minister signed the deal under "tremendous pressure," alleging the US utilized "leverage" related to the **"Epstein Files"** and ongoing **SEC/Adani lawsuits** in the US.
- **Agricultural Concerns:** Critics argue the deal may allow US agricultural products to enter India at zero or low tariffs, potentially "selling out" the interests of Indian farmers.
- **Sovereignty Debate:** The shift in oil policy is characterized by critics as a "surrender" of strategic autonomy regarding India's long-standing relationship with Russia.

### Conclusion

The 2026 trade deal provides immediate relief to Indian exporters and clears a path for deepened bilateral ties. However, the technical hurdle of adapting refineries to heavy crude and the political storm over "concessions" suggest that the implementation of this deal will be as much a domestic challenge as a diplomatic one.

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## Conservation of Wetlands in India

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### Context

In celebration of **World Wetlands Day** (February 2, 2026), the Government of India announced the addition of two new sites to the List of Wetlands of International Importance, commonly known as **Ramsar Sites**. This brings India's total tally to **98 sites**, the highest in South Asia.

### New Ramsar Sites (2026)

1. **Patna Bird Sanctuary (Uttar Pradesh):** Despite its name, it is located in the Etah district of Uttar Pradesh, not Bihar. It is one of the smallest bird sanctuaries in

India and a vital wintering ground for migratory birds.

2. **Tharidaand Wetland (Gujarat):** Situated in the **Kutch region**, this wetland plays a crucial role in maintaining the local groundwater table and supporting the unique biodiversity of the arid landscape.

### Understanding Wetlands: Key Concepts

- **World Wetlands Day:** Observed annually on **February 2nd** to commemorate the signing of the Ramsar Convention in 1971 in Ramsar, Iran.
- **The Ecotone:** Wetlands serve as a classic example of an **ecotone**, a transition zone between two distinct biological communities (terrestrial and aquatic). Because they contain species from both environments, they often possess high biodiversity, a phenomenon known as the **"edge effect."**

### The Crisis: Challenges and Degradation

Public health expert **Dr. Soumya Swaminathan** has advocated for wetlands to be classified as a **"National Public Good,"** highlighting a severe environmental crisis:

- **Vanishing Ecosystems:** India has lost approximately **40% of its wetlands** over the last 30 years.
- **Degradation:** Of the surviving wetlands, **50%** are in a state of rapid degradation.
- **Primary Drivers:** \* Discharge of untreated industrial and agricultural sewage.
  - Encroachment by construction on natural floodplains.
  - Accumulation of solid waste.
- **Pollution Indicators:** High levels of **E. coli bacteria** and chemical pollutants, particularly noted in the Ganga river basin, signal the collapse of natural filtration provided by these ecosystems.

### Legal and Constitutional Framework

The protection of the environment, including wetlands and wildlife, is a shared responsibility in India's federal structure:

- **Concurrent List:** Environment and the protection of wild animals and birds are

under the **Concurrent List** (Entry 17A and 17B).

- **42nd Amendment (1976):** These subjects were moved from the State List to the Concurrent List, allowing both the Union and State governments to legislate on them.
- **Article 51A(g):** It is a **Fundamental Duty** of every citizen to protect and improve the natural environment, including forests, lakes, rivers, and wildlife.

### Way Forward

- **Community-Led Conservation:** Moving beyond top-down regulation to involve local communities in "Wise Use" practices.
- **Standardized Mapping:** Using satellite imagery to create a real-time "Wetland Inventory" to prevent further encroachment.
- **Integrated Management:** Treating wetlands not as isolated water bodies but as integral parts of the wider hydrological cycle to ensure urban flood resilience.

### Conclusion

As natural buffers against climate change and vital "kidneys of the landscape," wetlands are indispensable. The jump to 98 Ramsar sites is a significant milestone, but the focus must now shift from legal designation to active ecological restoration.

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## Kidnapping

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### Context

Delhi reported a staggering **807 missing persons**, averaging **27 cases daily**. A critical concern has emerged regarding the safety of minors, as **137 children** remain untraced from this brief period, with a significant gender skew toward adolescent girls.

### About the News

**Defining the Crisis:** Kidnapping has evolved into a structured enterprise where criminal syndicates systematically abduct individuals for ransom, human trafficking, forced labor, or sexual exploitation.

**Key Data Trends (2015–2026):**

- **Vulnerability Gap:** Adolescent girls (12–18 years) are the primary targets; in January 2026, **120 out of 137** untraced minors were girls.
- **The Long-term Backlog:** Between 2015 and 2025, approximately **5,559 children** went missing in Delhi, with nearly 700 still unaccounted for.
- **Recovery Challenges:** The recovery rate remains low, with roughly **11% of missing children** in the national capital staying untraced over the last decade.
- **Geographic Hotspots:** Metropolitan hubs like Delhi, Mumbai, and Bengaluru experience high rates due to population density and the anonymity provided by migration.

### Factors Driving Organized Kidnapping

- **Trafficking Networks:** Abductions supply illegal markets for domestic servitude and the flesh trade (e.g., the 2024 crackdown on interstate gangs moving children to neighboring states for forced labor).
- **Economic Distress:** Poverty pushes minors to flee home for work, making them easy targets for traffickers at transit points like the New Delhi Railway Station.
- **Technological Luring:** Perpetrators use social media (Instagram/Facebook) to groom adolescents via "honey-trapping" or fraudulent job/modeling offers.
- **Surveillance Gaps:** High-density areas and slums (e.g., Nizamuddin and Jahangirpuri) often lack CCTV coverage, creating "dark spots" for criminal activity.
- **Domestic Triggers:** Hostile home environments and domestic abuse frequently lead to "runaway" cases that are quickly intercepted by organized syndicates.

### Security Implications and Challenges

- **Inter-State Jurisdictional Issues:** Traffickers move victims across state lines faster than police coordination can keep up, leading to critical delays in tracing.
- **Resource Constraints:** Delhi's **Anti-Human Trafficking Units (AHTU)** are

overwhelmed by the volume of cases, facing significant personnel shortages.

- **Sophisticated Logistics:** Gangs now utilize encrypted communication (Signal) and stolen vehicles with fake license plates to evade digital footprints.
- **Identity Erasure:** Criminals forge documents like **Aadhaar cards** to give recovered victims new identities, stalling legal and parental identification.

#### Existing Framework and Initiatives

- **Operation Muskaan/Milap:** Dedicated rescue and rehabilitation drives conducted by the Delhi Police.
- **ZIPNET (Zonal Integrated Police Network):** A real-time database for sharing information on missing persons across North Indian states.
- **Facial Recognition System (FRS):** AI-based software used to match missing children with those located in various shelter homes.
- **TrackChild Portal:** A national digital tracking system designed to facilitate inter-state coordination for vulnerable children.

#### Way Forward

- **Predictive Policing:** Deploy AI to identify kidnapping hotspots and peak times to optimize patrolling in vulnerable sectors.
- **Strengthening AHTUs:** Establish a dedicated task force in every district with specialized training in cyber-forensics and victim psychology.
- **Community Integration:** Involve **Resident Welfare Associations (RWAs)** and Mohalla Committees as early warning systems.
- **Zero FIR Portability:** Ensure that a "Zero FIR" for a missing person triggers an immediate, automatic alert across all national transit hubs.
- **Public Awareness:** Conduct targeted education in schools and slums regarding the dangers of online grooming and unverified employment offers.

#### Conclusion

The surge in missing person cases in 2026 highlights a systemic vulnerability in urban security. Addressing organized kidnapping requires a shift from reactive tracing to a proactive, tech-driven strategy that dismantles trafficking networks through seamless inter-state cooperation and community vigilance.

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### Operation Kiya

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#### Context

The **Basantgarh** area of **Udhampur** district (Jammu & Kashmir) witnessed a high-stakes counter-terrorism engagement. Security forces launched **Operation Kiya** following specific intelligence regarding the infiltration of heavily armed terrorists belonging to the Pakistan-based **Jaish-e-Mohammad (JeM)** outfit.

#### About Operation Kiya

**Definition:** Operation Kiya is an intelligence-based, joint counter-terrorism mission initiated by the Indian security grid to track and eliminate terrorists holed up in the dense, high-altitude forests of the Jammu region.

#### Key Features:

- **Synergised Command:** The operation is a coordinated effort involving the Army's **White Knight Corps** (specifically the **CIF Delta**), the **Jammu & Kashmir Police (JKP)**, and the **CRPF**.
- **Tactical Precision:** The mission utilized advanced surveillance including drones and dog squads to trap terrorists within a natural cave hideout in the **Jophar Forest**, eventually neutralizing them using calibrated firepower and explosives.

#### Major Outcome (February 2026):

- **Neutralization of Commanders:** Two top Pakistani terrorists, including a high-ranking JeM commander identified as **Rubani (alias Abu Mavia)**, were eliminated.
- **Arms Recovery:** Security forces recovered sophisticated weaponry, including a **US-made M4 carbine**, AK-series rifles, and "war-like stores,"

highlighting the high level of terrorist equipment.

### Significance of the Operation

- **Disruption of Foreign Modules:** The elimination of long-active commanders like Abu Mavia strikes a significant blow to the leadership of terror groups active in the Doda-Udhampur-Kathua circuit.
- **Strategic Area Domination:** By flushing out terrorists from natural caves and "dark spots" in the Basantgarh forest, the forces have reclaimed control over critical infiltration corridors.
- **Inter-Agency Synergy:** The operation serves as a blueprint for "seamless coordination," demonstrating how real-time intelligence from local police can be effectively converted into tactical military success.

### Security Challenges in the Region

- **Difficult Terrain:** The dense foliage and natural cave systems of the Basantgarh and Ramnagar tehsils provide hiding spots that are difficult to detect via traditional aerial surveillance.
- **Winter Resurgence:** Parallel operations like **Operation Trashi-I** in Kishtwar indicate a broader trend of terrorist attempts to use harsh weather and snow-covered reaches to establish bases.

### Conclusion

Operation Kiya underscores the Indian security forces' commitment to a "terror-free Jammu and Kashmir." By successfully neutralizing high-value targets in challenging geographical conditions, the operation reinforces the efficacy of the joint security grid in maintaining internal stability against cross-border threats.

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## SabhaSaar Initiative

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### Context

The **SabhaSaar Initiative** has gained significant momentum, with over **1.11 lakh Gram Panchayats** adopting this AI-enabled tool. Union Minister Shri Rajiv Ranjan Singh recently informed the Rajya Sabha that the platform has successfully automated meeting documentation

across 31 States and Union Territories, marking a milestone in digital grassroots governance.

### About the News

#### What is SabhaSaar?

Launched on **August 14, 2025**, SabhaSaar is an AI-powered voice-to-text and meeting summarization platform. It is designed to automatically generate structured **Minutes of Meetings (MoM)** from audio and video recordings of Gram Sabha and Panchayat proceedings.

#### Organizations Involved:

- **Ministry of Panchayati Raj (MoPR):** Nodal implementing ministry providing policy direction and rollout.
- **Ministry of Electronics and Information Technology (MeitY):** Provides the technical backbone through the **IndiaAI Mission**.
- **National Informatics Centre (NIC):** Designated as the nodal agency for secure data storage and protection.

#### The Workflow:

1. **Recording:** Gram Sabha proceedings are recorded via audio or video.
2. **Upload:** Officials use **e-GramSwaraj** credentials to upload the file to the SabhaSaar portal.
3. **Processing:** AI transcribes the speech and identifies key decisions, action points, and resolutions.
4. **Output:** A well-formatted, structured summary is generated in the chosen language.

#### Key Features

- **AI & NLP Transcription:** Leverages Natural Language Processing to convert discussions into structured minutes, ensuring no critical deliberation is missed.
- **Multilingual Support (Bhashini):** Integrated with the **Bhashini platform**, it supports **13 Indian languages** (including Hindi, Bengali, Tamil, Telugu, and Marathi) to bridge linguistic divides in rural India.
- **Secure Data Governance:** Operates entirely within government-controlled cloud infrastructure (**IndiaAI Compute Portal**). It is strictly compliant with the

**Digital Personal Data Protection (DPDP) Act, 2025**, ensuring no data is shared with third-party providers.

- **Governance Analytics:** Enables the Ministry to track meeting frequency, attendance trends, and the status of resolutions across the country.

### Significance

- **Grassroots Democracy:** Enhances the "Direct Democracy" aspect of Gram Sabhas by making records more accessible and verifiable for common citizens.
- **Administrative Efficiency:** Dramatically reduces the manual workload and errors associated with handwritten record-keeping.
- **Transparency & Accountability:** Standardized digital records prevent the post-meeting alteration of minutes, fostering public trust.
- **Informed Decision Making:** Provides a searchable digital repository of past resolutions, aiding in data-driven planning for village development.

### Way Forward

- **Capacity Building:** Continuous training for Panchayat functionaries to overcome digital literacy gaps.
- **Infrastructure Expansion:** Improving internet connectivity in "shadow areas" to ensure seamless uploading of high-quality video recordings.
- **Full Integration:** Prioritizing the complete data stream integration between SabhaSaar and the **Panchayat NIRNAY** portal for real-time monitoring.

### Conclusion

The SabhaSaar initiative represents a paradigm shift in rural administration, moving from "paper-heavy" to "AI-ready" governance. By leveraging the **IndiaAI Mission**, the government has not only modernized documentation but also strengthened the constitutional mandate of Panchayati Raj Institutions (PRIs) to be transparent and accountable.

## India Joins BRICS Centre for Industrial Competencies

### Context

In February 2026, India formally joined the **BRICS Centre for Industrial Competencies (BCIC)**.

This strategic move was solidified through a **Trust Fund Agreement** signed between India's Department for Promotion of Industry and Internal Trade (DPIIT) and the United Nations Industrial Development Organization (UNIDO).

The **National Productivity Council (NPC)** has been designated as India's nodal center to spearhead engagement with the BCIC.

### About the News

**What is the BRICS Centre for Industrial Competencies (BCIC)?** The BCIC is a multilateral, public-private platform launched in partnership with UNIDO. It functions as a "one-stop center" providing integrated support to manufacturing firms and MSMEs across BRICS and BRICS Plus nations.

- **Established:** Launched at UNIDO headquarters in Vienna (April 2025).
- **Foundation:** Supported under the **BRICS Partnership on New Industrial Revolution (PartNIR)**.
- **Primary Objective:** To bolster industrial competitiveness and productivity by accelerating the adoption of **Industry 4.0** technologies (AI, IoT, Big Data) and sustainable manufacturing practices.

### The Role of the National Productivity Council (NPC)

As India's nodal agency, the NPC, operating under DPIIT's policy guidance, will lead capacity-building initiatives, facilitate technology transfers, and help MSMEs close productivity gaps through UNIDO's technical support.

### Key Functions

- **Industry 4.0 & Digital Support:** Assists manufacturers in transitioning into "**Factories of the Future**" by integrating automation and digital innovation.
- **Partnership & Matchmaking:** Connects Indian enterprises with technology providers, research institutions, and potential business partners within the expanded BRICS+ network.

- **Market Intelligence:** Provides advisory services on market access, scaling operations, and internationalization of small businesses.
- **Sustainable Practices:** Promotes green manufacturing and energy efficiency to align with global sustainability standards.

### Significance for India

- **MSME Empowerment:** India's MSME sector (contributing ~30% to GDP) often struggles with the high costs of technology. BCIC provides a subsidized, structured pathway to global best practices.
- **Global Value Chain Integration:** Enables Indian firms to integrate more deeply into resilient BRICS supply chains, reducing dependence on non-member nations for critical industrial components.
- **Aatmanirbhar Bharat & Make in India:** Directly supports these missions by enhancing the global competitiveness and innovation-driven growth of local manufacturing.
- **Diplomatic Leadership:** Reinforces India's role as a key driver of the **Global South's** industrial agenda, particularly as the BRICS bloc expands.

### Conclusion

India's entry into the BCIC marks a pivotal step toward bridging the "digital divide" in its industrial sector. By leveraging the expertise of UNIDO and the collective resources of the BRICS nations, India is positioning its MSME sector to lead the **New Industrial Revolution**, ensuring that "Make in India" also signifies "Innovate in India."

## Bharat Taxi

### Context

In February 2026, Union Home and Cooperation Minister **Amit Shah** formally launched **Bharat Taxi** in New Delhi. This initiative represents India's first cooperative-sector ride-hailing platform, aiming to shift the digital mobility landscape toward a driver-owned model under

the vision of "**Sahkar se Samridhhi**" (Prosperity through Cooperation).

### About Bharat Taxi

#### Definition:

Bharat Taxi is an indigenous, cooperative-led alternative to private aggregator models (like Ola and Uber). It is designed to be a driver-owned and driver-led enterprise where the service providers are also the primary stakeholders and owners.

#### Key Institutional Details:

- **Operating Entity:** Sahkar Taxi Cooperative Limited (STCL).
- **Registration:** Registered under the **Multi-State Cooperative Societies Act, 2002** (established June 6, 2025).
- **Support:** Backed by eight major cooperatives including **Amul, IFFCO, and NAFED**.
- **Nodal Ministry:** Ministry of Cooperation.

### Comparison: Bharat Taxi vs. Private Aggregators

Feature	Bharat Taxi	Ola / Uber / Rapido
<b>Model</b>	<b>Cooperative / Driver-owned</b>	Private / Aggregator-based
<b>Commission</b>	<b>0% (Zero Commission)</b>	20% – 30% per ride
<b>Driver Status</b>	<b>"Sarathi" (Owner/Stakeholder)</b>	Contractual Gig Worker
<b>Surge Pricing</b>	<b>Strictly Surge-Free</b>	Dynamic (High surges during peak)
<b>Platform Fee</b>	Flat daily fee (approx. ₹30)	Percentage-based per ride

<b>Revenue Flow</b>	Full fare stays with the driver	Commission deducted from every fare
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### Key Features

- **"Sarathi hi Malik" Model:** Every driver is a shareholder in the cooperative. During the launch, top performers were awarded share certificates to cement this ownership principle.
- **Zero-Commission & Transparent Pricing:** By removing the middleman commission, the platform estimates fares to be **up to 30% cheaper** for passengers while ensuring higher take-home pay for drivers.
- **Robust Social Security:** Provides **₹5 lakh personal accident insurance** and **₹5 lakh family health insurance** for registered Sarathis, along with retirement saving options.
- **Safety & Digital Integration:** \* Integrated with India's **Digital Public Infrastructure (DPI)** (DigiLocker, UMANG).
  - Direct link to **Delhi Police** with 35 physical assistance booths at major transit hubs.
- **Women Empowerment:** Special initiatives like **"Sarathi Didi"** and **"Bike Didi"** have already onboarded over 150 women drivers.
- **Non-Exclusivity:** Drivers are free to operate on other platforms simultaneously, ensuring they are not "trapped" by a single algorithm.

### Significance

- **Empowerment of the Unorganized Sector:** Moves gig workers from precarious contract labor to dignified, institutional ownership.
- **Disruption of Market Monopolies:** Offers a home-grown, non-exploitative alternative to foreign-funded aggregators, aligning with **Atmanirbhar Bharat**.
- **Scalable Cooperative Model:** Proves that the cooperative framework can be

successfully applied to the modern, high-tech digital platform economy.

- **Economic Impact:** During its two-month pilot phase in Delhi-NCR and Gujarat, the platform successfully distributed over **₹10 crore** directly to drivers.

### Conclusion

The commercial launch of Bharat Taxi marks a major milestone in India's cooperative movement. By prioritizing driver welfare and passenger affordability through a zero-commission model, Bharat Taxi seeks to redefine urban mobility. The government plans to expand the service across all states and Union Territories within the next **three years**.

### Preventable Cancer

#### Context

A landmark global analysis published in **Nature Medicine** (February 3, 2026), conducted by the **World Health Organization (WHO)** and the **International Agency for Research on Cancer (IARC)**, has provided the most comprehensive look yet at the modifiable causes of cancer. The study marks a critical shift in public health, emphasizing that nearly **4 in 10** cancer cases are not a result of "bad luck" or genetics, but are linked to preventable exposures.

#### Key Findings: The 40% Prevention Potential

The analysis examined data from **185 countries** and **36 cancer types**, identifying **30 modifiable risk factors**.

- **Global Burden:** Approximately **37.8% (7.1 million)** of all new cancer cases in 2022 were linked to these preventable causes.
- **Top 3 Drivers:**
  1. **Tobacco Smoking:** The leading cause, responsible for **15%** of all new cases globally.
  2. **Infections:** Responsible for **10%** (2.3 million cases), including HPV, Hepatitis B/C, and *H. pylori*.
  3. **Alcohol Consumption:** Linked to over **3%** (700,000 cases).
- **Concentrated Risk:** Nearly half of all preventable cases are represented by just

three types: **Lung, Stomach, and Cervical cancer.**

### Primary Risk Factors

The study categorizes the 30 "changeable" elements into four main buckets:

Category	Primary Factors
<b>Metabolic / Lifestyle</b>	High Body Mass Index (Obesity), physical inactivity, and suboptimal breastfeeding.
<b>Behavioral</b>	Tobacco use (smoking and smokeless/areca nut) and alcohol consumption.
<b>Environmental</b>	Air pollution (PM2.5) and ultraviolet (UV) radiation exposure.
<b>Occupational</b>	Exposure to 13 specific carcinogens (e.g., asbestos, coal mining dust, or certain chemicals).
<b>Infections</b>	Nine specific agents, most notably <b>HPV</b> (Cervical), <b>H. pylori</b> (Stomach), and <b>Hepatitis B/C</b> (Liver).

### The Gender Disparity: Why Men Face Higher Risks

One of the study's most striking revelations is the significant gap between men and women in terms of preventable risk:

- **Men (45.4% Preventable):** Nearly 1 in 2 cancers in men can be prevented. Tobacco is the dominant risk factor for men in 126 of the 185 countries studied, contributing to **23.1%** of all male cancer diagnoses.
- **Women (29.7% Preventable):** Roughly 1 in 3 cancers in women are preventable. For women, **infections** (primarily HPV) are the leading modifiable risk factor globally.

### The Role of "Autophagy" and Fasting

The report and subsequent medical discussions have highlighted **Autophagy**, the body's natural

"recycling" mechanism as a key biological tool for prevention:

- **The Process:** Autophagy (literally "self-eating") allows the body to identify, break down, and recycle damaged organelles and misfolded proteins that could otherwise lead to DNA mutations.
- **Fasting Trigger:** Nutritional restriction, such as **intermittent fasting**, is one of the most effective ways to induce autophagy.
- **Tumor Suppression:** Studies in 2026 suggest that regular cycles of autophagy help "starve" developing tumors and protect normal cells from oxidative stress.

### Way Ahead:

The WHO emphasizes that there is no "one-size-fits-all" strategy:

- **Vaccination:** Expanding HPV and Hepatitis B vaccination is the highest priority for lower-income regions.
- **Regulatory Action:** Stronger tobacco control and alcohol regulation are essential in East Asia and Europe.
- **Air Quality:** Improving urban air quality is now recognized as a mandate as critical as tobacco control for preventing lung cancer in non-smokers.

### Conclusion

The 2026 Nature Medicine study serves as both a warning and a source of hope. While global cancer incidence is rising, **millions of cases can be avoided** through a combination of personal lifestyle changes like tobacco cessation and intermittent fasting and government-led initiatives for cleaner air and universal vaccination.

### Rat-Hole Mining

#### Context

In early February 2026, a devastating blast and subsequent collapse at an illegal coal mine in **East Jaintia Hills, Meghalaya**, has brought the issue of "rat-hole" mining back into the national spotlight. Despite a decade-long judicial ban, the practice continues to claim lives, highlighting a complex intersection of geology, constitutional law, and economic desperation.

#### Recent Update (February 2026)

- **Rising Death Toll:** As of **February 8, 2026**, the death toll from the Mynsyngat-Thangsko mine blast has risen to **27**.
- **The Incident:** On February 5, a dynamite explosion likely intended to break coal seams, ignited a methane gas pocket 350 feet deep. Rescue operations by the NDRF and SDRF have been hampered by waterlogging and mudslides within the narrow, labyrinthine tunnels.
- **Legal Action:** State police have arrested two mine owners and several others, charging them under the **MMDR Act** and for illegal possession of explosives.

### Technical Context: Why "Rat-Hole"?

Coal in Meghalaya's Jaintia, Khasi, and Garo Hills is found in **thin seams** (often less than 2 meters thick).

- **Economic Barrier:** Standard "open-cast" mining is unviable because removing the massive "overburden" (soil and rock) to reach such thin layers is too expensive.
- **The Method:** Instead, miners dig a vertical pit (100–400 feet deep) and then branch out into horizontal, narrow tunnels just 3–4 feet high. Workers must crawl on their stomachs or squat to extract coal manually using pickaxes, resembling rats in a burrow.

### Constitutional and Legal Complexity

**The 6th Schedule Factor:** Meghalaya is governed by the **Sixth Schedule** of the Indian Constitution, which protects tribal land rights and customary laws.

- **Private Ownership:** Unlike the rest of India where minerals belong to the state, in Meghalaya, the land and the minerals beneath it are often owned by **private individuals or clans**.
- **Regulatory Ambiguity:** This unique status creates a "gray zone" where the state government struggles to enforce federal mining laws (like the Mines Act, 1952) without appearing to infringe on tribal autonomy. This ambiguity is frequently exploited by illegal operators.

### The Judicial Ban:

- **NGT Ban (2014):** The National Green Tribunal banned the practice due to environmental damage and high fatality rates.
- **Supreme Court (2019):** While it allowed for "scientific mining" to resume, it upheld the ban on hazardous rat-hole methods. Despite this, the lack of a formalized scientific mining policy has allowed illegal rat-holes to persist.

### Impact: Environmental and Human Cost

- **Acid Mine Drainage (AMD):** When sulfur in coal reacts with water and air, it creates sulfuric acid.
  - *Example:* The **Kopili and Lukha Rivers** have turned bright orange/blue and highly acidic (pH as low as 3), making them "dead" rivers incapable of sustaining fish or providing drinking water.
- **"Black Lung" and Health:** Workers, often **migrant laborers or children**, suffer from silicosis and pneumoconiosis due to prolonged exposure to coal dust without protective gear.
- **Economic Dependence:** For thousands of families, coal is the primary income. Without **alternative livelihoods** in horticulture or tourism, the ban effectively criminalizes the local population's only means of survival.

### Way Ahead

- **Satellite Surveillance:** Using real-time satellite and drone data to detect new mine openings in remote forested areas.
- **Cooperative Mining:** Encouraging small landholders to form cooperatives to make regulated, scientific, and safe open-cast mining economically feasible.
- **Alternative Economies:** Investing in Meghalaya's **Bioeconomy** and tourism to pull the workforce away from hazardous "blood coal" labor.

### Conclusion

The 2026 tragedy underscores that a judicial ban alone cannot stop rat-hole mining. Until the state addresses the **socio-economic vacuum** and

clarifies the **regulatory overlap** between the state and the Autonomous District Councils, the hills of Meghalaya will continue to be broken by illegal dynamite.

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## Project HOPE

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### Context

In **August 2025**, India launched its most ambitious analog space mission to date: **Project HOPE** (Himalayan Outpost for Planetary Exploration). Situated in the high-altitude cold desert of Ladakh, this research station serves as a crucial rehearsal for India's upcoming **Gaganyaan** missions and the long-term goal of landing an Indian on the Moon by **2040**.

### About Project HOPE

**What it is?** Project HOPE is a "Mars analog" research station, a facility on Earth that replicates the physical and psychological challenges of living on another planet. It is India's first full-scale, crewed simulation environment designed to test how humans and equipment survive in extreme isolation.

#### Key Details:

- **Developer:** Spearheaded by **Protoplanet** (a Bengaluru-based space-tech firm) in collaboration with **ISRO's Human Space Flight Centre (HSFC)**.
- **Location:** The **Tso Kar Lake** region in Ladakh, approximately 150 km from Leh.
- **Altitude:** ~4,500 meters (14,500 feet), providing thin air and low oxygen levels (hypoxic environment).
- **The Habitat:** Consists of two interconnected modules **Phobos** (an 8-meter living habitat) and **Deimos** (a 5-meter utility module), named after the moons of Mars.

#### Why Ladakh?

Ladakh is considered one of the most "Mars-like" places on Earth due to several unique factors:

- **Terrain:** The rocky, barren landscape and saline permafrost closely mimic the geological features of the Martian surface.
- **Atmosphere:** The thin air and high UV radiation levels provide a natural

laboratory to test the durability of spacesuits and electronic components.

- **Climate:** Extreme temperature swings—ranging from **35°C to -25°C**—mirror the thermal stresses found on Mars.
- **Biological Parallel:** Scientists believe the Tso Kar basin resembles Mars as it was **2 billion years ago** when it still had liquid water and potentially hosted microbial life.

### Objectives and Research

The primary focus of Project HOPE is not just the technology, but the **human element**:

- **Psychological Studies:** Monitoring "isolation stress" and how small crews maintain mental health and team dynamics over long periods.
- **Biomedical Research:** Conducting genomic and epigenetic studies to see how the human body adapts to high altitudes and low oxygen in real-time.
- **Operational Training:** Testing "Extra-Vehicular Activity" (EVA) protocols, where analog astronauts perform tasks in heavy gear to simulate work on the Martian surface.
- **Life Support Testing:** Validating hydroponic systems for food growth and waste management technologies in a closed-loop environment.

### Significance for India

- **Gaganyaan Readiness:** Data from HOPE helps refine the protocols for India's first human spaceflight, ensuring astronauts are prepared for the isolation of orbit.
- **Bharatiya Antariksh Station:** The research informs the design and internal architecture of India's planned space station (expected by 2035).
- **Global Standing:** With this project, India joins an elite group of nations (like the US and Russia) that operate full-scale analog research facilities, enhancing its role in the global space community.

### Conclusion

Project HOPE transforms the silence of the Ladakh desert into a "silent rehearsal" for humanity's next giant leap. By mastering the

challenges of the Himalayas today, India is building the scientific foundation to inhabit the Moon and Mars tomorrow.

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## Dark Sky Reserves

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### Context

Dark Sky Reserves are protected areas where artificial light pollution is strictly minimized to ensure a naturally dark nocturnal environment. These sites are essential for high-precision **astronomical observation**, the protection of nocturnal wildlife, and the growing sector of **astro-tourism**.

### Key Locations Discussed

#### 1. University of Tokyo Atacama Observatory (TAO)

- **Location:** Summit of Cerro Chajnantor, Atacama Desert, **Chile**.
- **Altitude:** ~5,640 meters (the world's highest permanent astronomical observatory).
- **Scientific Edge:** The extreme altitude and dry air (low water vapor) allow it to capture **infrared light** that is usually absorbed by the atmosphere and invisible from lower elevations.

#### 2. Hanle, Ladakh (India)

- **Status:** India's first **Dark Sky Reserve (HDSR)**, established in late 2022.
- **Altitude:** ~4,500 meters within the Changthang Wildlife Sanctuary.
- **Conditions:** Boasts **Bortle-1** skies (the highest possible rating for darkness and clarity), low humidity, and over 300 clear nights annually.
- **Protection Measures:** A **22 km radius** around the Indian Astronomical Observatory (IAO) is a designated "dark core."
  - **Light Management:** Residents use warm-toned LED bulbs, lamp shades, and blackout curtains.
  - **Vehicle Curbs:** High-beam headlights and unnecessary night driving are prohibited within the reserve to prevent "sky glow."

### The Infrastructure of Hanle (IAO)

The Indian Astronomical Observatory at Hanle is one of the world's highest sites for optical, infrared, and gamma-ray astronomy. Key telescopes include:

- **Himalayan Chandra Telescope (HCT):** A 2-meter optical-infrared telescope.
- **MACE (Major Atmospheric Cherenkov Experiment):** The world's largest high-altitude gamma-ray telescope (designed by BARC).
- **GROWTH-India:** Part of a global network for studying transient cosmic events (e.g., supernovae).

### Significance of Dark Sky Reserves

- **Astrophysical Research:** Provides a "clean" data environment for sensitive instruments to detect faint light from distant galaxies or dark matter signatures.
- **Astro-Tourism:** Boosts the local economy by training villagers as "**Astronomy Ambassadors**" who lead stargazing tours using professional telescopes (e.g., 8-inch Dobsonians).
- **Ecological Preservation:** Protects the biological rhythms of nocturnal wildlife (like the Tibetan wolf and Black-necked crane) that are disrupted by artificial light.
- **Cultural Heritage:** Preserves traditional sky lore and indigenous knowledge of the stars.

### Conclusion

Dark Sky Reserves like Hanle and the Atacama represent a "silent revolution" in conservation. They prove that by protecting the "last 50% of our environment", the night we can bridge the gap between cutting-edge space science and sustainable rural development.

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## Global Climate Governance: From Diplomacy to Implementation

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### Context

Global climate governance underwent a strategic shift at **COP30** in Belém, Brazil (November 2025). Branded as the "**Global Mutirão**" (a Tupi-Guarani term for collective effort), the summit

aimed to pivot from abstract negotiations to real-world implementation. However, it faced criticism for "procedural optimism," as it formally acknowledged the risk of a **1.5°C overshoot** while stopping short of a legally binding fossil-fuel phase-out.

### About Global Climate Governance

**What is it?** Climate governance is the international system of treaties (like the **Paris Agreement**), domestic laws, and institutional frameworks designed to coordinate global efforts to mitigate greenhouse gas emissions and adapt to inevitable climate impacts.

#### The Current Architecture:

- **The Dual-Track System:** Operations are split between the **CMP** (Kyoto Protocol) and the **CMA** (Paris Agreement), often criticized for maintaining diplomatic motion without a mandatory final destination.
- **Consensus-Based Veto:** Since decisions require near-unanimous agreement among ~200 nations, final texts are often diluted to satisfy all parties, prioritized political face-saving over ecological urgency.
- **The Global Mutirão Framework:** COP30's signature approach emphasizes voluntary, bottom-up mobilization involving civil society, indigenous groups, and youth, moving beyond strictly state-led mandates.

#### Data & Statistics

- **Record Emissions:** Global emissions hit a peak of **57.4 GtCO<sub>2</sub>e** in 2024; India saw the highest absolute rise among G20 nations.
- **Finance Gap:** While developed nations pledged to triple adaptation finance to **\$120 billion by 2035**, the actual need for developing countries is estimated at **\$2.4–\$3 trillion annually**.
- **Temperature Path:** Current global policies trajectory suggests a **2.8°C warming** by the end of the century, far exceeding the 1.5°C limit.
- **Adaptation Deficit:** Only ~\$32 billion was directed toward adaptation in 2022,

leaving the world's most vulnerable communities significantly under-protected.

#### Challenges in Governance

- **"Implementation Disease":** Countries frequently make grand pledges (like India's **500 GW non-fossil target**) that face domestic delays due to transmission bottlenecks or unsigned power agreements.
- **Growth vs. Sustainability:** Strategic infrastructure projects, such as the **Great Nicobar Island project (2024–25)**, often conflict with the need to protect biodiversity and carbon sinks.
- **Coal Dependency:** To ensure grid stability, the Indian government approved **80 GW of new coal capacity** by 2032, complicating the long-term decarbonization timeline.
- **Short-termism:** Climate disasters, like the **2024 Wayanad landslides**, are often managed as isolated emergencies rather than catalysts for systemic governance reform.

#### Major Initiatives from COP30

- **Tropical Forests Forever Facility (TFFF):** A flagship **\$125 billion fund** designed to pay countries and indigenous stewards a fixed amount per hectare (approx. \$4/year) for keeping forests standing.
- **Global Implementation Accelerator (GIA):** A new platform to help nations align domestic policies with the 1.5°C mission through technical support and reporting.
- **Belém Mission to 1.5°C:** A high-level initiative to guide the next cycle of **Nationally Determined Contributions (NDCs)** to be more credible and science-based.
- **PM Surya Ghar Muft Bijli Yojana:** India's domestic push to solarize 10 million households, serving as a global model for decentralized green energy.

#### Way Forward

- **Binding Roadmaps:** Shifting from "voluntary encouragement" to specific, time-bound fossil-fuel phase-down schedules.
- **Financial Reform:** Redesigning the global architecture to provide **low-interest, long-term climate loans** instead of high-interest debt.
- **Subnational Empowerment:** Giving city and state governments more power to lead adaptation efforts, as they are on the front lines of heatwaves and flooding.
- **Nature-Based Solutions:** Integrating "Blue-Green" infrastructure (mangroves and urban forests) into every major urban planning project.

### Conclusion

COP30 in Belém highlighted a paradox: while the world has more platforms for cooperation than ever, emissions continue to rise. The focus must now shift from the "diplomatic theatre" of summits to the **rapid mobilization of trillions in finance** and the radical protection of existing natural ecosystems.

## Frontier Nagaland Territorial Authority (FNTA)

### Context

On **February 5, 2026**, a landmark tripartite agreement was signed in New Delhi between the Government of India, the Government of Nagaland, and the **Eastern Nagaland People's Organisation (ENPO)**. This pact establishes the **Frontier Nagaland Territorial Authority (FNTA)**, an autonomous body designed to empower six eastern districts of Nagaland while maintaining the state's territorial integrity.

### About the Tripartite Agreement

**What it is?** The FNTA is a unique administrative and territorial governance structure. It provides substantial legislative, executive, and financial autonomy to the Eastern Nagaland region. Unlike the Sixth Schedule areas, this is a **special arrangement** crafted specifically for Nagaland's unique constitutional landscape.

**Parties Involved:**

- **Government of India:** Represented by the Ministry of Home Affairs (MHA).
- **Government of Nagaland:** Led by the Chief Minister.
- **ENPO:** The apex body representing **eight recognized Naga tribes** (Konyak, Sangtam, Chang, Khiamniungan, Yimkhiung, Tikhir, Phom, and Sumi).

**Geographical Coverage:** The authority governs six eastern districts: **Tuensang, Mon, Kiphire, Longleng, Noklak, and Shamator.**

### Core Objectives

- **Regional Equity:** Addressing long-standing grievances regarding the lack of development and economic neglect in Eastern Nagaland.
- **Enhanced Autonomy:** Devolving decision-making powers to local tribal representatives.
- **Peace & Stability:** Providing a democratic alternative to statehood demands, thereby reducing political alienation.

### Key Features of FNTA

- **Administrative Structure:**
  - **Legislative Body:** A **49-member body** comprising **40 directly elected members** and **9 members nominated by the Governor.**
  - **Mini-Secretariat:** A regional administrative hub headed by a senior official of **Additional Chief Secretary or Principal Secretary** rank.
- **Devolution of Powers:**
  - The FNTA will have authority over **46 specified subjects** (primarily developmental and welfare-oriented, such as agriculture, rural development, and local infrastructure).
- **Financial Autonomy:**
  - **Direct Funding:** A fixed annual allocation from the Centre, with the MHA bearing the initial establishment costs.
  - **Proportional Sharing:** State development outlays for the region will be shared based on **population and area.**

- **Constitutional Safeguard:**
  - The agreement explicitly ensures that **Article 371(A)** remains fully intact. This protects Naga customary laws, social practices, and land ownership from outside interference.
- **Interim Nature:**
  - The arrangement is initially set for a **10-year period**, after which it will be reviewed through democratic political processes.

### Significance

- **Asymmetric Federalism:** Demonstrates the Indian Constitution's flexibility in accommodating diverse regional aspirations without altering state boundaries.
- **Inclusive Governance:** Shifts focus from the state capital to the grassroots, enabling "people-centered planning."
- **Security & Strategy:** Stabilizes a region that shares a strategic border with Myanmar, aligning with India's **Act East Policy**.

### Conclusion

The creation of the FNTA marks a "middle path" in Naga politics, balancing the ENPO's historic demand for a separate state with the need for Nagaland's unity. As described by local leaders, the agreement is the "beginning of an administrative journey" toward total regional transformation.

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## The International Space Station (ISS)

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### Context

The **International Space Station (ISS)** is scheduled for a controlled de-orbit in **2030**. This maneuver will result in a planned re-entry over a remote oceanic area, marking the end of more than three decades of continuous human habitation in low Earth orbit (LEO).

### About the International Space Station

**What it is?** The ISS is a modular, permanently crewed space laboratory. It serves as a unique environment for **microgravity research**, testing deep-space technologies, and studying the long-term effects of space on the human body.

### Launched in:

- **Zarya (1998):** The first module, launched by Russia, began the assembly process.
- **Expedition 1 (2000):** Continuous habitation commenced in November 2000 and has not been broken since.

**International Partnership:** The station is a collaborative effort between five major space agencies:

- **NASA (USA)**
- **Roscosmos (Russia)**
- **ESA (Europe)**
- **JAXA (Japan)**
- **CSA (Canada)**

### Objectives and Key Features

#### Aims:

- **Scientific Discovery:** Conduct research that is impossible on Earth, ranging from fluid physics to biotechnology.
- **Deep Space Gateway:** Test life-support systems and radiation shielding for future missions to the **Moon and Mars**.
- **Global Cooperation:** Foster peaceful international relations through shared governance and technological interdependence.

#### Key Features:

- **Modular Design:** Built through dozens of separate launches and hundreds of hours of spacewalks (EVAs).
- **Interdependence:** The station functions as an integrated whole; for example, the Russian segment provides propulsion/positioning, while the US segment provides the majority of the electrical power.
- **Shared Governance:** Managed by a complex legal framework (Intergovernmental Agreement) that spans 15 nations.

### The Planned De-orbit

As the station's primary structure ages, NASA and its partners have finalized plans for its retirement:

- **U.S. Deorbit Vehicle (USDV):** NASA has selected **SpaceX** to develop a specialized "space tug" (based on the Dragon

spacecraft) to safely guide the 450-ton station into the atmosphere.

- **Target Location:** The remnants will be directed toward **Point Nemo** in the South Pacific, the most remote spot on Earth, often called the "spacecraft cemetery."
- **Transition:** The goal is to avoid a "gap" in LEO presence by transitioning research to new, commercially operated space stations.

### Significance

The ISS remains the single largest structure ever built in space. Beyond its 4,000+ scientific experiments, its greatest legacy is the **operational blueprint** it provided for how diverse nations can live and work together in the most hostile environment known to man.

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## Sodium-ion Battery

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### Context

India is currently re-evaluating its national battery strategy. Amid rising concerns over the **dependency on critical minerals**, import vulnerabilities, and supply chain security associated with lithium-ion batteries, sodium-ion technology has emerged as a high-potential alternative for the domestic market.

### About Sodium-ion Battery Technology

**What it is?** Sodium-ion batteries (SiBs) are rechargeable energy storage systems that utilize **sodium ions (Na<sup>+</sup>)** as charge carriers. While they function on the same "rocking-chair" principle as lithium-ion batteries, they utilize sodium, a far more abundant and accessible element as the core material.

### How it works?

- **Charging:** Sodium ions move from the **cathode to the anode** through the electrolyte, while electrons travel through the external circuit.
- **Discharging:** The ions migrate back to the cathode, releasing the stored electrical energy.
- **Unique Component:** Unlike lithium-ion batteries that require expensive copper for the anode current collector, sodium-ion

batteries can use **aluminum** for both electrodes, further reducing costs.

### Key Features and Advantages

- **Lower Material Risk:** Sodium is ubiquitous (derived from common salt or soda ash), drastically reducing reliance on scarce minerals like lithium, cobalt, and nickel.
- **Enhanced Safety:** These batteries exhibit a lower risk of **thermal runaway** (fire). Critically, they can be discharged to **0% state of charge** for safe transportation and storage without damaging the cells.
- **Manufacturing Compatibility:** Existing lithium-ion production lines can be adapted for sodium-ion manufacturing with only minor modifications, lowering the barrier to entry for industry.
- **Strategic Suitability for India:** By leveraging domestic raw materials, India can achieve higher energy sovereignty and support large-scale grid storage requirements.
- **Cost Efficiency:** Long-term projections suggest significantly lower costs due to material abundance and simplified global logistics.

### Limitations and Challenges

- **Lower Energy Density:** Sodium ions are larger and heavier than lithium ions. Consequently, SiBs currently offer lower specific energy, making them less ideal for **long-range electric vehicles (EVs)**.
- **Technological Maturity:** The technology is in the early commercialization phase; performance optimization and cycle-life improvements are still ongoing compared to the mature lithium-ion market.
- **Process Complexity:** Sodium-ion chemistry is highly **sensitive to moisture**, requiring stricter vacuum and drying conditions during the manufacturing process.
- **Application Constraints:** At present, they are best suited for:
  - Stationary grid storage.

- Two-wheelers and three-wheelers (E-rickshaws).
- Short-range urban mobility.

### Conclusion

For India, sodium-ion technology represents more than just a chemical alternative; it is a strategic tool for **de-risking the energy transition**. While it may not replace lithium-ion in high-performance EVs immediately, its safety and cost-effectiveness make it a cornerstone for stationary storage and the mass-market electrification of light vehicles.

## Watsuji Tetsurō and the Philosophy of "Being-in-Betweenness"

### Context

Japanese philosopher **Watsuji Tetsurō** is being widely revisited in contemporary philosophy for offering a robust, non-Western ethical framework. His work serves as a critical alternative to hyper-individualistic notions of the self, emphasizing our inherent social and ecological connections.

### About Watsuji Tetsurō

#### Who he was:

- **Watsuji Tetsurō (1889–1960):** A preeminent 20th-century Japanese philosopher and ethicist.
- **Bridge-Builder:** One of the first Japanese scholars to critically engage with Western existentialism (Nietzsche, Kierkegaard, Heidegger, and Hegel).
- **Foundational Works:** Author of *Fūdo* (Climate and Culture) and *Rinrigaku* (Ethics), which established the pillars of Japanese environmental and relational ethics.

### Core Philosophies

**Critique of the Western Self:** Watsuji rejected the concept of the **atomized, autonomous individual**. He argued that Western ethics mistakenly universalized a culturally specific European subject, failing to account for social and ecological embeddedness.

### The Concept of 'Ningen' (Human Being):

- **Etymology:** In Japanese, the word for human (*ningen*) consists of two

characters: "person" and "betweenness" (*aida*).

- **Betweenness:** Humans are not isolated units but are constituted through relationships with others, history, and nature.
- **Dual Nature:** The self is **simultaneously individual and collective**—at once a singular entity and a part of a plural whole.

### Emptiness and Self-Negation:

- Drawing from **Mahayana Buddhism**, Watsuji utilized the concept of **emptiness (sūnyatā)**, the idea that the self has no fixed, independent essence.
- **Ethical Requirement:** Authentic life requires "self-negation," where the individual suppresses their ego to create a "betweenness" where others can flourish.

**Ethics as Lived Practice (Rinrigaku):** Watsuji redefined ethics not as abstract moral laws, but as the study of how humans live relationally.

Moral values are seen as emerging from concrete social practices, shared traditions, and communal life.

### Relevance in the Modern World

- **Environmental Crisis:** Counters anthropocentrism (human-centeredness) by stressing our biological and spiritual embeddedness in nature.
- **Mental Health & Alienation:** Offers a "relational" view of the self that combats the loneliness and alienation caused by hyper-individualistic societies.
- **Decolonial Philosophy:** Challenges Western universalism and provides a legitimate framework for plural ethical traditions.
- **Social Ethics:** Prioritizes community, compassion, and mutual responsibility over the modern drive toward pure egoism.

### Conclusion

Watsuji Tetsurō's philosophy of "betweenness" provides a vital lens for the 21st century. By shifting the focus from the "I" to the "Between," his work offers a pathway to solving global crises

through a deeper understanding of our interconnectedness.

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## Illegal Mining

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### Context

In early 2026, a massive explosion at an illegal **rat-hole coal mine** in Meghalaya's East Jaintia Hills killed at least 18 laborers. The tragedy has reignited a national debate over the persistence of banned mining practices, the failure of law enforcement, and the human cost of unregulated extraction.

### About the Illegal Mining Crisis

**What is Rat-Hole Mining?** Illegal mining involves extraction without valid licenses or in defiance of court bans. In Northeast India, this primarily manifests as **rat-hole mining**, a primitive and dangerous method where miners dig narrow horizontal tunnels (3–4 feet high) into hillsides or vertical pits to reach coal seams.

### Key Trends and Data:

- **Persistent Violations:** Despite a **2014 National Green Tribunal (NGT) ban**, an estimated **30,000 illegal rat-hole mines** exist in Meghalaya as of 2026.
- **Economic Scale:** Experts suggest nearly **6 million tonnes** of coal are extracted annually through illegal channels.
- **The Surveillance Gap:** Data indicates that state governments ignore roughly **87% of satellite-generated alerts** (Mining Surveillance System) regarding suspicious mining activity.
- **Vulnerable Workforce:** Miners are typically migrant laborers from Assam or Nepal, earning **₹1,500–₹2,000 per day** to work in unmapped, structural-less tunnels.

### Implications of Illegal Mining

- **Loss of Human Life:** Frequent collapses and toxic gas explosions occur due to a total lack of ventilation or structural support. The 2026 Thangsku blast is suspected to have been caused by unscientific dynamite use.

- **Environmental Degradation:** "Acid Mine Drainage" (AMD) turns local water bodies toxic.
  - *Example:* The **Kopili River** has turned bright blue/orange with a **pH as low as 2-3**, effectively killing all aquatic life.
- **Revenue Leakage:** Illegal operations bypass royalties and taxes; a 2025 report in Uttar Pradesh alone identified losses exceeding **₹784 crore**.
- **Funding Organized Crime:** Profits often flow to local "coal mafias" who use the funds to fuel criminal syndicates and exert political influence.
- **Ecological Destabilization:** Unscientific digging leads to land subsidence. In 2025, several houses in **Jharia (Jharkhand)** collapsed due to illegal scavenging in abandoned mines.

### Challenges in Enforcement

- **Politico-Criminal Nexus:** Mine owners are often influential figures, leading to "executive apathy" where committee reports are routinely ignored.
- **Difficult Terrain:** Many sites are hidden in remote, densely forested hills where drone and satellite visibility is limited and physical access for the NDRF is delayed.
- **Socio-Economic Dependence:** In regions like East Jaintia Hills, illegal mining wages are **3x higher** than agriculture, making it the primary livelihood for thousands of families.
- **Technological Bypassing:** While the Mining Surveillance System (MSS) triggers alerts, a lack of ground-level staff results in **zero prosecutions** in many jurisdictions.
- **Legal Loopholes:** Miners often transport fresh illegal coal by claiming it is "pre-ban" stock, a major point of legal contention in recent High Court hearings.

### Initiatives Taken

- **Mining Surveillance System (MSS):** A satellite-based tool designed to detect

unauthorized land clearing within 500m of legal leases.

- **Draft MMDR Amendment Bill 2026:** Proposed legislation to introduce harsher penalties and categorize illegal mining as a **strategic security threat**.
- **Justice Katakey Committee:** A court-appointed panel monitoring environmental restoration and stopping illegal coal transit in the Northeast.
- **Ex-Gratia Relief:** Immediate financial compensation (up to ₹5 lakh total) provided to the families of disaster victims.

### Way Ahead

- **Satellite-to-Action Mandate:** Create a legal requirement for police to act on MSS alerts within **48 hours** or face inquiry for negligence.
- **Transition to Scientific Mining:** Fast-track the shift to regulated, safe mining practices that follow Supreme Court safety norms.
- **Alternative Livelihoods:** Invest in the **Meghalaya Bioeconomy (2024–2026)** and eco-tourism to reduce local dependency on hazardous labor.
- **Smart Logistics:** Deploy **IoT sensors**, smart weighbridges, and GPS-tracked trucks to ensure no coal moves without a verifiable digital transit pass.
- **Specialized Judiciary:** Establish fast-track environmental courts to break the legal deadlock and penalize coal syndicates swiftly.

### Conclusion

The 18 lives lost in 2026 are a grim reminder that bans are ineffective without political will and technology-backed enforcement. India must move from a **reactive, compensation-based model** to a **proactive, safety-first strategy** that replaces the "blood coal" economy with sustainable, scientific practices.

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## Infertility in India

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### Context

Infertility has emerged as a critical public health challenge in India. Experts are increasingly highlighting a paradigm shift: mental health is no longer viewed merely as a consequence of reproductive failure, but as a primary physiological driver affecting all genders.

### About the News

**Definition:** Infertility is defined as the inability of a couple to conceive after 12 months of regular, unprotected intercourse. While historically framed as a "women's issue" due to patriarchal norms, 2026 data indicates a nearly equal distribution of causes between male and female factors.

### Key Trends and Data:

- **National Prevalence:** Approximately **15–20% of Indian couples** (nearly 30 million) currently face infertility, with higher concentrations in urban centers.
- **Falling TFR:** India's Total Fertility Rate (TFR) has dipped to **1.9**, falling below the replacement level of 2.1 due to both lifestyle choices and involuntary infertility.
- **Male Factor Rise:** Men now account for **40–50% of cases**, largely due to declining sperm quality linked to environmental toxins and stress.
- **The IVF Boom:** The Indian IVF market is projected to reach **billions by 2029**, reflecting a surge in medical intervention seeking.

### Causes of Rising Infertility

- **Delayed Parenthood:** Career prioritization and the pursuit of financial stability have pushed the average age of first-time parents beyond the biological prime.
- **Environmental Pollution:** Exposure to **Endocrine Disrupting Chemicals (EDCs)** in air and water is sabotaging hormonal health; air quality drops in cities like Delhi are now linked to reduced sperm motility.
- **Lifestyle-Related Disorders:** Sedentary routines and processed diets have led to an epidemic of **PCOS (Polycystic Ovary Syndrome)**, affecting one in five Indian women.

- **Chronic Psychological Stress:** High cortisol levels from workplace pressure inhibit the HPA axis, directly disrupting ovulation and spermatogenesis.
- **Untreated Infections:** In rural areas, the stigma surrounding STIs and Pelvic Inflammatory Disease (PID) leads to preventable tubal blockages.

### Challenges

- **Social Stigma:** Women often face social ostracization and identity fragmentation, particularly in rural clusters where derogatory labels persist.
- **Prohibitive Costs:** An average IVF cycle in 2026 costs between ₹1.5–3 lakh, yet over 90% of Indian insurance policies still exclude infertility coverage.
- **The Silence of Male Infertility:** Patriarchal norms often prevent men from seeking early screening, leading to delayed diagnosis and unnecessary invasive testing for women.
- **Psychological Feedback Loops:** The stress of failing to conceive creates a biological cycle where anxiety further reduces the probability of successful implantation.
- **Regulatory Gaps:** Rapidly proliferating clinics in Tier II and III cities often lack standardized protocols or transparent success rates.

### Government Initiatives

- **ART and Surrogacy (Regulation) Acts:** Stringent 2025 guidelines mandate clinic registration and protect donors from exploitation.
- **Budget 2026 Health Focus:** Proposals to upgrade regional mental health institutes (e.g., NIMHANS-2) to address the psychological toll of chronic infertility.
- **Project Sanjivini:** A collaborative effort to disseminate reproductive health knowledge at the grassroots level across multiple states.
- **National Digital Registry:** A centralized system to track ART outcomes, ensuring

clinics provide honest success rates to patients.

### Way Forward

- **Integrating Mental Health:** Counseling should be a mandatory, non-optional component of every IVF and ART cycle.
- **Insurance Inclusion:** The IRDAI should mandate partial coverage for infertility under standard health insurance to prevent financial ruin for middle-class families.
- **Workplace Sensitivity:** Corporates should adopt "Fertility Leave" policies and support egg-freezing benefits to accommodate modern reproductive timelines.
- **Male-Centric Campaigns:** Public health messaging must de-stigmatize male factor infertility to ensure both partners are tested simultaneously.
- **Community Education:** Utilizing **ASHA workers** to educate rural populations that infertility is a treatable medical condition, not a moral failure.

### Conclusion

Infertility demands a gender-neutral, holistic approach that bridges the gap between advanced reproductive science and empathetic social narratives. By treating the mind with the same urgency as the body, India can transform fertility care into a journey of dignity rather than one of silent suffering.

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## United States–India Interim Trade Agreement

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### Context

In February 2026, India and the United States announced a landmark framework for an **Interim Trade Agreement (ITA)**. Termed as an "early harvest" deal, it aims to resolve long-standing trade frictions and provide reciprocal market access while both nations work toward a comprehensive **Bilateral Trade Agreement (BTA)**. The deal is seen as a strategic de-escalation of trade tensions following a period of high tariffs.

### About the News

**Definition:**

The ITA is a temporary, outcome-oriented trade pact designed to deliver immediate commercial gains. It focuses on tariff realignment, removal of non-tariff barriers, and strengthening supply chain security between the world's two largest democracies.

**Key Drivers (2025-26):**

- **Strategic De-escalation:** The deal resets a 10-month deadlock where effective tariffs on some Indian goods had reached **50%** due to punitive duties.
- **Reciprocal Tariffs:** Alignment under the U.S. "Reciprocal Tariff" policy (Executive Order 14257) to ensure balanced trade.
- **Geopolitical Realignment:** A pivot toward "friendshoring" to enhance supply chain resilience and counter non-market economic policies of third parties (implicitly China).
- **Energy Transition:** India has committed to pivoting its energy procurement toward the U.S., significantly reducing reliance on Russian crude oil.

**Key Features of the Interim Trade Agreement**

Feature	Details & Impact
<b>Tariff Cuts (India)</b>	Elimination or reduction of duties on <b>all U.S. industrial goods</b> and a broad range of agricultural products (ethanol by-products, tree nuts, fruits, wine, and spirits).
<b>Tariff Reset (U.S.)</b>	The U.S. will apply a reciprocal tariff rate of <b>18%</b> (down from previous peaks of 50%), restoring competitiveness for Indian textiles, leather, and machinery.
<b>National Security Relief</b>	Removal of U.S. Section 232 tariffs on Indian <b>aircraft parts</b> , steel, and aluminum-linked items; preferential quotas for Indian <b>automotive components</b> .

<b>Non-Tariff Barriers</b>	India commits to easing restrictive import licensing for <b>ICT goods</b> and medical devices, plus aligning testing and standards within six months.
<b>Rules of Origin</b>	Jointly agreed rules to ensure trade benefits accrue primarily to India and the U.S., preventing third-country "circumvention."
<b>Digital Trade</b>	Commitment to address discriminatory digital practices and establish a pathway for ambitious digital rules in the upcoming BTA.

**Strategic Commitments & Technology Trade**

- **\$500 Billion Purchase Intent:** India intends to purchase **\$500 billion** worth of U.S. energy (LNG, coking coal), aircraft, critical minerals, and technology over the next five years.
- **AI & Hardware Hub:** Both nations will significantly increase trade in **Graphics Processing Units (GPUs)** and hardware for data centers, positioning India as a preferred partner in global tech value chains.
- **Economic Security Alignment:** Cooperation on export controls, inbound/outbound investment screening, and securing diversified sources for critical minerals (lithium, copper, nickel).

**Way Ahead**

- **Path to BTA:** The ITA serves as a foundation for the full **Bilateral Trade Agreement**, which will tackle more complex issues like deep digital trade rules and comprehensive agricultural access.
- **Regulatory Convergence:** Continuous dialogue to align technical regulations and conformity assessments to improve the "Ease of Doing Business."

- **Supply Chain Diversification:**  
Leveraging the 18% tariff window to move India from "assembly" to "deep manufacturing" under the **Make in India** initiative.

### Conclusion

The U.S.–India Interim Trade Agreement marks a decisive shift from transactional friction to strategic economic partnership. By slashing punitive tariffs and unlocking a massive \$500 billion procurement pathway, the agreement stabilizes the bilateral relationship and reinforces India's role as a trusted node in the redesigned global supply chain.

## AI Impact Summit 2026

### Context

In February 2026, New Delhi hosted the **India–AI Impact Summit 2026**, marking the first global AI summit held in the Global South. With participation from over 100 countries, the summit established a development-oriented framework for Artificial Intelligence, transitioning from "dialogue to delivery."

### About the News

**Framework:** The summit is anchored in three foundational pillars, or **Sutras** (People, Planet, and Progress), which are translated into action through **Seven Chakras** thematic working groups designed to deliver tangible policy and implementation outcomes.

### Key Highlights:

- **Venue:** Bharat Mandapam, New Delhi (February 16–20, 2026).
- **Leadership:** Attracted 15–20 Heads of Government and 50+ international ministers.
- **Logo Symbolism:** Features the **Ashoka Chakra** as a core of ethical governance, with neural network flares representing AI's transformative reach across languages and geographies.

### The Three Sutras (Foundational Pillars)

- **People:** Promoting human-centric AI that safeguards rights, respects cultural

diversity, and ensures equitable access to services.

- **Planet:** Advancing environmentally sustainable AI through energy-efficient compute, responsible resource use, and climate-resilient applications.
- **Progress:** Driving inclusive economic growth, productivity, and innovation to accelerate global development goals.

### The Seven Chakras (Thematic Working Groups)

Chakra	Importance & Focus Area
<b>Human Capital</b>	Prevents job displacement shocks; enables smooth workforce transitions through skilling; positions India as a global AI talent hub.
<b>Inclusion for Social Empowerment</b>	Ensures benefits reach women, farmers, and linguistic minorities; fosters AI that reflects diverse identities and prevents data bias.
<b>Safe and Trusted AI</b>	Builds public trust via transparency and accountability; provides democratized access to safety testing and auditing tools.
<b>Science</b>	Accelerates breakthroughs in health, climate, and agriculture; narrows the North–South research divide through collaborative, open science.
<b>Resilience, Innovation &amp; Efficiency</b>	Promotes "frugal AI"—lightweight, energy-efficient, and sustainable systems adaptable to low-resource contexts.

**Democratizing AI Resources** Addresses the digital divide by expanding access to data, compute, and models beyond "Big Tech" dominance.

**AI for Economic Development & Social Good** Converts AI capability into measurable outcomes in public interest sectors like justice delivery and healthcare.

### Key Initiatives & Flagship Programs

- **AI Pitch Fest (UDAAN):** Showcased innovative startups, specifically those led by women and differently-abled changemakers.
- **Kisan e-Mitra:** A voice-based AI chatbot supporting farmers in regional languages, handling over 20,000 queries daily.
- **Bharat-VISTAAR:** A multilingual digital agriculture platform integrating AgriStack and ICAR practices (introduced in the 2026-27 Union Budget).
- **Research Symposium:** Held on February 18, focusing on frontier work in AI impact from researchers across the Global South.

### Way Forward

- **Global Norm Setting:** Transition from abstract ethical principles to "standardized AI safety" and interoperable governance mechanisms.
- **Multilateral Cooperation:** Use the **ENACT Initiative** to integrate AI into national climate and biodiversity plans globally.
- **Viksit Bharat 2047:** Align AI deployment with India's long-term vision of becoming a digitally empowered, technology-driven developed nation.

### Conclusion

The India–AI Impact Summit 2026 signifies India's emergence as a strategic convenor in global AI governance. By centering the needs of the Global South and focusing on "impact" over mere "innovation," the summit provides a roadmap for responsible AI that balances

technological advancement with social justice and environmental stewardship.

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## Nature-based Solutions

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### Context

Nature-based Solutions (NbS) took center stage as the **TREESCAPES 2026** Congress concluded in Delhi (February 5–7, 2026). The event highlighted agroforestry's critical role in climate resilience. Simultaneously, the **UNEP State of Finance for Nature 2026** report warned of a massive global investment gap, revealing that for every \$1 spent on nature protection, \$30 are spent on nature-negative activities.

### About Nature-based Solutions (NbS)

#### Definition:

NbS are actions to protect, sustainably manage, and restore natural or modified ecosystems to address societal challenges—such as climate change, food security, and water safety—effectively and adaptively. They provide simultaneous benefits for both human well-being and biodiversity.

### Key Data & Stats (2025-26):

- **Mitigation Potential:** NbS can provide up to **37%** of the cost-effective \$CO<sub>2</sub>\$ mitigation needed by 2030 to keep global warming below 2°C.
- **Finance Gap:** The 2026 UNEP report reveals a **30:1 ratio** of nature-negative to nature-positive spending, with nature-negative flows reaching **\$7.3 trillion** annually.
- **Investment Need:** Global NbS investment must grow 2.5 times to **\$571 billion annually** by 2030 to meet climate and land restoration targets.
- **India's Green Cover:** India ranks **9th globally** in forest area; forest and tree cover account for approximately **25.17%** of its geographical area.
- **Agroforestry Potential:** Tree-based systems already account for **19.3%** of India's national carbon stocks.

### Need for Nature-based Solutions

- **Climate Change Mitigation:** NbS act as massive carbon sinks. India's **Ek Ped Maa**

**Ke Naam** campaign (2025) achieved the planting of **262.4 crore saplings** by December 2025 to enhance national sinks.

- **Disaster Risk Reduction:** Mangroves and wetlands act as natural buffers. The **MISHTI** initiative protects coastal communities in Odisha and West Bengal from cyclonic storm surges.
- **Water Security:** Restoring watersheds and urban wetlands improves groundwater recharge. In Bengaluru, rejuvenating seasonal lakes like Jakkur Lake has improved water tables and reduced flood risks.
- **Sustainable Livelihoods:** Ecosystem restoration creates jobs. The **MGNREGS** program increasingly focuses on Natural Resource Management (NRM), providing employment through pond desilting and afforestation.
- **Food Security:** Agroforestry improves soil health. A 2025 ICAR study found that one-acre agroforestry farms sequestered **154.5 megagrams of \$CO\_2\$ equivalent** over nine years while maintaining food production.

#### Challenges to Nature-based Solutions

- **Lack of Standardization:** Poor project design can lead to "greenwashing." Some afforestation drives in Central India were criticized for planting monoculture non-native species (e.g., Eucalyptus) that deplete groundwater.
- **Financing Constraints:** Only **10%** of total NbS investments currently come from the private sector due to high due diligence costs and liquidity risks.
- **Complex Governance:** Overlapping jurisdictions between forest, water, and urban departments stall projects like the **Aravalli Green Wall**, which spans four states (Delhi, Haryana, Rajasthan, Gujarat).
- **Urban Disconnect:** NbS are often treated as secondary to "grey infrastructure." Despite historical floods, many cities still

prioritize concrete drains over restoring natural blue-green floodplains.

- **Technical Gaps:** Mangrove restoration in parts of Tamil Nadu has failed previously because upstream water flow changes were not factored into the design.

#### Initiatives Taken

- **IUCN Global Standard for NbS:** A framework of 8 criteria to ensure projects are sustainable and benefit both people and the planet.
- **Aravalli Green Wall Project:** Launched in June 2025 to restore **6.45 million hectares** of degraded land across Northwest India to combat desertification.
- **Digital CAMPA Reforms:** Rollout of the **Digital APO Portal (2025)** to ensure transparency and real-time monitoring of compensatory afforestation funds and works.
- **ENACT Initiative:** A global partnership supported by India to accelerate NbS by integrating them into national climate and biodiversity plans.

#### Way Ahead

- **Infrastructure Integration:** Incorporate "Blue-Green" infrastructure into the **PM Gati Shakti** framework and the **Smart Cities Mission** (e.g., rain gardens and bioswales).
- **Unlocking Green Finance:** Develop **Sovereign Forest Bonds** and utilize the carbon credit market, projected to grow significantly in India by 2032.
- **Community-Led Governance:** Empower **Gram Sabhas** and women-led water committees (from Jal Jeevan Mission) to manage local wetland and forest restoration.
- **Science-Based Monitoring:** Use the **Meri LiFE portal (2026)** and satellite imagery to track the survival and health of planted saplings and restored ecosystems.
- **Scaling Agroforestry:** Implement the roadmap from the **South Asian Agroforestry Congress 2026** to reduce

India's **\$7 billion** wood import bill while supporting marginal farmers.

### Conclusion

Nature-based Solutions represent a transition from fighting nature to partnering with it. While funding gaps and standardized implementation remain hurdles, Indian initiatives like the Aravalli restoration and the massive "Ek Ped Maa Ke Naam" campaign show a strong political will. By bridging the finance gap and centering local communities, India can turn its natural capital into its strongest defense against climate change.

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## Social Media Ban for Children

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### Context

The tragic suicide of three sisters in Ghaziabad linked to digital addiction and parental conflict reignited an intense national debate. This incident has pressured the Union government to consider a legal ban on social media for minors to address the growing public health crisis of screen addiction.

### About the News

**Definition:** A social media ban for children involves regulatory prohibitions preventing individuals under a certain age (typically 16) from maintaining digital accounts. It shifts the burden of age verification onto tech companies through government IDs or biometric data.

### Key Statistics :

- **Massive User Base:** India hosts over **400 million** users each on Instagram and Facebook as of 2026.
- **Teen Dominance:** The **ASER Report (2025-26)** reveals that over **90%** of Indian teenagers are active on social media.
- **Health Warning:** The **Economic Survey 2025-26** officially classified "compulsive scrolling" as a major public health concern for the youth.
- **Gender Divide:** A significant gap persists, with only **33.3%** of women having used the internet compared to **57.1%** of men.
- **Time Consumption:** 61% of urban children spend over **3 hours daily** online, with many exceeding 6 hours.

### Need for Social Media Ban for Children

- **Combating Extreme Addiction:** Prolonged exposure to algorithm-driven content can lead to fatal behavioral shifts, as seen in the 2026 Ghaziabad case involving task-based digital games.
- **Mental Health Protection:** Heavy usage is consistently linked to rising rates of anxiety, depression, and body image dissatisfaction in the 15-24 age group.
- **Prevention of Cyber-Grooming:** Restricting access reduces the vulnerability of minors to digital predators and harmful interactions with AI chatbots.
- **Reducing Self-Harm Contagion:** Bans limit the spread of viral "challenges" or tasks that encourage self-harming behavior.
- **Restoring Academic Focus:** The Chief Economic Advisor noted in January 2026 that "constant scrolling" is eroding the attention spans and cognitive development of students.

### Challenges to Banning Social Media

- **Technical Porosity:** Children often bypass restrictions using **VPNs** (Virtual Private Networks) to access restricted apps or content.
- **Privacy and Surveillance Risks:** Enforcing the **Digital Personal Data Protection (DPDP) Act** through mandatory ID linking creates risks of mass state surveillance.
- **Loss of Digital Lifelines:** Marginalized youth, including queer and differently-abled individuals in rural India, rely on social media for community support unavailable in their physical surroundings.
- **Exacerbating Gender Inequality:** Rigid age mandates may provide a pretext for families in patriarchal settings to further restrict female internet access.
- **Migration to "Dark" Platforms:** Bans may drive users from moderated platforms (like Instagram) to unmoderated, encrypted spaces like Telegram where extremist content thrives.

## Global Best Practices

- **Australia's Minimum Age Law:** The first nation to enforce a strict **under-16 ban** on platforms like X and TikTok, supported by heavy corporate fines.
- **Singapore's App Store Code:** Focuses on regulating app stores to enforce strict age ratings and verification before downloads occur.

## Way Forward

- **Duty of Care:** Transition from blanket bans to holding Big Tech legally accountable for "safety-by-design" in their algorithms.
- **Independent Regulation:** Establish a dedicated expert body for digital safety to oversee platform compliance beyond standard bureaucracy.
- **Localized Research:** Fund longitudinal studies to understand the specific impact of social media across different Indian demographics and regions.
- **Digital Literacy:** Incorporate comprehensive digital citizenship in school curriculums to help children navigate the internet safely.
- **Democratic Inclusion:** Ensure the voices of young people are included in the policy-making process regarding their digital rights.

## Conclusion

A blunt ban may offer a temporary illusion of control, but it fails to address the systemic technical and social drivers of digital harm. India must strike a balance by compelling Big Tech to adopt rigorous safety standards while fostering a healthy media ecology that protects children without stripping them of their digital rights.

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## START & New START Treaty

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### Context

The **New START** (Strategic Arms Reduction Treaty) officially expired without a successor agreement. For the first time in over 50 years since the SALT I negotiations began in 1969, there are **no legally binding limits** on the

nuclear arsenals of the world's two largest nuclear powers, the United States and Russia.

### Background: Evolution of START

The START framework was born out of the Cold War necessity to shift from the "unlimited accumulation" of weapons to "negotiated reduction."

- **START I (1991):** Signed between the USA and the USSR (just months before its collapse), it was the first treaty to actually reduce nuclear warheads (to 6,000 each) rather than just capping their growth.
- **New START (2010):** Signed by Presidents Obama and Medvedev, it further lowered the ceilings. It entered into force in 2011 with an initial 10-year lifespan.
- **Extension (2021):** In one of their first major diplomatic acts, Presidents Biden and Putin agreed to a one-time, **five-year extension** (the maximum allowed), pushing the expiration to February 2026.

### Key Provisions of New START

The treaty imposed three "Central Limits" on each side:

1. **1,550 Deployed Strategic Warheads:** The actual bombs ready for immediate use.
2. **700 Deployed Delivery Systems:** Including ICBMs (Intercontinental Ballistic Missiles), SLBMs (Submarine-Launched Ballistic Missiles), and heavy bombers.
3. **800 Deployed and Non-deployed Launchers:** Total capacity including those in maintenance or storage.

### The Current Crisis

The treaty's "inglorious end" resulted from a breakdown in verification and changing geopolitical priorities:

- **Suspension in 2023:** Citing US support for Ukraine, Russia "suspended" participation in February 2023. While it pledged to stay within numerical limits, it halted **on-site inspections** and data exchanges, effectively blinding the verification process.

- **Russia's Final Offer:** In September 2025, Vladimir Putin proposed an informal **one-year "political commitment"** to adhere to New START limits if the US did the same.
- **The US Position (2026):** The Trump administration allowed the treaty to lapse, with the President stating, *"If it expires, it expires. We'll just do a better agreement."*
  - **The China Factor:** US Secretary of State Marco Rubio has emphasized that any 21st-century arms control must include **China**, whose arsenal has tripled since 2020 (now estimated at 600+ warheads).
  - **Technological Shift:** The US is pivoting toward missile defense (the "Golden Dome") rather than just counting offensive warhead numbers.

### Challenges & Global Risks

- **The Nuclear Vacuum:** Without inspections, "worst-case assumptions" will drive military planning, potentially triggering a new, expensive arms race.
- **Multipolarity:** Russia insists that if China is included, NATO allies (UK and France) must also be at the table.
- **NPT Erosion:** Non-nuclear states argue that the lapse violates **Article VI of the NPT**, which obliges nuclear powers to pursue disarmament, potentially encouraging other nations to "go nuclear."

### Conclusion

The expiration of New START marks the end of bilateral "Cold War-style" arms control. The focus now shifts to whether a **trilateral framework (US-Russia-China)** can be established in Abu Dhabi or Geneva, or if the world is entering an era of unconstrained nuclear expansion.

## Removal of Lok Sabha Speaker

### Context

Opposition **INDIA bloc** submitted a formal notice to the Secretary General for the removal of **Lok Sabha Speaker Om Birla**. The notice, signed by **118 MPs**, alleges that the Speaker has acted in a "blatantly partisan manner," specifically citing the

denial of speaking time to the Leader of the Opposition and the suspension of eight opposition members during the Budget Session.

### Constitutional Provisions

The removal of the Speaker is governed by specific articles that ensure the office remains accountable to the House:

- **Article 94(c):** States that the Speaker may be removed by a resolution of the House of the People passed by a **majority of all the then members** of the House.
- **Article 96:** Outlines that the Speaker **shall not preside** while a resolution for their removal is under consideration, though they have the right to participate in the proceedings.

### Procedure for Removal

The process is rigorous to prevent arbitrary removal and maintain the dignity of the Chair:

1. **Notice Period:** A mandatory **14-day advance notice** must be given in writing to the Secretary General of the Lok Sabha.
2. **Admissibility Scrutiny:** The notice is examined by the Secretariat (or the Deputy Speaker/Panel of Chairpersons) to ensure it contains **specific charges** and lacks defamatory language.
3. **Leave of the House:** Once the 14 days expire, the motion is moved in the House. For the resolution to be admitted, at least **50 members** must rise in their places to support it.
4. **Discussion & Voting:** If leave is granted, the resolution must be discussed and voted upon within **10 days**.

### The "Majority" Requirement

The resolution must be passed by an **Effective Majority**. Unlike a Simple Majority (majority of those present and voting), an Effective Majority is calculated as:

**Effective Majority** = More than 50% of (Total Strength of the House – Vacancies)

*Example: If the House has 543 seats and 3 are vacant, the effective strength is 540. The resolution would need **271 votes** to pass.*

### **Rights of the Speaker During Proceedings**

To ensure a fair trial, the Constitution provides the following safeguards to the Speaker while the resolution is being considered:

- **Participation:** The Speaker has the right to **speak in and take part** in the proceedings.
- **Non-Presiding Status:** They cannot sit in the Speaker's Chair or preside over the House. The Deputy Speaker (or a member from the Panel of Chairpersons) presides instead.
- **Voting Rights:** Unlike normal sessions where the Speaker only has a "Casting Vote" in case of a tie, during their removal proceedings, they can **vote only in the first instance** (as an ordinary member) but **cannot** vote to break a tie.

### **Current Status (February 2026)**

Historically, **no Speaker of the Lok Sabha has ever been removed** from office. While the opposition has the 50 members required to approve the motion, the current NDA government holds a comfortable majority of **293 seats**, making the actual removal unlikely. The move is widely seen as a symbolic assertion of the opposition's grievances regarding parliamentary conduct.

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## **IT Rules Amendment & AI Regulation (2026)**

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### **Context**

The Ministry of Electronics and Information Technology (MeitY) officially notified the **Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Amendment Rules, 2026**. These rules, set to come into force on **February 20, 2026**, introduce the first formal regulatory framework for "Synthetically Generated Information" (SGI) to combat the surge of deepfakes and AI-led misinformation.

### **Key Amendments (2026)**

- **Mandatory AI Labeling:** \* Platforms must ensure that all synthetic content (AI-generated or altered) carries a **clear and prominent label**.
  - **Traceability:** Intermediaries must embed permanent **metadata or unique identifiers** (provenance markers) to trace the content back to the source platform.
  - **Note:** A previous proposal to mandate that labels cover exactly 10% of the screen was dropped in the final notification following industry feedback.
- **Drastic Takedown Windows:**
  - **Lawful Orders:** Platforms must remove content flagged by a court or government order within **3 hours** (down from 36 hours).
  - **Sensitive Content:** Non-consensual deepfakes or intimate imagery must be removed within **2 hours** (down from 24 hours).
- **User Declarations:** Significant Social Media Intermediaries (SSMIs) must now require users to **declare** if their content is AI-generated at the time of upload. Platforms are also expected to deploy technical tools to verify these declarations.

### **Key Concepts & Definitions**

- **Synthetically Generated Information (SGI):** Defined as any audio, visual, or audio-visual information artificially created or modified to appear real/authentic.
  - **Exemptions:** Routine editing (color correction, noise reduction), accessibility tweaks (transcription/translation), and good-faith academic or training materials are **not** classified as SGI.
- **Safe Harbour (Section 79):** The 2026 amendment clarifies that platforms will **retain** their legal immunity if they remove synthetic content in good faith. However, they **lose** this protection if they "knowingly

permit or promote" unlabelled SGI or fail to act within the new 2-3 hour window.

### Comparison of Takedown Timelines

Content Category	Previous Timeline (2021/23)	New Timeline (Feb 2026)
Lawful Orders (Govt/Court)	36 Hours	3 Hours
Non-consensual Deepfakes/Nudity	24 Hours	2 Hours
Grievance Disposal (General)	15 Days	7 Days
Urgent Complaints	72 Hours	36 Hours

### Concerns & Challenges

- **The "Chilling Effect":** Critics argue that the 3-hour window is too short for platforms to distinguish between malicious deepfakes and legitimate political satire or criticism, potentially leading to over-censorship.
- **Verification Feasibility:** While platforms must verify user declarations, technical experts warn that detecting high-quality "stealth" deepfakes in real-time remains a significant engineering challenge.
- **Algorithmic Bias:** Automated moderation tools used to meet these tight deadlines may inadvertently flag regional dialects or cultural nuances as "synthetic."

### Conclusion

The 2026 IT Rules represent a shift toward **"Safety-by-Design."** By mandating provenance and near-instant removal, India is moving away from purely reactive moderation to a system of active accountability for both AI tool providers and social media giants.

## Seychelles

### Context

In February 2026, Prime Minister Narendra Modi and Seychelles President Patrick Herminie

announced the **Joint Vision "SESEL"** (Sustainability, Economic Growth and Security through Enhanced Linkages) during the President's state visit to New Delhi. The visit marks a historic milestone: the **50th anniversary of Seychelles' independence** and **50 years of India-Seychelles diplomatic ties.**

### About Seychelles

- **Definition:** A Small Island Developing State (SIDS) comprising an archipelago of **115 islands** in the western Indian Ocean.
- **Geography:** Located between **4°–11° S** latitude and **46°–56° E** longitude; approximately 1,600 km east of Kenya and 1,100 km northeast of Madagascar.
- **Capital: Victoria,** situated on the northeastern coast of **Mahé,** the largest and most populous island.

### Geological Classification

- **Inner Islands (Granitic):** Over **40 mountainous, granitic islands** (including Mahé, Praslin, and La Digue) featuring narrow coastal plains and lush central hills. These are fragments of the ancient Gondwana supercontinent.
- **Outer Islands (Coralline):** Over **70 low-lying coral atolls and reef islands** that are flat, mostly uninhabited, and rise only a few meters above sea level.
- **Highest Point: Morne Seychellois (905 m),** located within the Morne Seychellois National Park on Mahé island.
- **Natural Heritage:** Home to two UNESCO World Heritage Sites:
  - **Aldabra Atoll:** The world's second-largest coral atoll, famous for giant tortoises.
  - **Vallée de Mai:** A prehistoric forest on Praslin island containing the endemic **Coco de Mer** (the world's largest seed).

### India–Seychelles Joint Vision (SESEL)

The 2026 declaration focuses on five key pillars of cooperation:

- **Special Economic Package:** India announced a **USD 175 million** package, consisting of:

- **USD 125 million** as a Rupee-denominated Line of Credit (LoC).
- **USD 50 million** as a direct Grant for high-impact infrastructure and housing.
- **Maritime Security & MAHASAGAR:** Reaffirming Seychelles as a "key pillar" of India's **MAHASAGAR vision** (Mutual and Holistic Advancement for Security and Growth Across Regions). Includes:
  - Enhanced joint surveillance and hydrography.
  - Refitting the patrol ship *PS Zoraster* for the Seychelles Coast Guard.
  - Seychelles joining the **Colombo Security Conclave** as a full member.
- **Digital Transformation:** Deploying India's **Digital Public Infrastructure (DPI)** in Seychelles to revolutionize digital payments and e-governance service delivery.
- **Climate & Resilience:** \* Implementation of **Multi-Hazard Early Warning Systems**.
  - Technical assistance for power grid management and **Green Public Transport**.
  - Seychelles joining the **Coalition for Disaster Resilient Infrastructure (CDRI)**.
- **Healthcare & Food Security:**
  - Recognition of the **Indian Pharmacopoeia** to ensure access to affordable, quality medicines.
  - Donation of **10 advanced ambulances** and **1,000 metric tonnes** of food grains to lower the cost of living.

### Conclusion

The "SESEL" vision signals a strategic shift toward a more comprehensive, digital, and climate-focused partnership. As a "maritime neighbor," Seychelles remains indispensable to India's security architecture in the Western Indian Ocean, while India continues to be the preferred development and security partner for the island nation.

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## Mangrove Clam

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### Context

**ICAR–Central Marine Fisheries Research Institute (CMFRI)** achieved a rare global scientific milestone by successfully inducing the breeding of the mangrove clam under captive conditions. This breakthrough at the CMFRI's Mariculture Division aims to revive a rapidly declining estuarine resource and pioneer community-managed aquaculture models integrated with mangrove conservation.

### About the Mangrove Clam

- **Definition:** An ecologically critical bivalve (mud clam) native to the mangrove and estuarine ecosystems of South and Southeast Asia.
- **Scientific Name:** *Geloina erosa* (alternatively known as *Geloina expansa* or *Polymesoda erosa*).
- **Local Names:** Popularly known as "**Kandal Kakka**" in northern Kerala, where it is a valued traditional delicacy.

### Habitat and Ecology

- **Niche:** Inhabits organic-rich, muddy substrates specifically within **intertidal mangrove zones**.
- **Salinity Tolerance:** Exhibits remarkable euryhalinity, surviving in environments ranging from brackish water to nearly freshwater.
- **Burrowing Behavior:** A deep-burrowing, semi-infaunal species. Adults are typically found on the landward side of mangroves, while juveniles are more dependent on tidal presence.

### Key Characteristics

- **Giant Size:** One of the world's largest mud clams, with shells reaching up to **10 cm** in width.
- **Filter Feeder:** Acts as a biological filter, removing suspended particles and plankton, which recycles nutrients and improves water clarity.
- **Indicator Species:** Its abundance and health serve as indicators of coastal environmental pollution and ecosystem stability.
- **Reproductive Trait:** Lacks external sexual organs; sexes are identified

internally by the **color and structure of the gonads** (e.g., in specimens under 34 mm).

### Breakthrough in Restoration

Historically, farming this species was hindered by a total dependence on wild seed collection. The CMFRI breakthrough has "closed the life cycle" in captivity:

1. **Induced Spawning:** Scientists triggered spawning in captive broodstock under controlled environmental conditions.
2. **Larval Development:** Successful rearing through the embryonic and larval stages.
3. **Spat Settlement:** Reached the "spat" stage (the point where larvae settle and begin to resemble miniature clams) by the **18th day** post-spawning.

### Significance and Applications

- **Sustainable Aquaculture:** Paves the way for low-input, climate-resilient estuarine farming that requires minimal infrastructure.
- **Ecosystem Ranching:** Hatchery-produced seeds can be "ranching" (released) into degraded mangroves to restore natural populations and enhance biodiversity.
- **Livelihood Security:** Provides a steady, high-protein food source and income for mangrove-dependent coastal communities, particularly in Kerala and India's east coast.
- **Conservation:** Reduces the extreme harvesting pressure on dwindling wild stocks, which have been depleted by pollution and indiscriminate fishing.

### Conclusion

The successful captive breeding of *Geloina erosa* by CMFRI marks a shift toward **extractive aquaculture** where the species actually helps clean and restore the environment it is grown in. By standardizing these hatchery protocols, India positions itself as a leader in merging food security with deep-tier mangrove ecosystem restoration.

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## Digital Governance

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### Context

The Ministry of Electronics and Information Technology (MeitY) notified significant amendments to the **IT Rules, 2021**. The debate has shifted from simple content removal to **content provenance**, mandating that all AI-generated or "synthetically generated" media carry traceable digital tags or watermarks to combat the surge in deepfakes.

### About Digital Governance

- **Definition:** The application of digital technologies (AI, Blockchain, Cloud) alongside constitutional principles like **transparency and accountability** to modernize public administration.
- **Core Shift:** Moving beyond "digitizing paperwork" to a fundamental transformation in how citizens, the state, and markets interact for inclusive service delivery.

### Data & Facts

- **Economic Impact:** The digital economy contributed **13.42%** to India's national income in 2025; projected to reach 20% by 2030.
- **Infrastructure:** Over **97% of villages** are covered by mobile connectivity, supported by 4.74 lakh 5G towers.
- **Digital Identity:** **142 crore Aadhaar IDs** form the backbone of the world's largest biometric service delivery system.
- **Real-Time Payments:** UPI processed **₹24.03 lakh crore** in a single month (June 2025).
- **e-Governance Scale:** **DigiLocker** reached 53.92 crore users by mid-2025, eliminating massive physical paperwork.

### Need for Digital Governance in India

- **Ensuring Democratic Integrity:** Preventing AI-generated deepfakes from skewing public discourse.
  - *Example:* In the **2025 state elections**, the I4C intervened against fabricated videos used to incite communal tension.
- **Combating Gendered Cyber-Abuse:** Addressing the fact that 90% of global

deepfakes are non-consensual pornographic content.

- *Example:* A sharp rise in deepfake complaints was recorded on the National Cyber Crime Reporting Portal in 2025.
- **Financial Security:** Preventing fraud where "animated selfies" are used to bypass remote KYC systems.
  - *Example:* By early 2026, **1 in 5 biometric fraud attempts** involved AI-generated face swaps.
- **Inclusive Delivery:** Breaking language barriers via the **BHASHINI** platform, which now supports 35+ languages.
- **Administrative Accountability:** Reducing "leakages" in welfare.
  - *Example:* Direct Benefit Transfer (DBT) eliminated millions of "ghost beneficiaries" in the PM-KISAN scheme in 2025.

### Challenges

- **Algorithmic Opacity:** "Black-box" AI systems used in policing or welfare often lack transparency, making them difficult to appeal.
- **Surveillance & Privacy:** Risks of state overreach through excessive biometric data collection under new security apps.
- **The Digital Divide:** Structural inequality where rural or elderly citizens struggle with biometric-only distributions despite 5G expansion.
- **Big-Tech Dominance:** A few platforms acting as quasi-sovereign powers, leading to the **Digital Competition Bill (2024–25)**.
- **High Maintenance Costs:** The perpetual cycle of upgrading infrastructure to stay ahead of sophisticated cybercriminals.

### Ethical Principles & Way Forward

#### Ethical Pillars

- **Accountability (Dharma):** Every AI decision must be traceable to a responsible human.

- **Justice (Nyaya):** Systems must be fair, explainable, and respect India's linguistic diversity.
- **Transparency:** Citizens have a right to know if they are interacting with an algorithm or synthetic media.

### The 2026 Strategy

- **Lead Regulator:** Establishing an autonomous digital regulator to unify oversight across various ministries.
- **Implementation of 'CrediMark':** Mandatory, persistent digital tags (provenance) for all synthetic content that cannot be easily stripped.
- **3-Hour Takedown Rule:** New IT Rule amendments (effective Feb 20, 2026) require platforms to remove flagged deepfakes within **2–3 hours**.
- **Regulatory Sandboxes:** Allowing startups to test advanced detection tools in a supervised environment.
- **National Media-Forensics Labs:** Investing in state-of-the-art labs to help citizens and authorities identify synthetic deception.

### Conclusion

India's path toward **Viksit Bharat 2047** relies on a digital governance model that balances rapid innovation with constitutional guardrails. By mandating content provenance and shortening response times, India is setting a global benchmark for a trusted digital infrastructure that upholds human dignity.

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## Artificial Intelligence for Culture and Languages

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### Context

The Press Information Bureau (PIB) released a comprehensive update on the institutionalization of Artificial Intelligence (AI) for Indian culture and languages. The update highlights how national AI platforms are being leveraged to bridge the gap between ancient heritage and modern digital participation, shifting the focus from mere preservation to active cultural engagement.

### About the News

- **Strategic Shift:** The initiative transitions cultural resources from static archives to interactive digital assets, democratizing access to manuscripts, monuments, and oral traditions.
- **Philosophy:** It positions AI as "**Technology for Humanity**," aligning with the broader national vision of inclusive welfare (*Sarvodaya*).
- **Core Objective:** To ensure that India's civilizational identity is not lost in the digital transition by making heritage accessible to every citizen in their native tongue.

### Role of AI in Conservation

- **Digitization of Manuscripts:** High-speed scanning and metadata extraction catalog ancient works vulnerable to physical decay.
  - *Example:* The **Gyan Bharatam Mission** has documented over **44 lakh manuscripts** using intelligent AI cataloging.
- **Multilingual Access:** Real-time speech-to-text and translation remove literacy barriers.
  - *Example:* At **Kashi Tamil Sangamam 2.0**, Hindi speeches were translated in real-time into Tamil via the **BHASHINI** platform.
- **Preserving Endangered Languages:** AI transcribes oral folklore for languages lacking a formal script.
  - *Example:* The **Adi Vaani** platform provides translation for tribal languages like Santali, Bhili, and Gondi.
- **Digital Value Chains for Artisans:** AI tools help craftspeople reach global markets in their own languages.
  - *Example:* Multilingual catalogs for **GI-tagged products** reduce dependence on middle-men.
- **Enhancing Pilgrimage Experiences:** Automated assistance for large-scale heritage gatherings.

- *Example:* The **Kumbh Sah'Al'yak** chatbot provided navigation in **11 languages** during Maha Kumbh 2025.

### Key Initiatives

- **BHASHINI (National Language Translation Mission):** A Digital Public Infrastructure (DPI) providing AI-led services across 22 Scheduled languages.
- **Anuvadini:** An AICTE platform that translates technical and academic textbooks into regional languages to democratize knowledge.
- **Gyan Bharatam Mission (2024–31):** A national mission with an outlay of **₹482.85 crore** focused on digitizing India's vast manuscript heritage.
- **Adi Vaani:** A dedicated AI platform for tribal dialects, supporting health advisories and government messaging in native tongues.
- **Technology Development for Indian Languages (TDIL):** Focuses on standardizing OCR (Optical Character Recognition) and machine translation for Indian scripts.

### Challenges

- **The Digital Divide:** Many cultural practitioners in remote areas lack the digital literacy to navigate complex AI interfaces.
- **Documented vs. Private Wealth:** A significant portion of India's manuscripts resides in private *mutts* or temples, where custodians may be wary of centralized digitization.
- **Low-Resource Datasets:** Endangered languages lack the massive "text corpora" (data) required to train accurate **Large Language Models (LLMs)**.
- **Authenticity Concerns:** Ensuring that digitized versions of traditional designs (GI-tagged products) are protected from mass-produced counterfeits.
- **Infrastructure Gaps:** AI models often require high-speed internet, which is frequently unavailable in rural heritage sites or tribal belts.

## Way Forward

- **Language as DPI:** Expanding the "Language Layer" so startups and government bodies can build inclusive apps without massive initial investment.
- **Verifiable Digital Credentials:** Implementing AI-tracked skill certificates for artisans to improve market trust and formal employability.
- **Local Innovation:** Establishing **Digital Work Hubs** at the district level to support local language content creation and skilling.
- **Open-Source Models:** Shifting toward open-source AI to ensure cultural preservation tools remain a public good rather than proprietary technology.
- **Offline AI:** Developing "edge" AI models that can function without stable internet connectivity for last-mile accessibility.

## Conclusion

India is positioning AI as a guardian of its civilizational identity. Through missions like BHASHINI and Gyan Bharatam, the nation is ensuring that technological progress does not come at the cost of linguistic diversity. By aligning AI with social empowerment, India's rich heritage is being transformed into a living, breathing asset for the digital age.

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## Ancient Trade and Cultural Links

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### Context

Researchers presented groundbreaking findings at the International Conference on Tamil Epigraphy in Chennai, revealing nearly **30 ancient Indian inscriptions** found within the rock-cut tombs of Egypt's **Valley of the Kings**. These discoveries, documented between 2024 and 2025, provide "clinching evidence" of a robust, two-way trade relationship between the Indian subcontinent and the Roman Empire during the 1st to 3rd Century CE.

### About the Discovery

**Linguistic Finds:** The inscriptions were found across six tombs in the Theban Necropolis. Unlike previous finds restricted to coastal ports,

these show Indian travelers venturing deep into the Egyptian interior for sightseeing or extended stays.

- **Languages:** 20 inscriptions are in **Tamil-Brahmi** (Tamil), while the remaining 10 are in **Sanskrit, Prakrit, and Gandhari-Kharoṣṭhī**.
- **Key Name - "Cikai Korran":** \* This name appears **eight times** across five different tombs.
  - **Cikai:** Linked to the Sanskrit *Shikha*, meaning "tuft" or "crown."
  - **Korran:** A distinctly Tamil name derived from *Korram* (victory/slaying). It is linked to the Chera warrior goddess *Korravai* and the term *Korravan* (King).
- **Other Names:** "Kopan" (found in Tomb 1 with the phrase *Kopan varata kantana* — "Kopan came and saw"), "Catan," and "Kiran."

### Strategic Locations:

- **Valley of the Kings:** Inscribed as "graffiti" on tomb walls, sometimes as high as 4 meters, mimicking the existing practice of Greek and Roman visitors.
- **Berenike Port:** A vital Red Sea trade hub where longer Sanskrit inscriptions mentioning Roman emperors and representations of Indian deities (like Buddha) have been unearthed.
- **Quseir-al-Qadim:** Known for the famous "Paanai oRi" (*pot in a rope net*) Tamil-Brahmi pottery find.

### Geography: The Nile River System

Understanding the trade routes requires knowledge of the Nile, which served as the primary transport artery from the Red Sea ports to the Mediterranean.

**The Confluence:** The Nile is formed by the meeting of two major tributaries at **Khartoum (Sudan):**

1. **White Nile:** \* **Source:** Lake Victoria (Uganda/Tanzania/Kenya).
  - **Mnemonic:** "*Winners wear White*" (Victoria = Victory = Winners).

2. **Blue Nile:** \* **Source:** Lake Tana (Ethiopia).
- **Mnemonic:** "Losers get taunted 'Tana' and wear Blue" (Blue = Sadness/Defeat).

### Significance of the Finds

- **Two-Way Trade:** Confirms that trade was not just Romans coming to India for pepper, but Indian merchants actively residing in and traveling through Egypt.
- **High Literacy:** Suggests that ancient Tamil traders were likely multilingual, reading Greek graffiti and recording their own presence in their native scripts.
- **Diplomatic Links:** One Sanskrit inscription mentions an envoy of a **Kshaharata king** (Western Satraps), indicating official diplomatic missions between Indian royalty and the Roman administration.

### Conclusion

The presence of "Cikai Korran" in the tombs of Pharaohs bridges the gap between Sangam-era India and the Roman-era Nile Valley. These inscriptions transform our understanding of ancient Indians from mere "suppliers of spices" to active participants in the globalized culture of the Roman world.

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## Regulations on Books by Defense Personnel

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### Context

The Ministry of Defence (MoD) moved to formalize a detailed set of guidelines for publishing books by defense personnel. The catalyst for this move was the major political and security controversy surrounding the memoir "**Four Stars of Destiny**" by former Chief of Army Staff (COAS), **General M.M. Naravane**. Despite the book remaining unpublished and awaiting MoD clearance, leaked excerpts and digital "pre-print" copies circulated on social media, leading to heated debates in Parliament regarding operational secrecy.

**The Issue: "Four Stars of Destiny"**

The controversy centers on the book's alleged revelations concerning:

- **Operational Details:** High-level decision-making during the **2020 Galwan Valley clash** and the standoff at the Line of Actual Control (LAC).
- **Policy Critiques:** Internal discussions regarding the **Agnipath Scheme** and troop mobilization strategies.
- **Unauthorized Circulation:** The appearance of a hardbound copy in Parliament (used by the Leader of the Opposition) and a leaked PDF online, despite the MoD not having granted the mandatory **Pre-publication Clearance**.

### New Framework & Guidelines (2026)

To address the "legal grey area" that previously existed for retired officers, the government has streamlined the following rules:

#### 1. Mandatory Pre-publication Clearance:

- **Scope:** Applies to both **serving and retired** personnel of the Regular Army, Navy, and Air Force.
- **Process:** Manuscripts must be submitted to the MoD (typically through the **Directorate General of Military Intelligence** or the respective Service Headquarters).
- **Vetting:** Content is reviewed for sensitive operational data, intelligence inputs, equipment capabilities, and information that could affect foreign relations.

#### 2. Permanent Accountability (Official Secrets Act):

- Personnel are reminded that the **Official Secrets Act (OSA), 1923**, applies for life.
- Retired officers do not have the same immunity as civilians when it comes to classified information obtained during their tenure.

#### 3. Pension Rules (2021 Amendment Integration):

- The **Central Civil Services (Pension) Amendment Rules, 2021**, specifically Rule 8, now serves as a deterrent.
- **Pension Withholding:** Retired officials from intelligence or security-related

organizations (listed under the 2nd Schedule of the RTI Act) can have their **pension withheld or withdrawn** if they publish sensitive "domain-related" information without prior clearance.

#### Comparison: Serving vs. Retired Personnel

Feature	Serving Personnel	Retired Personnel
<b>Primary Regulation</b>	Service Acts (Army/Navy/Air Force Acts)	Official Secrets Act (OSA) & Pension Rules
<b>Permission</b>	Prior written permission is <b>explicitly mandatory</b> .	Generally expected to seek clearance if writing on "service matters."
<b>Legal Status</b>	Governed by Military Law.	Governed by Statutory/Civil Law.
<b>Penalty for Breach</b>	Court Martial / Disciplinary action.	Criminal prosecution under OSA; Loss of pension.

#### Objective: Balancing Rights and Security

The government's objective is to reach a stable equilibrium between:

- **National Security:** Protecting tactical strategies, troop movements, and diplomatic nuances that could be exploited by adversaries.
- **Freedom of Speech:** Allowing veterans to contribute to military history, leadership theory, and strategic discourse without "stifling" the intellectual growth of the force.

#### Conclusion

The **2026 Guidelines** signify a shift toward a "zero-tolerance" policy regarding unauthorized military memoirs. By linking publication clearances to pension benefits and the OSA, the Ministry of Defence aims to prevent the recurrence of the "Naravane-style" deadlock,

ensuring that the "Stars of Destiny" are shared only through the lens of national safety.

## Continental Mantle Earthquakes

### Context

**Stanford University** (published in the journal *Science*) unveiled the first global map of **rare continental mantle earthquakes**. By analyzing over 46,000 seismic events recorded since 1990, researchers identified **459** specific events that occurred deep within the mantle beneath continental landmasses, challenging the long-held belief that the mantle is too ductile to "snap" and cause quakes.

### About Continental Mantle Earthquakes

**What are they?** Most earthquakes occur in the Earth's brittle **crust** (the top 10–29 km).

Continental mantle earthquakes are anomalies that originate far deeper, often more than **80 km** below the **Mohorovičić discontinuity (Moho)**, which is the boundary between the crust and the mantle.

**Global Distribution:** While these events occur worldwide, they are not random. The study identified two primary clusters:

- **The Himalayan Collision Zone:** Where the Indian Plate subducts beneath the Eurasian Plate. The Tibetan Plateau is almost "ringed" by these mantle quakes.
- **The Bering Strait:** The region between Asia and North America, south of the Arctic Circle.
- **Other Noted Areas:** The Alpine-Himalayan belt, Romania's Vrancea zone, and Iran's Zagros mountains.

### How They Originate

For decades, scientists debated if the mantle could support earthquakes because high heat and pressure usually make rocks flow like plastic (ductile) rather than break (brittle).

- **Thermal Variations:** Localized "cool" zones within the mantle (often from subducting plates) may remain brittle enough to fracture even at great depths.
- **Stress Transfer:** Intense tectonic stress from crustal collisions can penetrate the

Moho, triggering ruptures in the upper mantle.

- **Mantle Convection:** Internal heat-driven "rivers of rock" recycle old crustal slabs, which can crack as they descend.

#### Comparison: Crustal vs. Mantle Earthquakes

Feature	Crustal Earthquakes	Continental Mantle Earthquakes
<b>Origin Depth</b>	Typically 10–29 km	>80 km below the Moho
<b>Material State</b>	Brittle rock	Generally ductile (quakes occur in rare brittle pockets)
<b>Seismic Wave Ratio</b>	High <b>Lg waves</b> (crustal-travelling)	High <b>Sn waves</b> (mantle-travelling)
<b>Surface Impact</b>	Can be highly destructive	Minimal; shaking is rarely felt at the surface
<b>Frequency</b>	Very common	Rare (approx. 3-4% of identified deep events)

#### Detection Technology: The "Waveform Signature"

The Stanford team used a "game-changer" method to identify these quakes by comparing the ratio of two specific seismic waves:

1. **Lg Waves:** High-frequency waves that bounce through the crust.
2. **Sn (Lid) Waves:** Shear waves that travel through the top layer of the mantle (the "lid").

A high **Sn/Lg amplitude ratio** serves as a "fingerprint," confirming that the earthquake's energy originated below the crustal boundary.

#### Significance

- **Earth's Interior "Sonogram":** These quakes act like a natural ultrasound, providing data on the stress and temperature of the mantle that we cannot reach by drilling.
- **Mountain Building:** In the Himalayas, mantle quakes offer clues into how deep tectonic processes drive **orogeny** (mountain formation).
- **Interconnected Cycle:** The study suggests that the crust and mantle are a single "interconnected earthquake cycle," where deep breaks may influence future shallow, destructive quakes.

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### 'Vande Mataram'

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#### Context

The **Ministry of Home Affairs (MHA)** issued fresh guidelines formalizing the protocol for the National Song, '**Vande Mataram**'. The order coincides with the ongoing nationwide celebrations of the **150th anniversary** of the song's creation (November 1875). For the first time, the government has mandated the singing of **all six stanzas** of the original composition at official functions.

#### About the New Guidelines

**Standardization of Rendition:** The MHA has notified that the "official version" of the National Song now encapsulates all six stanzas written by **Bankim Chandra Chatterjee**. This restores the full original length, which had historically been shortened to the first two stanzas in 1937.

#### Key Protocol Features:

- **Official Duration:** The prescribed duration for the full six-stanza rendition is **3 minutes and 10 seconds** (190 seconds).
- **Order of Performance:** When both the National Song and the National Anthem (*Jana Gana Mana*) are performed together, the **National Song must be played first**.
- **Mandatory Occasions:**
  - **Union Level:** Played during civil investiture ceremonies and upon the

arrival/departure of the **President of India** at formal state functions.

- **State Level:** Played upon the arrival/departure of **Governors or Lieutenant Governors** at official functions.
- **Public Media:** Broadcast before and after the President's address on Akashvani (AIR) and Doordarshan.
- **Events:** Played during the unfurling of the National Flag at ceremonial or cultural functions.
- **Schools:** The MHA advised that the day's work in all schools may begin with **community singing** of the National Song to promote familiarity among students.

### Protocols & Decorum

- **Audience Posture:** Whenever the official version is played or sung, the audience **must stand in attention**.
- **Exemptions:** Standing is **not mandatory** in cinema halls when the song is played as part of a film, newsreel, or documentary, to avoid disruption of the viewing experience.
- **Ceremonial Signals:**
  - **Drumroll:** When played by a band, the song must be preceded by a roll of drums (or mridangam/trumpet).
  - **Marching Drill:** In a marching context, the drumroll should last **seven paces** in a slow march before the song commences.
- **Mass Participation:** Guidelines encourage "mass singing" at public events, suggesting the use of choirs and the distribution of printed lyrics to ensure unison.

### Historical & Significance

- **150th Anniversary:** The song was originally composed by Bankim Chandra Chatterjee on **November 7, 1875** (Akshaya Navami). The 150-year celebration runs from November 2025 to November 2026.
- **Cultural Reaffirmation:** The guidelines seek to restore the song's original status

as a rallying cry during the Indian freedom struggle.

- **Legal Standing:** While the National Anthem has explicit statutory protection, this order serves as the **first formal executive protocol** to standardize the rendition of the National Song.

### Conclusion

The MHA's 2026 guidelines transition 'Vande Mataram' from a flexible cultural hymn to a formally regulated national symbol with a standardized protocol. By mandating the full six stanzas and prioritizing its placement before the National Anthem, the government aims to reinforce historical continuity and national pride during the song's sesquicentennial year.

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### B-READY Assessment

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#### Context

The Department for Promotion of Industry and Internal Trade (DPIIT) announced that India is scheduled for the World Bank's **Business Ready (B-READY) 2026** assessment. This marks a significant shift in how India's investment climate will be evaluated globally, moving beyond the discontinued "Ease of Doing Business" rankings to a more transparent and holistic framework.

#### About the B-READY Assessment

**What is B-READY?** The **Business Ready (B-READY)** is the World Bank Group's new corporate flagship report that assesses the business and investment climate worldwide. Launched in **2024**, it replaces the earlier *Doing Business Report (DBR)*, which was discontinued in 2020 due to data integrity concerns.

**Key Structural Pillars:** The assessment is built on three distinct pillars that evaluate the balance between business flexibility and social benefits:

- **Pillar I – Regulatory Framework:** Measures the quality and clarity of statutory laws (**de jure**) governing a business.
- **Pillar II – Public Services:** Evaluates the quality of institutions and infrastructure (e.g., digital portals, utility reliability) provided by the government.

- **Pillar III – Operational Efficiency:** Measures the real-world experience (**de facto**) of businesses in complying with rules and using services.

#### Key Features and Methodology

- **Lifecycle Approach:** Evaluates 10 core topics spanning a firm's lifecycle:
  1. Business Entry
  2. Business Location
  3. Utility Services
  4. Labor
  5. Financial Services
  6. International Trade
  7. Taxation
  8. Dispute Resolution
  9. Market Competition
  10. Business Insolvency
- **Cross-Cutting Themes:** Unlike its predecessor, B-READY integrates **Digital Adoption, Environmental Sustainability, and Gender Inclusion** across all 10 topics.
- **Dual Data Collection:** Combines **Expert Consultations** (for legal frameworks) with nationwide **Firm-level Surveys** (via the World Bank Enterprise Surveys) to capture ground-level reality.

#### India's Strategy for B-READY 2026

India has launched a series of "pro-business" reforms to secure a strong position in the 2026 assessment:

- **Regulatory Compliance Burden (RCB):** Over **47,000 compliances** have been reduced over the last five years, including the simplification of 16,109 items and the decriminalization of 4,623 provisions.
- **Jan Vishwas Bill 2025:** A massive legislative effort to decriminalize minor technical and procedural defaults across 355 provisions to foster "ease of living" and "ease of business."
- **National Single Window System (NSWS):** A digital "one-stop shop" integrating 32 Central Ministries and 33 States/UTs, offering access to over 3,300 approvals.

- **Business Reforms Action Plan (BRAP):** The seventh edition (2024–25) is currently in progress, focusing on streamlining building permissions and enhancing inspection procedures across states.

#### Challenges in Assessment

- **The "Public Services Gap":** Early B-READY pilot reports show that most economies score higher on *Regulations* (Pillar I) than on the *Public Services* (Pillar II) needed to implement them.
- **De Jure vs. De Facto:** While India has strong laws on paper, the B-READY survey-based methodology (Pillar III) may expose gaps in ground-level implementation and bureaucratic delays.
- **Sustainability Standards:** The inclusion of environmental and gender benchmarks requires Indian firms to adopt greener practices and more inclusive labor policies than previously measured.

#### Conclusion

The inclusion of India in the B-READY 2026 assessment serves as a litmus test for the "Viksit Bharat" vision. By shifting the focus from mere "ease" to "readiness," the World Bank is pushing India to not only simplify its laws but also to upgrade its public infrastructure and ensure that reforms reach the smallest enterprises.

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### IT Rules Amendment 2026

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#### Context

On February 10, 2026, the Union Government notified the **Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Amendment Rules, 2026**. This landmark update targets the escalation of deepfakes and misinformation by mandating a swift **3-hour takedown window** and compulsory labelling for all AI-generated content.

#### About the IT Rules Amendment 2026

##### Definition of Synthetically Generated Information (SGI):

The amendment introduces "SGI" as any audio, visual, or audio-visual content created or altered algorithmically to appear real or indistinguishable from a natural person or real-world event.

## Key Provisions:

- **Legal Recognition:** Provides a technical definition for synthetic content, specifically targeting **deepfakes** and **AI impersonation** while exempting good-faith edits (e.g., accessibility features).
- **Mandatory Labelling: \* Visual/Audio:** AI-generated videos must carry visible watermarks; audio must include spoken disclaimers.
  - **Metadata:** Platforms must embed "provenance markers" (digital fingerprints) to trace the origin of the content to the specific AI tool used.
- **Prohibition on Illegal AI Content:** Intermediaries must use automated filters to block:
  - **CSAM & NCII:** Child abuse material and non-consensual deepfake nudity.
  - **Public Safety Risks:** AI-generated instructions for explosives or weapons.
  - **Deception:** Content designed to impersonate officials or create fraudulent electronic records.
- **Accelerated Takedown Timelines: \* 3 Hours:** Standard window for illegal content flagged by courts or government.
  - **2 Hours:** Critical window for high-sensitivity violations like non-consensual deepfake nudity.
- **Safe Harbour Conditionality:** Intermediaries lose their **Section 79 protection** (immunity from user-posted content) if they fail to label AI content or miss the mandatory takedown deadlines.

## Significance of the Amendment

- **Protecting Individual Dignity:** Fast-tracks remedies for victims of non-consensual AI imagery, preventing irreversible reputational harm.
- **Electoral Integrity:** Guards against the use of AI-cloned voices or morphed videos of candidates during sensitive election periods.
- **Business Accountability:** Forces global tech giants to invest heavily in India-

specific detection technologies and expanded grievance teams.

- **Legal Harmonization:** Aligns digital regulations with the **Bharatiya Nyaya Sanhita (BNS), 2023**, replacing outdated IPC references.

## Challenges

- **Technical Accuracy:** Automated filters struggle to differentiate between high-quality deepfakes and legitimate satire or parody.
- **Resource Constraints:** Smaller platforms may find it logistically impossible to maintain 24/7 legal teams to meet the **180-minute takedown** mandate.
- **Censorship Concerns:** Short windows may lead to "censorship by proxy," where platforms over-remove content to avoid legal liability.
- **Privacy vs. Traceability:** Metadata requirements may conflict with end-to-end encryption, potentially compromising user anonymity.

## Way Forward

- **Standardized Watermarking:** Developing global industry standards for digital watermarks that survive file compression.
- **Capacity Building:** Training local law enforcement units to identify and process synthetic harms accurately.
- **Independent Oversight:** Establishing autonomous expert bodies to review takedown orders and prevent political misuse.
- **Incentivizing Research:** Supporting Indian startups in building AI-detection tools tailored for regional languages.

## Conclusion

The 2026 IT Rules Amendment marks the end of unregulated generative AI in India by shifting the **burden of truth** onto platforms. While the aggressive takedown windows present logistical hurdles, the shift reflects a clear policy priority of **public safety over safe harbour**. The long-term success of these rules will depend on balancing strict enforcement with the protection of fundamental free speech.

## Corruption Perceptions Index 2025

### Context

**Transparency International** released the 2025 Corruption Perceptions Index (CPI), placing India at **91st position** among 182 countries. This marks a five-place rise from its 96th rank in the previous year. While the ascent reflects marginal progress, India's score of **39** remains below the global average, signaling that corruption continues to be a systemic structural challenge.

### About the CPI 2025

**The Index:** The CPI ranks countries based on perceived levels of public sector corruption on a scale of **0 (highly corrupt)** to **100 (very clean)**. It aggregates data from 13 different surveys and assessments by experts and business executives.

### Key Global Insights:

- **Top Performers: Denmark (89)**, Finland, and Singapore continue to lead as the world's cleanest nations.
- **Bottom Performers: Somalia and South Sudan (9)** remain at the bottom, highlighting the link between conflict and corruption.
- **Democracy Backslide:** Countries like the **UK (20th)** and **US (29th)** have seen declines due to weakening standards and political funding opacity.
- **Regional Trends:** The Asia-Pacific region witnessed Gen Z-led protests (e.g., in Nepal and Indonesia) against unaccountable leadership and poor public services.

### Reasons for Corruption Persistence in India

- **Bureaucratic Red Tape:** Complex regulations and opaque approval processes create "gatekeeping" opportunities. In 2024, multiple investigations into state land acquisitions revealed officials demanding bribes to bypass procedural delays.
- **Targeting of Journalists:** The 2025 report specifically labels India as **dangerous for journalists** investigating corruption. A staggering 90% of journalist

killings globally occur in countries with scores below 50.

- **Weak Whistleblower Protection:** Despite existing laws, individuals exposing mining or sand mafias continue to face severe physical threats and harassment.
- **Political Funding Opacity:** The influence of money in elections sustains a corrupt ecosystem, with ongoing 2025 debates focusing on the lack of transparency in funding following the scrapping of previous bond schemes.
- **Normalization of 'Speed Money':** A societal tendency toward *jugaad* (shortcuts) makes petty bribery common for basic services like RTO driving tests.

### Initiatives & Challenges

#### Counter-Corruption Measures:

- **Digitalization:** The expansion of **Direct Benefit Transfer (DBT)** and e-governance has successfully eliminated many middlemen.
- **Legal Strengthening:** The **Prevention of Corruption (Amendment) Act 2024** introduced stricter penalties and provisions for asset forfeiture.
- **Tech Integration:** States are adopting **Blockchain** for immutable land records and AI-powered tools within the Central Vigilance Commission (CVC) to detect financial fraud.

#### Major Implementation Barriers:

- **Judicial Backlog:** Trials for high-profile scams from the 2010s are still pending in 2025, significantly reducing the deterrent effect of the law.
- **Cross-Border Complexity:** Recovering illicit funds from foreign tax havens remains difficult due to complex **Hawala networks** that bypass formal banking.
- **Technological Misuse:** Fraudsters are now using **deepfakes** and encrypted platforms to facilitate "digital arrest" scams and other extortions.

#### Way Forward

- **Institutional Autonomy:** Granting fixed tenures and greater independence to

investigative agencies like the CBI and ED to reduce political interference.

- **Fast-Track Justice:** Establishing dedicated courts mandated to conclude corruption trials within a **one-year timeframe**.
- **Transparency in Finance:** Moving toward a public-funded election model to curb illicit corporate influence.
- **Ethics Education:** Integrating integrity training into school curriculums and civil service induction to foster a long-term cultural shift.

### Conclusion

India's move to 91st rank is a positive sign of incremental progress, yet the score of 39 warns of a deep-rooted malaise. For India to break into the top tier, the focus must shift from digital symbols of reform to **substantive enforcement** and the protection of those who speak truth to power.

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## Ayushman Sahakar Scheme

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### Context

The Union Minister for Home and Cooperation provided an update in the **Rajya Sabha** regarding the **Ayushman Sahakar Scheme**. The update highlighted the scheme's role in strengthening rural healthcare through cooperative institutions and the funding disbursed by the National Cooperative Development Corporation (NCDC) for the 2025-26 period.

### About the Scheme

- **What It Is:** A unique healthcare funding scheme formulated by the **National Cooperative Development Corporation (NCDC)** to assist cooperative societies in building and modernizing healthcare infrastructure.
- **Launched:** October 19, 2020 (in the wake of the COVID-19 pandemic).
- **Ministry: Ministry of Cooperation** (transferred from the Ministry of Agriculture & Farmers Welfare following the creation of the new ministry).

- **Financial Corpus:** NCDC has earmarked **₹10,000 crore** for term loans to cooperatives over a five-year period.

### Key Features

- **Eligibility:** Any cooperative society (State or Multi-State) with provisions for healthcare services in its bye-laws. This includes hospitals run by cooperatives, and even cooperatives formed by doctors.
- **Comprehensive Financial Aid:**
  - **Scope:** Covers establishment, modernization, expansion, and repairs of hospitals, medical colleges (MBBS/BDS/AYUSH), diagnostic centers, and pharmacies.
  - **Loan Details:** Loans cover up to **90% of the project cost** (recently revised from 70% to 90% to ease credit access).
  - **Tenure:** Up to **8 years**, including a 1–2 year moratorium on principal repayment.
- **Women's Incentive:** Cooperatives where women members are in the majority receive a **1% interest subvention** (reduction) on term loans.
- **Working Capital:** Provides "Margin Money" and working capital to ensure smooth day-to-day operations of the healthcare facilities.

### Significance

- **Strengthening Rural Health:** Leverages the deep network of cooperatives in rural India to provide affordable, community-owned healthcare where private and public facilities may be limited.
- **Promoting AYUSH:** Specifically incentivizes the creation of infrastructure for **Ayurveda, Yoga, Unani, Siddha, and Homeopathy**, aligning with the National Health Policy 2017.
- **Digital Integration:** Encourages cooperatives to participate in the **Ayushman Bharat Digital Mission (ABDM)**, creating a digitized healthcare ecosystem at the grassroots.

- **Complementary Role:** Supports the government's aim of "**Sahakar-se-Samridhi**" (Prosperity through Cooperation) by diversifying the business of agricultural and other cooperatives into the service sector.

### Challenges

- **Low Awareness:** Many primary agricultural credit societies (PACS) are unaware of the funding available for diversifying into healthcare services.
- **Technical Capacity:** Grassroots cooperatives often lack the technical expertise required to manage complex medical facilities or large-scale medical colleges.
- **Geographic Imbalance:** Success has been largely concentrated in states with strong cooperative cultures (like Kerala and Maharashtra), with lower uptake in northern and eastern states.

### Way Forward

- **Convergence:** Dovetail Ayushman Sahakar with other central schemes like **Ayushman Bharat (PM-JAY)** to ensure cooperative hospitals are empanelled for cashless treatment.
- **Capacity Building:** MoSPI and NCDC should provide training and technical handholding to societies looking to venture into healthcare.
- **Infrastructure Audit:** Regular audits to ensure that the 90% funding is leading to quality infrastructure that meets National Accreditation Board for Hospitals (NABH) standards.

### Conclusion

Ayushman Sahakar is a landmark initiative that shifts healthcare from a purely commercial or state-led model to a **community-led model**. By empowering cooperatives to become healthcare providers, the government aims to bridge the rural-urban health divide while fostering economic resilience among cooperative members.

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## PAIMANA Web Portal

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### Context

The **Ministry of Statistics and Programme Implementation (MoSPI)** recently presented updated data in the Lok Sabha regarding the **PAIMANA Web Portal**. This platform serves as the primary digital watchdog for high-value central infrastructure projects, ensuring accountability in national development.

### About PAIMANA Web Portal

- **Full Form:** Project Assessment Infrastructure Monitoring and Analytics for Nation-Building.
- **Purpose:** A sophisticated web-based system designed to track the progress of **Central Sector Infrastructure Projects** with a budget of **₹150 crore and above**.
- **Legacy:** It replaces the aging **OCMS-2006** (Online Computerized Monitoring System), bringing modern analytics to project oversight.

### Key Features & Integration

- **"One Data, One Entry" Principle:** By using Application Programming Interfaces (APIs), data flows automatically between systems. This eliminates the need for redundant manual entries and reduces human error.
- **Inter-Departmental Synergy:** PAIMANA is integrated with the **Integrated Project Monitoring Portal (IPMP)** managed by the **DPIIT** (Department for Promotion of Industry and Internal Trade).
- **Automated Tracking:** Currently, approximately **60% of projects** in critical sectors like Roads, Petroleum, and Coal are auto-updated through system integration.
- **Broad Coverage:** Monitors high-value projects across **17 different Union Ministries**, providing a centralized bird's-eye view of India's infrastructure landscape.

### Significance of the Portal

- **Real-Time Oversight:** Allows implementing agencies and ministries to update and view project status digitally, facilitating quicker interventions in case of delays.

- **Fiscal Responsibility:** By monitoring projects worth ₹150 crore+, the government can better manage cost overruns and ensure that large-scale taxpayer investments are utilized efficiently.
- **Data-Driven Governance:** The "Analytics" component of PAIMANA helps in identifying patterns in project bottlenecks, aiding future policy decisions.

#### Challenges in Infrastructure Monitoring

- **Data Latency:** While 60% is automated, the remaining 40% still relies on manual updates from various field agencies, which can lead to reporting lags.
- **Inter-Ministerial Coordination:** Aligning different reporting standards across 17 ministries remains a complex task for MoSPI.
- **External Factors:** While the portal tracks progress, it cannot directly resolve external issues like land acquisition disputes or environmental clearances, which remain the leading causes of project delays.

#### Conclusion

The PAIMANA Web Portal represents a leap toward "**Digital India**" in governance. By moving away from the manual-heavy OCMS-2006 to an API-integrated, analytical platform, MoSPI is streamlining how the nation builds its future. It transitions project management from mere record-keeping to proactive, data-led monitoring.

### The 16th Finance Commission and the States

#### Context

The **16th Finance Commission (FC)** has submitted its recommendations for the **2026-31** period. It marks a significant shift in India's fiscal federalism by introducing a "Contribution to GDP" criterion and enforcing strict fiscal discipline on States through deficit caps and the elimination of off-budget borrowings.

#### About the News

- **Definition:** The Finance Commission is a **Constitutional Body (Article 280)** that recommends the distribution of the "Divisible Pool" of central taxes between the Union and States (**Vertical Devolution**) and among the States (**Horizontal Devolution**).
- **Taxes Shared:** Includes Corporation Tax, Personal Income Tax, CGST, and the Centre's share of IGST.
- **Demands of the States:**
  - **Higher Vertical Share:** 18 States requested an increase from **41% to 50%** to cover rising welfare costs (e.g., Kerala's health and education expenditures).
  - **Inclusion of Cess/Surcharge:** States like Tamil Nadu argued that excluding these reduces their effective share to below 30%.
  - **Reward for Efficiency:** Industrialized states (Maharashtra, Gujarat) demanded that **GDP Contribution** be factored into the distribution.
  - **Flexible Grants:** Request for fewer "tied" grants to allow for state-specific needs (e.g., Karnataka's urban challenges).

#### Major Recommendations (2026-31)

- **Vertical Devolution:** Retained at **41%**, maintaining the status quo despite state demands for more.
- **New Horizontal Criterion:** Introduced "**Contribution to GDP**" with a **10% weight**, rewarding states with higher economic output.
- **Fiscal Discipline:**
  - **Fiscal Deficit Cap:** Strictly capped at **3% of GSDP**.
  - **Off-Budget Borrowings:** All liabilities of state-owned entities must now be transparently included in the main State budget.
- **Sectoral Reforms:** Recommended the **privatization of DISCOMs** to reduce mounting state debt.

- **Local Body Grants:** Allocated ₹9.47 lakh crore for local bodies and disaster management, while discontinuing state-specific grants.

### Analysis of Recommendations

Feature	Impact/Positive	Concern/Negative
<b>GDP Weightage</b>	<b>Reward for Growth:</b> Incentivizes states like Tamil Nadu and Karnataka to improve business environments.	<b>Equity Concerns:</b> Reducing the weight of "Income Distance" may hurt poorer states like Uttar Pradesh or Bihar.
<b>Transparency</b>	<b>Debt Clarity:</b> Ending off-budget borrowings gives a true picture of financial health (relevant for Telangana/Andhra Pradesh).	<b>Fiscal Space:</b> Keeping the vertical share at 41% ignores the shrinking fiscal room for states due to inflation.
<b>Urban Focus</b>	<b>Infrastructure:</b> "Urbanization Premium" grants help cities like Pune or Ahmedabad manage rapid expansion.	<b>Policy Interference:</b> Warnings against unconditional cash transfers (e.g., Gruha Lakshmi) are seen as infringing on state policy.

Environment	Forest Protection:	Power Sector:
	Rewarding the increase in forest cover promotes active conservation in states like Chhattisgarh.	Mandatory DISCOM privatization may cause social unrest in states like Punjab where power subsidies are sensitive.

### Challenges

- **Compliance-driven Federalism:** The shift toward efficiency over equity creates a "winners and losers" scenario among states based on industrialization levels.
- **Stagnant Devolution:** By maintaining the 41% limit and excluding cesses, the Union retains a larger portion of the effective tax collection.
- **One-Size-Fits-All:** Strict deficit caps and mandatory reforms may not account for the diverse socio-economic realities of different regions.

### Conclusion

The 16th Finance Commission represents a pivot toward **economic efficiency and fiscal discipline**. While it finally recognizes the contribution of industrialized states to the national exchequer, the overall fiscal autonomy of States remains under pressure. Balancing the needs of high-growth engines with the requirements of lagging states remains the central challenge of Indian federalism.

## Digital Privacy and Data Sovereignty

### Context

The Ministry of Electronics and Information Technology (MeitY) issued new directives aimed at strengthening the **Data Sovereignty framework**. This follows growing concerns regarding the unauthorized harvesting of personal biometric data by international tech firms and the necessity of protecting the "digital personhood" of Indian citizens.

## About the News

- **Background:** A public interest litigation (PIL) was filed following reports that several cross-border e-commerce applications were storing sensitive user data including facial recognition patterns and gait analysis on servers located outside national jurisdiction without explicit, granular consent.
- **Government/Court Observations:**
  - **Data as a National Asset:** Personal data is not merely a commodity but an extension of an individual's identity.
  - **Informed Consent:** Terms and conditions must be simplified; "dark patterns" used to trick users into sharing data are legally untenable.
  - **Localization:** Critical personal data must be mirrored or stored locally to ensure the state can protect its citizens from foreign surveillance.
- **Immediate Action:** The government has mandated a 90-day compliance window for "Significant Data Fiduciaries" to audit their storage protocols and appoint a local grievance officer.

## Constitutional Framework on Privacy

- **Article 21:** The right to life and personal liberty includes the **Right to Privacy** as a fundamental right (Justice K.S. Puttaswamy v. Union of India, 2017).
- **Article 19:** Privacy is seen as a prerequisite for the effective exercise of free speech; surveillance creates a "chilling effect" on expression.
- **Reasonable Restrictions:**
  - National Security
  - Prevention of Crime
  - Protection of the rights and freedoms of others
- **Judicial Precedents:**
  - **K.S. Puttaswamy v. Union of India (2017):** Established a three-fold test for state interference: Legality, Necessity, and Proportionality.
  - **Vinit Kumar v. CBI (2019):** Interception of communications must

strictly adhere to legal procedure; mere suspicion does not justify privacy breaches.

## Data Protection: Legal Evolution

- **IT Act, 2000:** Initial focus was on electronic commerce and cybercrime, with limited provisions for data protection (Section 43A).
- **Justice B.N. Srikrishna Committee (2018):** Laid the groundwork for a comprehensive data protection law, emphasizing "Data Principal" rights.
- **Digital Personal Data Protection (DPDP) Act, 2023:** \* Introduced the concept of **Data Fiduciaries**.
  - Shifted focus toward the "Notice and Consent" mechanism.
- **Current Perspective:** Moves beyond mere protection toward **Data Sovereignty**, ensuring that the economic value of Indian data benefits the domestic ecosystem.

## Challenges

- **Technological Gap:** Rapid advancements in Generative AI make it difficult for static laws to keep pace with new methods of data deanonymization.
- **Cross-Border Enforcement:** Indian regulators face jurisdictional hurdles when seeking "Right to be Forgotten" enforcement from companies based in "data havens."
- **Compliance Burden:** Smaller startups argue that stringent localization and auditing requirements create high entry barriers, potentially stifling innovation.
- **Surveillance Concerns:** Critics argue that "Data Sovereignty" should not become a tool for state-led mass surveillance or the suppression of dissent.

## Way Forward

- **Legislative Refinement:** Continuously update the DPDP rules to include specific protections for AI-generated synthetic data.
- **Privacy by Design:** Encourage tech developers to integrate privacy features

(like end-to-end encryption and local processing) at the architectural stage of product development.

- **Digital Literacy:** Launch national campaigns to educate users on "Data Hygiene" and how to revoke consent on digital platforms.
- **International Cooperation:** Advocate for a "Global Data Accord" to standardize how personal information is treated across international borders.

### Conclusion

The shift toward Data Sovereignty reflects India's ambition to lead in the digital age while protecting the fundamental rights of its citizens. By balancing the economic potential of data with the non-negotiable right to privacy, the framework aims to create a secure, transparent, and sovereign digital future.

## Reimagination Ahead Roadmap

### Context

The **NITI Aayog's Frontier Tech Hub** has released a comprehensive 10-year strategic blueprint titled "*Technology Services – Reimagination Ahead.*" The roadmap outlines a definitive path to scale India's technology services sector to a valuation of **\$850 billion by 2035**.

### About the Roadmap

**What is it?** It is a visionary framework designed to transition India's tech industry from a traditional "labor-arbitrage" (low-cost outsourcing) model to an **AI-native, IP-led, and platform-driven ecosystem**.

### Core Objectives:

- **Economic Scaling:** Growing the sector significantly to reach the \$850 billion mark by 2035.
- **Architectural Leadership:** Shifting from back-office support to leading global **AI system architecture**.
- **Value Evolution:** Moving from "time-and-material" billing to **outcome-oriented services** driven by proprietary intellectual property (IP).

### Five Priority Growth Levers

The roadmap identifies five specific pillars to drive this decadal transformation:

- **Agentic AI:** Developing autonomous AI systems capable of independent decision-making and complex task execution across various industrial verticals.
- **Software & Products:** Incentivizing the transition from "services-only" exports to high-margin **SaaS (Software as a Service)** platforms and branded software products.
- **Digital Infrastructure:** Prioritizing the expansion of sovereign cloud services, hyperscale data centers, and the domestic **semiconductor ecosystem**.
- **Innovation-led Engineering:** Scaling deep-tech R&D, specialized chip design (VLSI), and embedded systems engineering.
- **India-for-India Solutions:** Creating bespoke AI solutions for domestic challenges in healthcare, agriculture, and governance, which can subsequently be exported to other emerging markets.

### Comparison Table: The Generational Shift

Feature	Traditional Labor-Arbitrage Model	AI-Native / IP-Led Roadmap (2035)
<b>Primary Value Driver</b>	Cost Efficiency: Savings based on wage differentials (man-hours).	Value Creation: Revenue based on business outcomes and intelligent automation.
<b>Billing Structure</b>	Time & Materials: Charging for the number of people and hours worked.	Outcome-Oriented: Charging for results, performance, or subscription (SaaS).

<b>Growth Engine</b>	Headcount Expansion: Scaling requires hiring more employees linearly.	Technological Leverage: Scaling through AI agents and proprietary software platforms.
<b>Core Offering</b>	Service-Only: Implementation, maintenance, and back-office support.	IP-Driven: Ownership of software products, AI models, and "Agentic" systems.
<b>Talent Focus</b>	Standardized Skills: Large pools of developers and support staff.	Deep Tech Expertise: Specialized roles in AI architecture, chip design, and R&D.
<b>Competitive Edge</b>	Operational Scale: Being the "World's Back Office."	Strategic Innovation: Being the "Architect of AI Enterprises."

(HPC) for startups through the IndiaAI Mission.

## Reframing India's Foreign Policy

### Context

Prime Minister Narendra Modi formally acknowledged a **"New World Order"** in Parliament. This marks a decisive transition from the traditional doctrine of **Strategic Autonomy** toward a proactive, interest-based framework explicitly aligned with the vision of **Viksit Bharat 2047** (Developed India by 2047).

### About the News

**What it is?** The new framework represents a shift from "tactical neutrality" to **purpose-driven engagement**. While strategic autonomy prioritized staying out of power blocs, this new era focuses on leveraging international partnerships to achieve high-income status and technological sovereignty.

### The Erosion of Multilateralism:

- **Dysfunctional Institutions:** Traditional bodies like the **WTO** are increasingly paralyzed. For instance, in 2025, India was forced to pursue bilateral "mini-trade deals" as major powers bypassed global dispute mechanisms.
- **Transactional Diplomacy:** Global relations are now guided by "America First" or "China-centric" transactionalism rather than shared liberal values.
- **Weaponization of Trade:** Tariffs and sanctions are frequently used as coercive tools. In 2025, the U.S. linked 50% steel and aluminum tariffs to India's continued energy trade with Russia.
- **China's Institutional Capture:** Beijing's dominance in UN agencies has challenged India's traditional leadership in the Global South.

### The Limits of Strategic Autonomy

- **Cold War Obsolescence:** Non-alignment was designed for a bipolar world. In today's era of technological competition, staying unaligned risks exclusion from critical supply chains.

### Strategic Significance

The roadmap highlights AI not merely as a tool, but as a **structural inflection point**. By focusing on "AI-native" services, India aims to capture the top tier of the global value chain, ensuring that the "Viksit Bharat" vision is powered by indigenous technological breakthroughs rather than just imported systems.

### Way Forward

- **Skill Re-orientation:** Massively upskilling the existing workforce in generative AI and prompt engineering.
- **IP Protection:** Strengthening the patent regime to encourage firms to move from service delivery to product creation.
- **Compute Access:** Ensuring affordable access to high-performance computing

- **Economic Vulnerability:** Relying on "autonomy" without domestic industrial strength is seen as a hollow policy. India's **90% dependence** on East Asian semiconductors (2025 data) has constrained its ability to set independent tech norms.
- **The "Swing State" Label:** Major powers now view India as a "variable" that must be incentivized to join a specific bloc rather than a constant neutral force.
- **Fragmented Global South:** Developing nations now have highly differentiated interests (e.g., specific climate agendas for island nations), making a single "non-aligned" voice harder to maintain.

### The New Strategic Reality

- **Asymmetric Power Politics:** Global relations have returned to a "might is right" style. The **India-U.S. Interim Trade Agreement (Feb 2026)** required India to double certain imports to secure tariff relief.
- **Technological Sovereignty:** Power is now defined by AI and space. The **2025 India-Russia agreement** to link **NavIC and GLONASS** ground stations represents a move toward a non-Western navigation ecosystem.
- **Competitive Manufacturing:** India must compete in a world where the "multilateral ladder" used by China has been pulled up. Electronics exports hit **₹4 lakh crore** in 2025, yet face fierce competition from Vietnam.
- **Neighborhood Volatility:** Increased Chinese influence in Bangladesh and Pakistan has created a "2.5-front" security challenge for Indian diplomacy.

### Reframing Indian Foreign Policy

- **Internal Strength First:** Adopting a low international profile to focus on **PLI schemes** and "Rare Earth Corridors" (Union Budget 2026-27) to bypass Chinese processing.
- **Aggressive Trade Diversification:** Moving beyond traditional markets by

finalizing the **India-EU FTA (Jan 2026)**, which covers 99% of India's export trade value.

- **Tech-Centric Alliances:** Prioritizing issue-based coalitions (e.g., linking digital currencies for BRICS trade) for space, quantum, and cyber technologies.
- **Passive Regional Posture:** Managing neighborhood issues primarily as foreign policy challenges to ensure domestic economic focus remains uninterrupted.

### Conclusion

India's foreign policy is undergoing its most significant transformation since 1991. By shifting from defensive strategic autonomy to an assertive **Viksit Bharat** vision, India aims to navigate a fragmenting world not as a follower, but as an independent global pole and a \$30 trillion economy by 2047.

### Safeguarding Women at Work

#### Context

Ministry of Women and Child Development (MoWCD) convened a National Conference on Safety of Women at the Workplace. The summit focused on reinforcing the **Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 (SH Act)** and promoting the revamped **SHe-Box portal** as a unified digital solution for grievance redressal.

#### About the News

**Definition:** Safeguarding women at work involves a legal and institutional framework designed to prevent and redress sexual harassment. The **SH Act, 2013** serves as the primary legislative pillar for these protections.

#### Key Data & Facts:

- **Rising Participation:** Net female payroll additions reached approximately **4.42 lakh** in July 2025, highlighting the urgent need for formal safety protocols.
- **The Reporting Gap:** Studies indicate nearly **two-thirds** of harassment incidents remain unreported due to fear of professional retaliation.
- **NCRB Trends:** Official data records over **400 cases** annually, though experts view

this as a significant underestimation of the actual prevalence.

- **Compliance Deficit:** A 2024-25 survey found that **53% of HR professionals** still struggle with the practical nuances of POSH (Prevention of Sexual Harassment) implementation.

### Need for Safeguarding Mechanisms

- **Constitutional Mandate:** Protecting dignity is a non-negotiable obligation under **Articles 14, 15, and 21**. In *Aureliano Fernandes v. State of Goa*, the Supreme Court noted that lapses in SH Act enforcement violate these fundamental guarantees.
- **Economic Goals:** Achieving the **Viksit Bharat** target of 70% female workforce participation requires a secure environment. Safety concerns currently suppress the Labor Force Participation Rate (LFPR) in several urban hubs.
- **Talent Retention:** High attrition rates, particularly in the tech sector, are often linked to biased or ineffective POSH mechanisms.
- **Unorganized Sector Protection:** Millions of domestic and agricultural workers remain vulnerable; 2025 surveys show a critical lack of knowledge regarding **Local Committees (LCs)**.
- **Mental Health:** Harassment causes deep psychological trauma. Initiatives like **Project Stree Manoraksha (2025)** aim to provide trauma-informed support to survivors.

### Initiatives Taken

- **SHe-Box Portal (2024 Revamp):** A centralized, multi-lingual platform for filing and tracking complaints across all sectors.
- **Mandatory Disclosure:** Amendments to **Company (Account) Rules** now require firms to disclose the number of POSH cases in their annual Board Reports.
- **National Workplace Safety Pledge:** A 2026 MoWCD initiative to foster a "Zero-Tolerance" culture in both public and private sectors.

- **Capacity Building:** Specialized training modules developed with the **ISTM** are now available on the **iGOT Karmayogi** platform.
- **Judicial Monitoring:** The Supreme Court continues to oversee State Governments to ensure the functional constitution of Internal Committees (ICs).

### Challenges

- **Awareness Deficit:** Only **8% of workers** are fully aware of their specific company POSH policies; many are unaware of the 3-month limitation period for filing.
- **Fear of Retaliation:** In sectors like sports and high-level corporate management, victims fear "blacklisting" or career-ending consequences.
- **Institutional Inertia:** While ICs exist in large firms, **Local Committees (LCs)** for the unorganized sector are often defunct or underfunded.
- **The Digital Divide:** Agricultural and rural laborers often lack the digital literacy required to access the SHe-Box portal.
- **Gender Neutrality Debates:** Current laws only allow women to file complaints, leading to 2025 legal discussions regarding protection for male and transgender victims.

### Way Forward

- **Universal Training:** Transition from one-time onboarding videos to periodic, mandatory sensitization workshops for all staff levels.
- **Strengthening Local Committees:** State governments must fund LCs and publicize contact details at the panchayat and district levels.
- **Incentivizing Safety:** Link government contracts and subsidies to a firm's "Safe Workplace" rating on the SHe-Box repository.
- **Grassroots Outreach:** Deploy mobile safety units and awareness camps specifically for construction and domestic workers.

- **Strict Penalties:** Enforce provisions for license cancellation for repeat offenders to demonstrate that safety is a core business priority.

### Conclusion

The transition from "compliance on paper" to "safety in practice" is essential for India's socio-economic evolution. While the SH Act and SHE-Box provide a strong legal scaffold, proactive employer engagement and rigorous judicial oversight remain the keys to ensuring a harassment-free workplace for every woman.

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## Quorum Sensing

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### Context

Recent breakthroughs in microbiology and biochemistry have highlighted **Quorum Sensing (QS)** as a critical mechanism in bacterial communication. As global health faces the rising threat of **Anti-Microbial Resistance (AMR)**, understanding how bacteria "talk" has shifted from a niche biological curiosity to a cornerstone of next-generation medical therapeutics.

### About the Science

**Background:** Bacteria were long considered solitary organisms. However, research into bioluminescent marine bacteria (like *Vibrio fischeri*) revealed that they only glow when they reach a certain population density. This led to the discovery of Quorum Sensing, a process where bacteria produce and detect chemical signal molecules called **autoinducers**.

### Mechanism of Action:

- **Density Detection:** Individual bacteria release signaling molecules into their environment.
- **Threshold Achievement:** As the bacterial population grows, the concentration of these molecules increases.
- **Coordinated Response:** Once a "quorum" (threshold) is reached, the molecules bind to receptors, triggering a collective change in gene expression across the entire colony.

### Communication Hierarchy

Bacteria are essentially "multilingual," utilizing different chemical languages depending on their audience:

- **Intra-species Communication:** Use of specific signaling molecules (like Acylated Homoserine Lactones in Gram-negative bacteria) to talk exclusively to members of their own species, a "private language."
- **Inter-species Communication:** Use of universal signaling molecules (like Autoinducer-2) that allow different species of bacteria to sense and respond to each other in a "universal language."

### Key Bacterial Behaviors

When the quorum is met, bacteria transition from individual survivors to a coordinated "super-organism," manifesting several behaviors:

- **Biofilm Formation:** Bacteria secrete a sticky matrix to create protective layers (biofilms). These structures are highly resistant to antibiotics and the human immune system.
- **Virulence Factor Expression:** Pathogenic bacteria often wait until they have sufficient numbers before releasing toxins to overwhelm the host.
- **Bioluminescence and Motility:** Coordinated glowing or movement (swarming) to navigate environments or interact with hosts.

### Challenges and the AMR Crisis

- **Antibiotic Resistance:** Traditional antibiotics work by killing bacteria or stopping their growth. This creates "evolutionary pressure," leading to the survival of resistant strains.
- **Biofilm Barriers:** Biofilms can be up to 1,000 times more resistant to antibiotics than free-floating bacteria.
- **Signal Complexity:** The sheer variety of chemical signals makes it difficult to design a "one-size-fits-all" inhibitor.

### Way Forward: Quorum Quenching

Rather than killing bacteria, scientists are developing **Quorum Quenching (QQ)**, the biological equivalent of "jamming" a radio signal.

- **Signal Destruction:** Using enzymes to break down autoinducers before they can reach other bacteria.
- **Receptor Blocking:** Creating "decoy" molecules that plug bacterial receptors, preventing the real signals from docking.
- **Anti-Virulence Therapy:** By breaking communication, bacteria remain in their harmless, individual state. Since this doesn't kill them, it exerts less pressure to evolve resistance, offering a sustainable weapon against **AMR**.

### Conclusion

Quorum Sensing reveals that the microbial world is far more social and strategic than previously imagined. By transitioning from "killing" bacteria to "silencing" them through Quorum Quenching, science may find a way to manage infections without fueling the fire of drug resistance.

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## The 62nd Munich Security Conference (MSC 2026)

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### Context

Held from **February 13–15, 2026**, in Munich, Germany, the 62nd MSC convened at a pivotal moment for global geopolitics. Under the theme "**Under Destruction**," the conference focused on the accelerating erosion of the post-1945 international order, characterized by "wrecking-ball politics" and a shift toward a world shaped by transactional deals rather than universal norms.

### About the News

**Background:** The conference saw participation from over 50 heads of state and government, including German Chancellor Friedrich Merz and French President Emmanuel Macron. A major point of contention was the internal fragmentation of the West, fueled by a more isolationist U.S. administration and deepening transatlantic rifts over trade, defense, and security guarantees.

**India's Presence:** External Affairs Minister **S. Jaishankar** led the Indian delegation, positioning India as a "stabilizing force" in a messy multipolar world. India's participation was marked by the "afterglow" of a landmark **India-EU Free Trade Agreement (FTA)** concluded in January 2026.

### India's Strategic Stance

India articulated a policy of "**Strategic Autonomy**," asserting that its foreign policy is guided by national interest and a "nimble and dynamic" approach to multipolarity.

- **Oil Procurement & Energy Policy:** \* Jaishankar defended India's purchase of Russian oil as a commercially driven decision based on **availability, cost, and risk**.
  - He pushed back against claims that a recent trade deal with the U.S. (which saw a reduction in U.S. tariffs on Indian exports) required India to stop Russian imports, stating India remains "independent-minded."
- **Multipolarity vs. Anti-Westernism:**
  - India reiterated its identity as a "**non-Western**" but not "anti-Western" state.
  - Engagement with the G7 was highlighted as a way to find "common ground" and shared interests in maritime security and resilient connectivity.

### Global Security Concerns

The conference report and discussions highlighted a "crisis of order" where institutions like the UN and WTO are being bypassed:

- **Erosion of Rules-Based Order:** The rise of unilateral actions, particularly from the U.S. and China, has led to what the MSC Report calls "**wrecking-ball politics**."
- **Technological Security:** For the first time, cyber risks and AI were treated as core architecture for security, on par with traditional military hardware.
- **UN Reform:** India led the charge for the **UN@80 agenda**, demanding meaningful reforms to the UN Security Council (UNSC) to reflect 21st-century realities.

### Challenges

- **Transactional Diplomacy:** The shift from principled cooperation to "bilateral deal-making" threatens the security of smaller nations.
- **Transatlantic Rifts:** European leaders expressed deep concern over the volatility

of U.S. security signals, leading to calls for European "geopolitical power."

- **Connectivity Obstacles:** Projects like the **India-Middle East-Europe Economic Corridor (IMEC)** are progressing slower than expected due to ongoing conflict in West Asia.

### Way Forward

- **Strategic Pluralism:** Nations are increasingly adopting "multi-alignment," extracting gains from as many ties as possible.
- **Resilient Infrastructure:** A focus on safeguarding sea lines of communication and contributing to resilient submarine cable infrastructure.
- **Reforming Multilateralism:** There is an urgent need to revitalize global institutions before they are rendered entirely obsolete by regional hegemonies.

### Conclusion

The 62nd Munich Security Conference underscored that the old global status quo is under significant demolition. India's stance suggests that in this new era of "wrecking-ball politics," the path to security lies in maintaining multiple options, fostering trust-based partnerships, and remaining "nimble" enough to navigate a fragmented world.

## Women-Led Renewable Energy (DRE)

### Context

In **February 2026**, the **India Distributed Renewable Energy Summit (IDRES)** highlighted women-led DRE as a strategic pillar for India's net-zero transition. Concurrently, the Chhattisgarh government unveiled "**Anjor Vision 2047**," a landmark roadmap aiming to establish 5,000 women-led DRE solutions and create 50,000 green jobs by 2030.

### About Women-Led DRE

**Definition:** Women-led DRE is a transformative model that shifts rural women from passive "last-mile consumers" to active **designers, owners, and operators** of small-scale energy systems (e.g., solar pumps, mini-grids, and solar dryers).

**Core Philosophy:** It integrates energy access with **gender equity**, ensuring that clean energy infrastructure is managed by local women collectives, such as Self-Help Groups (SHGs), to power both domestic needs and rural livelihoods.

### Key Data and Facts

Indicator	Global Average	India Current (2025-26)
Workforce Representation	32%	11%
Operations & Maintenance	-	< 1%
Income Impact	-	90% of women users report income growth

- **Economic Potential:** Empowering women in the energy sector could add **\$2.9 trillion** to India's economy by 2025-26.
- **Health Impact:** Transitioning from traditional biomass can prevent approximately **200,000 premature deaths** annually in India, primarily among women.
- **Livelihood Scale:** Technologies like solar silk-reeling have increased monthly incomes from **₹1,500 to ₹6,000** for tribal weavers.

### The Need for Women-Led DRE

- **Bridging the Reliability Deficit:** While grid connectivity is high, rural consistency is often low; DRE ensures steady power for essential services like vaccine refrigeration in forest-fringe health centers.
- **Mitigating "Time Poverty":** Rural women spend 3–4 hours daily collecting fuelwood. DRE automates drudgerous tasks, freeing time for education and rest.
- **Productive Use of Energy (PURE):** Affordable energy allows for mechanizing small enterprises such as solar-powered bulk milk chillers in Rajasthan—to make them market-competitive.

- **Climate Resilience:** During extreme weather events, decentralized systems managed by local women often remain the only functioning source of power for emergency communication.

#### Initiatives & Frameworks

- **PM Surya Ghar (Solar Villages):** Targeting 10,000 solar villages by 2030 with a focus on community and women-led management.
- **Lakhpati Didi Scheme:** Integrating DRE technologies into SHG-led businesses in food processing and textiles.
- **Anjor Vision 2047 (Chhattisgarh):** A dedicated state roadmap to increase the RE share to 66% through women-led "Solar Didis."
- **Surya Sakhi (UP):** Training 57,000 women as solar entrepreneurs for installation and after-sales service in every Gram Panchayat.

#### Key Challenges

- **High Upfront Costs:** Solar bulk milk chillers can cost up to ₹25 lakh, a prohibitive amount for typical village SHGs without low-interest green credit.
- **Technical Skill Gap:** A shortage of local female technicians (**Oorja Sakhis**) often leaves systems defunct for months when male technicians are unavailable.
- **Deep-Seated Patriarchy:** Women own only **13.9% of land** in India, making it difficult to secure bank loans for energy assets like solar pumps.

#### Way Forward

- **Asset Ownership:** Mandate women as primary or joint owners of energy assets, mirroring the success of the Ujjwala Yojana model.
- **Green Credit Access:** Launch dedicated credit lines and **First Loss Default Guarantees (FLDG)** specifically for women-led clean-tech enterprises.
- **Solar Didis & Oorja Sakhis:** Scale up vocational training in STEM and technical roles to create a local cadre of maintenance professionals.

- **Panchayat Integration:** Empower Gram Panchayats to partner with women's collectives to provide "Energy-as-a-Service."

#### Conclusion

India's energy transition will only be truly just when women at the "last mile" transition from beneficiaries to leaders. By turning the last mile into the front line of progress, India can simultaneously address energy poverty, climate targets, and gender inequality, accelerating the path toward a **Viksit Bharat**.

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#### Seva Teerth

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##### Context

Prime Minister Narendra Modi recently dedicated '**Seva Teerth**' to the nation, institutionalizing the guiding principle of '**Nagrikdevo Bhava**' (The Citizen is God). This initiative serves as a symbolic and practical reinforcement of the government's commitment to **citizen-centric governance** under the overarching vision of "**India First**."

##### About the Concept

##### Definition:

'Nagrikdevo Bhava' translates to "**May the citizen be treated as God**." It is an evolution of the ancient Indian ethos of *Atithi Devo Bhava* (The Guest is God), adapted for the relationship between the state and its people.

##### Core Objective:

It places the **individual citizen at the epicenter of the administrative universe**, redefining public service as a **sacred duty (Seva)** rather than a mere bureaucratic or administrative function.

##### Philosophical & Constitutional Foundations

The spirit of Nagrikdevo Bhava is built upon four distinct pillars:

- **Civilizational Values:** Draws from the concepts of *Seva* (selfless service) and *Dharma* (duty-bound conduct), where the ruler is seen as the first servant of the people.
- **Gandhian Philosophy:** Resonates with **Antyodaya**, the principle of prioritizing the welfare of the last person in the line.

- **Constitutional Morality:** Aligns with **Articles 14 (Equality) and 21 (Dignity)** of the Indian Constitution, ensuring that every citizen is treated with respect by the state machinery.
- **Ethical Governance:** Reflects the "Trusteeship" model of power, where public office is held as a trust (*Lok Seva*) on behalf of the citizens.

### Significance in Modern Governance

The transition from an authority-driven to a service-driven state has several practical implications:

Dimension	Impact
<b>Service Delivery</b>	Strengthens reforms like <b>Digital India, JAM trinity,</b> and <b>Direct Benefit Transfer (DBT)</b> to eliminate middlemen.
<b>Accountability</b>	Enhances transparency and creates more responsive grievance redressal mechanisms (e.g., CPGRAMS).
<b>Moral Legitimacy</b>	Validates state power through the lens of compassion and empathy rather than just legal authority.
<b>Inclusive Growth</b>	Supports the <b>Viksit Bharat 2047</b> vision by ensuring that the benefits of development reach the "marginalized divinity"—the poor and vulnerable.

### Conclusion

'Nagrikdevo Bhava' represents a paradigm shift in Indian administration—moving from the "colonial mindset" of a ruler and subject to a "democratic mindset" of a servant and deity. By treating the citizen as the ultimate stakeholder, the government aims to transform the character of

the Indian state into a more compassionate, efficient, and dignified entity.

## Complaints Against Judges in India

### Context

In **February 2026**, the Union Law Minister informed the Lok Sabha that the office of the **Chief Justice of India (CJI)** received **8,630 complaints** against sitting judges of the High Courts and the Supreme Court between 2016 and 2025. This disclosure has reignited the national debate on judicial accountability and the transparency of the "In-house Procedure."

### About the News

#### Nature of Complaints:

Complaints typically involve allegations of **corruption, sexual misconduct, abuse of authority, or serious impropriety**. Complaints regarding the merits of a judicial decision (judgment) are usually dismissed as they must be challenged through appeals.

#### Key Data & Trends (2016–2025):

- **Total Volume:** 8,630 formal complaints.
- **Peak Years:** Recent years (2023–2025) saw a significant uptick, with 2024 reaching a high of **1,170 complaints**.
- **Routing:** While most are sent directly to the CJI, many are now being filed via the **CPGRAMS** (Centralised Public Grievance Redress and Monitoring System) and then forwarded to the judiciary.

### Legal and Institutional Framework

The Indian judiciary follows a two-tiered approach to accountability, distinguishing between "minor misconduct" and "proved misbehaviour."

Mechanism	Framework	Purpose
<b>In-house Procedure (1999)</b>	Evolved through SC judgments ( <i>C. Ravichandran Iyer case</i> )	Addresses misconduct below the threshold of removal.

<b>Constitutional Removal</b>	<b>Articles 124(4) &amp; 217 + Judges (Inquiry) Act, 1968</b>	For "proved misbehaviour or incapacity" involving Parliament.
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### The In-house Procedure

Since the government has no disciplinary control over the higher judiciary, the SC adopted an internal mechanism in 1999:

1. **Initial Scrutiny:** The CJI (or HC Chief Justice) examines if the complaint is frivolous.
2. **Fact-Finding Committee:** If serious, a 3-member committee of judges is formed to investigate.
3. **Action:** \* If minor: The judge is cautioned.
  - o If serious: The CJI may advise the judge to **resign** or seek **voluntary retirement**.
  - o If the judge refuses: The CJI can **withdraw judicial work** and recommend that Parliament initiate impeachment.

### Key Challenges

- **Transparency Gap:** The "In-house" process is entirely confidential. The public and the complainant often remain unaware of the findings or the specific action taken.
- **Separation of Powers:** The executive cannot intervene in these complaints, leading to a "judges judging judges" scenario which critics argue lacks independent oversight.
- **Pendency:** There is no fixed timeline for completing in-house inquiries, leading to long periods of uncertainty for both the judge and the complainant.

### Way Forward

- **Judicial Standards and Accountability:** There is a growing call to revive a legislative framework (like the lapsed *Judicial Standards and Accountability Bill*) that balances independence with external scrutiny.
- **Publication of Reports:** Making summarized findings of in-house committees public (while protecting

privacy) could enhance institutional credibility.

- **Establishment of a Permanent Secretariat:** A dedicated body to handle judicial grievances would streamline the process and reduce the administrative burden on the CJI's office.

### Conclusion

While the rising number of complaints reflects increased public awareness and ease of filing, the lack of a transparent outcome remains a concern. Upholding the "Restatement of Values of Judicial Life" is essential to ensure that judicial independence does not become a shield against accountability.

### Denotified Tribes (DNTs)

#### Context

In February 2026, a significant feature in the "Text & Context" section highlighted the ongoing demands of **Denotified, Nomadic, and Semi-Nomadic Tribes (DNTs)**. These communities are intensifying their call for a separate census classification and explicit constitutional recognition to address decades of systemic marginalization.

#### About the News

#### Historical Backdrop:

- **Criminal Tribes Act, 1871:** During British rule, over 200 communities were "notified" as hereditary criminals.
- **Repeal (1952):** Post-independence, the Government of India repealed the Act, "denotifying" these tribes. However, they were replaced by **Habitual Offenders Acts**, which many argue continued the cycle of social stigma and police harassment.

#### Core Demands:

- **Separate Census Category:** Current data is fragmented across SC, ST, and OBC categories, making it difficult to target welfare schemes effectively.
- **Constitutional Status:** A dedicated constitutional framework to protect their

unique cultural identity and socio-economic rights.

### Key Commissions & Frameworks

While this is a recurring theme in national discourse, the following pillars remain central to understanding the DNT issue:

- **Renke Commission (2008):** The first to highlight that nearly 90% of DNTs lacked basic documents like caste certificates or ration cards. It recommended that DNTs be provided with the same benefits as SCs/STs.
- **Idate Commission (2015):** Reinforced the need for a permanent Commission for DNTs and suggested a dedicated constitutional amendment to define and protect these groups.
- **DWBDNC:** The **Development and Welfare Board for Denotified, Nomadic and Semi-Nomadic Communities** was established in 2019 to oversee welfare programs like the **SEED (Scheme for Economic Empowerment of DNTs)**.

### Challenges

- **The "Invisible" Population:** Due to their nomadic nature, many DNTs are not included in local electoral rolls or census data, leading to a "citizenship gap."
- **Societal Stigma:** Despite being "denotified" for over 70 years, these communities often face "presumptive criminality" by law enforcement and society.
- **Overlapping Classifications:** Many DNTs fall under OBC in one state but SC or ST in another, creating a "patchwork" of benefits that is difficult to navigate.

### Way Forward

- **Comprehensive Enumeration:** The 2026 Census (or subsequent surveys) must include a specific sub-category for DNTs to map their actual population and needs.
- **Legal Reform:** Replacing the "Habitual Offenders" mindset with a focus on restorative justice and social integration.
- **Skill Development:** Tailoring the SEED scheme to provide modern vocational

training while respecting traditional nomadic skills (e.g., artisanal crafts, animal husbandry).

### Conclusion

The transition from being "Criminal Tribes" to "Denotified Tribes" was a legal step, but the transition to "Equal Citizens" remains incomplete. Addressing the demands of the Renke and Idate Commissions is essential to ensuring that these "forgotten" communities are integrated into India's growth story.

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## Copper Crunch

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### Context

Copper prices have entered a "structural bull phase," hitting record highs near **\$13,000 per tonne**. Despite moderate supply increases, the market is grappling with a looming deficit. The **Economic Survey 2026** recently warned that copper is becoming a strategic "choke-point" for the global energy transition and the burgeoning AI sector.

### Why the Demand Surge?

- **The Electrification Engine:** Copper is the "bloodstream" of the green economy due to its unrivaled conductivity.
- **Electric Vehicle (EV) Intensity:** A fully electric vehicle requires approximately **80kg** of copper, nearly **4 times** more than a traditional internal combustion engine (ICE) car.
- **The "AI Multiplier":** A single AI data center can consume **28–30 tonnes** of copper for power distribution, high-capacity wiring, and specialized cooling systems.
- **Supply-Demand Gap:** By 2030, experts predict a primary supply shortfall of **8 million to 10 million tons** if new mining investments do not accelerate.

### Copper Science: The Strategic Metal

- **Properties:**
  - **Conductivity:** Second only to silver, making it the most cost-effective conductor for large-scale grids.

- **Durability:** Malleable, ductile, and highly resistant to corrosion.
- **Infinite Recyclability:** Can be recycled repeatedly without losing its electrical or thermal properties.
- **The "Ore Grade" Challenge:** Average ore grades globally are declining (now often <0.6%). To produce just **1 ton of copper**, miners must process nearly **500 tons of rock**, a massive energy and logistical undertaking.
- **Common Ores: Chalcopyrite** (the most abundant sulfide ore), Chalcocite, and Bornite.

### Global & Indian Reserves

#### Global Geography:

- **Chile:** Holds the world's largest reserves (**190M tonnes**) and is the top producer, primarily from the Andes' **Porphyry Copper** deposits.
- **Major Players:** Peru (**100M tonnes**), Australia (**100M tonnes**), and the Democratic Republic of Congo (a rising leader in high-grade reserves).

#### Indian Geography:

- **Top Producing States:**
  - **Madhya Pradesh:** Leading producer (Malanjkhand).
  - **Rajasthan:** Significant historical and modern production (Khetri).
  - **Jharkhand:** Major deposits in the Singhbhum belt.
- **Key Mines:**
  - **Malanjkhand (MP):** India's largest open-pit copper mine.
  - **Khetri (Rajasthan):** Managed by Hindustan Copper Limited (HCL).
  - **Singhbhum (Jharkhand):** Home to the Ghatsila smelter.

### Challenges & Way Forward

- **Import Dependency:** India currently imports a significant portion of its refined copper requirements, especially following the closure of major plants like Sterlite's Tuticorin smelter (which once met 36% of demand).

- **AI & Grid Stress:** The Economic Survey 2026 highlights that a 1 GW wind turbine requires **2,866 tonnes** of copper, emphasizing the need for massive "pit-to-product" domestic capability.
- **Circular Economy:** Scaling up copper scrap recycling could meet up to **40% of global demand** by 2030, reducing the ecological footprint of primary mining.

### Conclusion

The "Copper Crunch" signifies that the global energy transition is no longer just a technological race but a mineral one. For India, securing a stable copper supply through domestic mining expansion and international "off-take" agreements is critical to becoming a \$5 trillion economy without hitting a "commodity ceiling."

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### Transitioning to Green Steel: India's Decarbonization Roadmap

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#### Context

To align with India's commitment to achieve **Net Zero emissions by 2070**, the steel sector, one of the "hard-to-abate" industries, is undergoing a fundamental shift. The government intensified its focus on **Green Steel** to ensure industrial growth does not derail climate targets while protecting exports from emerging global carbon taxes.

#### Why Focus on Steel?

- **Emission Giant:** The steel sector is the largest industrial source of CO<sub>2</sub> in India, contributing approximately **12%** of the nation's total emissions.
- **Global Impact:** Globally, steel production accounts for **8–10%** of emissions.
- **Intensity:** Traditional blast furnace methods (BF-BOF) remain carbon-heavy, generating roughly **1.5 to 3 tons of CO<sub>2</sub>** for every 1 ton of steel produced.

#### Defining Green Steel

Green Steel refers to steel manufactured with significantly lower or near-zero carbon footprints.

- **Technologies:** Utilization of **Green Hydrogen (H<sub>2</sub>-DRI)**, **Renewable Energy** (Solar/Wind) to power Electric Arc

Furnaces (EAF), and **Carbon Capture, Utilization, and Storage (CCUS)**.

- **India's Green Steel Taxonomy (First Globally):**
  - **Threshold:** Steel qualifies as "Green" only if emission intensity is **below 2.2 t-CO<sub>2</sub>e/tfs** (tonnes of CO<sub>2</sub> equivalent per tonne of finished steel).
  - **Star Rating System:**
    - **5-Star:** Intensity < **1.6 t-CO<sub>2</sub>e/tfs**.
    - **4-Star:** Intensity **1.6 – 2.0 t-CO<sub>2</sub>e/tfs**.
    - **3-Star:** Intensity **2.0 – 2.2 t-CO<sub>2</sub>e/tfs**.
  - **Nodal Agency:** The **National Institute of Secondary Steel Technology (NISST)** handles measurement and certification.

#### Drivers for Transition

- **EU's CBAM (Carbon Border Adjustment Mechanism):** As of **January 1, 2026**, the EU has begun implementing carbon costs on imports. Indian exporters may face price hikes of **15–22%** to absorb these taxes, making the transition to low-carbon steel a prerequisite for market access.
- **Energy Security:** India imports over **50 million tons of coking coal** annually. Moving to hydrogen and renewables reduces dependency on volatile global fossil fuel markets.
- **National Green Hydrogen Mission:** A strategic push with a specific **₹455 Crore outlay** for pilot steel projects to make hydrogen-based steelmaking commercially viable by 2030.

#### Challenges

- **The Green Premium:** Production costs for green steel are currently **30% to 54% higher** than traditional methods due to expensive electrolyzers and hydrogen.
- **Scrap Quality:** Transitioning to Electric Arc Furnaces (EAF) requires high-quality steel scrap, which is currently in short supply domestically and often contaminated with impurities.

- **Infrastructure Gaps:** Massive scaling of renewable energy and hydrogen pipelines is required to support industrial-scale production.

#### Way Forward

- **Green Public Procurement (GPP):** The government aims to mandate that Public Sector Undertakings (PSUs) procure a minimum percentage of certified green steel for major infrastructure projects (Railways, NHA) starting **FY28**.
- **Demand Aggregation:** Following the "UJALA LED model," aggregating demand through government tenders can lower green steel prices by an estimated **15–20%** within three years.
- **Market Diversification:** While transitioning, exporters are looking toward less stringent markets in the Middle East and Africa to mitigate the immediate "CBAM shock."

#### Conclusion

Green Steel is no longer just an environmental choice but a **strategic economic imperative**. By leveraging the new Green Steel Taxonomy and the National Green Hydrogen Mission, India aims to become a global leader in low-carbon manufacturing, ensuring that "Viksit Bharat 2047" is built on a sustainable foundation.

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### Great Nicobar Project

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#### Context

In recent developments, the **National Green Tribunal (NGT)** granted environmental clearance to the Great Nicobar Project. The Tribunal concluded that primary environmental challenges have been addressed through mitigation plans, emphasizing that the project is a "vital necessity" for India's national security and economic infrastructure.

#### About the News

##### Project Overview:

- **Location:** Great Nicobar Island, the southernmost island of the Nicobar archipelago.

- **Investment:** Estimated at ₹92,000 Crore (revised upward from the initial ₹72,000 Crore).
- **Core Components:**
  - **International Container Transshipment Terminal (ICTT):** A deep-sea port to facilitate global trade.
  - **International Airport:** Designed for both civilian and strategic defense use.
  - **Gas and Solar Power Plant:** To ensure energy self-sufficiency for the island.
  - **Township and Area Development:** Creating an urban ecosystem to support the workforce and security personnel.

#### Geographical & Strategic Framework

- **Andaman vs. Nicobar:** The Andaman group lies to the North, while the Nicobar group is situated to the South.
- **The 10 Degree Channel:** This specific latitude separates the Andaman Islands from the Nicobar Islands.
- **Indira Point:** Located at the southernmost tip of Great Nicobar, it marks the southernmost point of Indian territory.

#### Strategic Significance:

- **Malacca Strait Proximity:** The island sits near the western entrance of the Strait of Malacca, a primary maritime chokepoint connecting the Indian and Pacific Oceans.
- **Geopolitical Balancing:** Enhances India's "Act East" policy and serves as a vital counterweight to increasing foreign naval presence (specifically China) in the Bay of Bengal and Myanmar's Coco Islands.

#### Environmental & Social Concerns

##### Ecological Risks:

- **Biodiversity Loss:** Concerns over the diversion of pristine rainforests and damage to **Coral Reefs** in the Andaman Sea.
- **Endangered Fauna:** Potential destruction of nesting sites for **Leatherback Turtles** at Galathea Bay and threats to the

**Nicobar Megapode** (a rare mound-building bird).

##### Tribal Rights:

- **PVTG Displacement:** Critics highlight the impact on the **Shompen** tribe (a Particularly Vulnerable Tribal Group) and the **Nicobarese** communities, fearing the loss of traditional hunting grounds and cultural identity.

##### NGT's Observations:

- The project does not violate **Coastal Regulation Zone (CRZ)** norms.
- Mandatory measures for **coral regeneration** and the establishment of new turtle nesting sanctuaries must be implemented to offset ecological damage.

#### Challenges

- **Seismic Vulnerability:** The region is highly prone to earthquakes and tsunamis (as seen in 2004), raising concerns about the long-term durability of heavy infrastructure.
- **Compensatory Afforestation:** Critics argue that planting trees in mainland India cannot replace the unique, ancient tropical ecosystem of the Nicobar Islands.
- **Balancing Act:** Ensuring "Holistic Development" while maintaining the "Precautionary Principle" of environmental law.

#### Way Forward

- **Rigorous Monitoring:** Establish an independent committee to oversee the implementation of environmental safeguards in real-time.
- **Inclusive Governance:** Ensure the Shompen and Nicobarese tribes are consulted continuously to prevent involuntary displacement or loss of livelihood.
- **Technological Integration:** Utilize eco-friendly construction technology to minimize the carbon footprint of the port and township.
- **Strategic Synergy:** Align the project with India's broader maritime security

architecture to maximize the ₹92,000 Crore investment.

### Conclusion

The Great Nicobar Project represents a significant shift toward prioritizing maritime strategy and economic connectivity. While the NGT clearance provides the legal green light, the project's success hinges on India's ability to prove that large-scale industrial growth can coexist with the preservation of one of the world's most delicate ecological and tribal frontiers.

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## Indian Scientific Service (ISS)

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### Context

The proposal for an **Indian Scientific Service (ISS)** has gained significant momentum following the **Economic Survey 2025-26**. As India transitions toward "Deep-Tech" and AI-first governance, high-level meetings of the **Empowered Technology Group** have underscored the urgent need for a specialized cadre to handle increasingly complex technical policy decisions.

### What is the Indian Scientific Service (ISS)?

The ISS is envisioned as a **permanent, all-India specialized cadre** of scientists and technocrats. Unlike the generalist Indian Administrative Service (IAS), the ISS would:

- **Direct Integration:** Place scientific expertise directly into the decision-making hierarchy of ministries.
- **Specialized Service Rules:** Operate under rules that prioritize **scientific integrity** and peer review over traditional administrative neutrality.
- **Modern Career Path:** Provide a structured trajectory for researchers to influence policy without the constraints of colonial-era bureaucratic rules (CCS Conduct Rules 1964).

### Key Trends in India's S&T

- **Global Innovation:** India climbed to **38th rank** in the **Global Innovation Index (GII) 2025**, leading lower-middle-income nations for 15 years.

- **R&D Expenditure:** Despite progress, India's Gross Expenditure on R&D (GERD) stagnates at **0.64% of GDP**, trailing behind the US (3.48%) and South Korea (4.91%).
- **Patent Growth:** Applications nearly doubled between 2020 and 2025; India now ranks **6th globally**.
- **Mission Mode:** The operationalization of the **National Quantum Mission** (₹6,003 crore) and the **IndiaAI Mission** marks a shift from services to high-end hardware and Intellectual Property (IP) creation.

### The Need for a Dedicated ISS

- **Complexity of Modern Governance:** Generalists often lack the technical depth to regulate fields like Biotechnology or AI.
  - *Example:* Drafting the **Digital India Act 2025** required a nuanced understanding of algorithmic bias.
- **Bridging the "Valley of Death":** India struggles to move lab research (TRL 1-3) to market-ready products (TRL 7-9). Specialized oversight is needed to scale technologies like **Green Hydrogen**.
- **Scientific Integrity:** Currently, scientists can be penalized for presenting evidence that contradicts official policy. An ISS would provide legal protection to "speak truth to power."
  - *Example:* Documenting environmental warnings during Himalayan ecological crises often faces bureaucratic resistance.
- **Scientist-Diplomats:** Negotiating global supply chains (e.g., semiconductors) requires negotiators who understand **lithography and material sciences** at a granular level.

### Challenges to Implementation

- **Generalist vs. Specialist Friction:** Potential "turf wars" between IAS and ISS officers regarding seniority and authority.
- **Lateral Entry Resistance:** Systemic pushback from traditional services against bringing in mid-career experts.

- **Salary Parity:** Difficulty attracting top talent from the private sector or Silicon Valley due to rigid government pay scales.
- **Boundary Definition:** Balancing where purely scientific advice ends and political/economic policy begins.

### Way Forward

1. **Pilot Cadres:** Start by establishing the **Indian Environmental & Ecological Service** and **Indian Public Health Service**.
2. **Structural Protection:** Legally mandate that scientific assessments be part of the official record, even if the final policy differs.
3. **Dynamic Pay:** Implement performance-linked incentives to prevent "brain drain" to global tech giants.
4. **Joint Training:** Conduct collaborative sessions at **LBSNAA (Mussoorie)** for IAS and ISS officers to foster a "Whole-of-Government" approach.

### Conclusion

The creation of the ISS is the final step in India's transition from a colonial administrative state to a modern, technology-driven power. By institutionalizing expertise, India can ensure that its policies are not just efficient, but **scientifically sound and future-proof**.

## Creative Industries

### Context

India's **Union Budget 2026-27** and the **Economic Survey 2025-26** have officially pivoted toward the "Orange Economy" as a primary driver for the next phase of economic growth. With the projected need for **2 million professionals** in the AVGC (Animation, Visual Effects, Gaming, and Comics) sector by 2030, the government has announced a massive rollout of **15,000 Content Creator Labs** in schools to build a "ready-to-create" workforce.

### What is the Orange Economy?

The term **Orange Economy** refers to a socio-economic ecosystem where value is generated

from **creativity, culture, and intellectual property (IP)**.

- **Convergence:** It bridges the gap between traditional heritage (handicrafts, festivals) and cutting-edge digital industries (VFX, Gaming, OTT).
- **Symbolism:** The color orange is traditionally associated with culture and creativity in many global regions, representing the "commodification of imagination."

### Key Stats on India's Creative Economy (2024-26)

- **Market Valuation:** The Media & Entertainment (M&E) sector reached **₹2.5 trillion (\$30 billion)** in 2024 and is on track to hit **₹3.06 trillion by 2027**.
- **Employment:** Supports over **10 million livelihoods**. Notably, creative roles pay approximately **88% higher** than comparable non-creative administrative roles.
- **Export Surge:** Creative services exports (including VFX and architectural design) grew by **20%** in 2023, reducing India's reliance on purely IT-based services.
- **Gaming Powerhouse:** India now hosts nearly **500 million gamers**, making it one of the largest gaming markets by user base globally.

### The Multiplier Effect of the Creative Sector

- **Massive Job Creation:** The **AVGC-XR** (Extended Reality) sector is labor-intensive. Unlike heavy industry, it can absorb talent from Tier-2 and Tier-3 cities like Pune and Indore, where animation hubs are rapidly expanding.
- **Soft Power & Cultural Diplomacy:** Successes like *Project K* and *RRR* have converted cinematic locations into global tourism magnets, shifting India's image from a "back-office" to a "creative frontline."
- **Technological Spillover:** High-end tools like the **Unreal Engine** (used for *Black Myth: Wukong* style visuals) are being

repurposed by Indian firms for medical simulations and defense "Digital Twins."

- **Urban Economic Stimulus:** Large-scale live events (e.g., stadium concerts in Navi Mumbai) cause immediate spikes up to **40%** in local hotel occupancy and transport demand.

### Major Government Initiatives

- **WAVES Summit (2025):** The "World Audio Visual and Entertainment Summit" established **WAVES Bazaar**, a marketplace that facilitates billion-dollar deals for Indian scripts, music, and animation rights.
- **IICT Mumbai: The Indian Institute of Creative Technologies** is being developed as a "National Centre of Excellence" with a **₹391 crore outlay**, modeled after IITs to formalize creative education.
- **Content Creator Labs:** Budget 2026-27 allocated **₹250 crore** to install high-tech creation pods in **15,000 secondary schools**, introducing students to digital storytelling and 3D modeling as core subjects.
- **Create in India Challenge:** A nationwide talent hunt aimed at linking rural creators with international platforms like the Tokyo and Madrid cultural festivals.

### Challenges & Roadblocks

- **The Platform Trap:** Creators are vulnerable to opaque algorithms of global tech giants. Sudden policy shifts can lead to **30% revenue drops** for micro-influencers overnight.
- **IP Financing Gaps:** Banks often refuse loans to creative MSMEs because they lack "physical" collateral (land/machinery). Digital characters and scripts are not yet widely accepted as valid assets.
- **Skill-Industry Mismatch:** There is a surplus of "software operators" but a shortage of original storytellers and game designers.
- **Infrastructure Costs:** High-performance computing (HPC) for rendering CGI

remains expensive, forcing small Indian studios to outsource rendering to overseas servers.

### Way Forward

- **IP-Backed Lending:** The RBI and Ministry of I&B must create a framework to treat **Copyrights and Trademarks** as collateral for institutional credit.
- **Single-Window Clearance:** Operationalize the proposed **Live Entertainment Development Cell (LEDC)** to eliminate the 10-15 separate permits currently required for a single concert.
- **Focus on Original IP:** Shift from being a "service provider" (outsourcing for Hollywood) to a "creator" of original Indian IP that can be licensed worldwide.
- **AI-Native Tools:** Developing domestic AI for dubbing and localization can make Indian regional content (Tamil, Telugu, Bengali) globally accessible at a fraction of the current cost.

### Conclusion

The Orange Economy represents India's transition to a "knowledge and imagination" superpower. By treating creativity as a hard economic engine rather than a decorative accessory, India is ensuring that its demographic dividend becomes a global **Creative Dividend**.

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## PM RAHAT Scheme

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### Context

Launched in February 2026, the **PM RAHAT (Road Accident Victim Hospitalization and Assured Treatment)** scheme is a nationwide initiative designed to provide immediate, cashless medical care. By removing financial barriers during the critical "Golden Hour," the government aims to drastically reduce road accident fatalities across India.

### About PM RAHAT Scheme

**What is it?** PM RAHAT is a **national cashless emergency treatment framework** that provides financial coverage up to **₹1.5 lakh per victim** for the first **7 days** following an accident.

### Key Organizations Involved:

- **Ministry of Road Transport and Highways (MoRTH):** Provides policy oversight and maintains the **eDAR** (Electronic Detailed Accident Report) platform.
- **National Health Authority (NHA):** Manages claim processing via the **TMS 2.0** (Transaction Management System), ensuring seamless hospital coordination.

### Core Objectives

- **Zero Fatality Goal:** Ensuring no life is lost simply because immediate medical funds were unavailable.
- **Golden Hour Intervention:** Prioritizing the first 60 minutes after an accident, which is medically proven to be the most critical for survival.
- **Hospital Assurance:** Guaranteeing payments to hospitals to prevent them from denying treatment due to payment concerns.

### Key Features & Digital Integration

- **Universal Eligibility:** Covers all victims (including foreign nationals) on any category of road (National Highways, State Highways, or local roads).
- **Stabilization Window: \* 24 Hours:** For non-life-threatening injuries.
  - **48 Hours:** For life-threatening injuries, subject to police authentication.
- **Emergency Support:** Integrated with the **112 ERSS helpline**. Good Samaritans (*Rah-Veers*) or bystanders can dial 112 to locate the nearest designated hospital and request an ambulance.
- **Funding Mechanism:** Payments are drawn from the **Motor Vehicle Accident Fund (MVAFF)**.
  - For insured vehicles: Contributions from insurance companies.
  - For uninsured/Hit & Run cases: Budgetary support from the Central Government.

- **Time-Bound Payments:** Hospitals receive claim settlements within **10 days** of approval by State Health Authorities.

### Significance of the Scheme

- **Preventing Economic Shock:** Protects families from "catastrophic health expenditure" and distress borrowing during a sudden medical crisis.
- **Good Samaritan Support:** Empowering bystanders (*Rah-Veers*) to help without fear of legal or financial repercussions, as hospitals are now mandated to provide treatment without upfront deposits.
- **Data-Driven Safety:** Integration with the **iRAD (Integrated Road Accident Database)** helps identify "Black Spots" (accident-prone areas) for future infrastructure improvements.

### Challenges

- **Hospital Empanelment:** Ensuring that private hospitals in remote areas are onboarded and willing to accept the scheme's rates.
- **Digital Uptime:** The scheme relies heavily on the synchronization of **eDAR** and **TMS 2.0**; any platform downtime could hinder hospital admissions.
- **Verification Timelines:** Mandatory police authentication within 24–48 hours requires high efficiency from local law enforcement to ensure treatment remains "uninterrupted."

### Conclusion

PM RAHAT marks a shift toward a "**Citizen-First**" safety model. By treating emergency care as a right rather than a privilege, the scheme strengthens India's trauma care ecosystem and moves the nation closer to its goal of reducing road accident deaths by 50% by 2030.

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### CBDC-based Public Distribution System

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#### Context

On **February 15, 2026**, the Union Home Minister launched India's first **Central Bank Digital Currency (CBDC)-based Public Distribution System (PDS)** in Gandhinagar, Gujarat. This pilot

marks a global milestone in "Programmable Money," where the **Digital Rupee (₹)** is used specifically to ensure that food subsidies reach the intended beneficiary without diversion or middlemen.

### What is CBDC-based PDS?

It is a "Purpose-Bound" digital currency system. Instead of receiving cash or physical grain through traditional biometric shops, beneficiaries receive **Programmable Digital Food Coupons** in their RBI-enabled digital wallets.

- **The Logic:** These digital tokens are coded (programmed) to be valid **only** for specific commodities (like rice, wheat, or pulses) at authorized **Fair Price Shops (FPS)** or **Grain ATMs**.

### Organizations & Technical Framework

- **Nodal Ministries:** Ministry of Consumer Affairs, Food and Public Distribution (oversight) and the Ministry of Home Affairs.
- **Banking Partner: Reserve Bank of India (RBI)** issues the e-currency, while **Punjab National Bank (PNB)** manages the initial technical deployment for the pilot.
- **The "Annapurna" Machine (Grain ATM):**
  - A "Made in Gujarat" innovation.
  - Can dispense **25 kg of food grains in just 35 seconds** with 99.9% accuracy.
  - Eliminates human error in weighing and reduces wait times.

### Key Features & Benefits

- **Elimination of Biometric Failures:** Traditionally, worn fingerprints (common among elderly and laborers) or poor network connectivity caused transaction failures. The CBDC system uses **QR codes or SMS-based vouchers**, allowing for offline or instant authentication.
- **"Har Dana, Har Rupiya, Har Adhikar":** The slogan emphasizes that every grain sent from the center reaches the citizen's plate.
- **Merchant Binding:** Coupons expire within a set timeframe to prevent hoarding and are restricted to authorized

merchants, preventing the use of subsidy money for non-essential items.

- **Real-time Settlements:** Fair Price Shop owners receive their commissions instantly in their digital accounts, improving their business liquidity.

### Challenges & Roadblocks

- **Digital Literacy:** While QR codes are simple, the transition for non-smartphone users requires extensive "Digital Mitras" (volunteers) to assist in the initial phase.
- **Smartphone Dependency:** Although feature phone users can use SMS-based vouchers, a full nationwide rollout will require high network reliability in remote "Aspirational Districts."
- **System Integration:** Syncing the **eDAR** (Accident Database), **Aadhaar**, and **RBI CBDC** platforms requires massive server infrastructure to handle 80 crore beneficiaries.

### Way Forward

- **Nationwide Rollout:** Following the Gandhinagar pilot, the system will expand to **Chandigarh, Puducherry, and Dadra & Nagar Haveli** by late 2026.
- **Universal Adoption:** The government aims to cover the entire country within the next **3–4 years**, effectively ending the era of "ghost ration cards" and physical leakages.
- **Policy Integration:** This system serves as a model for other "Conditional Cash Transfers" like Fertilizer Subsidies or Education Scholarships.

### Conclusion

The CBDC-based PDS is more than just a payment system; it is a **"Digital Satyagraha"** against corruption. By embedding policy intent directly into the currency, India is moving toward a future where welfare delivery is guaranteed by code, ensuring that the last person in the line receives their full entitlement.

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### Startup India Fund of Funds 2.0 (FoF 2.0)

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#### Context

The Union Cabinet approved **Startup India Fund of Funds 2.0 (FoF 2.0)** with a **₹10,000 crore corpus**. Building on the decade-long success of its predecessor (FFS 1.0), this second phase is designed to mobilize long-term domestic venture capital specifically for **deep-tech** and **high-end manufacturing**, aligning with the "Viksit Bharat @ 2047" vision.

### About Startup India Fund of Funds 2.0

**What is it?** FoF 2.0 is a government-backed financial instrument that does not invest directly in startups. Instead, it acts as a **"Fund of Funds,"** meaning it invests in SEBI-registered **Alternative Investment Funds (AIFs)**, which then deploy that capital into promising Indian startups.

#### Evolution from FFS 1.0:

- **FFS 1.0 (2016):** Focused on building the basic venture capital architecture. It committed its entire ₹10,000 crore corpus to **145 AIFs**, which catalyzed over **₹25,500 crore** of total investment into 1,370+ startups.
- **FoF 2.0 (2026):** Transitions from purely "ecosystem building" to "strategic capability formation," focusing on high-risk, long-gestation technology sectors.

#### Key Features of FoF 2.0

- **Targeted Segmentation:** Prioritizes **Deep-Tech** (AI, Robotics, Quantum Computing, Semiconductors) and **Innovative Manufacturing** that require patient capital.
- **Early-Growth Safety Net:** Aims to reduce failure rates for founders transitioning from the "prototype" to the "product-market fit" stage.
- **National Reach:** Explicitly encourages AIFs to look beyond major metros (Delhi, Bengaluru, Mumbai) to foster innovation in Tier-2 and Tier-3 regional clusters.
- **Support for Smaller AIFs:** Designed to strengthen the domestic VC base by backing smaller, niche funds that focus on priority strategic sectors.
- **Operating Agency:** Managed by the **Small Industries Development Bank of**

**India (SIDBI)** under the monitoring of **DPIIT**.

#### Significance and Impact

- **Self-Reliance (Atmanirbharta):** By directing capital toward hardware and IP-led startups, India aims to reduce its dependency on imported critical technologies.
- **Counter-Cyclical Role:** Provides a stable source of domestic capital during "funding winters" when foreign venture capital might pull back from emerging markets.
- **Job Creation:** Deep-tech and manufacturing startups are significant drivers of high-quality, high-paying technical employment.
- **Economic Resilience:** Enhances India's competitiveness by shifting the startup narrative from "service-based apps" to "global technology champions."

#### Challenges

- **Gestation Periods:** Deep-tech breakthroughs often take 7–10 years to commercialize; the fund must remain "patient" despite slow initial returns.
- **Deployment Speed:** The success of FoF 2.0 will depend on how quickly SIDBI can process AIF applications and how fast those funds can reach startups.
- **Governance:** Maintaining high levels of transparency through digital dashboards to track the geographical and sectoral distribution of funds.

#### Conclusion

Startup India Fund of Funds 2.0 represents the maturation of India's entrepreneurial policy. While the first phase built the road, this second phase decides the direction steering India toward a future where it is not just a consumer of technology, but a global innovator in complex, high-impact industries.

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#### Privacy vs. Transparency

##### Context

A significant constitutional friction emerged between the **Right to Information (RTI) Act, 2005**, and the **Digital Personal Data Protection**

**(DPDP) Act, 2023.** This conflict centers on where a citizen's right to know ends and an individual's right to digital privacy begins.

**The Core Conflict**

The tension arises from two landmark legislations with opposing objectives:

- **Transparency (RTI):** Aims to make the government accountable by providing citizens access to information.
- **Privacy (DPDP):** Aims to protect the personal data of individuals from unauthorized disclosure or processing.

**Legislative Framework: Before vs. After**

The DPDP Act has fundamentally altered how public authorities handle information requests involving personal data.

Feature	RTI Act (Original Section 8(1)(j))	DPDP Act (Amended Section 44(3))
<b>Standard</b>	Allowed disclosure of personal information if it had a <b>larger public interest</b> or related to public activity.	Strictly <b>prohibits</b> the sharing of personal information regardless of public interest.
<b>Discretion</b>	Public Information Officers (PIOs) could balance privacy against the public's need to know.	Removes discretionary power; personal data is now a "blanket" exemption.
<b>Accountability</b>	Citizens could verify beneficiary lists, salaries, and assets of public officials.	Public offices can now deny these details, citing the protection of personal data.

**Key Concerns & Challenges**

- **Dilution of RTI:** Critics argue that by amending Section 8(1)(j) of the RTI Act via the DPDP Act, the government has created a "legal shield" against scrutiny.
- **Corruption Risk:** Information regarding government recruitment, social security beneficiaries (like MGNREGA), and public official conduct may become inaccessible,

making it harder to spot "ghost beneficiaries" or nepotism.

- **The "Personal Information" Excuse:** Public offices may use the broad definition of personal data to deny legitimate and necessary information that is vital for administrative transparency.
- **Judicial Stand:** The Supreme Court (e.g., in the *Justice K.S. Puttaswamy* case) held that both rights are fundamental. However, the current "blanket" restriction in the DPDP Act is seen by many as disproportionate.

**Way Forward**

- **Harmonization:** The law should be interpreted to distinguish between "private" personal data (home addresses, medical records) and "public" personal data (names of project beneficiaries, official expenses).
- **Public Interest Override:** Re-introducing a "Public Interest Test" within the DPDP framework to ensure that transparency is not sacrificed for secrecy.
- **Independent Oversight:** Empowering the Data Protection Board and the Information Commissions to work together to resolve disputes regarding data disclosure.
- **Anonymization:** Public authorities can adopt technology to provide data in an **anonymized** format, satisfying the need for transparency while protecting individual identities.

**Conclusion**

The balance between privacy and transparency is not a zero-sum game. While protecting digital data is crucial in the 21st century, it should not become a tool for administrative opacity. A robust democracy requires a fine-tuned legal mechanism that respects individual dignity without blinding the eyes of the public.

**Parliamentary Privileges & Committee**

**Context**

In the evolving landscape of Indian governance in 2026, **Parliamentary Privileges** remain a

cornerstone of legislative independence. These protections ensure that elected representatives can perform their duties effectively, balancing the need for free speech with the dignity of the House.

### About Parliamentary Privileges

#### What are they?

Parliamentary privileges are special rights, immunities, and exemptions enjoyed by the Houses of Parliament, their committees, and their members. These are essential for the legislature to maintain its authority, independence, and dignity.

#### Constitutional Basis:

- **Article 105:** Specifies the privileges of the Parliament, its members, and committees.
- **Article 194:** Specifies the corresponding privileges for State Legislatures.

#### Types of Privileges

Privileges are broadly categorized into two types to ensure both individual freedom and collective authority:

- **Individual Privileges:**
  - **Freedom of Speech:** Members cannot be held liable in any court for anything said or any vote given in the House.
  - **Freedom from Arrest:** Immunity from arrest in **civil cases** during a session and 40 days before/after. (Note: This does not apply to criminal cases or preventive detention).
  - **Exemption from Jury Service:** Members can refuse to attend court as witnesses when Parliament is in session.
- **Collective Privileges:**
  - **Right to Publish:** The power to publish reports and proceedings and the right to exclude others from doing so.
  - **Right to Exclude Strangers:** The power to hold "secret sittings" to discuss sensitive matters.
  - **Punitive Power:** The authority to punish both members and outsiders for "breach of privilege" or "contempt of the House."
  - **Regulation of Internal Affairs:** The right of the House to regulate its own procedure and conduct of business.

### Privileges Committee

The Privileges Committee acts as a **quasi-judicial standing committee**. Its primary role is to examine cases of "breach of privilege" and recommend appropriate action to the House.

Feature	Lok Sabha Committee	Rajya Sabha Committee
<b>Membership</b>	15 Members	10 Members
<b>Nominated By</b>	The Speaker	The Chairman
<b>Function</b>	Investigates breaches, examines witnesses, and submits a report to the House.	Similar functions; ensures the dignity of the Upper House is maintained.

**State Legislatures:** Committees typically consist of **9 to 15 members**, depending on the size of the assembly and its specific rules of procedure.

#### Challenges and Criticisms

- **Lack of Codification:** Unlike many other democracies, India has not fully codified these privileges. They are still largely based on British House of Commons precedents as they existed on January 26, 1950.
- **Conflict with Fundamental Rights:** There is often a "tussle" between Parliamentary Privilege and the **Right to Freedom of Speech (Article 19)** of citizens and the press.
- **Ambiguity:** The term "contempt of the House" is broadly defined, leading to concerns about potential misuse against political critics or journalists.

#### Way Forward

- **Codification:** Legal experts often suggest codifying privileges to provide clarity and prevent overlap with the fundamental rights of citizens.
- **Judicial Oversight:** While courts generally do not interfere in internal

legislative proceedings, they can intervene if a privilege violates the "basic structure" or fundamental rights (as seen in the *MSM Sharma* and *Keshav Singh* cases).

- **Self-Restraint:** Legislatures should exercise these powers sparingly, focusing on protecting the *functioning* of the House rather than punishing *criticism* of the House.

### Conclusion

Parliamentary privileges are not meant to place legislators "above the law" but to ensure they can represent the people without fear or favor. As India's democracy matures, balancing these ancient protections with modern transparency remains a vital constitutional task.

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## Graphics Processing Unit (GPU)

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### Context

**Graphics Processing Units (GPUs)** have transitioned from niche gaming components to the essential backbone of global digital infrastructure. They are currently the primary drivers of **Generative AI**, real-time industrial "Digital Twins," and massive cloud-based high-performance computing (HPC) clusters.

### About Graphics Processing Unit (GPU)

**Definition:** A GPU is a specialized electronic circuit designed to rapidly manipulate and alter memory to accelerate the creation of images in a frame buffer intended for output to a display.

- **Core Philosophy:** While a **CPU** (Central Processing Unit) is a "generalist" designed for sequential logic and complex branching, a **GPU** is a "specialist" designed for **massive parallelism**.

**Origin:** The term was popularized in **1999** by **Nvidia** with the release of the **GeForce 256**, the first chip to integrate transform, lighting, triangle setup/clipping, and rendering engines onto a single processor.

### How it Works: The Rendering & Compute Pipeline

A GPU handles "embarrassingly parallel" workloads by breaking a single large task into thousands of smaller, simultaneous operations:

1. **Vertex Processing:** Uses matrix mathematics to calculate the position of 3D objects in a virtual space.
2. **Rasterization:** Converts those geometric shapes (usually triangles) into a grid of pixels or "fragments."
3. **Shading:** Simultaneously calculates color, light, and shadows for every pixel using thousands of tiny cores.
4. **Output:** The final frame is stored in **VRAM** (Video RAM) and pushed to the display.

**The AI Pivot:** In AI applications, the GPU skips the visual rendering steps. Instead, it repurposes its cores to perform **matrix multiplications**, the fundamental math required to train and run neural networks.

### Key Features

- **Parallel Architecture:** Modern GPUs contain thousands of **CUDA cores** (Nvidia) or **Stream Processors** (AMD). Specialized **Tensor Cores** are now included specifically to accelerate deep learning math.
- **High Memory Bandwidth:** Uses ultra-fast memory like **GDDR6X** or **HBM3** (High Bandwidth Memory) to ensure data reaches the processors without bottlenecks.
- **Programmability:** Through frameworks like **CUDA** or **OpenCL**, GPUs are no longer restricted to graphics; they can perform any mathematical task (**GPGPU** - General-Purpose computing on GPUs).
- **Thermal & Energy Demands:** High-end AI GPUs in 2026 (like the Blackwell or Rubin architectures) can exceed **1000W** per chip, necessitating advanced liquid-cooling solutions in data centers.

### Applications

Sector	Usage
Artificial Intelligence	Training Large Language Models (LLMs) and real-time AI inference.

<b>Gaming &amp; Metaverses</b>	Real-time <b>Ray Tracing</b> (simulating light) and 8K resolution rendering.
<b>Scientific Research</b>	Simulating climate change, protein folding for drug discovery, and astrophysics.
<b>Industrial AI</b>	Creating "Digital Twins" of entire factories to simulate efficiency before building.
<b>Blockchain</b>	Executing complex cryptographic hashes for decentralized networks.

### Challenges

- **Supply Chain Concentration:** Production is heavily reliant on a few players (Nvidia for design, TSMC for fabrication), leading to "GPU shortages" and geopolitical tension over semiconductor access.
- **Power Consumption:** The massive energy footprint of GPU-heavy data centers poses a challenge to global net-zero sustainability goals.
- **Software Complexity:** Writing code for GPUs is significantly more complex than for CPUs, requiring specialized knowledge of parallel programming.

### Conclusion

The GPU has evolved into the "engine" of the fourth industrial revolution. As AI models grow in complexity, the demand for GPU compute power has become a new form of digital currency, dictating the pace of innovation across every scientific and commercial field.

## India-UK Offshore Wind Taskforce

### Context

During the **Fourth India-UK Energy Dialogue**, India and the United Kingdom officially launched the **India-UK Offshore Wind Taskforce**.

Operating under the **India-UK Vision 2035** framework, the taskforce aims to accelerate

strategic cooperation and execution in the offshore wind sector.

### About the India-UK Offshore Wind Taskforce

**Definition:** A bilateral working mechanism (described by Union Minister Pralhad Joshi as a "**Trustforce**") designed to provide strategic leadership and coordination. It pairs the UK's global leadership in scaling offshore wind with India's massive market scale and long-term renewable energy demand.

### Objectives:

- **Accelerate Deployment:** Move beyond symbolic partnership to achieve time-bound workstreams and measurable milestones.
- **Ecosystem Building:** Create a comprehensive framework covering policy, infrastructure, and financing to support India's **70 GW potential** in offshore wind.
- **Energy Transition:** Position offshore wind as a strategic pillar for grid stability and industrial competitiveness under Vision 2035.

### Key Features:

- **Strategic Leadership:** Co-chaired by representatives from both nations, with a unique inclusion of a representative from **Denmark** (a global pioneer in offshore technology).
- **Three Priority Pillars:**
  - **Ecosystem Planning & Market Design:** Refining seabed leasing frameworks and establishing credible revenue-certainty mechanisms.
  - **Infrastructure & Supply Chains:** Port modernization, local manufacturing (towers, blades, cables), and development of specialized marine vessels.
  - **Financing & Risk Mitigation:** Mobilizing long-term institutional capital and utilizing blended finance models.
- **Identified Zones:** Initial focus on promising zones off the coasts of **Gujarat**

(36 GW potential) and **Tamil Nadu** (35 GW potential).

- **Financial Support:** Integration with the **₹7,453 crore (~£710 million)** Viability Gap Funding (VGF) scheme approved by the Union Cabinet to de-risk early projects.

### Strategic Linkages

- **National Green Hydrogen Mission:** Offshore wind is expected to provide steady, high-quality renewable power to coastal industrial and green hydrogen clusters.
- **Energy Milestones:** The launch coincides with India crossing **272 GW** of non-fossil fuel installed capacity (including 141 GW solar and 55 GW wind).
- **Grid Stability:** Unlike solar, offshore wind offers higher capacity utilization factors (CUF), helping manage grid fluctuations and enhancing energy security.

### Challenges in Offshore Wind

- **Capital Intensity:** Offshore projects are significantly more expensive than onshore wind due to complex seabed foundations and marine logistics.
- **Technical Complexity:** Requires specialized port infrastructure and specialized vessels for installation and maintenance.
- **Tariff Viability:** Early projects face high generation costs, necessitating government support through VGF and attractive power purchase agreements (PPAs).

### Way Forward

- **Execution Focus:** The taskforce will meet regularly to convert global lessons into "Indianized" solutions.
- **Supply Chain Localization:** Building domestic manufacturing capabilities to reduce dependence on imports and lower project costs.
- **Grid Integration:** Strengthening transmission planning for an initial **10 GW** evacuation capacity (5 GW each for Gujarat and Tamil Nadu).

### Conclusion

The India-UK Offshore Wind Taskforce represents a shift from high-level dialogue to **execution-level collaboration**. By addressing structural barriers like financing and specialized logistics, the partnership is set to unlock India's vast maritime wind resources, moving the nation closer to its 2030 renewable energy targets.

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## India–France Special Global Strategic Partnership

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### Context

French President Emmanuel Macron visited India to participate in the **AI Impact Summit** and inaugurate the **2026 India-France Year of Innovation**. During this visit, both nations elevated their bilateral ties to a **“Special Global Strategic Partnership,”** providing a comprehensive roadmap for cooperation until 2047.

### About the News

**Definition:** The "Special Global Strategic Partnership" is a high-level diplomatic upgrade shifting the relationship from sectoral cooperation to a long-term alliance focused on global stability.

### Core Pillars:

- **Strategic Autonomy:** Strengthening sovereignty and independent decision-making for both nations.
- **Global Governance:** Acting as a joint force to address macroeconomic imbalances and climate crises.
- **Security & Innovation:** Deepening co-development in AI, Space, and Nuclear energy while securing resilient supply chains.

### Historical Evolution:

- **1947:** Establishment of diplomatic relations based on shared visions of sovereignty.
- **1998:** France becomes the first Western power to enter a Strategic Partnership with India, notably declining to impose sanctions after India's nuclear tests.

- **2008:** France is the first country to sign a civil nuclear agreement with India following the NSG waiver.
- **Horizon 2047:** A roadmap adopted in 2023 to guide the relationship through India's 100th year of independence.
- **Reciprocity:** High-level honors including PM Modi as Guest of Honor at Bastille Day (2023) and President Macron at India's Republic Day (2024).

#### Key Agreements & Strategic Initiatives

- **Year of Innovation 2026:** High-impact collaborations in healthcare, AI, and sustainable development.
- **Defence Industrial Roadmap:** Focus on co-production of fighter jet engines (**Safran-HAL**) and the procurement of **26 Rafale-Marine** jets.
- **Nuclear Energy:** Commitment to co-develop **Small Modular Reactors (SMRs)** to support India's 100 GW nuclear target.
- **Indo-Pacific Synergy:** Strengthening triangular cooperation to support health and digital infrastructure projects in third countries.
- **Healthcare & AI:** Joint research center between **AIIMS New Delhi** and the **Paris Brain Institute**.
- **Space Autonomy:** Expanding **CNES-ISRO** partnership in human spaceflight and satellite launchers.
- **Mobility:** Six-month pilot for **visa-free transit** for Indians in French airports; target of 30,000 Indian students in France by 2030.

#### Challenges

- **Divergent Geopolitical Views:** Differing nuances on global conflicts (e.g., the Ukraine war) requires constant diplomatic balancing.
- **Regulatory Barriers:** Long-standing hurdles in **India-EU FTA** negotiations regarding labor, environment, and data privacy standards.

- **Nuclear Implementation:** Decades of delays in projects like the **Jaitapur Nuclear Plant** due to technical issues and civil nuclear liability concerns.
- **Technological Protectionism:** Difficulties in achieving full **Transfer of Technology (ToT)** for sensitive military hardware despite "Make in India" goals.
- **Regional Instability:** Middle East conflicts threatening the viability of the **India-Middle East-Europe Economic Corridor (IMEC)**.

#### Way Forward

- **Operationalizing IMEC:** Prioritizing the 2026 Ministerial Meeting to transition the corridor from concept to physical reality.
- **Democratizing AI:** Bridging the global digital divide to ensure developing nations have access to secure AI tools.
- **UNSC Reforms:** Intensifying joint lobbying for India's permanent membership in a reformed UN Security Council.
- **Green Transition:** Leveraging the **International Solar Alliance (ISA)** to fund climate resilience in the Global South.
- **Educational Exchange:** Utilizing "International Classes" to make French education accessible to a diverse range of Indian students.

#### Conclusion

The transition to a **Special Global Strategic Partnership** marks an evolution from a traditional buyer-seller dynamic to a collaborative alliance. By aligning the **Horizon 2047 roadmap** with shared democratic values, India and France are establishing themselves as vital pillars of a stable, multipolar world order.

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### Circular Economy in Agriculture

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#### Context

In February 2026, the Government of India released a landmark report titled "**Circular Economy in Agriculture: Waste to Wealth.**" The report highlighted the growing success of the **GOBARdhan (Galvanizing Organic Bio-Agro Resources Dhan)** scheme, which now covers

over **51.4% of India's districts**, marking a significant transition from waste-intensive farming to regenerative and resource-efficient agriculture. This reflects India's commitment to sustainable development, climate mitigation, and income diversification for farmers.

### **About Circular Economy in Agriculture**

#### **Definition**

A circular economy in agriculture is a **regenerative production system** that replaces the conventional linear model of “*take–make–dispose*” with a **closed-loop system**, where agricultural waste is reintegrated into the production cycle. It is based on the **6 Rs principle — Reduce, Reuse, Recycle, Refurbish, Recover, and Repair**, ensuring optimal utilization of biological resources. This approach transforms organic waste such as crop residue, cattle dung, and food waste into valuable outputs like **bio-CNG, biogas, compost, organic fertilizers, and biochar**, thereby reducing environmental damage and enhancing resource efficiency.

#### **Key Data and Facts**

- **Agricultural Waste Generation:** India produces approximately **350 million tonnes of agricultural waste annually**, including crop residues and livestock waste.
- **Energy Generation Potential:** Crop residues alone have the capacity to generate over **18,000 MW of renewable energy annually**, contributing significantly to India's clean energy transition.
- **Economic Potential:** India's circular economy is projected to reach **\$2 trillion in economic value and create nearly 10 million jobs by 2050**, highlighting its role in sustainable economic growth.
- **Food Waste:** Globally, about **1.3 billion tonnes of food is wasted annually**, while in India, nearly **60% of food waste occurs at the household level**, indicating the need for improved waste management practices.
- **GOBARdhan Progress:** As of January 2026, **979 biogas and bio-CNG plants**

**are operational**, converting organic waste into clean energy and organic manure.

### **Importance of Circular Economy in Agriculture**

- **Soil Health Restoration**

The excessive use of chemical fertilizers has depleted soil organic carbon and reduced soil fertility. The application of **biogas slurry, compost, and organic manure** derived from agricultural waste helps restore soil structure, improves microbial activity, and enhances long-term agricultural productivity.

- **Climate Change Mitigation**

Agricultural waste decomposition releases methane, a potent greenhouse gas. Circular economy practices capture methane through biogas plants and convert it into energy, thereby reducing emissions. This directly supports India's commitments under the **Paris Agreement and Net Zero target by 2070**. The **Unified GOBARdhan Portal** helps monitor Compressed Biogas production and emission reductions.

- **Enhancing Farmers' Income**

Circular agriculture converts waste into economic assets. Farmers can earn additional income by selling crop residues, supplying dung to biogas plants, or producing organic fertilizers. This supports the goal of **doubling farmers' income** and strengthens rural livelihoods.

- **Water Resource Conservation**

The reuse of treated wastewater and greywater for irrigation under initiatives such as the **Jal Shakti Mission** reduces dependence on groundwater, conserves freshwater resources, and improves water sustainability in rural areas.

- **Resource Efficiency and Sustainability**

Circular agriculture reduces dependence on synthetic inputs and promotes efficient use of natural resources. It aligns with **Sustainable Development Goal (SDG) 2 (Zero Hunger)** and **SDG 12 (Responsible Consumption and**

**Production).** Innovations such as biochar enhance soil moisture retention and improve drought resilience.

### Major Government Initiatives

- **GOBARdhan Scheme**  
The GOBARdhan scheme promotes the conversion of cattle dung and organic waste into **biogas, compressed biogas (CBG), and organic fertilizers**, supporting clean energy generation and rural sanitation.
- **Crop Residue Management (CRM) Scheme**  
The government has allocated **₹3,926 crore (2018–2026)** to promote crop residue management. Over **42,000 Custom Hiring Centres (CHCs)** have been established, enabling farmers to access residue management machinery and reduce stubble burning.
- **Agriculture Infrastructure Fund (AIF)**  
The AIF has sanctioned **₹80,224 crore for over 1.5 lakh projects**, including infrastructure for organic fertilizer production, waste management systems, and bioenergy generation.
- **Animal Husbandry Infrastructure Development Fund (AHIDF)**  
With a corpus of **₹15,000 crore**, this fund supports the scientific processing of animal waste and by-products, promoting value addition and circular livestock management.
- **Swachh Bharat Mission (Gramin) 2.0**  
This initiative focuses on **solid and liquid waste management**, helping villages achieve **ODF Plus status** while promoting resource recovery and sustainable sanitation.

### Challenges in Implementation

- **High Initial Investment**  
The establishment of bio-CNG plants, compost units, and waste processing infrastructure requires substantial capital investment. Small and marginal farmers often lack access to finance and credit.
- **Logistical Constraints**

The collection, transportation, and processing of bulky agricultural waste from fragmented landholdings is costly and time-sensitive, particularly during the short interval between harvesting and sowing.

- **Technological Limitations**  
Limited access to advanced technologies, such as modular biogas reactors and efficient biomass processing systems, restricts large-scale adoption.
- **Behavioral and Social Barriers**  
Traditional practices such as stubble burning continue due to convenience, lack of awareness, and immediate economic considerations, particularly in the Indo-Gangetic plains.
- **Weak Market Linkages**  
Organic fertilizers face stiff competition from highly subsidized chemical fertilizers like urea, affecting their commercial viability and market adoption.

### Way Forward

#### Promoting Carbon Credit Mechanisms

Farmers adopting sustainable waste management practices should be integrated into carbon markets, enabling them to earn additional income through carbon credits.

- **Strengthening Farmer Producer Organizations (FPOs)**  
FPOs can play a key role in establishing and managing decentralized bio-CNG plants, improving economies of scale and ensuring efficient waste management.
- **Investment in Research and Innovation**  
Greater investment in research is needed to develop advanced microbial solutions, efficient biomass processing technologies, and affordable decentralized waste-to-energy systems.
- **Ensuring Policy and Subsidy Support**  
Providing equal policy support, subsidies, and distribution networks for organic fertilizers will enhance their competitiveness and encourage adoption.
- **Promoting Mass Awareness and Public Participation**

Behavioral change through awareness campaigns and community participation is essential to promote waste segregation and sustainable practices at the grassroots level.

### Conclusion

The transition to a circular economy in agriculture represents a transformative shift toward sustainable, climate-resilient, and economically viable farming in India. By converting agricultural waste into valuable resources, initiatives such as GOBARdhan, Crop Residue Management, and the Agriculture Infrastructure Fund are reducing environmental degradation while enhancing farmers' income and energy security.

Strengthening institutional support, technological innovation, and farmer participation will be crucial to scaling this model. The circular agricultural economy has the potential to transform agricultural waste from an environmental burden into a major economic opportunity, contributing significantly to India's vision of achieving **sustainable development and a Viksit Bharat by 2047**.

## Diversity in the Judiciary

### Context

In early 2026, Rajya Sabha MP P. Wilson introduced the **Constitution (Amendment) Bill, 2026**. This private member's Bill seeks to mandate **social diversity** within the higher judiciary and proposes the establishment of **regional benches** of the Supreme Court to democratize access to justice.

### About the News

**Concept of Judicial Diversity:** It refers to the equitable representation of various social, gender, caste, and regional groups within the court system. A diverse bench ensures that judicial interpretations reflect the collective lived experiences of India's multi-layered society.

### Key Statistics on the Indian Judiciary:

- **Caste Representation:** Between 2018 and 2024, approximately **78%** of High Court judges belonged to upper castes. In contrast, Scheduled Castes (SCs) and

Scheduled Tribes (STs) accounted for only about **5% each**.

- **Gender Gap:** As of August 2024, women constitute only **14%** of High Court judges. Currently, there is only **one sitting woman judge** in the Supreme Court (Justice B.V. Nagarathna).
- **Minority Representation:** Religious minorities account for less than **5%** of judges appointed to the higher judiciary over the last six years.
- **Pendency & Vacancies:** As of January 2026, the Supreme Court faces over **90,000 pending cases**. Furthermore, High Courts struggle with a nearly **33% vacancy rate**, severely hampering the speed of justice.

### Constitutional Framework

- **Article 124:** Governs the appointment of Supreme Court judges by the President in consultation with the Chief Justice of India (CJI).
- **Article 217:** Outlines the appointment process and qualifications for High Court judges.
- **Article 130:** Grants the CJI authority, with Presidential approval, to appoint "other places" as seats for the Supreme Court, providing the legal basis for regional benches.

### Need for Diversity in the Judiciary

- **Enhanced Public Trust:** Representation strengthens institutional legitimacy. For instance, the elevation of **Justice B.R. Gavai** signaled a commitment to including marginalized communities in the highest echelons of law.
- **Inclusivity in Interpretation:** Diverse backgrounds help judges understand the social context of disputes. Women judges, for example, often bring vital sensitivity to cases involving domestic violence and gender sensitization.
- **Correcting Historical Exclusion:** Reform addresses systemic barriers; India's lack of a woman Chief Justice for over seven

decades highlights the need for structural change.

- **Democratization of the Bar:** Visible role models at the top encourage first-generation lawyers and marginalized students to pursue litigation careers.
- **Advancing Social Justice:** A diverse bench aligns the judiciary with the constitutional goals of equality by reflecting the varied social realities of the litigants.

### Challenges

- **Opaque Collegium System:** The lack of transparency in the current appointment process can perpetuate "elite networks," often excluding qualified candidates from marginalized backgrounds.
- **Structural Barriers for Women:** Inadequate infrastructure (e.g., lack of separate washrooms in district courts) and patriarchal norms create a "funnel effect," where fewer women reach senior positions.
- **Lack of Formal Reservation:** Unlike the lower judiciary, the higher judiciary has no constitutional quotas for caste or gender, making diversity dependent on judicial discretion.
- **Geographical Barriers:** The centralization of the Supreme Court in Delhi makes it difficult for lawyers from distant regions (like the Northeast or South India) to gain the visibility required for elevation.

### Way Forward

- **Institutionalizing Diversity Metrics:** Formally include demographic diversity as a criterion in the **Memorandum of Procedure (MoP)** for judicial appointments.
- **Establishing Regional Benches:** Set up permanent Supreme Court benches in **Chennai, Mumbai, and Kolkata** to reduce travel costs and decentralize justice.
- **Time-bound Appointments:** Mandate a 90-day window for the government to

clear names recommended by the Collegium to prevent "pocket vetoes" of diverse candidates.

- **Reviving Appointment Reforms:** Consider a transparent body similar to the **NJAC**, balancing judicial independence with executive and civil society oversight.
- **Pipeline Mentorship:** Create formal programs to support first-generation and marginalized lawyers, ensuring a steady stream of diverse talent for future judicial roles.

### Conclusion

The pursuit of a diverse judiciary is not a compromise on merit; rather, it is an enrichment of it. By implementing the reforms suggested in the P. Wilson Bill, India can ensure that its "temples of justice" truly reflect the society they serve. A judge who understands the social context of a litigant is a more effective guardian of the Constitution.

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## Center-State Relations

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### Context

The debate over Indian federalism reached a boiling point. Seeking to redefine the constitutional balance of power, the Tamil Nadu government established a high-level committee to examine the structural tensions between the Union and the States.

### The Kurian Joseph Committee

The Tamil Nadu government appointed a three-member committee headed by **Justice Kurian Joseph (Retd.)** to review the current state of Center-State relations.

- **Objective:** To evaluate how recent central policies have impacted state autonomy and to suggest constitutional safeguards.
- **Findings:** The committee's report warns of a "**creeping centralism**" that threatens the federal spirit enshrined in the Basic Structure of the Constitution.

### Key Friction Points

The report identifies four critical areas where the relationship has become adversarial:

#### 1. The Role of the Governor:

- **The Issue:** Frequent clashes between elected State Cabinets and Governors over the passage of bills and university appointments.
- **Proposed Reform:** The committee suggests providing Governors with **security of tenure** and ensuring they are **politically neutral** figures to prevent them from acting as agents of the Union.

## 2. Financial Autonomy:

- **Fiscal Federalism:** Concerns regarding the biased distribution of resources via the Finance Commission and the increasing reliance on **Cesses and Surcharges**, which are not shared with the states.
- **Program Interference:** The Center is accused of altering schemes like **MGNREGA** and **NHM** without state consultation, despite states bearing significant implementation costs.

## 3. The Delimitation Deadline:

- **The "South-North" Divide:** Southern states fear that the upcoming **Delimitation Commission** (based on the next census) will reduce their parliamentary representation because they successfully implemented population control, unlike their northern counterparts.

## 4. All India Services (AIS):

- Recent amendments to cadre management rules have sparked fears that the Center can unilaterally summon IAS/IPS officers, undermining the state's control over its own administration.

## Historical Perspective vs. Modern Reality

- **1947–1950:** A "strong center" was a historical necessity to prevent the fragmentation of a newly independent nation and to manage the aftermath of Partition.
- **2026 Perspective:** The committee argues that while a strong center is still needed for national integrity, the framework is now being used to **weaken regional parties** and bypass state legislatures on subjects like agriculture, education, and health.

## Suggested Reforms

To restore the federal balance, the report advocates for:

- **Reforming Article 356:** Stricter guidelines to prevent the arbitrary dismissal of state governments.
- **Empowering the Inter-State Council:** Transforming it from an advisory body into a robust forum for dispute resolution.
- **Financial Redesign:** Increasing the states' share of the divisible pool of taxes to at least **50%** to account for their increasing welfare responsibilities.

## Conclusion

The Kurian Joseph Committee report serves as a manifesto for "Cooperative Federalism." It argues that a strong India is not built by a dominant Center, but by strong, autonomous States. As the 2026 Delimitation looms, the recommendations of this committee are likely to form the basis for a national dialogue on constitutional restructuring.

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## Gen Z & Democratic Engagement

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### Context

As we move through 2026, **Generation Z (Gen Z)** individuals born between 1997 and 2012 have emerged as a disruptive force in global and domestic politics. Their approach to democratic engagement differs fundamentally from previous generations, characterized by digital fluency, emotional radicalism, and a rejection of traditional hierarchical structures.

### Characteristics of Gen Z

Gen Z is often defined by a "radical authenticity" that bleeds into their political identity:

- **Hyper-Transparent:** Unlike older generations who compartmentalize personal and professional lives, Gen Z is blunt about personal flaws, financial struggles, and mental health.
- **Digital Natives:** They view the internet not just as a tool, but as the primary "public square" for democratic discourse.
- **Unpredictability:** Their voting patterns and political leanings are less tied to legacy party loyalty and more to specific, immediate social causes.

**Key Quote:** "Gen Z will continue to disappoint us with responses we expect, but surprise us with responses we haven't thought of."

### Role in Democracy and Protests

Recent events, including the 2024–25 movements in **Bangladesh and Nepal**, have highlighted the specific "Gen Z style" of activism:

- **High Energy, Low Structure:** They can mobilize thousands in hours using social media, yet these movements often lack a centralized leadership or a formal manifesto.
- **Apolitical Beginnings:** Many Gen Z-led protests start as non-partisan movements focused on specific grievances (e.g., job quotas, corruption) rather than an ideology.
- **Global Solidarity:** They are more likely to connect local issues to global movements (like climate change or human rights), viewing their struggle through a universal lens.

### Challenges and Critiques

While effective at sparking change, Gen Z's engagement faces significant hurdles regarding sustainability:

- **The "Instant Results" Trap:** Raised in an era of instant gratification, this generation often demands immediate policy shifts and may lose momentum if results are not visible quickly.
- **Sustainability Issues:** Unlike the **Farmers' Protests (2020-21)**, which demonstrated years of logistical and organizational endurance, Gen Z movements tend to be "flash-mobs" of dissent, intense but short-lived.
- **Leaderless Vulnerability:** The lack of clear figureheads makes it difficult for these movements to negotiate with the State, often leading to a power vacuum that is filled by older, more organized political entities.

### The Digital Paradox

For Gen Z, democracy is a 24/7 engagement, but it often borders on "slacktivism":

- **Pros:** They are the best at "fact-checking" in real-time and exposing institutional hypocrisy through viral content.
- **Cons:** High levels of digital fatigue and exposure to algorithmic echo chambers can lead to extreme political polarization.

### Conclusion

Gen Z is rewriting the rules of democratic engagement by prioritizing **authenticity over authority**. While their lack of traditional organization poses a risk to the long-term success of their movements, their ability to mobilize at a moment's notice ensures that governments can no longer rely on traditional "wait-and-watch" strategies to suppress dissent.

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## Election Commission (ECI) vs. Supreme Court

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### Context

A major legal and constitutional confrontation emerged between the **Election Commission of India (ECI)** and the **Judiciary**. The core of the dispute involves the **Special Intensive Revision (SIR)** of electoral rolls, a door-to-door verification drive aimed at sanitizing voter lists, which critics and state governments have challenged as a potential tool for disenfranchisement.

### The Issue: Special Intensive Revision (SIR)

The ECI launched the SIR in **June 2025**, starting with Bihar and expanding to other states like West Bengal. Unlike regular summary revisions, the SIR involves:

- **Fresh Enumeration:** Booth Level Officers (BLOs) conduct house-to-house visits to verify every voter.
- **Target:** To eliminate **duplicate IDs, deceased voters, and foreign nationals** (specifically citing infiltrators from neighboring countries) who may have entered the rolls.
- **Bihar Results (Sept 2025):** The final list saw a net decrease of nearly **4.7 million voters** compared to the draft roll, after 21.5 lakh new additions and massive deletions.

### Criticism and Concerns:

- **Jurisdictional Overreach:** Critics argue that the ECI is acting as a "policeman" for citizenship—a domain primarily belonging to the **Ministry of Home Affairs (MHA)**.
- **Disenfranchisement:** There are widespread fears that marginalized groups and migrant laborers may lose their right to vote due to a lack of "legacy documents" or missing the BLO visits.

### Judicial Intervention

The Supreme Court has stepped in to ensure transparency and "natural justice" in the revision process.

- **West Bengal Case (Feb 2026):** In an "extraordinary" move, the Supreme Court directed the assignment of **judicial officers** to assist in the scrutiny of voter claims and objections in West Bengal.
- **Voter Documentation:** The Court ordered the ECI to accept **Aadhaar** as a valid document for identity proof (bringing the total to 12 accepted documents), though it clarified that Aadhaar is **not proof of citizenship**.
- **Transparency Mandate:** Justice Surya Kant famously remarked, "*If Poonam Devi has been omitted, she must know why,*" ordering that booth-wise lists of deleted names be displayed at local Panchayat offices.

### Constitutional Concerns: Separation of Powers

This conflict highlights a delicate balance regarding **Article 50** (Separation of Judiciary from Executive):

- **Judicial Activism vs. Overreach:** The ECI argues that under **Article 324**, it has "plenary powers" to conduct elections as it deems fit. They view judicial interference in the mechanics of voter lists as a violation of the separation of powers.
- **Judicial Stand:** The Court maintains that while it cannot stop the SIR, it must ensure the process is not "**untrammelled or unregulated.**" It asserts its right to review actions that impact fundamental rights like the right to vote (**Article 326**).

### Suggested Reforms

To move past the "house of cards" verification process, several technology-led reforms have been proposed:

- **Voluntary Aadhaar Linking:** Using **Form 6B** to link EPIC (Voter ID) with Aadhaar. While currently voluntary, proponents argue it is the only way to effectively weed out duplicates nationwide.
- **Biometric Authentication:** Using fingerprint or iris scans at polling booths to eliminate impersonation.
- **Real-time Updates:** Integrating the ECI database with the digital death and birth registries to automate deletions and additions.

### Conclusion

The 2026 ECI-SC standoff represents a pivotal moment for Indian democracy. It tests whether the ECI can modernize the electoral roll without infringing on the rights of the most vulnerable, and whether the Judiciary can provide oversight without stalling the essential functions of the executive.

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## US Tariffs & Global Trade Dynamics

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### Context

The global trade landscape underwent a massive shift following a landmark judicial decision in the United States. The **U.S. Supreme Court** struck down President Donald Trump's use of emergency powers to levy tariffs, prompting an immediate pivot to alternative trade statutes that have redefined America's economic relations with the world.

**Recent Developments: The Tariff Tug-of-War**  
**The Supreme Court Ruling (Feb 20, 2026):** The Court ruled **6-3** that the *International Emergency Economic Powers Act (IEEPA)* does not grant the President the authority to impose tariffs.

- **Outcome:** All "Reciprocal Tariffs" and immigration-linked duties imposed under IEEPA were declared **illegal**.
- **Implication:** The federal government may be required to refund over **\$160 billion** in

collected duties, though the process remains legally contested.

**The Pivot to Section 122:** Within hours of the court's rebuke, President Trump invoked **Section 122 of the Trade Act of 1974** to announce a new **10% global import surcharge**.

- **Legal Basis:** Section 122 allows temporary (150-day) surcharges of up to 15% to address "fundamental international payments problems" (trade deficits).
- **Status of India:** Despite the global surcharge, the **18% tariff trade deal** signed earlier in February 2026 remains the baseline for Indian goods, ensuring some continuity amidst the chaos.

### Impact on India

The shifting US trade policy presents a "mixed bag" for the Indian economy:

- **Export Pressure:** Even with a bilateral deal, a 10%–18% tariff makes Indian goods more expensive than domestic US alternatives, potentially lowering demand for:
  - **Textiles and Garments**
  - **Generic Medicines** (Pharmaceuticals)
  - **Agricultural Products** (Rice, spices)
  - **Pearls and Jewelry**
- **Competitive Advantage:** Since the global surcharge hits all nations, India's **18% fixed rate** may actually be more favorable than the rates faced by competitors like China, who are subject to additional Section 301 investigations.

### Global Context: The WTO Crisis

The global trade "safety net" is currently paralyzed. The **World Trade Organization (WTO) Appellate Body**, essentially the supreme court of international trade, is non-functional.

- **The Blockade:** The US continues to block the appointment of new members (94 times as of late 2025/early 2026), citing concerns over judicial overreach.
- **Consequence:** Trade disputes are "appealed into a void." Without a functional arbiter, nations are increasingly

turning to **protectionism and isolationism**, ignoring multilateral rules in favor of bilateral "deals."

### Way Forward for India

To mitigate the risks of "America First" policies and a paralyzed WTO, India is pursuing a strategy of **Trade Diversification**:

1. **Expanding Horizons:** Finalizing Comprehensive Economic Partnership Agreements (CEPAs) with the **UK, European Union, and UAE**.
2. **Focusing on Africa:** Tapping into the African Continental Free Trade Area (AfCFTA) to export engineering goods and digital services.
3. **Strengthening "China Plus One":** Positioning India as a reliable manufacturing hub for companies exiting the Chinese market due to even higher US-China trade barriers.

### Conclusion

The US Supreme Court's intervention marks a critical juncture where constitutional law met global trade. While the ruling temporarily checked executive power, the immediate shift to Section 122 signals that **protectionism** remains the dominant global trend. For India, the path to resilience lies in balancing its "fantastic relationship" with the US while aggressively building new trade corridors elsewhere.

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## Bonded Labour

### Context

February 2026 marks the **50th anniversary** of the **Bonded Labour System (Abolition) Act, 1976**. Despite five decades of legislation, recent reports, particularly from states like Odisha highlight a disturbing trend where rescued labourers relapse into bondage due to systemic delays in rehabilitation.

### About the 50th Year of Ending Bonded Labour

**Background:** The year 2026 commemorates half a century since India took a landmark legal step to eradicate modern-day slavery. While the 1976 Act successfully criminalized the practice, this milestone serves as a somber reminder of the

persistent gap between **legal release** and **social rehabilitation**.

#### Key Features of the 1976 Act:

- **Abolition of Liability:** All obligations to repay "bonded debt" were extinguished upon the commencement of the Act.
- **Release and Freedom:** Any labourer trapped in the system is legally discharged from the obligation to provide forced labour.
- **Administrative Responsibility:** District Magistrates (DMs) and Vigilance Committees are mandated to identify, release, and rehabilitate labourers.
- **Cognizable Offense:** Forcing individuals into bondage is a punishable crime to deter creditors and contractors (*Thekedars*).
- **Scope:** The law covers both economic debt-bondage and hereditary, caste-based servitude (e.g., customary services by barbers or washermen).

#### Data and Facts:

- **National Scale:** Per SECC-2011, approximately **1.65 lakh** bonded labourers were legally released across India.
- **Regional Focus (Odisha):** Over **8,304** bonded labourers (mostly from tribal communities) were identified in the last major assessment.
- **Financial Gaps:** Districts are required to maintain a **₹10 lakh corpus fund** for immediate relief; however, nearly 50% of districts in Odisha lack this fund.
- **Rehabilitation Scale:** The 2022 revised Central Scheme provides graded assistance ranging from **₹1 lakh to ₹3 lakh** based on the severity of exploitation.
- **Conditions:** Reports indicate labourers often work **14–15 hours a day** in makeshift shelters with severely restricted movement.

#### Challenges in Elimination

- **Relapse into Bondage:** Rescue without immediate financial support forces victims back to exploiters. (e.g., Panchanan Muduli of Odisha migrated back to a kiln

just five months after rescue due to lack of aid).

- **Bureaucratic Delays:** Coordination gaps between source and destination states stall the issuance of **Release Certificates**, which are essential for financial aid.
- **Lack of Monitoring:** Many districts fail to conduct mandatory periodic surveys. The 15-year gap since the SECC-2011 data indicates a lack of updated national statistics.
- **Caste-Based Institutionalization:** Local officials often deny the existence of customary servitude. In Puri, certificates for **1,283 people** were revoked as officials failed to recognize the systemic nature of caste bondage.
- **The Debt Trap:** Rescued workers often lack land or skill-based livelihoods in their home villages, making migration and re-exploitation inevitable.

#### Way Forward

- **Immediate Relief:** Ensure every district activates its **₹10 lakh corpus fund** to provide spot payments to survivors within 48 hours of rescue.
- **Convergence of Schemes:** Link survivors to MGNREGS, PMAY (Housing), and Ration Cards immediately to prevent distress migration.
- **Digital Tracking:** Implement a real-time **inter-state tracking portal** to monitor the status of release certificates and fund transfers.
- **Skill Development:** Provide vocational training (e.g., masonry, tailoring) to help survivors establish sustainable local businesses.
- **Strengthening Vigilance:** Reconstitute District and Sub-divisional Vigilance Committees with active participation from **Civil Society Organizations (CSOs)**.

#### Conclusion

The 50th anniversary of the Act emphasizes that **Rehabilitation** is just as critical as **Rescue**. Legal freedom remains hollow without economic dignity. To break the cycle of bondage, India must

transition from a reactive, law-enforcement approach to a proactive, welfare-driven model of permanent social reintegration.

## The Vibrant Villages Programme–II (VVP-II)

### Context

The Union Home Minister launched the **Vibrant Villages Programme–II (VVP-II)** in Nathanpur village, Cachar district, Assam. The initiative aims to drive comprehensive development in border villages, strengthening national security through community integration and infrastructure growth.

### About the Vibrant Villages Programme–II (VVP-II)

**What it is?** VVP-II is a **Central Sector Scheme** designed for the holistic development of villages located in blocks abutting India's **International Land Borders (ILBs)**. It extends the developmental model to areas not covered by the initial northern border-focused VVP-I.

### Timeline and Implementation:

- **Approval:** Approved for implementation during **FY 2024-25 to 2025-26**, with financial support extending up to **2028-29**.
- **Official Launch:** February 2026 in Assam's Cachar district.

### Evolution of Border Development:

- **1986-87:** The **Border Area Development Programme (BADP)** was launched to bridge infrastructure gaps. However, many regions continued to face migration and development deficits.
- **2023 (VVP-I):** Launched specifically for northern borders to reverse out-migration and fortify strategic villages.
- **2026 (VVP-II):** Expanded the model to all other international land borders (Indo-Bangladesh, Indo-Nepal, Indo-Myanmar, Indo-Bhutan, and Indo-Pakistan) across **15 States and 2 Union Territories**.

### Objectives and Vision

- **Infrastructure & Livelihood:** Address critical gaps in connectivity and basic

services while creating sustainable economic opportunities.

- **Strategic Integration:** Integrate border populations into the national mainstream, empowering them to act as the **“eyes and ears”** for border guarding forces.
- **Stability:** Prevent forced migration from border areas by improving the quality of life, thereby maintaining a permanent civilian presence for territorial integrity.

### Key Features of the Programme

- **Financial Outlay:** A dedicated budget of **₹6,839 crore** allocated through FY 2028-29.
- **Geographic Reach:** Covers 15 States and 2 UTs with area-specific strategies tailored to diverse terrains.
- **Saturation-Based Approach:** Ensures 100% coverage of all eligible households under existing Central and State government schemes.
- **Convergence Model:** Synergizes multiple flagship schemes to ensure efficient resource utilization and rapid delivery.
- **Strategic Identification:** Focused development of **1,954 strategic villages**.

### The Four Core Infrastructure Themes:

1. **All-weather road connectivity:** Implemented via PMGSY-IV.
2. **Telecom connectivity:** Powered by Digital Bharat Nidhi.
3. **Television connectivity:** Delivered through the BIND scheme.
4. **Electrification:** Managed under the Revamped Distribution Sector Scheme (RDSS).

### Livelihood and Community Engagement

- **Economic Drivers:** Promotion of border tourism, Self-Help Groups (SHGs), Farmer Producer Organizations (FPOs), and specialized skill development.
- **Financial Inclusion:** Ensuring banking and credit access for remote border populations.
- **Security Outreach:** Conducting community activities to foster mutual trust

and cooperation between local residents and border security forces.

### Conclusion

VVP-II represents a shift from traditional border management to a "Border-Led Development" model. By transforming remote outposts into "Vibrant Villages," the government seeks to ensure that India's frontiers are not just lines on a map, but thriving hubs of economic activity and national resilience.

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## Judiciary Sensitization and Hate Crimes

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### Context

The Chief Justice of India (CJI) highlighted a pressing need to address **racial slurs** and **hate crimes**, particularly those targeting individuals from Northeast India. The judiciary emphasized that India's constitutional "Unity in Diversity" is not merely a slogan but a legal mandate requiring mutual respect across all ethnic and regional boundaries.

### About the News

**Judicial Insensitivity:** The Supreme Court (SC) recently intervened following a controversial ruling by the **Allahabad High Court** in a case under the **POCSO (Protection of Children from Sexual Offences) Act**.

- The High Court judge utilized highly offensive and insensitive language regarding a minor victim to justify the downgrading of sexual assault charges.
- The SC termed such language "deplorable," noting that judicial discourse must uphold the dignity of survivors rather than retraumatize them.

**Formation of the SC Panel:** To prevent future occurrences of judicial bias or linguistic insensitivity, the Supreme Court has constituted a high-level committee to draft national guidelines.

- **Composition:** Led by **Justice Surya Kant** (alongside a 3-judge bench) and **Justice Anirudh Bose**, Director of the National Judicial Academy.
- **Mandate:** To create a "Standard Operating Procedure" (SOP) for gender-

sensitive and culturally-aware communication in courtrooms.

### Key Objectives of the New Guidelines

**1. Linguistic Sensitivity and Neutrality:** Judges are instructed to abandon patriarchal or moralistic language. The focus is on using **plain, non-offensive English** while avoiding complex legal jargon that alienates the common citizen.

**2. Accuracy in Regional Translations:** The panel identified a critical "translation gap" in India's polyglot society. Regional nuances can lead to severe legal misunderstandings:

- **Example:** The Telugu word "*Randi*" is a respectful invitation ("Please come in") in South India, yet it is a severe derogatory slur in North India.
- **Requirement:** Courts must rely on verified, context-aware translators to prevent cultural misinterpretation from affecting judicial outcomes.

**3. Combatting Racial Profiling:** The guidelines will include specific modules on the socio-cultural history of Northeast India to sensitize judicial officers against systemic biases and the casual use of racial slurs in legal proceedings.

### Constitutional & Legal Framework

- **Article 14:** Ensures equality before the law; insensitive judicial language violates the right to equal dignity.
- **Article 15:** Prohibits discrimination on grounds of religion, race, caste, sex, or place of birth.
- **Article 21:** The right to a fair trial includes the right to be treated with dignity by the court itself.

### Challenges

- **Entrenched Biases:** Deep-seated social prejudices often inadvertently seep into judicial writing (referencing the *Aparna Bhat v. State of MP* case regarding gender stereotypes).
- **Vast Jurisdiction:** Implementing uniform linguistic standards across thousands of subordinate courts and multiple languages is a massive logistical hurdle.
- **Translation Nuance:** The lack of a standardized legal lexicon for various

Indian dialects often leads to "lost in translation" scenarios during evidence recording.

### Way Forward

- **Mandatory Training:** The **National Judicial Academy (NJA)** should integrate sensitization modules into the foundation courses for all newly appointed judges.
- **AI-Assisted Translation:** Utilizing specialized legal AI tools to provide context-sensitive translations of witness testimonies.
- **Public Audits:** Periodic reviews of judgments by the SC panel to identify and redact regressive or insensitive remarks.

### Conclusion

The Supreme Court's proactive stance signals that the **language of the law** is just as important as the **letter of the law**. By ensuring that the judiciary speaks with empathy and cultural precision, India moves closer to a legal system that truly respects the "dignity of the individual" as promised in the Preamble.

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## National Counter-Terrorism Policy

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### Context

On **February 23, 2026**, the Ministry of Home Affairs (MHA) unveiled **PRAHAAR**, India's first comprehensive and unified national counter-terrorism policy. This landmark framework transitions India from a reactive security posture to a proactive, multi-dimensional strategy designed to neutralize modern extremist threats.

### About the Policy

**The PRAHAAR Framework:** The policy is built upon a strategic acronym that defines its core pillars:

- **P – Prevention:** Adopting a "vaccine-style" approach to stop radicalization and terror plots before they manifest.
- **R – Response:** Standardizing rapid-action protocols to neutralize active threats with precision.
- **A – Aggregating:** Unifying the intelligence and operational capabilities of

the CBI, IB, State Police, and Armed Forces under a single cohesive umbrella.

- **H – Human Rights & Rule of Law:** Striking a constitutional balance between stringent national security and the protection of individual civil liberties.
- **A – Attenuating:** Systematically reducing the influence of extremist ideologies and minimizing the impact of existing threats.
- **A – Aligning:** Harmonizing local enforcement efforts with international counter-terrorism laws and global best practices.
- **R – Recovery:** Focusing on post-incident societal rebuilding and collective community engagement to foster resilience.

### Key Features and Scope

**Zero Tolerance Approach:** The policy mandates a "zero tolerance" stance toward terrorism, explicitly decoupling terror activities from any specific religion, ethnicity, or nationality to maintain social cohesion.

### Protection of Critical Infrastructure:

Specialized protection protocols are established for high-value sectors, including:

- **Energy & Power:** Nuclear installations and power grids.
- **Transport:** Aviation, railways, and major maritime ports.
- **Strategic Assets:** Defense facilities, space research centers, and atomic energy labs.

**Modern Threat Mitigation:** PRAHAAR leverages the **Multi-Agency Centre (MAC)** to tackle 21st-century warfare, such as:

- **Cyber Terrorism:** Protecting digital sovereignty and preventing data breaches.
- **Drone Warfare:** Implementing anti-drone technologies against aerial incursions.
- **Terror Financing:** Disrupting the flow of illicit funds and sleeper cell logistics.

### Constitutional & Legal Framework

- **National Security vs. Fundamental Rights:** While the policy strengthens the state's hand, it remains subject to judicial

review to ensure it does not bypass the protections offered under **Article 21** (Right to Life and Liberty).

- **Federal Cooperation:** Under the Seventh Schedule, "Public Order" is a State subject, but PRAHAAR facilitates better coordination between the Centre and States for "National Security" concerns.

### Challenges in Implementation

- **Inter-Agency Rivalry:** Overcoming traditional silos between different intelligence and police wings.
- **Technological Gap:** Staying ahead of the rapid evolution of encrypted communication used by terror modules.
- **Legal Scrutiny:** Ensuring that "prevention" measures do not lead to arbitrary detentions or infringement of privacy.

### Way Forward

- **Institutional Strengthening:** Expanding the reach of the Multi-Agency Centre (MAC) to the district level.
- **Community Policing:** Engaging local leaders to assist in the "Attenuating" phase of the policy to counter grassroots radicalization.
- **Global Collaboration:** Using the "Aligning" pillar to lead international forums against cross-border state-sponsored terrorism.

### Conclusion

**PRAHAAR** represents a paradigm shift in India's internal security architecture. By integrating intelligence, technology, and community recovery into a single policy, the government aims to create a "terrorism-free" environment that is resilient to both physical and digital incursions while upholding the democratic values of the Republic.

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## Freedom of Speech of MPs

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### Context

Parliamentary privileges are essential for the democratic functioning of a legislature, ensuring that representatives can discharge their duties without fear of external legal repercussions. In

recent years, the balance between an MP's absolute freedom inside the House and the Speaker's power to expunge remarks has been a subject of significant constitutional debate.

### About the News

- **Article 105 (Parliamentary Privileges):** This constitutional provision grants Members of Parliament (MPs) **absolute freedom of speech** within the House. It ensures that no member is liable to any proceedings in any court in respect of anything said or any vote given by them in Parliament.
- **State Analogy:** A corresponding provision, **Article 194**, extends similar protections and privileges to Members of Legislative Assemblies (MLAs) in State Legislatures.
- **Official Records:** Remarks made by MPs are entered into the official permanent records of the House, providing them immunity from defamation or civil/criminal suits regarding their speech on the floor.

### The Speaker's Power & Rule 380

While the freedom is broad, it is regulated internally to maintain the dignity of the House:

- **Rule 380 (Expunction):** Under the Rules of Procedure and Conduct of Business, the Speaker holds the authority to "expunge" words from the record if they are deemed **unparliamentary, defamatory, undignified, or indecent**.
- **Constitutional Caution:** Legal experts argue that while the Speaker can delete specific derogatory words, **arbitrarily suppressing entire paragraphs** or deleting substantive portions of an MP's speech may constitute an infringement of the fundamental protections guaranteed under Article 105.

### Constitutional Restrictions (Article 121)

The freedom of speech in Parliament is "absolute" regarding external legal action, but it is subject to specific constitutional limitations:

- **Conduct of Judges: Article 121** explicitly prohibits MPs from discussing the conduct of any **Supreme Court or High Court Judge** in the discharge of their duties.

- **The Exception:** Such a discussion is only permissible when a formal motion for the **removal (impeachment)** of the judge is actively being considered in the House.
- **Rules of the House:** Speech is also subject to the internal rules of procedure, which forbid the use of offensive language or making personal charges against fellow members.

### Challenges

- **Defining "Unparliamentary":** The definition of what constitutes "unparliamentary" language is often subjective, leading to allegations of political bias when opposition speeches are heavily edited.
- **Judicial Review:** While courts generally do not interfere in the internal proceedings of Parliament (Article 122), the extent to which "expunction" can be used to silence dissent remains a gray area in constitutional jurisprudence.
- **Public Access:** Expunged remarks are not supposed to be reported by the media; however, in the age of live telecasts and social media, "deleting" speech from the record has become technically challenging.

### Way Forward

- **Objective Guidelines:** Developing clearer, bipartisan guidelines for the exercise of Rule 380 to ensure it is used for maintaining decorum rather than curbing political criticism.
- **Strengthening Ethics:** Encouraging self-regulation among MPs to adhere to the highest standards of parliamentary etiquette, reducing the need for Chair intervention.
- **Codification of Privileges:** Periodic debate on whether parliamentary privileges should be formally codified to provide more clarity on the limits of free speech versus the powers of the Chair.

### Conclusion

The synergy between **Article 105** and **Rule 380** represents a delicate balance between absolute

freedom and necessary decorum. For a vibrant democracy, it is vital that the "shield" of privilege remains robust, while the "sword" of expunction is used sparingly to protect the sanctity of the institution rather than to stifle legitimate debate.

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## Nari Shakti Vandan Adhiniyam

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### Context

In 2023, the Indian Parliament passed the **128th Constitution Amendment Bill**, known as the **Nari Shakti Vandan Adhiniyam**. This landmark legislation seeks to address the historical under-representation of women in India's highest legislative bodies by mandating a fixed quota for female lawmakers.

### About the News

- **Background:** Despite making up nearly half the population, women's representation in Parliament and State Assemblies has remained stagnantly low. Historical data suggests that inclusive participation leads to more multi-dimensional policy-making and improved resource management, such as in water and sanitation sectors.
- **Historical Milestone:** The quest for this reservation is not new; the first official bill to secure seats for women in Parliament was introduced nearly three decades ago, in **1996**.
- **Key Provisions:**
  - **1/3rd Reservation:** Mandates the reservation of **33% of seats** for women in the **Lok Sabha** and **State Legislative Assemblies**.
  - **Exclusions:** The reservation does not extend to the **Rajya Sabha** (Upper House of Parliament) or **State Legislative Councils**.

### Representation Challenges

- **The "Pradhan Pati" Phenomenon:** A significant hurdle in grassroots politics is the proxy culture. Often, even when women win elections, actual administrative and political power is

exercised by male relatives (husbands, fathers, or fathers-in-law).

- **Structural Barriers:** Lack of financial resources, internal party hierarchies, and societal prejudices continue to limit the entry of independent female leadership into the political mainstream.

### Implementation Timeline & Conditions

The Act includes specific "linked conditions" that have deferred its immediate application:

1. **The Census Requirement:** The reservation will only be implemented after the next official **Census** is conducted and published (expected around 2027).
2. **Delimitation Exercise:** Following the Census, a **Delimitation Commission**, a statutory body must be established to redraw constituency boundaries.
3. **Projected Date:** Because delimitation is a time-consuming legal and geographical process (often taking 6 to 7 years), the actual implementation of the quota is likely to be realized only by **2033 or 2034**.

### Way Forward

- **Capacity Building:** Beyond legal quotas, there is a need to train and empower women leaders to dismantle the "proxy" culture and ensure substantive representation.
- **Expediting Processes:** Streamlining the Census and Delimitation timelines could help bring the benefits of the Act to the electorate sooner than the current decade-long projection.
- **Institutional Reform:** Political parties should proactively grant more tickets to women in the interim, rather than waiting for the legal mandate to take effect.

### Conclusion

The Nari Shakti Vandan Adhiniyam is a transformative step toward gender parity in Indian governance. While the procedural delays regarding Census and Delimitation pose a challenge, the legislative commitment marks a shift from viewing women's participation as an act of patronage to recognizing it as a fundamental constitutional right.

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## Global Capability Centres (GCCs)

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### Context

India has emerged as the "GCC capital of the world," transitioning from a traditional outsourcing destination to a sophisticated hub for global integrated operations. As of 2026, the sector continues to be a cornerstone of India's digital economy and a primary driver for high-skill employment.

### About the News

- **Definition:** Also known as **Global In-house Centres (GICs)**, GCCs are strategic offshore units established by Multinational Corporations (MNCs) to perform core business functions.
- **Shift in Role:** Unlike third-party outsourcing, GCCs are owned by the parent company. They have evolved from simple "back-office" support to centers of excellence focusing on **Research and Development (R&D)**, Intellectual Property (IP) creation, and advanced IT services.
- **The Indian Boom:** India currently hosts over **1,800 GCCs**, employing more than **2 million professionals**. Major tech and industrial giants like Google, Meta, and General Electric have established massive R&D entities within the country.

### Why India? (The Value Proposition)

The preference for India as a GCC destination is driven by several structural advantages:

- **Talent Pool:** Access to a "multi-dimensional" talent pool. India offers a rare combination of technical expertise (STEM) and managerial skills in a single geographic location.
- **Demographic Dividend:** A highly skilled, young, and English-speaking workforce provides a long-term human resource pipeline.
- **Cost Efficiency:** While the focus has shifted to "value," the availability of affordable, high-quality talent remains a significant competitive edge over Western markets.

- **Ecosystem:** A mature startup ecosystem and favorable government policies (like SEZ benefits and Digital India initiatives) facilitate easy setup.

### Economic Impact

- **Employment Generation:** GCCs are major creators of high-paying white-collar jobs, particularly in Tier-1 and emerging Tier-2 cities.
- **GDP Contribution:** They contribute significantly to India's service exports and overall economic growth.
- **Knowledge Transfer:** The presence of global giants fosters a culture of innovation and international best practices within the local workforce.

### Challenges

- **Competition for Talent:** With 1,800+ centers, the "war for talent" has led to high attrition rates and rising wage costs.
- **Infrastructure Gaps:** Rapid expansion often outpaces the development of urban infrastructure and stable power/internet utilities in secondary cities.
- **Regulatory Compliance:** Navigating complex taxation, data privacy laws (like the DPDP Act), and cross-border transfer pricing remains a hurdle for new entrants.

### Way Forward

- **Tier-2 & Tier-3 Expansion:** To manage costs and tap into new talent, GCCs are increasingly looking beyond Bengaluru and Hyderabad toward cities like Pune, Ahmedabad, and Jaipur.
- **Focus on Deep Tech:** Future growth will likely be driven by niche technologies such as **Generative AI**, Quantum Computing, and Cybersecurity.
- **Policy Support:** Continued government focus on "Ease of Doing Business" and specific incentives for R&D-heavy units will be crucial.

### Conclusion

GCCs have redefined India's image from the "world's back office" to the "world's engine room." By balancing cost-efficiency with high-end innovation, these centers are pivotal in integrating

India into the global value chain while providing a massive boost to the domestic economy.

## Lapis Lazuli

### What it is

Lapis Lazuli is a vibrant, deep-blue **metamorphic rock** that has been prized for millennia as a semi-precious gemstone. Unlike many gems that are single minerals (like diamonds or sapphires), Lapis is an **aggregate** of several minerals. It is technically a rock, typically formed through contact metamorphism where heat from magma alters limestone or marble.

### Composition

The distinctive appearance of Lapis Lazuli is the result of a precise mineral blend:

- **Lazurite (25–40%):** The primary source of the stone's intense royal blue color. It is a silicate mineral belonging to the sodalite group.
- **Pyrite:** Often appears as "golden" flecks or streaks. These are actually iron sulfide inclusions that give the stone a celestial, starry appearance.
- **Calcite:** Appears as white veins or mottling. High-quality "gem-grade" Lapis is valued for having minimal to no visible calcite.
- **Others:** Trace amounts of diopside, sodalite, and mica may also be present.

### Global Locations & Quality

- **Afghanistan (Badakhshan):** The **Sar-e-Sang** mines have been the world's premier source of the highest-quality Lapis for over 6,000 years. The stones here are known for their uniform, deep indigo hue.
- **Chile:** The **Flor de los Andes** mine produces Lapis that is often lighter in color and contains significantly more grey or white calcite.
- **Russia:** Found near **Lake Baikal**, often characterized by a distinctive "Siberian" blue with varying levels of pyrite.
- **Others:** Smaller deposits exist in Pakistan (Chagai), the United States (Colorado and California), Myanmar, and Tajikistan.

## Historical & Cultural Significance

### 1. The Indus Valley Civilization (IVC)

Lapis Lazuli was a cornerstone of ancient trade for the Harappans.

- **Shortughai Colony:** The Harappans established a dedicated trading outpost in **Shortughai** (modern-day Afghanistan) specifically to control the mining and export of Lapis Lazuli.
- **Trade Routes:** Artifacts have been found across major IVC sites like **Mohenjo-Daro** and **Harappa**, proving it was crafted into beads, amulets, and inlay work.

### 2. Ancient Egypt & Mesopotamia

- **Pharaonic Regalia:** Lapis was considered the "Stone of Heaven." It was used in the famous **death mask of Tutankhamun** and ground into powder for the world's first blue eyeshadow (used by Cleopatra).
- **Sumerian Mythology:** In the *Epic of Gilgamesh*, Lapis is described as a sacred material associated with the gods and royalty.

### 3. The Renaissance & "Ultramarine"

During the Middle Ages and Renaissance, Lapis was exported to Europe and ground into **Ultramarine**, the most expensive and vibrant blue pigment available.

- Artists like **Michelangelo** and **Vermeer** (e.g., in *Girl with a Pearl Earring*) reserved this pigment for the most important subjects, such as the robes of the Virgin Mary, because it was often more valuable than gold.

### Significance Today

Beyond jewelry, Lapis Lazuli remains a subject of study in **provenance research**. Because the chemical signature of Afghan Lapis is so unique, archaeologists use it to map out the oldest commercial trade routes in human history, often referred to as the "**Lapis Road**."

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## PM Modi's State Visit to Israel

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### Context

On **February 25–26, 2026**, Prime Minister Narendra Modi undertook a historic two-day State Visit to Israel. This marks his second official visit (the first was in 2017) and reinforces the **India-Israel Strategic Partnership**. The visit is significant as it occurs amid a reshaped geopolitical landscape in West Asia following the events of October 7, 2023.

### Address to the Knesset

PM Modi became the **first Indian Prime Minister** to address the **Knesset** (Israel's Parliament).

- **Solidarity against Terrorism:** He condemned the "barbaric" Hamas attack and reiterated India's policy of "**zero tolerance for terrorism**" with no double standards, drawing parallels between the October 7 attacks and India's own experience during 26/11.
- **Support for Peace:** While standing firmly with Israel, he endorsed the **Gaza Peace Initiative** (UNSC-backed) as a pathway to "just and durable peace," emphasizing that dialogue and humanity must guide the way forward.

### Strategic & Economic Cooperation

- **The "Iron Alliance":** Israeli PM Benjamin Netanyahu described the relationship as an "enormous multiplier" and an "iron alliance" between two resilient democracies.
- **Technology & Innovation:** Both leaders visited an exhibition in Jerusalem focused on:
  - **AI & Quantum Computing:** Collaborative research in strategic technologies.
  - **Water & Agri-tech:** Solutions for desalination (WaterGen) and micro-irrigation (N-Drip).
  - **Cybersecurity:** Advanced threat prevention and data security.
- **Free Trade Agreement (FTA):** Both nations agreed to fast-track negotiations for an ambitious FTA to unlock untapped trade potential.

### Geopolitical Developments

## 1. The Hexagonal Alliance (Netanyahu's Vision)

Israeli PM Netanyahu proposed a new geopolitical architecture called the "**Hexagon of Alliances**".

- **Structure:** A 6-nation framework comprising **Israel, India, Greece, Cyprus,** and select Arab and African nations.
- **Objective:** To create a security and strategic axis to counter "radical axes" (both the radical Shia axis led by Iran and emerging radical Sunni axes).
- **India's Balancing Act:** While India is a "core partner" in this vision, New Delhi remains cautious. India maintains vital energy and civilizational ties with **Iran, Saudi Arabia, and Qatar,** and typically avoids rigid military-style blocs to preserve its **Strategic Autonomy.**

## 2. IMEC Corridor (India-Middle East-Europe Economic Corridor)

- **Status:** Renewed enthusiasm for the corridor was a central theme. Netanyahu described India and Israel as the most "secure anchors" of this axis.
- **Connectivity:** The project aims to link India to Europe via the UAE, Saudi Arabia, Jordan, and Israel (Haifa Port).
- **Current Hurdles:** Although delayed by the Gaza conflict, the signing of the **India-EU Trade Deal** in January 2026 and the 2025 Trieste Summit have given the project a new lease of life as a "future-proof" alternative to the Suez Canal and China's BRI.

### Significance of the Visit

- **De-hyphenation:** India successfully demonstrated its "de-hyphenated" policy supporting Israel's security while explicitly backing a **Two-State Solution** and Palestinian humanitarian needs.
- **Defense Ties:** Reaffirmed Israel's role as a top-tier defense partner for India, moving beyond a buyer-seller relationship to joint development of missiles and drones.

- **Cultural Connect:** PM Modi visited **Yad Vashem** (Holocaust Memorial) and interacted with the Indian-Jewish diaspora, highlighting the deep "blood and sacrifice" ties between the two nations.

### Conclusion

The 2026 visit cements the transition of India-Israel ties from a quiet defense partnership to a public, multifaceted strategic alliance. By positioning India at the heart of the "Hexagon" and the IMEC corridor, both nations are looking to build a stable, technology-driven corridor of prosperity in a volatile world.

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## Double Taxation Avoidance Convention (DTAC)

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### Context

India and France signed a landmark **Amending Protocol** to update their 1992 Double Taxation Avoidance Convention. This update, signed during French President Emmanuel Macron's official visit to India, aligns the three-decade-old treaty with modern international tax standards and the **OECD's BEPS** (Base Erosion and Profit Shifting) framework.

### About Double Taxation Avoidance Convention (DTAC)

- **What it is:** A bilateral agreement between two nations designed to prevent the same income from being taxed twice, once in the **Source Country** (where it is earned) and once in the **Resident Country** (where the taxpayer lives).
- **Methods of Relief:**
  - **Exemption Method:** Income is taxed in only one country and is entirely exempt in the other.
  - **Tax Credit Method:** Income is taxed in both, but the resident country provides a credit for taxes paid in the source country.

### Key Features of the 2026 Amended India-France DTAC

The Amending Protocol introduces several sweeping changes to curb tax avoidance and simplify the investment landscape:

- **Full Capital Gains Taxing Rights:** India (the source country) now has full rights to tax gains from the sale of shares of Indian companies. Previously, certain interpretations allowed for exemptions; this change puts the France treaty on par with India's treaties with **Mauritius** and **Singapore**.
- **Tiered Dividend Taxation:** The previous flat 10% rate has been replaced with a split-rate structure to reward strategic investors:
  - **5% Tax:** For shareholders holding at least **10%** of the company's capital.
  - **15% Tax:** For all other investors (portfolio/minority investors).
- **Deletion of the MFN Clause:** The **Most-Favoured-Nation (MFN)** clause was formally removed. This follows a 2023 Supreme Court ruling (*Nestle SA Case*) and ends disputes where treaty partners automatically claimed lower rates granted to other nations.
- **Service Permanent Establishment (PE):** A "Service PE" clause was added, expanding India's right to tax foreign entities that provide services within India for an extended period without a fixed physical base.
- **BEPS Integration:** Directly incorporates **Multilateral Instrument (MLI)** provisions to prevent multinational corporations from using "treaty shopping" to avoid taxes.

#### Significance of the 2026 Protocol

- **Investment Boost:** By providing a clear, dual-rate dividend structure, it incentivizes large-scale French **Foreign Direct Investment (FDI)** into India.
- **Legal Certainty:** The removal of the MFN clause brings an end to years of litigation regarding "automatic" tax benefits, providing a predictable regime for global corporations like **Capgemini, Sanofi, and L'Oreal**.
- **Anti-Evasion:** Enhanced provisions for the **Exchange of Information** and a new article on **Assistance in Collection of**

**Taxes** strengthen the ability of both nations to track fiscal evasion and illegal financial flows.

- **Revenue Protection:** Secures India's right to tax capital gains from the sale of domestic shares, protecting the national exchequer from profit shifting.

#### Conclusion

The 2026 amendment to the India-France DTAC marks a transition from a legacy treaty to a modern, anti-abuse tax framework. While it may increase the tax burden on certain portfolio investors (FPIs), it provides the long-term transparency and certainty required for the next phase of the **India-France Strategic Partnership**.

### Human Papillomavirus (HPV) Vaccination

#### Context

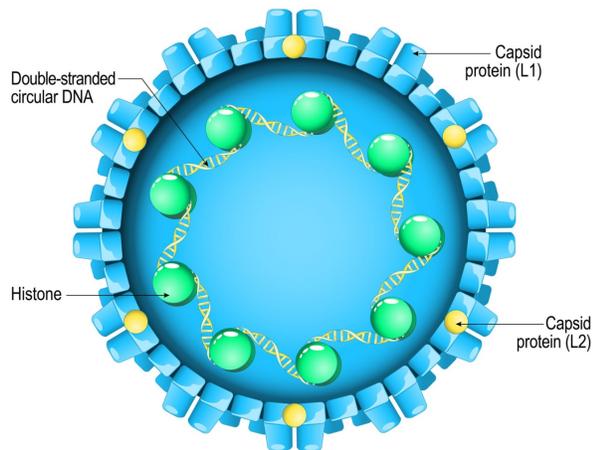
The Government of India announced the formal rollout of a nationwide **Human Papillomavirus (HPV) vaccination programme**. Aimed at eliminating cervical cancer, the initiative focuses on adolescent girls as a primary preventive measure, marking one of India's most significant public health pushes for women's wellness.

#### About the News

- **The Vaccine:** A recombinant vaccine that triggers an immune response using virus-like genetic material (no live virus).
- **The Goal:** To protect against high-risk HPV variants that cause nearly **85% of all cervical cancers** in India.
- **National Statistics (2026):**
  - **Annual Burden:** India reports approximately **1.27 lakh new cases** and **nearly 80,000 deaths** annually.
  - **Mortality Rate:** Roughly one woman dies every eight minutes from this preventable disease.
  - **Global Share:** India accounts for nearly **one-fifth** of the global cervical cancer burden.

# HPV

(human papillomavirus)



## Vector for HPV

- **Primary Cause:** Persistent infection with high-risk **Human Papillomavirus (HPV)** types, particularly **16 and 18**, which are oncogenic.
- **Transmission:** A common sexually transmitted infection (STI) spread through skin-to-skin contact.
- **Progression:** It typically takes **10 to 20 years** for a persistent HPV infection to develop into invasive cervical cancer, providing a wide window for early prevention via vaccination and screening.

## Key Features of the Initiative

- **Target Group:** Girls who turn **14 years old** each year (an annual cohort of ~1.15 crore girls). Vaccination at this age provides the strongest immune response and occurs before potential exposure.
- **Vaccine Used:** The government is utilizing **Gardasil-4** (quadrivalent), which protects against four HPV types: **16 & 18** (cancer-causing) and **6 & 11** (causing genital warts).
  - *Note:* While the indigenous **Cervavac** (Serum Institute of India) is available in the private market, the government currently uses Gardasil for the national drive through its partnership with **Gavi, the Vaccine Alliance**.

- **Dosage:** A **single-dose schedule** has been adopted based on 2022 WHO recommendations and ICMR guidance, proving as effective as multi-dose regimens for this age group.
- **Implementation:** Voluntary and **free of cost** at government facilities (Ayushman Arogya Mandirs, district hospitals).
- **Tracking:** Managed through the **U-WIN digital platform** for seamless registration and appointment booking.

## Significance

- **High Efficacy:** Vaccination can reduce the risk of cervical cancer by **90% to 95%** when administered during the early teens.
- **Equity:** Removing the "price barrier" (private vaccines cost ₹3,000–₹4,000 per dose) ensures that girls from all socio-economic backgrounds are protected.
- **Economic Impact:** Reducing the cancer burden directly improves long-term economic productivity and reduces the public healthcare expenditure on advanced cancer treatments.

## Way Forward

- **Universal Immunization:** While currently a special campaign, the aim is to eventually integrate HPV shots into the **Universal Immunisation Programme (UIP)**.
- **Screening Integration:** Combining vaccination for the young with regular screening (VIA/HPV DNA tests) for women aged 30–65.
- **Awareness:** Overcoming vaccine hesitancy through community-level sensitisation by ASHA workers and school-based outreach.

## Conclusion

The 2026 HPV vaccination drive is a historic step toward achieving the WHO's global target of **eliminating cervical cancer by 2030**. By prioritizing 14-year-old girls, India is investing in a future where "Swastha Nari" (Healthy Woman) forms the foundation of a resilient nation.

## Keralam

### Context

The **Union Cabinet** officially approved the proposal to rename the State of **Kerala** to **Keralam**. This decision follows unanimous resolutions passed by the Kerala Legislative Assembly in 2023 and 2024, aimed at aligning the state's constitutional name with its traditional Malayalam nomenclature.

### About the News

- **What it is:** The approval marks the transition from the English-adopted term "Kerala" to "**Keralam**," the name used by native speakers.
- **Legislative Step:** Following Cabinet approval, the **Kerala (Alteration of Name) Bill, 2026** will be processed in Parliament to formally amend the Constitution.
- **Historical Context:** The demand is rooted in the **Aikya Kerala movement**, which advocated for the unification of Malayalam-speaking regions. Since the state was formed on linguistic lines in 1956, the government argued the name should reflect its linguistic identity.

### Constitutional Framework for Renaming a State

The process of changing a state's name is governed by the following constitutional provisions:

- **Article 3:** Empowers Parliament to form new states or alter the areas, boundaries, or **names of existing states**.
- **The Proviso to Article 3:**
  - A Bill for renaming can only be introduced in Parliament on the **recommendation of the President**.
  - Before recommendation, the President must refer the Bill to the **concerned State Legislature** to express its views within a specified period.
- **First Schedule:** This schedule contains the list of all States and Union Territories. Renaming a state requires an amendment to this schedule.

### Step-by-Step Procedure

The renaming process involves a specific sequence of federal and state interactions:

1. **State Resolution:** The Kerala Legislative Assembly passed a resolution requesting the Union to change the name under Article 3.
2. **Union Scrutiny:** The **Ministry of Home Affairs (MHA)** reviews the proposal, seeking "No Objection" from various agencies (e.g., Intelligence Bureau, Registrar General).
3. **Cabinet Approval:** The Union Cabinet clears the proposal, allowing the drafting of the Alteration of Name Bill.
4. **Presidential Reference:** The President sends the proposed Bill to the State Legislature for their opinion (though the opinion is not binding on Parliament).
5. **Parliamentary Passage:** The Bill is introduced in Parliament on the President's recommendation and must be passed by a **Simple Majority** in both Houses.
6. **Notification:** Once the President signs the Bill, the First Schedule is amended, and the name change is notified in the Gazette.

### Significance of the Change

- **Linguistic Identity:** Asserts the cultural and linguistic autonomy of the Malayalam-speaking population.
- **Decolonization of Nomenclature:** Follows the precedent of other states that changed names to reflect native heritage (e.g., United Provinces to Uttar Pradesh, Madras to Tamil Nadu, Mysore to Karnataka, and Orissa to Odisha).
- **Official Consistency:** Ensures that the name used in state records, literature, and daily speech matches the official Constitutional entry.

### Conclusion

The transition to "Keralam" is a symbolic yet significant step in India's federal structure, honoring the linguistic principles upon which

states were reorganized in 1956. By invoking Article 3, the Union and State governments are collaborating to harmonize constitutional law with regional cultural sentiment.

## Green Ammonia

### Context

In late 2025 and early 2026, India achieved a global breakthrough in clean energy. Through the **Solar Energy Corporation of India (SECI)**, the country discovered record-low prices for green ammonia reaching nearly **40%–50% lower** than European benchmarks (H2Global). This underscores India's emerging role as a cost-leader in the global green hydrogen economy.

### About the News

- **What it is:** Green ammonia is produced by synthesized nitrogen from the air and **green hydrogen** (generated via water electrolysis using renewable energy).
- **The "Zero-Carbon" Advantage:** Unlike "Grey Ammonia" which uses natural gas and emits high levels of CO<sub>2</sub>, the green variant has a near-zero carbon footprint.
- **Key Statistics (2025–26):**
  - **Record Low Price:** SECI auctions discovered prices of **₹49.75 to ₹64.74/kg** (\$572–\$744/tonne), compared to the EU's \$1,153/tonne.
  - **Demand Aggregation:** The tender targeted an annual demand of **724,000 tonnes** across 13 major fertilizer plants.
  - **Emission Savings:** Targeted abatement of **50 MMT of \$CO<sub>2</sub>** annually by 2030.

### Potential of Green Ammonia

- **Decarbonizing Agriculture:** Replacing fossil-fuel-based feedstock in fertilizers.
  - *Example:* **Paradeep Phosphates** in Odisha recently received 75,000 tonnes of green ammonia, marking a sectoral shift.
- **Zero-Carbon Marine Fuel:** Ammonia is more energy-dense and easier to store

than liquid hydrogen, making it ideal for shipping.

- *Example:* The **Rotterdam-India-Singapore** green shipping corridor is being developed to operationalize this.

- **Hydrogen Carrier:** Its stable chemical structure makes it an efficient medium to transport green hydrogen globally.
- **Energy Storage:** Acts as a long-duration storage solution to balance the national grid during renewable energy fluctuations.

### Initiatives Taken

- **SIGHT Programme:** An outlay of **₹17,490 crore** providing production-linked incentives (PLI) for both electrolysers and green hydrogen.
- **National Green Hydrogen Mission (NGHM):** Aims for **5 MMTPA** production capacity by 2030, attracting over ₹8 lakh crore in investment.
- **Green Hydrogen Hubs:** Three major ports **Deendayal (Kandla), Paradip, and V.O. Chidambaranar (Tuticorin)** have been formally recognized as dedicated hubs for hydrogen derivatives.
- **ISTS Waiver:** Exemption from Inter-State Transmission System charges for projects commissioned before December 2030.

### Challenges Associated

- **The "Green Premium":** Despite price drops, green ammonia remains slightly costlier than grey ammonia (~\$515/tonne), requiring mandatory blending norms to be competitive.
- **Infrastructure Deficit:** High capital cost for specialized bunkering, storage, and **ammonia cracking units** at ports.
- **Regulatory Fragmentation:** Inconsistent state-level policies on power banking and transmission subsidies.
- **Safety & Toxicity:** Ammonia is highly corrosive; its use as a marine fuel requires rigorous new safety protocols and engine re-engineering.

### Way Ahead

- **Mandatory Blending:** Introduce consumption mandates for refineries and fertilizer plants to ensure a guaranteed market.
- **Global Standards:** Align India's green certification with international norms (like the EU's RFNBO) to facilitate exports.
- **Blended Finance:** Utilize low-interest capital from multilateral banks to bridge the initial "viability gap."
- **Indigenous Technology:** Incentivize local manufacturing of electrolyzers to reduce dependence on imports.

### Conclusion

India's green ammonia strategy is a pivot from **energy security to energy independence**. By leveraging the **SIGHT programme** and competitive SECI auctions, India is rapidly closing the price gap with fossil fuels. Successfully scaling this "green molecule" will be the cornerstone of India's journey toward **Net Zero by 2070**.

## Women, Business and the Law

### Context

Released in February 2026, the 11th edition of the World Bank's **Women, Business and the Law (WBL)** report reveals a "shockingly large" gap between laws on paper and their actual implementation. While legal reforms are advancing, women globally still face steep barriers due to weak enforcement and a lack of supportive infrastructure like childcare and safety services.

### About the Report

- **What it is:** An annual study measuring the enabling environment for women's economic opportunities across **190 economies**.
- **The WBL 2.0 Framework:** For the first time, the report benchmarks progress across three distinct pillars:
  1. **Legal Frameworks:** Laws as written on the books (*De Jure*).
  2. **Supportive Frameworks:** Policies, institutions, and services (e.g., childcare, hotlines) that enable the law.
  3. **Enforcement Perceptions:** How legal experts perceive the laws being applied in practice (*De Facto*).

### Key Global Highlights

- **The Implementation Gap:** The global average score for **Legal Frameworks is 67.9**, but it plummets to **47.3 for Supportive Frameworks** and **53.4 for Enforcement Perceptions**.
- **The 4% Benchmark:** Only 4% of women globally live in countries that have achieved "nearly full legal equality" (scoring 90+ across all three pillars).
- **Economic Stakes:** Closing the gender gap in labor force participation and entrepreneurship could boost global GDP by **more than 20%** over the next decade.
- **Safety Crisis:** Safety is the lowest-scoring category globally. Only one-third of necessary safety laws exist, and even then, enforcement fails roughly **80% of the time**.
- **Childcare Deficit:** In low-income economies, only **1% of the required childcare support mechanisms** are currently in place.

### Global Best Practices

- **Integrated Implementation:** Successful economies (e.g., **Egypt**, the world's top reformer this year) align legal changes with dedicated budgets and specialized gender-police units.
- **Incentivizing Care:** Countries providing direct subsidies for childcare and mandating **paid parental leave for both parents** see a significant rise in female workforce participation.
- **Gender-Responsive Procurement:** Nations like **Viet Nam** use public procurement laws to specifically support and include women-led businesses in the economy.

### Challenges & Barriers

- **The Motherhood Penalty:** The lack of affordable childcare is a primary driver for women exiting the workforce.
- **Financial Exclusion:** Only half of the world's economies have laws that explicitly prohibit **gender-based**

**discrimination** in financial services/credit access.

- **Weak Monitoring:** Most governments lack **gender-disaggregated data** to track whether policies like "equal pay for equal work" are actually being followed in the private sector.
- **Technological & Cultural Hurdles:** Even with legal rights, deep-seated social norms often prevent women from utilizing them without fear of social marginalization.

### Way Ahead

- **Bridge the Implementation Gap:** Shift focus from passing new laws to funding the agencies and services (courts, hotlines, nurseries) needed to enforce them.
- **Invest in "Care Infrastructure":** Treat childcare as an economic infrastructure priority rather than a private family matter.
- **Mandate Equal Credit Access:** Enact and enforce laws that stop lenders from using gender as a risk factor for business loans.
- **Strengthen Safety Services:** Establish 24/7 legal aid and specialized protection units to ensure women can travel and work without fear.

### Conclusion

The 2026 report serves as a diagnostic tool for a world in demographic and economic strain. It underscores that **rights on paper are not rights in practice**. To unlock the potential of the 600 million girls entering the workforce this decade, governments must invest in the "supportive framework" that transforms a legislative milestone into a lived reality.

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## Maritime Labour Convention (MLC), 2006

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### Context

On February 23, 2026, the **International Labour Organization (ILO)** and the **International Maritime Organization (IMO)** marked the 20th anniversary of the MLC, 2006. The milestone celebrates two decades of the convention's role

as the global "Seafarers' Bill of Rights," ensuring safety and dignity for millions of maritime workers.

### About the Maritime Labour Convention (MLC), 2006

- **What it is:** A comprehensive international treaty that establishes minimum requirements for nearly every aspect of working and living conditions for seafarers. It is considered the **"fourth pillar"** of the international maritime regulatory regime.
- **Establishment:** Adopted on **23 February 2006** by the International Labour Conference in Geneva.
- **Aims:** \* To consolidate nearly 70 existing maritime labour instruments into a single, coherent convention.
  - To ensure seafarers globally regardless of nationality or ship flag have access to decent work.
  - To create a level playing field for shipowners by preventing unfair competition from substandard vessels.

### Key Features of the Convention

The MLC is structured around five "Titles" that mandate specific standards:

- **Minimum Requirements:** Sets strict standards for **minimum age** (16 years), medical certification, and mandatory training/qualifications.
- **Conditions of Employment:** Regulates employment agreements, fair wages, defined hours of work and rest, and the right to **repatriation** (returning home) at no cost to the seafarer.
- **Accommodation & Recreation:** Mandates specific quality standards for on-board living, including ventilation, lighting, and recreational facilities.
- **Health & Medical Care:** Ensures seafarers receive medical care on board and in port that is comparable to that available to workers ashore.
- **Social Security Protection:** Requires member states to provide social security branches, including coverage for sickness, unemployment, and occupational injuries.

### Compliance and Enforcement

The convention features a "double-lock" system to ensure global adherence:

1. **Flag State Inspections:** The country where the ship is registered is responsible for inspecting and certifying that the vessel meets MLC standards.
2. **Port State Control:** Foreign ports have the authority to inspect ships and, in cases of severe non-compliance, can detain vessels until labour violations are rectified.

### Significance

- **Seafarers' Welfare:** Significantly enhanced global standards for wages, safety, and mental health support, especially highlighted during the "crew change crisis" of the early 2020s.
- **Fair Global Trade:** By enforcing uniform labour standards, it prevents a "race to the bottom" where shipowners might otherwise cut costs by exploiting workers.
- **Universal Application:** Because it applies to all ships entering the ports of ratifying states, it effectively covers over **90% of the world's fleet**.

### Conclusion

Twenty years on, the MLC, 2006 remains the bedrock of maritime social justice. As the industry moves toward automation and green shipping, the convention continues to evolve through amendments to protect the human element at the heart of global trade.

## National Monetisation Pipeline 2.0 (NMP 2.0)

### Context

In early 2026, the Union Finance Minister launched the **National Monetisation Pipeline 2.0 (NMP 2.0)**. This second phase builds on the initial framework to accelerate infrastructure financing by unlocking the value of operational public assets.

### About the News

- **What it is:** NMP 2.0 is a medium-term roadmap (FY 2026–2030) designed to monetise **brownfield** (existing/operational) public infrastructure assets.

- **Core Philosophy:** "Asset Recycling", unlocking idle capital from completed projects to fund the construction of new "greenfield" infrastructure.
- **Implementing Agencies:** \* Developed by **NITI Aayog**.
  - Monitored by the **Core Group of Secretaries on Asset Monetisation (CGAM)** under the Ministry of Finance.

### Key Features of NMP 2.0

- **Total Potential:** Targeted at **₹16.72 lakh crore** for the period FY 2026–2030.
- **Private Participation:** Expected to draw approximately **₹5.8 lakh crore** in private investment.
- **Monetisation Models:** Utilizes various structures including:
  - Public-Private Partnership (PPP) Concessions.
  - Infrastructure Investment Trusts (InvITs).
  - Securitisation of cash flows and strategic auctions.
- **Revenue Flow:** Proceeds are directed toward the Consolidated Fund of India, relevant PSUs, or State Consolidated Funds to be reinvested in CAPEX.
- **Standardisation:** Simplified processes and time-bound execution based on feedback and lessons learned from NMP 1.0.

### Sectoral Allocation (Top 5 Shares)

The pipeline covers a wide array of sectors, with the following five accounting for the bulk of the valuation:

Sector	Share (%)	Potential Value (₹ Lakh Crore)
<b>Highways, MMLPs &amp; Ropeways</b>	26%	4.42
<b>Power Sector</b>	17%	2.76
<b>Railways</b>	16%	2.62
<b>Ports</b>	16%	2.63

Coal	13%	2.16
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### Significance

- **Fiscal Efficiency:** Mobilises resources for fresh infrastructure development without increasing the national debt or fiscal deficit.
- **Capital Recycling:** Enables the government to exit "mature" assets and reinvest the proceeds into high-risk, early-stage projects.
- **Investment Visibility:** Provides a clear, long-term pipeline for institutional investors (like pension funds and sovereign wealth funds) to participate in India's growth.
- **Operational Efficiency:** Private sector participation often leads to better maintenance and technological upgrades of existing public utilities.

### Challenges & Monitoring

- **Execution Risk:** Ensuring time-bound bidding and transparent valuation of aging assets.
- **Market Appetite:** Dependency on global and domestic financial market conditions for InvITs and auctions.
- **Oversight:** A continuous monitoring mechanism is led by an empowered inter-ministerial group headed by the **Cabinet Secretary**.

### Conclusion

NMP 2.0 serves as a critical engine for India's infrastructure ambitions. By shifting the focus from "owning" assets to "managing" their value, the government aims to create a self-sustaining cycle of investment that fuels economic productivity while maintaining fiscal discipline.

## Adolescent Mental Health

### Context

A series of tragic adolescent deaths in Ghaziabad sparked a nationwide conversation. The incidents highlighted the "quiet crisis", a surge in mental health struggles among India's youth driven by

academic pressure, digital addiction, and a lack of early intervention.

### About the News

- **Definition:** The "quiet crisis" refers to invisible psychological struggles like anxiety and depression that manifest as early as age 4–5 but are often dismissed as "phases."
- **Key Data (2025–26):**
  - **Prevalence:** 7% to 10% of Indian adolescents have a diagnosable mental health condition.
  - **ADHD Burden:** 5% to 7% of school-aged children show symptoms of ADHD.
  - **Digital Shift:** Many children spend 6–7 hours daily on screens; India now has over 800 million low-cost internet users.
  - **Treatment Gap:** A massive deficit exists, with fewer than 10,000 psychiatrists for 1.4 billion people.

### Reasons for the Crisis

- **Unregulated Digital Environments:** Excessive screen time leads to "brain rot," disrupted sleep, and emotional dysregulation.
- **Academic Pressure:** Schools often prioritize competitive rankings over emotional resilience. The **ASER 2024 report** noted high academic anxiety despite high social media usage.
- **The Displacement Effect:** Digital devices act as "babysitters," replacing the sensory play essential for healthy brain development.
- **Social Comparison:** A 2025 study revealed that **65% of adolescent girls** in India report distress linked to online body image comparisons and FOMO.
- **Lack of Early Recognition:** Stigma prevents families from seeking help during the early onset of emotional disorders.

### Legal and Policy Framework

- **Tele-MANAS:** A 24/7 national helpline (14416) for crisis counseling and digital addiction.
- **Online Gaming (Regulation) Act, 2025:** Aimed at curbing addiction and financial distress caused by real-money gaming.

- **Ayushman Bharat:** Integration of mental health screening into school-level primary healthcare.
- **Proposed Social Media Curbs:** The government is currently exploring age-based restrictions (under 16) similar to Australian regulations.

### Challenges

- **Severe Manpower Shortage:** Experts at **ANCIPS 2026** highlighted an 85% treatment gap due to a lack of child specialists.
- **Technological Workarounds:** Tech-savvy minors frequently use VPNs or fake accounts to bypass **Digital Personal Data Protection (DPDP)** rules.
- **Pervasive Stigma:** Mental health issues are still viewed as "bad behavior" or personal weakness in many peri-urban areas.
- **Institutional Resistance:** Tech giants have raised concerns over proposed **Aadhaar-linked logins** for age verification.
- **Fragmented Referral Pathways:** Even when schools identify issues, there is often no clear follow-up mechanism to connect students with specialists.

### Way Forward

- **Digital Wellness Curricula:** Integrate screen-time management and cyber-safety into school subjects.
- **Mandatory Physical Activity:** Enforce daily play to build neuroplasticity and combat sedentary digital habits.
- **Routine School Screening:** Implement universal mental health check-ups alongside standard physical growth monitoring.
- **Parental Support Groups:** Build community spaces for trauma-informed parenting education.
- **Age-Based Access:** Implement thoughtful digital limits while ensuring marginalized youth retain access to essential digital lifelines.

### Conclusion

Adolescent mental health is the foundational pillar of India's demographic dividend. Shifting from crisis response to pre-emptive care requires a collective effort from parents, educators, and digital platforms. Breaking the silence of this crisis is essential to ensure childhood remains a period of resilience rather than isolation.

## West Asia Policy

### Context

In **February 2026**, Prime Minister Narendra Modi's state visit to Israel marked a historic milestone, elevating the relationship to a **"Special Strategic Partnership."** Simultaneously, India has deepened its "Extended Neighbourhood" engagement with the Arab world, specifically **Saudi Arabia and the UAE**, navigating the complex geopolitical rivalries of West Asia through a policy of **strategic autonomy and "de-hyphenation."**

### Key Strategic Pillars

#### 1. De-hyphenation Policy:

India has successfully decoupled its relations with Israel from its ties with Palestine. Each relationship is treated as an independent bilateral track, allowing India to pursue deep defense and tech ties with Israel while maintaining traditional support for Palestinian statehood.

#### 2. The "Think West" Strategy:

Beyond energy, India is now a "security provider" and a "technology partner" in the region.

- **Energy Security:** Shifting from transactional oil buying to long-term equity and gas pacts (e.g., the 2026 **HPCL-ADNOC 10-year LNG deal**).
- **Strategic Autonomy:** India maintains a "middle ground" stance, refusing to join sectarian alliances while engaging with both Iran and the Saudi-led bloc.

### Major Strategic Forums

Forum	Members	Primary Focus (2025-26 Updates)

<b>I2U2 (West Asia Quad)</b>	India, Israel, USA, UAE	Focus on <b>"bankable projects"</b> in food security and clean energy. Progress includes the <b>\$2 billion UAE-funded food parks</b> in India and hybrid renewable energy projects in Gujarat.
<b>IMEC</b>	India, UAE, Saudi, EU, USA	Designed as an alternative to China's BRI. Despite regional tensions, stakeholders in 2026 are moving ahead with <b>independent components</b> (port-to-rail links) to maintain momentum.
<b>Board of Peace (Gaza)</b>	US-led (India as Observer)	India was invited in late 2025 as an <b>observer</b> to the \$7 billion fund for Gaza's reconstruction, signaling its role as a credible, non-partisan stabilizer.

### The Palestine Question & Two-State Solution

Despite growing proximity to Israel, India has reaffirmed its traditional stance:

- **UN Voting (Sept 2025):** India voted in favor of the **"New York Declaration,"** endorsing a sovereign, independent, and viable State of Palestine.
- **Diplomatic Balancing:** In January 2026, the **India-Arab League Joint Statement** reiterated support for the 1967 borders and a peaceful resolution to the conflict.
- **Humanitarian Aid:** India remains a consistent contributor to UNRWA and has pledged participation in post-conflict reconstruction in Gaza.

### Challenges

- **Regional Volatility:** The 2025-26 tensions between Israel and Iran, and Houthi threats in the Red Sea, complicate the **IMEC** maritime links.
- **Perception of Alignment:** Balancing the new **Strategic Defence Partnership** with the UAE (signed Jan 2026) against defense ties with Israel without appearing to join a regional military bloc.
- **The China Factor:** Countering Chinese investments in Gulf infrastructure (e.g., UAE's Khalifa Port) which may pose security risks to plurilateral frameworks like I2U2.

### Way Forward

- **Economic Integration:** Finalize the **India-Israel Free Trade Agreement (FTA)** and expand the **India-UAE CEPA** to reach the \$200 billion trade target by 2032.
- **Defense Co-production:** Shift from "buyer-seller" to "co-development" under *Atmanirbhar Bharat*, focusing on AI, drones, and missile defense (e.g., Israel's **Iron Beam** laser system).
- **Digital Corridors:** Establish **"Data Embassies"** and supercomputing clusters with Arab partners to secure sovereign data and fintech interoperability (UPI-JAYWAN integration).

### Conclusion

India's West Asia policy in 2026 reflects a transition from "ideological positioning" to **"strategic pragmatism."** By positioning itself as a "swing power" that can talk to all sides, India has secured its energy, diaspora, and security interests without being drawn into the region's historical fault lines.

### Regulation of Social Media & Safe Harbor

#### Context

In recent years, the rapid proliferation of AI-driven deepfakes, coordinated misinformation, and explicit content has prompted the Indian government to reconsider the accountability of Big Tech. There is an increasing push to make

platforms like Meta, YouTube, and WhatsApp legally responsible for the content they host to ensure a safer digital ecosystem.

### About the News

#### The Core Issue:

The government is evaluating the necessity of strict accountability for Intermediaries to curb the spread of harmful digital content that threatens social harmony and individual privacy.

#### Safe Harbor Principle (Section 79, IT Act, 2000):

- **Definition:** Provides legal immunity to digital platforms, ensuring they are not held liable for third-party information or data hosted by them.
- **Conditionality:** This immunity is currently "conditional," meaning platforms must follow "due diligence" to retain their protected status.

#### Government Stance & Actions:

- **Revocation Warnings:** The government has signaled that "Safe Harbor" protection may be withdrawn if platforms fail to promptly remove flagged, objectionable, or deepfake content.
- **Accountability:** Shifting the burden from the user alone to the platform to ensure proactive moderation.

### Regulatory Framework

#### Section 69A of the IT Act:

Empowers Central and State governments to issue directions to block or delete online content in the interest of:

- Sovereignty and integrity of India
- Defense of India and Security of the State
- Friendly relations with foreign states
- Public order
- Preventing incitement to any cognizable offense

#### IT (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021:

Mandates the appointment of grievance officers and provides timelines for content take-down (e.g., 24 hours for explicit content).

#### Analysis: Pros and Cons

Pros (Governance & Security)	Cons (Rights & Expression)
<b>Combats Misinformation:</b> Curbs the viral spread of fake news and deepfakes.	<b>Suppression of Dissent:</b> Critics argue broad powers can be misused to silence political criticism.
<b>National Security:</b> Enables rapid response to content inciting violence or communal disharmony.	<b>Censorship Concerns:</b> Fear of "over-compliance" where platforms delete legal speech to avoid liability.
<b>Victim Protection:</b> Ensures swift removal of non-consensual explicit imagery.	<b>Vagueness:</b> Lack of precise definitions for "objectionable content" can lead to arbitrary enforcement.

### Challenges

- **Scale of Content:** The sheer volume of data makes manual moderation impossible, leading to reliance on flawed algorithms.
- **Free Speech vs. Security:** Striking a balance between the "Safe Harbor" immunity (which fosters innovation) and state control (which ensures order).
- **End-to-End Encryption:** For platforms like WhatsApp, identifying the "first originator" of a message remains a technical and privacy-related hurdle.

### Way Forward

- **Legislative Clarity:** The proposed Digital India Act should clearly define the categories of content that trigger a loss of Safe Harbor.
- **Judicial Safeguards:** Implementing "Natural Justice" principles where users are given a chance to appeal content take-downs.
- **Technological Audits:** Mandatory transparency reports and independent audits of AI moderation tools used by platforms.

- **International Alignment:** Adopting global best practices (like the EU's Digital Services Act) that categorize intermediaries based on their size and risk.

### Conclusion

While the "Safe Harbor" principle was essential for the early growth of the internet, the age of AI demands updated accountability. The challenge for India lies in crafting a regulatory regime that eliminates digital harms without creating a "chilling effect" on the fundamental right to free expression.

## Recall of NCERT Textbooks

### Context

The Supreme Court of India took *suo motu* (on its own motion) cognizance of newly printed Class 8 NCERT textbooks. The Court directed the immediate withdrawal of these books due to content deemed derogatory toward the judicial institution.

### About the News

**The Issue:** The controversial textbooks contained a chapter specifically highlighting "**corruption in the judiciary**" and the massive **pendency of cases** across various courts.

### Court Observations & Reactions:

- **Perception of Justice:** Senior Advocate Kapil Sibal argued that teaching 8th-grade students about judicial corruption creates a prematurely negative perception and "scandalizes" the judiciary.
- **Institutional Apology:** Following the Court's strict stance, both the **NCERT** and the **Union Education Minister** issued apologies, promising to recall over 2 lakh printed copies.
- **Balance of Information:** While data on pendency is public, the Court emphasized that educational material must maintain the dignity of constitutional institutions.

### Key Constitutional Concepts Discussed

#### 1. Right to Speedy Trial (Article 21)

- A speedy and fair trial is recognized as a **Fundamental Right** under the right to life and liberty.
- The phrase "**Justice delayed is justice denied**" remains a central concern given the current backlog of cases.

#### 2. Prison Reforms & Undertrials

- **Data:** Roughly **75% of prisoners** in India are undertrials (those awaiting trial or a verdict).
- **Legal Principle:** This situation challenges the fundamental doctrine that "**Bail is the Norm, Jail is the Exception.**" Excessive detention of undertrials is seen as a violation of Article 21.

#### 3. Separation of Powers & Checks and Balances

- **Article 50:** Directs the State to separate the judiciary from the executive in public services.
- **Indian Model:** Unlike the "water-tight" separation seen in the USA, India follows a system of "**checks and balances.**"
  - **Legislature/Executive:** Appoints judges and can initiate removal (impeachment) proceedings.
  - **Judiciary:** Can declare laws passed by Parliament as unconstitutional through **Judicial Review.**

#### 4. Judicial Review & Basic Structure

- **Judicial Review:** The power of the courts to check the constitutionality of legislative acts and executive orders.
- **Basic Structure Doctrine:** A judicial innovation (Kesavananda Bharati case, 1973) stating that Parliament cannot alter the fundamental features of the Constitution. Note: This term is **not explicitly mentioned** in the text of the Constitution.

#### Challenges in Governance

- **Standardization of Curriculum:** Ensuring that educational content is factual without undermining the "prestige" of democratic pillars.
- **Judicial Overreach vs. Activism:** Debates continue on whether the court's

intervention in textbook content constitutes necessary protection of its image or an overstep into the domain of the Executive (Education Ministry).

- **Addressing Pendency:** While the "scandalous" text was removed, the underlying issue of nearly **5 crore pending cases** remains a structural challenge for the Indian State.

### Way Forward

- **Collaborative Review:** Establishing a joint committee of legal experts and academicians to review sensitive political and legal topics in school books.
- **Systemic Reforms:** Instead of merely removing mentions of pendency, focusing on the "**e-Courts Project**" and increasing the strength of the subordinate judiciary to solve the root cause.
- **Objective Civic Education:** Transitioning from "negative" portrayals to constructive critiques that explain *how* the judiciary functions and the mechanisms available for its reform.

### Conclusion

The Supreme Court's intervention underscores the delicate balance between **freedom of expression** in education and the need to protect the **integrity of constitutional institutions**.

Moving forward, the focus must remain on providing students with a balanced view of India's democratic challenges while upholding the dignity of the law.

## Overview of the Budget

- **Budget Year:** 2026–27.
- **Significance:** This is the 10th budget of the Yogi Adityanath government and the last full budget of their second term.
- **Total Size:** ₹9,16,696 crore (approximately ₹9.12 lakh crore). *Growth:* 12.9% increase over the previous year.
- **Fiscal Deficit:** Estimated at **2.98% of GSDP**, staying within the 3% FRBM limit.
- **Capital Expenditure (Capex):** Pegged at **19.5%** of the total outlay (approx. ₹2 trillion), signaling a heavy focus on asset creation.

- **GSDP Performance:** Estimated at **₹30.25 lakh crore** for 2024-25 with a growth rate of **13.4%**.
- **Per Capita Income:** Estimated to reach **₹1,20,000** in 2025-26.
- **Unemployment Rate:** Claimed to have declined to **2.24%**.
- **Key Themes:** Focused on "Viksit Uttar Pradesh" (Developed UP), Self-reliant UP, Youth Empowerment, and Employment.
- **Presented By:** Finance Minister Suresh Khanna.

### Key Sector Highlights

#### 1. Youth and Employment

- **Job Targets:** The government aims to provide 10 lakh new jobs.
- **Digital Empowerment:**
  - ₹2,374 crore allocated for digital education.
  - Distribution of tablets and smartphones to students.

#### • Skill Development:

- New training centers will be established under the PPP (Public-Private Partnership) model.
- Introduction of the Digital Entrepreneurship Scheme to encourage self-employment.

#### 2. Women Empowerment (Nari Shakti)

- **Marriage Grants:** Under the Chief Minister's Mass Marriage Scheme (Samuhik Vivah Yojana), the grant amount has been increased to ₹1 lakh.
- **Mobility:** ₹400 crore allocated for distributing scooties to eligible female students.
- **Workforce Participation:** Establishment of special training centers to increase women's participation in the workforce.

#### 3. Industrial Growth & Manufacturing

##### • Mobile Manufacturing Hub:

- Uttar Pradesh is being developed as a Global Hub for mobile manufacturing.
- Stat: UP currently produces 65% of India's total mobile phones and 55% of mobile components.

- **Electronics:** Provision of ₹44,744 crore for electronics manufacturing and exports.

##### • Investments:

- MoUs worth ₹50 lakh crore have been signed.

- Over 16,000 projects worth ₹15 lakh crore are being implemented on the ground.

- **Connectivity:** Mention of two High-Speed Rail Corridors: **Delhi-Varanasi** and **Varanasi-Siliguri**.
- **Roads & Bridges:** Allocation of **₹34,468 crore**.
- **Industrial Clusters:** ₹5,000 crore for the *Chief Minister Industrial Area Expansion Scheme*.
- **Defence Corridor:** MoUs signed for 200 industries with an investment potential of ₹35,280 crore.
- **Urban Expansion:** ₹3,500 crore for the *Chief Minister's Urban Expansion and New City Promotion Scheme* (New housing in Agra, Lucknow, and Meerut).

#### 4. Agriculture

- **Modernization:** Focus on "Farm to Foreign" strategies, including the establishment of Agri-Export Hubs.
- **Projects:** Implementation of the World Bank-aided "UP Agris" project to increase farmers' income.
- **Support:** Provision for advanced seeds, subsidies, and disaster relief assistance.
  - **Production Targets:** 753.55 lakh metric tonnes (foodgrains) and 48.18 lakh metric tonnes (oilseeds).
  - **UP-AGREES Project:** A World Bank-assisted project to establish an **Agri-Export Hub** (₹245 crore) and aquaculture infrastructure.
  - **Solarisation:** ₹637.84 crore for converting diesel pump sets into solar pumps.
  - **Dairy:** A new dairy plant in **Mathura** (1 lakh litre/day capacity).
  - **Livestock:** ₹2,000 crore for the maintenance of stray cattle.

#### 5. Governance & Rankings

- **SDG India Index:** UP has made a significant leap in the Sustainable Development Goals (SDG) rankings.
  - 2018–19 Rank: 29th.
  - Current Rank: 18th.

- **Ease of Doing Business:** Improvements cited through the "Jan Vishwas Model" and streamlined licensing processes.

#### Budget Financial Allocation (Sector-Wise Breakdown)

The speaker highlighted specific percentage allocations for key sectors from the total budget:

Sector	Allocation (% of Budget)	Focus Areas
Infrastructure	22%	Roads, bridges, electricity, water, housing, and urban projects
Education	13%	School development, hostels, and facilities for girls
Agriculture	11%	Subsidies, advanced seeds, and farmer income support
Health & Medical	6%	Healthcare services and infrastructure



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