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PULSE



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Day	Celebrated As	Theme 2026	Announced / By Whom	Significance
Feb 1	Indian Coast Guard Day	-	Government of India	Celebrates the establishment of the Indian Coast Guard in 1977 and honors its role in maritime security and rescue operations.
Feb 2	World Wetlands Day	Protecting Wetlands for Our Common Future	Ramsar Convention Secretariat / United Nations	Raises awareness about the importance of wetlands for biodiversity, climate regulation, and human livelihoods.
Feb 4	World Cancer Day	United by Unique	Union for International Cancer Control (UICC)	Promotes awareness about cancer prevention, detection, and treatment globally.
Feb 6	International Day of Zero Tolerance for Female Genital Mutilation	Stepping Up the Pace	United Nations	Aims to eliminate female genital mutilation and protect the rights and health of women and girls.
Feb 7	Safer Internet Day	Together for a Better Internet	European Commission / Insafe Network	Promotes safe and responsible use of digital technology, especially among children and youth.
Feb 10	National Deworming Day	-	Ministry of Health and Family Welfare, Government of India	Aims to eliminate intestinal worm infections among children and adolescents through mass deworming programs.
Feb 11	International Day of Women and Girls in Science	Unpacking STEM Careers: Her Voice in Science	United Nations	Encourages equal participation of women and girls in science and technology fields.
Feb 12	National Productivity Day	From Ideas to Impact: Productivity for Sustainable Growth	National Productivity Council (India)	Promotes productivity culture in industries and organizations.
Feb 13	World Radio Day	Radio and Climate Change	UNESCO	Celebrates radio as a powerful medium for communication, education, and emergency response.
Feb 14	Valentine's Day	-	Cultural / Global Observance	Celebrates love and affection between partners, family, and friends.
Feb 20	World Day of Social Justice	Empowering Inclusion: Bridging Gaps for	United Nations	Promotes efforts to tackle poverty, inequality, and unemployment.



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		Social Justice		
Feb 21	International Mother Language Day	Multilingual Education – A Necessity to Transform Education	UNESCO	Promotes linguistic and cultural diversity and multilingual education.
Feb 24	Central Excise Day	-	Central Board of Indirect Taxes and Customs (CBIC), India	Honors the contribution of excise officers in enforcing tax laws and preventing corruption.
Feb 27	World NGO Day	-	Recognized by the United Nations and EU	Recognizes and honors non-governmental organizations working for social welfare and development.
Feb 28	National Science Day	Empowering Indian Youth for Global Leadership in Science & Innovation for Viksit Bharat	Government of India / Ministry of Science & Technology	Celebrates the discovery of the Raman Effect by C. V. Raman and promotes scientific awareness.

AWARDS

Award	Field	Winner / Key Recipient	Given By / Organization	Significance
BBC Indian Sportswoman of the Year 2025	Sports	Smriti Mandhana	BBC	Recognizes the most outstanding Indian female sportsperson of the year.
Emerging Player of the Year	Sports (Chess)	Divya Deshmukh	BBC Indian Sportswoman Awards	Honors young emerging female athletes in India.
Para-Sportswoman of the Year	Para Sports	Preethi Pal	BBC	Recognizes achievements of Indian para-athletes.
Lifetime Achievement Award	Sports	Anjali Bhagwat	BBC	Honors long-term contribution to Indian sports.
Bhavya Bharat Bhushan Award	Sports / National Service	Saina Nehwal	Isha Outreach (Sadhguru)	Award recognizing individuals who contributed significantly to India's global image and national development.
Emerging Player of the Year	Sports (Chess)	Divya Deshmukh	Various sports recognition platforms	Award highlighting outstanding young chess talent.



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Laureus World Sports Awards (Nominations announced)	Sports	Luke Littler nominated for Breakthrough of the Year	Laureus World Sports Academy	Prestigious international award honoring top global sporting achievements.
Laureus Team of the Year Nomination	Sports	Indian Women's Cricket Team	Laureus World Sports Academy	First women's cricket team nominated for this global award.
Gallantry Awards (Ashok Chakra, Kirti Chakra, Shaurya Chakra etc.)	Defence	Personnel of Indian Armed Forces	President of India	Awards for exceptional bravery and service in military operations.
Police Gallantry & Service Medals	Defence / Police	Officers of Police & CAPFs	Ministry of Home Affairs	Recognizes bravery, distinguished service, and meritorious service in policing.

APPOINTMENTS AND PERSONALITIES :

1. Guru Ravidas: Mystic Poet-Saint and Advocate of Equality

Guru Ravidas was a revered Indian mystic poet-saint and social reformer associated with the Bhakti movement during the 15th–16th century CE, best remembered for challenging caste hierarchies and championing spiritual and social equality.

- Born into a leatherworking family in Seer Govardhanpur, near Varanasi (Uttar Pradesh), Ravidas rose above the rigid social order of his time to become a leading voice against discrimination based on caste, creed, or gender. His devotional poetry stressed personal devotion to a formless God, unity, and human dignity, making spiritual wisdom accessible to all, especially the marginalised.
- Ravidas's teachings rejected "man-made distinctions" and envisioned an egalitarian society called Begampura — a place free from sorrow, fear, and discrimination. His hymns and verses were so influential that 41 of them were later included in the Sikh sacred scripture, the Guru Granth Sahib, underscoring his importance across spiritual traditions.
- He is also credited with mentoring distinguished disciples, including the devotional poet Meera Bai, and his legacy helped shape the ethos of the broader Bhakti movement that sought direct communion with the divine, beyond ritualism and hierarchy.
- Today, Ravidas is not only venerated as a saint but has inspired a distinct community identity — with the Ravidassia religion revering his teachings and scriptures such as the Amritbani Guru Ravidass. His birth anniversary (Ravidas Jayanti, celebrated on Magh Purnima) is observed widely with religious gatherings, discourse, and renewal of his message of equality, brotherhood, and social justice.

Recent events around his 649th birth anniversary in 2026 have seen political recognition and cultural celebrations, reflecting his enduring influence on India's social and spiritual landscape.

2. Ramakrishna Paramahansa – Personality in News

The **190th birth anniversary (2026)** of **Ramakrishna Paramahansa** is being commemorated across India.



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Basic Profile

- Birth name: **Gadadhar Chattopadhyaya**
- Born: **18 February 1836**, Kamarpukur, Bengal Presidency (now West Bengal)
- Died: **16 August 1886**, Calcutta (Kolkata)
- Spouse: **Sarada Devi**
- Occupation: Mystic and priest at **Dakshineswar Kali Temple**

Key Teachings

- Advocated **unity of all religions** – believed all paths lead to the same ultimate reality (Brahman).
- Practised multiple traditions including:
 - Vaishnavism
 - Shaktism
 - Advaita Vedanta
 - Islamic Sufism
 - Christianity
- Emphasised:
 - **Direct spiritual experience over ritualism**
 - **Bhakti (devotion) as path to liberation**
 - **Service to humanity as worship of God**

Legacy

- Spiritual guru of **Swami Vivekananda**.
- Inspired the establishment of the **Ramakrishna Mission** in 1897.
- Associated with the **Bengal Renaissance**.

Significance Today

- **Religious pluralism**: philosophical basis for interfaith harmony.
- **Service ethics**: social service as spiritual duty.
- **Influence on modern Hindu thought** and global spiritual discourse.

3. Rajagopalachari Statue to Replace Lutyens at Rashtrapati Bhavan

The Government of India approved installation of a statue of **C. Rajagopalachari** at **Rashtrapati Bhavan**, replacing a statue of **Edwin Lutyens**.

Who Was Rajagopalachari?

- Full name: **Chakravarti Rajagopalachari (1878–1972)**
- Key roles:
 - **Last Governor-General of India (1948–1950)**
 - Chief Minister of Madras State
 - Union Cabinet Minister
 - Founder of the **Swatantra Party**



Contributions

- Close associate of **Mahatma Gandhi**
- Advocated:
 - Civil liberties
 - Constitutional governance
 - Free-market economic ideas
 - Decentralisation of power

Why the Statue Replacement Matters

1. Decolonisation of Public Spaces

Replacing colonial-era statues reflects efforts to **remove colonial symbols and highlight Indian national leaders**.

2. Reframing Historical Memory

Public monuments shape collective memory; the shift emphasises **India's democratic leadership rather than colonial administrators**.

3. Cultural Policy Shift

Part of broader debates on **post-colonial identity, heritage management, and symbolic representation in public institutions**.

Analytical Insight

The replacement of Lutyens' statue with Rajagopalachari represents a **symbolic assertion of post-colonial identity**, reflecting India's attempt to **reframe historical narratives and foreground indigenous political leadership in national spaces**.

4. Nidhi Chhibber Takes Charge as NITI Aayog CEO

- **Nidhi Chhibber**, a **1994-batch IAS officer of the Chhattisgarh cadre**, has been given **additional charge as the Chief Executive Officer (CEO) of NITI Aayog**.
- She assumed the role after the **tenure of B. V. R. Subrahmanyam ended on 24 February 2026**.
- The appointment was approved by the **Appointments Committee of the Cabinet (ACC)** and will continue **until a regular CEO is appointed or further orders are issued**.
- Before this, she served as **Director General of the Development Monitoring and Evaluation Office (DMEO)** at NITI Aayog, responsible for **monitoring and evaluating government programmes**.

Background

- NITI Aayog, established in **2015**, replaced the Planning Commission as the **Government of India's premier public policy think tank** that promotes **cooperative federalism and strategic policy planning**.
- The CEO plays a key role in **policy coordination, monitoring flagship schemes, and facilitating Centre-State collaboration**.



Ravi Shankar Chhabi Appointed DIG in CRPF

- **Ravi Shankar Chhabi**, a **2007-batch IPS officer of the Uttar Pradesh cadre**, has been appointed **Deputy Inspector General (DIG)** in the **Central Reserve Police Force** on **central deputation**.
- The appointment was approved by the **Ministry of Home Affairs (MHA)** against an existing vacancy.
- Before this, he served as **DIG (Public Grievances) at the DGP Headquarters in Lucknow**.
- The **Uttar Pradesh government was asked to relieve him** to enable him to assume his central assignment.

5. IOC Elects First Female Member from Iran

- **Soraya Aghaei Hajiagha** has been elected as the **first female member from Iran** to the **International Olympic Committee**.
- She was elected during the **145th IOC Session held in Milan, Italy, on 4 February 2026**.
- Aghaei is a **former Olympic badminton player** who represented Iran at the **Tokyo Olympics**.
- At about **30 years old**, she became the **youngest current IOC member** and only the **third Iranian representative in IOC history**.

Significance

- Marks **greater female representation in global sports governance**.
- Reflects **Iran's evolving participation in international sporting institutions**.

MILITARY EXERCISE AND NEWS:

1. Agni-III: India's Intermediate-Range Ballistic Missile

Agni-III is a key surface-to-surface **intermediate-range ballistic missile (IRBM)** developed by **Defence Research and Development Organisation (DRDO)** under India's **Agni series** of ballistic weapons. It enhances India's strategic deterrence capability, particularly in the **nuclear triad**, by providing reliable delivery of warheads at long ranges.

Key Features and Capabilities

- **Range:** Approximately **3,000 km**, placing it in the **intermediate-range** category capable of targeting deep strategic assets in adversary territory.
- **Configuration:** Two-stage **solid-fuelled** missile, which enables quicker launch readiness and reduced logistical burden compared to liquid-fuelled systems.
- **Payload:** Designed to carry a **conventional or nuclear warhead**, providing flexibility for strategic and deterrence doctrines.
- **Guidance:** Equipped with an **advanced inertial navigation system** for enhanced accuracy.
- **Mobility:** Can be launched from **mobile road-mobile launchers**, improving survivability and making pre-emptive targeting difficult for adversaries.

Strategic Significance

- **Credible Deterrence:** Agni-III expands India's **strategic reach** well beyond neighbouring regions, underpinning deterrence against threats across the extended neighbourhood.
- **Triad Support:** As part of the Agni family, it complements India's **nuclear triad** — land-, air- and sea-based delivery systems — ensuring a secure second-strike capability.



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- **Regional Stability:** By maintaining a credible missile capability, India reinforces strategic stability through the **doctrine of minimum credible deterrence** and strategic ambiguity.
- **Technology Advancement:** Solid-fuelled systems like Agni-III reflect advancements in **propulsion, guidance and materials technology** for India's defence industry.

Development and Trials

Agni-III has undergone **multiple successful developmental trials**, demonstrating:

- Consistent performance and reliability.
- Improved accuracy and flight stability.
- Operational maturity that gradually integrates it into India's strategic arsenal.

Each test validates technological benchmarks and contributes to confidence in performance under different climatic and geographic conditions.

Context in India's Missile Programme

Agni-III is one of a family of missiles with progressively increasing ranges:

- **Agni-I & Agni-II:** Shorter ranges suited to regional deterrence.
- **Agni-IV & Agni-V:** Greater ranges extending beyond 4,000–5,000 km. Together, they provide layered deterrence and flexibility across theatres.

Agni-III is a **cornerstone of India's strategic missile capability**, balancing range, mobility and reliability to enhance deterrence against emerging threats. Its solid-fuel technology and intermediate-range capacity make it a strategic asset that reinforces India's national security doctrine while supporting broader regional stability and defence preparedness.

2. INS Arnala: Indian Navy's Fast Attack Craft

INS Arnala is a **Fast Attack Craft (FAC)** serving with the Indian Navy under the **Western Naval Command**. Named after **Arnala Island** on the **Maharashtra coast**, the ship strengthens India's coastal defence and fast response capability in the Arabian Sea region.

Design and Platform

INS Arnala is part of a class of **high-speed, agile surface combatants** designed for **littoral (near-shore) operations**. Fast Attack Craft like Arnala are optimised for quick interception, patrol, and attack missions in coastal waters, particularly against small surface threats, hostile vessels, or asymmetric security challenges.

Capabilities and Armaments

- **Speed and Manoeuvrability:** The ship's design prioritises **high speed and rapid acceleration**, enabling swift response to unfolding maritime threats in the **Exclusive Economic Zone (EEZ)** and coastal waterways.
- **Weapons Suite:** FACs typically carry a mix of **guns, close-in weapon systems, and short-range missiles**, allowing them to engage small, fast adversaries effectively. While exact specifications vary by vessel, they are fitted to support **surface warfare and patrol missions**.



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- **Sensors and Communications:** Equipped with modern **radars and communication systems**, FACs maintain situational awareness and networked operations with other naval and coastal security assets.

Role in Maritime Security

INS Arnala enhances the Indian Navy's ability to undertake a range of tasks important for coastal security and deterrence:

- **Maritime Surveillance and Patrol:** Monitoring activities in Indian coastal waters, including deterrence against infiltration or piracy.
- **Quick Reaction:** Rapid interception of suspicious vessels and support to offshore assets.
- **Support to Coastal Command:** FACs operate in conjunction with naval aviation, larger warships, and Coast Guard units to build a layered defence posture.

In an era of complex maritime threats — including asymmetric actors, smuggling, and contested littoral zones — FACs like INS Arnala provide **agile and cost-effective platforms** to bolster the Navy's operational reach close to shore.

While smaller and more specialised than destroyers or frigates, vessels like INS Arnala play an essential role in India's **tri-service maritime security architecture**. They contribute to India's ability to protect territorial waters, uphold maritime law, and respond swiftly to emerging threats in its coastal and near-sea zones — particularly important along the **Arabian Sea coastline** facing strategic sea lines of communication.

3. SCALP Missile — Overview, Features, and Strategic Significance

What Is the SCALP Missile?

SCALP (commonly referred to in India as Storm Shadow/SCALP) is a long-range, air-launched cruise missile developed by MBDA (a European defence consortium). It is designed for precision strikes against high-value, well-protected, and critical enemy targets such as command centres, airfields, radars, and infrastructure deep behind defended airspace.

In Indian service, the SCALP missile marks a significant enhancement of stand-off strike capability, enabling the Indian Air Force (IAF) to engage strategic targets at extended ranges without directly entering heavily defended enemy airspace.

Key Features and Capabilities

1. Long Range

SCALP has a strike range exceeding 250 km, classifying it as a long-range cruise missile. This allows Indian fighter aircraft to launch the missile far outside hostile air defence envelopes, reducing risk to aircrews.

2. Air-Launched and Stand-Off

The missile is launched from combat aircraft such as the Dassault Rafale on a stand-off basis — meaning the launch platform can fire from a position outside the lethal range of enemy air defences while still successfully engaging high-priority targets.

3. Precision Navigation



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It uses a combination of inertial navigation systems (INS), GPS, and terrain reference navigation, along with electro-optical seekers in the terminal phase, enabling highly accurate strikes even under challenging conditions.

4. Low Observable (Stealth-Friendly) Design

The missile's design reduces its radar cross-section, helping it evade detection and interception by enemy air defence systems during ingress.

5. Multiple Warhead Options

It can be equipped with high-explosive penetrating warheads suitable for hardened and deeply buried targets, ensuring destruction of reinforced bunkers, command complexes, or critical infrastructure.



Operational Context

India selected SCALP missiles as part of its defence modernisation — primarily to enhance the IAF's long-range strike and deterrence capabilities. Integrated with platforms like the Rafale, SCALP significantly improves India's ability to project power with precision, especially in complex threat environments.

Strategic Significance for India

1. Enhanced Deterrence

With the SCALP missile, India strengthens its conventional deterrent posture. Possessing a precision long-range strike capability complicates adversary planning and raises the stakes of any hostile action by threatening critical military and infrastructure assets.

2. Risk Mitigation

Stand-off weapons like SCALP reduce the necessity for aircraft to penetrate dense air defence systems, thereby lowering risks to pilots and aircraft during high-threat missions.

3. Flexible Strategic Options

SCALP adds operational flexibility for planners — useful in scenarios where rapid, precise, and remote engagement of targets is needed without escalating to nuclear options or larger military mobilisations.

4. Integration with Advanced Aircraft

When coupled with modern combat aircraft (such as the Rafale), the SCALP missile allows the IAF to conduct:

- Deep strike missions
- Pre-emptive targeting of enemy C4ISR (Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance)
- Suppression of air defence systems

This integration increases the effectiveness of air campaigns.



Comparison with Similar Systems

In the global context, SCALP is comparable to other long-range cruise missiles such as:

- AGM-158 JASSM (USA)
- SCALP/Euro-IS variants used by European forces

What sets SCALP apart is its combination of range, precision navigation, low observability, and penetrating warhead options, tailored for deep strike missions while avoiding heavy air defence zones.

The SCALP missile represents a leap in India's stand-off strike capability, adding depth, precision, and survivability to its conventional airpower. As regional security dynamics evolve, such systems enhance deterrence, provide credible operational options, and contribute to a balanced strategic posture in the sub-continent. By integrating SCALP with modern combat aircraft, India expands its ability to project power and defend national interests with precision and reduced risk to personnel and assets.

4. Airship-based High Altitude Pseudo Satellite (HAPS)

What it is:

An airship-based High Altitude Pseudo Satellite (HAPS) is a solar-powered unmanned platform that operates in the stratosphere, typically around 18–20 km above Earth. It behaves like a satellite but does not orbit in space. Instead, it stays almost stationary over a specific region for long durations -weeks or even months -carrying cameras, communication equipment, or surveillance sensors. HAPS can be in the form of aircraft, balloons, or airships.

Think of it as a middle layer between drones and satellites: higher and longer-lasting than drones, but cheaper and easier to deploy than satellites.

Why this technology exists

- The core problem is a capability gap. Satellites provide broad coverage but are expensive, hard to repair, and cannot hover over one area continuously. Drones are flexible but limited by fuel and altitude. HAPS emerged because advances in lightweight materials, solar panels, and batteries now allow persistent flight in thin stratospheric air.
- Another driver is strategic surveillance. Countries want persistent monitoring over borders, oceans, or disaster zones without launching costly satellites. HAPS also helps in emergency communication when ground networks collapse.

What it is used for / where it is heading:

- Major uses include border surveillance, disaster response, environmental monitoring, and temporary telecom networks. Because these platforms operate above commercial air traffic and weather systems, they offer stable, continuous coverage. They are cheaper to deploy and recover compared to satellites, and can be upgraded or reused.
- The long-term goal is to build a layered system: satellites for global coverage, HAPS for regional persistence, and drones for tactical operations.

HAPS is not just a new aircraft -it's an attempt to redefine how surveillance and communication are delivered by filling the strategic gap between air and space technologies.



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5. 16th Edition of Exercise VAJRA PRAHAR (India-USA)

The 16th edition of Exercise Vajra Prahar, a joint Special Forces military exercise between India and the United States, commenced at the Special Forces Training School, Bakloh (Himachal Pradesh). The exercise aims to enhance interoperability, joint operational capability and counter-terrorism coordination between elite forces of both countries.



Key Features

- Type: Joint Special Forces Exercise
- Countries: India and United States
- Venue (2026): Bakloh, Himachal Pradesh
- Conducted alternately in both countries
- Focus on:
 - Counter-terrorism operations
 - Special reconnaissance
 - Urban warfare techniques
 - Joint mission planning

Objectives

- Improve combat readiness of Special Forces
- Exchange best practices in asymmetric warfare
- Strengthen India-US defence cooperation under strategic partnership

6. Exercise DHARMA GUARDIAN (India-Japan)

- The 7th edition of Exercise Dharma Guardian, an annual India-Japan joint military exercise, began at Chaubattia, Uttarakhand between the Indian Army and the Japan Ground Self-Defense Force (JGSDF).

Key Highlights

- Participants: Indian Army and Japan Ground Self-Defense Force (JGSDF)
- Nature: Bilateral Army Exercise
- Location (2026): Uttarakhand
- Conducted alternately in India and Japan

Focus Areas

- Counter-terrorism operations
- Urban and semi-urban warfare
- Tactical coordination
- UN peacekeeping-style missions



Strategic Importance



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- Strengthens India-Japan Special Strategic and Global Partnership
- Supports Indo-Pacific security cooperation
- Enhances interoperability among democratic partners

7. Exercise KHANJAR: India–Kyrgyzstan Joint Special Forces Military Drill

Exercise KHANJAR is an annual bilateral military exercise undertaken by the Indian Army and the armed forces of Kyrgyzstan to enhance cooperation between their elite special forces. Started in December 2011, the exercise has been institutionalised as a recurring engagement that alternates locations between the two countries, reflecting deepening defence ties.

Purpose and Objectives

The primary objective of Exercise KHANJAR is to improve interoperability, tactical coordination, and mutual understanding between the two nations' special forces. In particular, the drill focuses on:

- Counter-terrorism operations in complex environments.
- Mountain and high-altitude warfare skills, given the terrain challenges familiar to both armies.
- Close-quarters battle and tactical manoeuvres, including building intervention and precision engagement.
- Sharing best practices in planning and execution of joint operations.

These training aims are designed to sharpen operational agility in scenarios that may involve insurgency, asymmetric threats, and high-risk missions where coordination and advanced tactics are critical.

Training Modules

During the exercise, participants undertake a series of structured modules, including:

- Mission planning and rehearsals focused on synchronising approaches.
- Simulated counter-terror drills in built-up or semi-urban terrain.
- Mountain warfare techniques and acclimatisation training, reflecting geographical realities in both India and Kyrgyzstan.
- Live tactical exercises to test endurance, decision-making, and execution under stress.



Participants and Structure

The Indian contingent is typically drawn from the Indian Army's elite special forces units, known for their high standards of training and operational experience. The Kyrgyz side sends its special operations units, bringing their own expertise in mountain and high-altitude warfare. Joint sessions, briefings, and after-action reviews form part of the exercise to ensure mutual learning and doctrinal exchange.

Cultural and Strategic Dimensions

Beyond purely military training, Exercise KHANJAR includes cultural engagement and informal interaction, which help build trust, camaraderie, and mutual respect among personnel. Traditional observances or local events sometimes coincide with the drill, adding a people-to-people dimension to the professional exchange.



Significance

Exercise KHANJAR strengthens the bilateral defence relationship between India and Kyrgyzstan, particularly in areas of special operations and high-altitude conflict preparedness. In a region concerned with terrorism, insurgency, and border security challenges, such joint drills enhance collective readiness, improve tactical interoperability, and contribute to broader regional stability by fostering closer strategic ties and defence cooperation.

8. Exercise MILAN 2026

- The **13th edition of Exercise MILAN-2026** was inaugurated by **Rajnath Singh** at **Visakhapatnam**.
- It is a **multilateral naval exercise hosted by the Indian Navy** aimed at strengthening maritime cooperation among friendly nations.
- The 2026 edition saw participation from **74 countries**, making it one of the **largest naval gatherings hosted by India**.
- The exercise included **42 ships and submarines along with 29 aircraft**, including participation from foreign navies.
- It is conducted in **two phases: Harbour Phase and Sea Phase**, involving seminars, operational planning, and joint naval drills.

9. Yantra India Limited Granted Miniratna Category-I Status

- **Yantra India Limited** was granted **Miniratna Category-I status** by the **Ministry of Defence** with approval from Defence Minister **Rajnath Singh**.
- YIL was formed in **2021 after the corporatisation of the Ordnance Factory Board** and functions under the **Department of Defence Production**.
- With Miniratna-I status, the company's board can **approve capital expenditure up to ₹500 crore without government approval**, giving greater financial autonomy.
- The PSU manufactures **key defence components such as metal alloys, composites, and parts for ammunition, artillery guns, armoured vehicles, and tanks**.
- The move supports the government's **Aatmanirbhar Bharat initiative in defence manufacturing and indigenisation**.

BOOKS AND AUTHORS:

1. Vishwaguru Srila Prabhupada (Gujarati Biography)

- Gujarat Chief Minister **Bhupendra Patel** released the Gujarati biography **"Vishwaguru Srila Prabhupada"** in **Gandhinagar**.
- The book is based on the life of **A. C. Bhaktivedanta Swami Prabhupada**, founder of the **International Society for Krishna Consciousness**.
- It highlights how Prabhupada spread **Krishna devotion and Vedic philosophy worldwide**.
- The biography was written by **Dr. Usha Upadhyay** to present his teachings in Gujarati for wider reach.
- The book also reflects Prabhupada's global spiritual mission, including establishing **more than 100 Krishna temples worldwide**.

2. Atal Bihari Vajpayee: The Eternal Statesman



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- The book **“Atal Bihari Vajpayee: The Eternal Statesman”** was unveiled in **New Delhi** by **C. P. Radhakrishnan**.
- It is a **coffee-table book** highlighting the life and political journey of **Atal Bihari Vajpayee**.
- The book documents major milestones such as the **1998 Pokhran nuclear tests and infrastructure initiatives like the Delhi Metro**.
- It portrays Vajpayee’s leadership values including **dialogue, democracy, and development**.
- The publication serves as a tribute to Vajpayee’s role in strengthening **India’s democratic and developmental vision**.

3. Four Stars of Destiny – An Autobiography

- **“Four Stars of Destiny”** is the autobiography of **Manoj Mukund Naravane**.
- Naravane served as the **28th Chief of the Indian Army**.
- The book traces his **journey from childhood to becoming Army Chief**, highlighting challenges and experiences in military service.
- It provides insights into **leadership, discipline, and the functioning of the Indian Army**.
- The memoir also reflects on key events and responsibilities faced during his tenure.

4. History That India Ignored (Second Edition)

- The **second edition of the book “History That India Ignored”** was launched by **Pramod Sawant** in **Panaji, Goa**.
- The book is authored by **Prem Prakash**, Chairman of **Asian News International (ANI)**.
- First published in **April 2025** by **Vitasta Publishing Private Limited**.
- It highlights **lesser-known aspects of India’s freedom struggle**, including contributions of revolutionary movements and unsung heroes.
- The book aims to bring overlooked historical narratives to **students and younger generations**.

5. The One: Cricket, My Life and More — Shikhar Dhawan

- Former Indian cricketer **Shikhar Dhawan** released his autobiography titled **“The One: Cricket, My Life and More.”**
- The book was **published by HarperCollins India on 26 June 2025**.
- It narrates Dhawan’s **journey from his early days in Delhi cricket to becoming one of India’s leading opening batsmen**.
- The memoir discusses **career highs, personal struggles, selection setbacks, and mental challenges** faced during his cricket career.
- The book also provides **insights into dressing-room experiences, international tournaments, and life beyond cricket**.
- Through candid reflections, Dhawan describes **fame, failures, resilience, and transformation during his cricket journey**.

INDEX AND REPORTS:

1. IEA Report on Electricity Analysis and Forecast to 2030

The International Energy Agency (IEA) released its annual **Electricity 2026** report analysing global electricity demand and supply trends up to 2030. The report forecasts that:



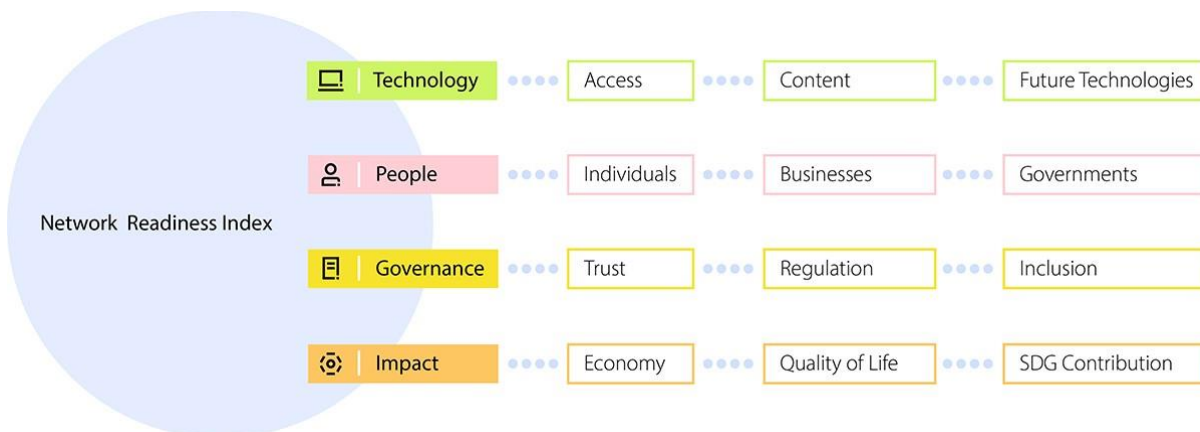
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- Global electricity demand will grow at about **3.6% annually** through 2030, outpacing overall GDP growth due to rising use of electric vehicles, data centres, and air-conditioning.
- Low-emission sources (renewables and nuclear) are expected to meet all incremental demand, accounting for nearly half of global electricity generation by 2030.
- The global power sector’s **CO₂ emissions are expected to plateau**, signalling a shift towards cleaner energy even as demand accelerates.

Significance: This reflects energy transitions worldwide and highlights the need for policy frameworks that balance rising electricity demand with climate goals and energy security.

2. Network Readiness Index (NRI) 2025: Digital Transformation, Global Trends, and India’s Performance

What Is the Network Readiness Index?



The Network Readiness Index (NRI) is a global benchmark that assesses how well countries harness information and communication technologies (ICTs) - including digital infrastructure, skills, policies, and usage - to drive socio-economic development and sustainable growth. It measures a country’s readiness and ability to leverage digital transformation across economy, governance, education, and innovation.

The index is compiled by institutions such as the Portulans Institute and World Economic Forum partners, evaluating multiple indicators across pillars of technology, affordability, skills, trust, and usage.

Key Findings of NRI 2025

1. India’s Performance

- India improved its ranking in the 2025 report, reflecting advancements in digital infrastructure, mobile broadband adoption, and digital public services.
- Despite challenges, India’s digital ecosystem shows resilience, with India ranking higher than several peers in Asia and developing economies.

2. Global Trends

The 2025 NRI highlights:



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- Widening digital divides: Nations with strong governance and investment in digital skills are rapidly outpacing others.
- ICT adoption surge: Increased use of digital services in health, education, finance, and commerce.
- Trust and security concerns: Cybersecurity readiness and data privacy frameworks are now key determinants of readiness.

Significance:

The Network Readiness Index serves as a benchmark for digital development and competitiveness:

- It helps countries identify gaps in policy, infrastructure and adoption.
- For India, rising NRI ranks validate digital strategies under initiatives like Digital India and highlight roadmaps for future reforms.
- As economies digitise, stronger readiness correlates with economic growth, governance efficiency, and global competitiveness.

The Network Readiness Index 2025 reflects the evolving contours of the digital age, where connectivity, skills, trust and innovation define a nation's ability to thrive. India's improved performance underscores progress in digital infrastructure and public platforms, while also pointing to persistent challenges in skills and cybersecurity. As digital transformation accelerates globally, NRI offers a valuable lens to assess readiness for a future that increasingly rests on information and technology.

3. Corruption Perceptions Index (CPI) 2025

The Corruption Perceptions Index (CPI) 2025, released by Transparency International, ranks countries based on perceived levels of public-sector corruption. The index uses a score from 0 (highly corrupt) to 100 (very clean) and evaluates countries using expert assessments and business surveys. The 2025 report highlights global stagnation in anti-corruption efforts and concerns about weakening institutional checks across both developing and developed nations.

Key Highlights of CPI 2025

- Total countries ranked: 182
- Global average score: 42, indicating persistent governance issues worldwide.
- More than two-thirds of countries scored below 50, showing widespread corruption concerns.
- Top performers:
 - Denmark — score 89 (least corrupt)
 - Finland — score 88
 - Singapore — score 84
- Lowest ranked:
 - South Sudan
 - Somalia — both scored 9.

India's Performance

India ranked 91st with a score of 39, improving by five positions compared to the previous year but still below the global average. This reflects marginal progress rather than structural transformation.

Key observations regarding India:



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- Improvement in rank due mainly to relative shifts globally rather than major domestic breakthroughs.
- Persistent concerns regarding public-sector corruption perception.
- India was listed among countries where journalists reporting on corruption face heightened risks.

ranking improvement sounds good politically, but a score below 40 still signals weak institutional trust. The headline improvement should not be mistaken for systemic reform.

Global Trends & Emerging Patterns

1. Democracies showing decline

Several established democracies saw falling scores, including:

- United States (29th rank)
- United Kingdom (20th rank)

The report links this to politicization, weakening checks and balances, and reduced public trust in governance systems.

2. Shrinking civic space

Countries with restrictions on media and civil society tend to perform worse, indicating a strong correlation between democratic openness and anti-corruption performance.

3. Regional stagnation in Asia-Pacific

Despite economic growth, many nations in the region show slow anti-corruption progress due to weak enforcement and institutional inertia.

Why the CPI Matters (Significance)

Corruption isn't just a moral issue — it directly affects development outcomes.

- Economic impact: discourages investment and increases transaction costs.
- Social impact: reduces quality of public services like health and education.
- Governance impact: weakens trust in institutions and rule of law.
- Developmental impact: corruption leads to underfunded infrastructure and delayed welfare delivery.

Challenges Highlighted by the Report

- Weak enforcement of anti-corruption laws.
- Political interference in institutions.
- Limited protection for investigative journalists.
- High dependence on perception-based indicators, which may not capture ground reality fully.

Countries mentioned as dangerous for journalists include Brazil, Mexico, Pakistan and Iraq, showing the link between governance weakness and transparency risks



2. The CPI 2025 shows that corruption remains a systemic global challenge despite decades of reforms. India's slight improvement is positive but insufficient; sustained institutional strengthening, not symbolic anti-corruption messaging, will determine long-term progress.

4. Report on Digital Payments after 10 Years of UPI Launch

The **Department of Financial Services** under the Ministry of Finance released a report titled "*Socio-Economic Impact Analysis of Incentive Scheme for Promotion of RuPay Debit Card and low-value BHIM-UPI Transactions (P2M)*". The report reviews the transformation of India's digital payment ecosystem roughly a decade after the launch of the **Unified Payments Interface (UPI)**, developed by the National Payments Corporation of India. The findings show that digital payments have shifted from being an urban convenience to a mainstream economic infrastructure.

Key Highlights of the Report

The report confirms that UPI has moved beyond a niche fintech product and now forms the backbone of daily transactions in India.

Major findings

- UPI has become the **most preferred transaction mode**, with around **57% usage**, surpassing cash payments in preference surveys.
- India accounts for nearly **49% of global instant payment transactions**, reflecting worldwide leadership in real-time retail payments.
- Merchant integration is very high, with about **94% adoption among surveyed merchants**, driven by easy QR-based transactions and digital record keeping.
- UPI contributed an estimated **\$16.2 billion to GDP in 2022** through efficiency gains and transaction cost savings.

Evolution of Digital Payments (10-Year Perspective)

When UPI was launched in 2016, India already had digital systems like NEFT and IMPS, but they were fragmented and less user-friendly. UPI introduced interoperable, real-time, app-agnostic transfers that drastically reduced friction in payments.

Key structural shifts over the decade:

- QR codes replaced expensive POS terminals for millions of small merchants.
- Peer-to-merchant payments expanded rapidly.
- Small-ticket payments (tea stalls, local shops, transport) moved online.
- Payments became API-driven, enabling fintech growth.

UPI's scale is now supported by a broader ecosystem monitored by the Reserve Bank of India, whose Digital Payments Index has consistently risen, reflecting deeper adoption and infrastructure expansion.

Global Expansion and Strategic Value

The report also highlights international expansion:



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- UPI acceptance and RuPay systems are live across several countries including the United Arab Emirates, Singapore, Bhutan, Nepal, Sri Lanka, France, Qatar, and Mauritius.

This expansion strengthens India's digital public infrastructure diplomacy and reduces dependence on legacy card networks.

Economic and Governance Impact

The report links digital payments with macroeconomic outcomes:

Economic effects

- Lower transaction costs compared to cash handling.
- Faster settlement cycles for businesses.
- Improved transparency for small merchants.

Governance benefits

- Better financial data trails.
- Improved tax compliance and formalisation.
- Potential integration with Direct Benefit Transfers (DBT) for targeted welfare.

Financial inclusion impact

- Digital payments reduce entry barriers for micro-businesses.
- Smartphone-based payments widen participation without requiring card infrastructure.

Recommendations from the Report

The report does not treat growth as automatic; it proposes targeted improvements:

- Expand QR and sandbox deployment in smaller towns.
- Scale **offline payment modes** like UPI Lite and 123Pay for low-connectivity areas.
- Integrate UPI with government subsidy systems.
- Strengthen digital literacy, especially among women entrepreneurs.
- Deploy AI-based fraud monitoring systems for real-time anomaly detection

Challenges Highlighted

This section matters because growth has started exposing system weaknesses.

1. Infrastructure gaps
 - Poor network coverage still affects transaction reliability in rural areas.
2. Cybersecurity risks
 - Rising digital fraud increases trust concerns.



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3. Digital literacy

- Advanced features like AutoPay or offline payments remain underused.

4. Market concentration

- A few large apps dominate transaction volume, raising competition concerns.

Emerging Structural Issues :

A deeper look reveals a few tensions:

- Even as digital payments grow rapidly, cash in circulation has also risen in absolute terms - meaning digital growth supplements, rather than entirely replaces, cash usage yet.
- The ecosystem's success creates systemic risks: outages or cyber incidents can affect millions instantly.
- Sustainability questions remain because many low-value transactions operate on minimal transaction fees.

Broader Policy Significance

UPI's success reflects three deeper shifts:

- **Digital Public Infrastructure (DPI)** becoming a development model.
- Government incentives accelerating private innovation.
- Payments becoming an entry point for broader fintech services like credit and insurance.

This is why UPI is increasingly treated not as a payment tool but as economic infrastructure comparable to roads or telecom networks.

Ten years after its launch, UPI has transformed India's payment culture from cash-dominant to digitally integrated. The real achievement is not transaction volume alone but the creation of a scalable digital infrastructure that supports inclusion, efficiency, and economic formalisation. The next challenge is ensuring that rapid scale does not outpace security, competition, and accessibility.

5. Global Mind Health 2025 Report

- Released by **Sapien Labs** under the **Global Mind Project**.
- Uses **Mind Health Quotient (MHQ)** — measures emotional, cognitive, social health, drive and resilience.
- **Key India findings:**
 - Young adults (18-34) MHQ score ~33 vs global 66 — indicating **lower mental well-being**.
 - Older adults (55+) score ~96, ranking better globally.
 - **Ultra-processed food consumption** linked to poorer mental control among youth (44%).

6. Women, Peace and Security Index 2025–26

The **Women, Peace and Security (WPS) Index 2025–26** ranks countries based on the **status, safety, and empowerment of women** worldwide. It evaluates **181 countries** using indicators related to women's **inclusion, justice, and security**.



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The index is produced by:

- **Georgetown Institute for Women, Peace and Security**
- **Peace Research Institute Oslo.**

Key Rankings (2025–26)

Rank	Country
1	Denmark
2	Iceland
3	Norway
31	United States
131	India
181	Afghanistan

- **Denmark** topped the index with a score of **0.939**.
- **Afghanistan** ranked last with a score of **0.279**.
- **India ranked 131st** with a score of **0.607**.
- **United States ranked 31st**, improving from earlier editions.

What the Index Measures

The WPS Index evaluates women's status through **three dimensions**:

1. Inclusion

- Women's education
- Employment
- Parliamentary representation
- Access to financial services and mobile phones

2. Justice

- Legal discrimination against women
- Access to justice
- Maternal mortality
- Gender bias (e.g., preference for sons)

3. Security

- Safety from violence
- Community safety
- Exposure to conflict.

Key Global Findings

- About **676 million women lived near conflict zones** in the past year.
- Progress in women's rights has **slowed or stagnated globally**.
- Countries with **higher gender equality tend to be more peaceful and prosperous**.



India's Performance

India ranked **131st**, reflecting **uneven progress** in women's empowerment.

Challenges include:

- Low female labour force participation
- Gender-based violence
- Limited political representation.

However, improvements have been seen in:

- Financial inclusion
- Maternal health indicators.

NATIONAL:

1. Open Acreage Licensing Policy (OALP)

The Open Acreage Licensing Policy (OALP) is a landmark reform in India's upstream oil and gas exploration regime aimed at accelerating domestic exploration and production (E&P) of hydrocarbons. It was introduced by the Government of India on 30 March 2016 as a key component of the Hydrocarbon Exploration and Licensing Policy (HELP), which replaced the earlier New Exploration and Licensing Policy (NELP) after nearly two decades of implementation.

What is OALP?

Under the OALP, oil and gas companies are no longer constrained to government-designated areas for exploration. Instead:

- They can identify and select blocks of their choice anywhere within India's sedimentary basins that are not already under exploration or production.
- After evaluating these areas using geological and geophysical data, companies can submit an Expression of Interest (EoI) to the Directorate General of Hydrocarbons (DGH) at any time during the year.
- The DGH accumulates these interests periodically (usually a few times a year) and offers them up for competitive bidding.

This approach marks a major departure from the older administrative bidding rounds where companies could only bid on blocks that the government had already identified and offered.

Why was OALP Introduced?

The primary goals behind OALP include:

1. **Boosting Exploration Activity:** By giving exploration firms the freedom to choose their blocks, India aims to unlock more acreage and encourage continuous E&P activity.



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2. Reducing Import Dependency: With domestic production still unable to meet rising energy demand, expanding exploration is critical to reducing heavy reliance on oil imports.
3. Enhancing Investment and Ease of Doing Business: The policy brings flexibility, transparency, and investor-driven exploration decisions - factors that are attractive for both domestic and foreign companies.

2. India Expands Wetland Protection: Two New Ramsar Sites Added in 2026

- Ahead of World Wetlands Day on 2 February 2026, India added two wetlands to its list of Ramsar Sites — internationally recognised “Wetlands of Importance” under the Ramsar Convention (1971), reinforcing the country’s commitment to ecological conservation.
- The newly designated sites are:
 - Patna Bird Sanctuary in Etah district, Uttar Pradesh — a small but biodiverse freshwater wetland that supports hundreds of resident and migratory birds and rich plant life.
 - Chhari-Dhand Wetland in Kutch, Gujarat — a seasonal saline wetland adjoining the Banni grasslands, serving as a crucial habitat for waterfowl and supporting diverse fauna including cranes and flamingos.
- With these additions, India’s tally of Ramsar sites has risen to 98, marking a dramatic increase from just 26 sites in 2014 — a nearly 300% expansion in a little over a decade.
- Ramsar designation is not symbolic: it brings international recognition and a framework for sustainable management. Wetlands perform vital ecological functions — they act as biodiversity hotspots, groundwater recharge zones, natural flood buffers, and carbon sinks — and support the livelihoods and cultural practices of local communities.
- India’s growing Ramsar network underscores a strategic focus on ecosystem protection, climate resilience, and sustainable use of natural resources, aligning national policy with global environmental goals.

3. Basic Customs Duty (BCD): What It Is and Why It Matters

Basic Customs Duty (BCD) is the primary tax levied on goods imported into India. It is imposed under Section 12 of the Customs Act, 1962, with the applicable rates specified in the First Schedule of the Customs Tariff Act, 1975. BCD is charged as a percentage of the value of imported goods, typically on an ad-valorem basis — meaning the duty is calculated relative to the assessed value of the goods once they land at Indian ports or airports. The assessable value usually includes the cost of the goods, insurance, and freight (CIF).

Purpose of BCD

The fundamental objectives of levying BCD are:

- Protecting domestic industries: By taxing imports, BCD makes foreign products more expensive relative to locally manufactured goods, helping domestic producers compete.
- Generating government revenue: Customs duties contribute significantly to the Central Government’s receipts.
- Regulating trade: BCD serves as a tool to influence the volume and pattern of imports, aiding macroeconomic and trade policy.

BCD rates vary widely depending on the category of goods and their classification under the Harmonized System (HSN) code. In general, BCD rates range from low single digits up to very high tariffs (often 5–40% or more for certain products). The Central Government retains the authority to exempt specific imports from BCD altogether for policy reasons.





How BCD Is Applied

BCD is applied first in the sequence of levies on an imported item. Once the customs authority determines the assessable value (e.g., the CIF value), the BCD rate corresponding to the HSN tariff heading is applied to calculate the duty payable. Any subsequent levies — such as Social Welfare Surcharge (SWS) or Integrated Goods and Services Tax (IGST) — are often calculated on top of the BCD amount.

Recent Policy Use of BCD

In the Union Budget 2026-27, the government announced full exemptions of BCD on 17 cancer-related drugs and medicines, lowering their import cost and supporting patient access to healthcare. This use of BCD exemptions reflects how customs duties can be adjusted to achieve broader social or economic goals.

Key Takeaways

- Basic Customs Duty is India's main customs tax on imported goods.
- It protects local industries, regulates trade, and raises revenue.
- BCD amounts are determined based on the assessed value of imports and vary by product type.
- The government can adjust BCD rates or exempt items to support policy outcomes.



4. Bharat-VISTAAR: AI-Powered Digital Leap for Indian Agriculture

Bharat-VISTAAR (short for Virtually Integrated System to Access Agricultural Resources) is a multilingual artificial intelligence (AI) tool proposed in the Union Budget 2026-27 to transform how Indian farmers access agricultural knowledge and services. It integrates various digital agricultural platforms — notably the government's AgriStack portals and the agricultural best-practice packages developed by the Indian Council of Agricultural Research (ICAR) — with AI systems to deliver timely, customised advisory support to farmers across the country.

Purpose and Working

The core aim of Bharat-VISTAAR is to provide farmers with data-driven, actionable guidance on key agricultural decisions such as crop planning, soil management, pest control, weather forecasting, and market access. Using AI, the platform will analyse vast datasets from AgriStack and ICAR to generate context-specific advisories tailored to local conditions and individual needs. It will operate in multiple Indian languages, helping overcome linguistic barriers that many farmers face in accessing extension services and scientific knowledge.

Significance for Agriculture

Bharat-VISTAAR represents a shift toward digital and knowledge-based agriculture by enabling precision farming and risk reduction through technology. By offering personalised guidance, it is expected to enhance farm productivity, strengthen decision-making at the farm level, and improve income resilience, especially for small and marginal farmers. The interoperable nature of the platform means farmers can connect with a wider ecosystem of data, innovations, and government support schemes in real time.



Role of AgriStack

At the heart of Bharat-VISTAAR is AgriStack, a digital infrastructure framework that consolidates agricultural data such as land records, crop history, credit, insurance coverage, and beneficiary details. AgriStack's integration with AI enables Bharat-VISTAAR to go beyond generic advisories, offering hyper-local insights that are crucial for effective farm planning and risk management.

Broader Vision

The initiative aligns with the government's broader strategy to position technology and data as key drivers in modernising Indian agriculture. It is part of the digital transformation agenda aimed at boosting farmers' productivity, sustainability, and economic empowerment.

5. PM VIKAS Scheme: Pradhan Mantri Virasat Ka Samvardhan

The PM VIKAS Scheme - *Pradhan Mantri Virasat Ka Samvardhan* - is a **Central Sector Scheme** launched by the Ministry of Minority Affairs in **2025** to empower **minority and artisan communities** through an integrated development framework. The scheme converges earlier disparate initiatives into a unified platform to amplify socio-economic impact and preserve India's rich artistic heritage.

Objective and Rationale

PM VIKAS aims to promote **inclusive growth** by enhancing **skills, education, leadership, and sustainable livelihoods** among **six notified minority communities** - Muslims, Christians, Sikhs, Buddhists, Jains, and Parsis - as well as traditional artisans. It addresses gaps in employment, education, and cultural continuity by aligning training with evolving market demands and cultural preservation goals.

6. Menstrual Health as a Fundamental Right: A Landmark Supreme Court Ruling

In a historic judgment in **January 2026**, the Supreme Court of India formally recognised **menstrual health and hygiene (MHH)** as part of the **fundamental right to life and dignity** under **Article 21 of the Constitution**. This marks a major shift from viewing menstrual health as a welfare concern to an enforceable **constitutional entitlement** that the State must uphold.

Why It's in the News

The decision arose in the case *Dr. Jaya Thakur v. Government of India & Ors.* (2026), in which the Court held that insufficient access to **menstrual hygiene products, sanitation facilities, and related infrastructure** violates the fundamental rights to **life, dignity, bodily autonomy, equality (Article 14)** and even access to **education**. The Court emphasised that menstruation is a **natural biological process**, not a taboo, and that denying essential menstrual health measures undermines the dignity and development of menstruating persons, especially adolescent girls.

Key Legal Determinations

- **Menstrual health as integral to Article 21:** The Court declared that safe access to menstrual hygiene products and the ability to manage menstruation with dignity are essential to the **right to life and dignity** itself. Excluding menstrual hygiene from constitutional protection was held to perpetuate discrimination and social exclusion.



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- **Equality under Article 14:** The judgment noted that unequal access to facilities—such as sanitary pads, clean water, and toilets—**disproportionately affects girls and women**, constituting a violation of the right to equality, since biological needs are not being accommodated.
- **Education rights:** For school-going adolescents, the Court linked menstrual health access to the **Right to Education**, noting that lack of sanitary products and facilities contributes to absenteeism and dropout rates among girls.

Judicial Directives and Implementation

The Court issued a **continuing mandamus** - a type of ongoing supervisory order - requiring the **Centre and States** to implement comprehensive menstrual hygiene measures nationwide. Its directives include:

- **Free sanitary napkins in all schools**, including provisions via vending machines;
- **Functional, gender-segregated toilets and menstrual hygiene corners** equipped for safe disposal and emergencies;
- **Sensitisation and curriculum integration** on gender-responsive menstrual education for teachers and students;
- Ensuring menstrual health policies are incorporated into health, education, and sanitation schemes.

Why This Matters

This ruling elevates menstrual health from a *social welfare issue* to a *constitutional mandate*, creating enforceable rights that the State must protect and uphold. It addresses deep-rooted social taboos, tackles **period poverty**, and seeks to ensure that menstruation does not become a barrier to **health, education, or dignity**. In doing so, it also redirects policy attention toward systemic infrastructure gaps - from school toilets to affordable hygiene products - placing menstrual health at the centre of public health and gender equality discourse.

In essence, the Supreme Court has affirmed that **dignity in menstruation management is not a privilege but a right**, anchoring it firmly within India's constitutional framework of justice, equality, and human rights.

7. Indian Computer Emergency Response Team (CERT-In): India's National Cybersecurity Nodal Agency

The Indian Computer Emergency Response Team (CERT-In) is the **national nodal agency responsible for incident response and cyber-threat management** under India's **Ministry of Electronics and Information Technology (MeitY)**. It was designated under **Section 70B of the Information Technology Act, 2000** and has been operational since 2004, playing a central role in safeguarding India's cyberspace.

Why It's in Focus

CERT-In has gained increasing prominence due to the **rapid digitalisation of governance, commerce, finance, and citizen services**, which makes India both a vast digital economy and a significant target for cyber adversaries. As cyberattacks such as **phishing, ransomware, online fraud and critical infrastructure breaches** spike globally and in India, CERT-In's role in prevention, response and resilience has become strategically important for national security and trust in digital systems.

Core Functions

CERT-In's mandate includes a comprehensive set of activities to counter cyber threats:



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- **Collection, analysis and dissemination of cyber incident information** to stakeholders and the public.
- **Issuing forecasts, alerts, advisories and vulnerability notes** on emerging threats and attack vectors.
- **Emergency response measures** for handling ongoing cyber incidents and mitigating impacts.
- **Coordination of national cyber incident response activities** across government, public and private sectors.
- **Guidelines on information security practices, procedures and reporting of incidents** to strengthen overall resilience.
- **Cyber security awareness and capacity building** among users and organisations.

Proactive and Reactive Roles

CERT-In operates both **reactively and proactively**:

- **Reactive services** include incident reception, incident response helpdesk, forensic assistance and tracing.
- **Proactive services** involve issuing security advisories, analysing vulnerabilities, conducting risk assessments, and training stakeholders.

CERT-In also collaborates with **sectoral and state CSIRTs, law enforcement agencies, industry partners, ISPs, academia and international counterparts** to share threat intelligence and best practices, reinforcing India's cyber defence ecosystem.

Strategic Importance

In an era where digital infrastructure underpins governance, finance, communication and critical services, cyber threats pose direct risks to **national security, economic stability and societal trust**. CERT-In's work to forecast incidents, coordinate responses and issue advisories underpins India's ability to manage threats from everyday ransomware to sophisticated state-sponsored attacks.

Globally, CERT-In has been recognised for strengthening **cyber resilience** and leading initiatives such as **national crisis management planning** and sector-specific resilience frameworks-critical in protecting digital assets and public confidence in India's expanding digital ecosystem.

Why It Matters for India

Given the rise in cyber incidents targeting businesses, government services, financial systems and personal data, CERT-In's role is increasingly central. It supports India's digital transformation by:

- **Strengthening security posture** of public and private sector systems.
- **Reducing economic losses** from cybercrime and digital fraud.
- **Enabling safe adoption** of digital technologies across sectors.
- **Enhancing readiness** against evolving threat landscapes including AI-enabled attacks.

In essence, CERT-In functions as India's frontline defender in cyber space-coordinating incident response, issuing technical guidance and shaping a safer, more resilient digital environment in a world of rapidly evolving cyber risks.

8. Revocation of President's Rule in Manipur and Formation of New Government

After nearly **one year of direct central governance, President's Rule in Manipur** has been officially **revoked**, marking a significant shift back toward **democratic state governance**. The President of India, exercising powers under **Article 356 of the Constitution**, issued a proclamation withdrawing the earlier order that had been in place since **13**



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February 2025. During that period, the Manipur Legislative Assembly was kept under **suspended animation** after the then Chief Minister resigned amid a prolonged political and security crisis.

Context of President's Rule

President's Rule was imposed following months of political instability and **ethnic violence** particularly between the majority **Meitei** community and the **Kuki-Zo** tribal groups - unrest that erupted after a tribal march in May 2023 and escalated tensions across the state. The incumbent government led by N. Biren Singh resigned in February 2025, leaving a power vacuum that the Centre filled with direct administration through the Governor.

Formation of the New Government

With President's Rule lifted, the **National Democratic Alliance (NDA)** - led by the Bharatiya Janata Party - moved swiftly to establish a new government. Senior party leader Yumnam Khemchand Singh was elected as the **leader of the NDA legislature party** and formally met the Governor of Manipur, Ajay Kumar Bhalla, to stake claim to form the government in Imphal. This followed the selection of Singh by the state BJP and its allies after the Legislature Party meeting in New Delhi.

Later in the day, Singh took oath as the **Chief Minister** of Manipur at a ceremony held at Lok Bhavan in Imphal, administered by the Governor. Alongside him, two deputies were sworn in - Nemcha Kipgen (BJP), representing the **Kuki community**, and Losii Dikho (Naga People's Front), representing the **Naga community** - reflecting a **power-sharing approach** aimed at broader inclusivity amid deep ethnic divisions. Two other ministers from the BJP and its ally National People's Party were also inducted into the new cabinet.

Political and Social Significance

The end of President's Rule - one of the longest periods of direct central administration in recent times - is significant on multiple fronts:

- **Restoration of Electoral Governance:** The return to a democratically accountable state government restores political agency to the elected representatives of Manipur, whose mandate had been on hold for nearly a year.
- **Attempt at Stability and Inclusion:** The appointment of deputies from **Kuki and Naga communities** signals an effort to ease ethnic tensions and foster a more representative leadership structure in a state deeply scarred by violence and mistrust.
- **Institutional Normalisation:** With the legislative assembly no longer under suspended animation, normal parliamentary processes can resume, including legislative sessions and policy debates crucial for rebuilding governance.

Continuing Challenges

Despite these developments, the political landscape remains **delicate**. Some tribal organisations had publicly urged community legislators not to join the government without **written assurances** on specific demands - including calls for **distinct political arrangements for tribal areas** - highlighting ongoing fractures and the complexity of reconciliation efforts in the post-conflict environment.

The **revocation of President's Rule and the installation of an NDA-led government** under **Yumnam Khemchand Singh** marks a major transition for **Manipur**, both politically and administratively. It ushers in a return to representative governance after a prolonged emergency period and represents a tentative step toward addressing deep-seated social and ethnic tensions through inclusive political power sharing and renewed democratic processes.



The coming months will be crucial in determining whether the new leadership can stabilise the state and foster sustainable peace.

9. BRICS Centre for Industrial Competencies (BCIC)

India has **officially joined the BRICS Centre for Industrial Competencies (BCIC)** - a multilateral initiative launched under the framework of BRICS with support from the United Nations Industrial Development Organization to bolster industrial cooperation and competitiveness across BRICS and BRICS+ countries.

What Is BCIC?

The **BRICS Centre for Industrial Competencies (BCIC)** is a **public-private, one-stop platform** intended to support manufacturing firms and **Micro, Small and Medium Enterprises (MSMEs)** across BRICS nations. Established in partnership with UNIDO, the Centre aims to:

- Facilitate adoption of **Industry 4.0 and advanced technologies**, including automation, digitalisation, AI and smart manufacturing practices.
- Promote **capacity building, productivity enhancement, and skill development** for industrial enterprises.
- Provide **market intelligence, advisory services, and partnerships** to integrate MSMEs into regional and global value chains.
- Encourage **sustainable and inclusive industrial transformation** in line with emerging global trends.

India's Role and Engagement

The **National Productivity Council (NPC)** has been designated as India's nodal centre for BCIC activities.

Under the policy guidance of the **Department for Promotion of Industry and Internal Trade (DPIIT)**, the NPC will lead India's participation, focusing on enhancing productivity, fostering innovation, and promoting the adoption of advanced manufacturing technologies by Indian firms. A **Trust Fund Agreement** between DPIIT and UNIDO formalised India's membership.

Strategic Importance

India's entry into BCIC is significant on several fronts:

- **Strengthening Manufacturing and MSMEs:** It offers Indian manufacturers and MSMEs access to technological resources, best practices, and collaborative networks across BRICS markets.
- **Boosting Competitiveness:** By connecting firms to advanced industrial ecosystems and global partnerships, BCIC supports India's ambitions under *Make in India* and efforts to integrate deeper into international supply chains.
- **Supporting Inclusive Industrial Growth:** MSMEs constitute a large portion of employment and economic activity in BRICS countries; BCIC's focus on sustainable and digitally enabled industrialisation can help level the competitive landscape.





Why It Matters

The BCIC initiative aligns with broader global trends where cooperation on **technology diffusion, productivity enhancement, and industrial modernisation** is essential for economic resilience. India’s participation underscores its commitment to **multilateral industrial cooperation**, bridging domestic enterprises with international competencies - particularly in a period of shifting global manufacturing paradigms and competitive pressures.

10. Bharat Taxi Initiative: India’s Public-Private Transport Collaboration

Bharat Taxi Initiative is a collaborative scheme launched by the **Ministry of Road Transport and Highways (MoRTH)** in partnership with automobile and transportation stakeholders to **strengthen taxi services nationwide** and enhance mobility across India. It is designed to formalise and empower taxi operations through a set of policy measures, technology integration, and regulatory support.

Purpose and Background

India’s taxi sector has traditionally been characterised by fragmented operators, informal service providers, and inconsistent regulation. The emergence of app-based platforms increased reach but also highlighted gaps in standardisation, safety, pricing transparency, and service quality.



The **Bharat Taxi Initiative** responds to these challenges by creating a **structured framework** that supports both traditional and app-based taxi services while encouraging adoption of **electric vehicles (EVs)** and **digital mobility standards**. The initiative is also part of India’s broader efforts to:

- Modernise urban and intercity transport;
- Improve safety and reliability for passengers;
- Reduce emissions through EV adoption; and
- Strengthen employment and skill opportunities in the transport sector.

11. No-Confidence Motion Against Lok Sabha Speaker: Constitutional Basis, Procedure, and Political Significance

Why the No-Confidence Motion Was Moved

In an unusual and politically charged development during the 2026 Budget Session, the Opposition in the Lok Sabha formally submitted a no-confidence motion seeking the removal of the Speaker, Om Birla. The motion, backed by over 118 opposition MPs, alleges that the Speaker acted in a “blatantly partisan” manner in conducting House proceedings. Key grievances cited include:

- Denial of speaking time to the Leader of the Opposition on substantive issues, particularly on quoting excerpts from an unpublished book during the Motion of Thanks debate;

Table 22.2 Censure Motion vs No Confidence Motion

Censure Motion	No-Confidence Motion
1. It should state the reasons for its adoption in the Lok Sabha.	1. It need not state the reasons for its adoption in the Lok Sabha.
2. It can be moved against an individual minister or a group of ministers or the entire council of ministers.	2. It can be moved against the entire council of ministers only.
3. It is moved for censuring the council of ministers for specific policies and actions.	3. It is moved for ascertaining the confidence of Lok Sabha in the council of ministers.
4. If it is passed in the Lok Sabha, the council of ministers need not resign from the office.	4. If it is passed in the Lok Sabha, the council of ministers must resign from office.



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- Suspension of eight opposition MPs during the session;
- Perceived inaction against certain ruling party members despite controversial remarks; and
- Comments by the Speaker discouraging the Prime Minister's attendance on safety grounds.

The Opposition says these actions undermined the neutrality and fairness expected of the Speaker - a role constitutionally meant to be impartial and above party politics. Opposition protests around Parliament and raised tensions culminated in the formal motion, which now awaits procedural processing.

Constitutional Basis for Removal of the Speaker

The office of the Speaker - the presiding authority of the lower house - does not have a fixed tenure independent of the Lok Sabha. Under Article 94(c) of the Constitution of India, the Lok Sabha can remove its Speaker by a resolution passed by a majority of all the then members of the House. This requires:

- A written notice with the text of the resolution submitted to the Lok Sabha Secretary-General;
- Compliance with a minimum 14-day notice period before the motion can be taken up for discussion.

The Speaker's removal process is deliberately stringent: it does not permit removal by just a simple majority of members present and voting. It requires a majority of the effective strength of the entire House - a much higher bar that reflects the importance and independence of the Speaker's office.

Procedural Steps After Submission

Once a notice is submitted by members:

1. Examination of the Notice:

The motion's text is reviewed to ensure it contains specific, factual points and is free from defamatory or vague allegations - otherwise the House may reject it at the outset.

2. Notice Period:

After acceptance, it cannot be taken up for 14 days, during which time the Speaker traditionally does not preside over proceedings related to the motion. In this case, Birla has voluntarily chosen not to attend the Lok Sabha until the motion is resolved, although this is not strictly required by rules but aims to maintain dignity and impartiality.

3. Admission in the House:

At least 50 MPs must support the motion on the floor for it to be admitted for debate once tabled.

4. Discussion and Voting:

Upon admission, the motion is taken up for debate and then put to a vote (voice vote or division). If a majority of the entire House's membership votes in favour, the Speaker stands removed from office.

Role of the Constitution and Parliamentary Rules

- The Speaker's removal process is part of the constitutional checks and balances: although the Speaker is expected to be neutral, they remain politically accountable to the House they preside over.



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• Article 96 of the Constitution specifies that when a resolution to remove the Speaker is under consideration, the Speaker cannot preside over the House. This is to prevent any conflict of interest during the process. In the current instance, Birla's voluntary step-aside adheres to the spirit of this requirement.

Historical Context and Rarity

Attempts to remove Lok Sabha Speakers are very rare in Indian parliamentary history. Previous motions - such as against Speakers like G.V. Mavalankar (1954), Hukam Singh (1966), and Balram Jakhar (1987) - were never successful. No Speaker has been removed through this process so far.

This reflects both the high threshold required for removal and the political sensitivity around the Speaker's constitutional role as a neutral arbiter above everyday party contests.

Political and Parliamentary Significance

- Political Symbolism: Even if the motion's success is unlikely given the ruling coalition's numerical strength, filing it allows the Opposition to formally register grievances on record and hold robust debate on House functioning.
- Parliamentary Discipline: The motion raises broader questions about chair neutrality, parliamentary decorum, rights of members to debate, and the role of the Speaker in upholding these norms.
- Opposition Strategy: Parties like the TMC chose not to sign immediately, indicating strategic divergence within the opposition bloc on the timing and optics of such a motion.

What Happens Next

As per sources, the discussion on the notice is **likely to be taken up on 9 March 2026, the first day of the second part of the ongoing Budget Session. Until then, the motion remains pending under scrutiny and procedural timelines.

The no-confidence motion against the Lok Sabha Speaker is a rare parliamentary action that underscores the tension between constitutional office and political dynamics. It tests India's parliamentary procedures and democratic norms, reflecting how mechanisms like Article 94(c) are designed to balance institutional independence with accountability to the elected House.

11. Right to Disconnect Bill, 2026: Background, Provisions, and Significance

The Right to Disconnect Bill, 2026 is proposed legislation in India aimed at protecting workers' rights by ensuring that employees are not obligated to engage in work-related communication or tasks beyond normal working hours. It seeks to address modern challenges arising from digitisation and flexible work arrangements, especially where boundaries between work and private life have become blurred.

With the advent of digital communication tools - emails, instant messaging, virtual Online meeting platforms and mobile phones - the traditional 9-to-5 work boundary has eroded. Many workers are routinely expected to respond to messages or complete tasks after office hours, during weekends, or on holidays, leading to:

- Chronic work stress
- Deterioration of mental health
- Work-life imbalance
- Burnout and reduced productivity



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These issues have been exacerbated by remote and hybrid work modes adopted widely after the COVID-19 pandemic. The bill emerges against this backdrop, recognising that constant connectivity is affecting employee well-being and undermining fundamental rights to privacy, rest, and personal time.

Core Provisions of the Bill

The Right to Disconnect Bill, 2026 aims to institutionalise a legal framework that:

1. Defines the Right to Disconnect

Workers have the right to not engage in work communication or performance of duties outside prescribed working hours - including calls, emails, texts, or tasks assigned through digital platforms - unless explicitly required by job responsibilities and with prior consent.

2. Obligations on Employers

Employers are required to:

- Establish clear policies regarding expected availability of employees outside work hours.
- Ensure work assignments and communications are limited to normal working hours unless in case of emergencies or agreed overtime.
- Communicate policies clearly in employment contracts and workplace manuals.

3. Enforcement Mechanisms

The bill proposes:

- Labour inspectorate oversight to monitor compliance.
- A mechanism for employee grievances and dispute adjudication.
- Penalties or sanctions for employers who violate the right, including administrative fines.

4. Applicability

Though primarily targeted at traditional employment contracts, the bill also covers certain categories of gig workers, remote workers and digitally connected professionals, subject to sector-specific rules.

Significance of the Bill

1. Worker Well-Being

The legislation aims to protect mental health and personal time, ensuring employees can have uninterrupted rest periods without work intrusions - a key factor in improving overall quality of life and productivity.

2. Legal and Social Recognition

By codifying the Right to Disconnect, the bill recognises that employment is not 24/7 servitude, affirming workers' protected time and human dignity in the context of modern work environments dominated by digital connectivity.

3. Alignment with Global Trends

Several countries and jurisdictions - including France, Belgium and the Canadian province of Ontario - have adopted similar norms or laws recognising off-duty rest and limiting after-hours work contact. The Indian initiative aligns with



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such international labour standards and evolving norms of decent work advocated by the International Labour Organization (ILO).

4. Productivity and Employment Rights

Evidence suggests that clear boundaries between work and non-work time can help reduce burnout, absenteeism and turnover, thereby enhancing workplace performance and employee retention.

Challenges and Considerations

1. Enforcement in the Digital Economy

Ensuring compliance in sectors like IT, BPOs and gig work - where flexible hours are common - may require nuanced regulations and robust monitoring.

2. Defining Normal Working Hours

Different industries have varied work norms; flexible scheduling may complicate enforcement unless clear guidelines are provided.

3. Employer Concerns

Some employers argue that rigid disconnection rules could hamper responsiveness, especially in global operations spanning time zones.

The Right to Disconnect Bill, 2026 is a forward-looking legislative effort to protect workers from the pervasive intrusion of digital work into personal life. By establishing legal boundaries for work communication outside office hours, it seeks to balance labour rights, worker well-being and productivity in a digitised economy. If implemented effectively, it could mark a significant step in India's labour law reforms and enhance workplace culture for the digital age.

12. Swavalambini Scheme - Empowering Women through Financial Inclusion and Skill Development

The Swavalambini Scheme is a gender-focused initiative launched by the Ministry of Rural Development (government of India) to enhance women's economic empowerment, financial independence, and entrepreneurship. The scheme aims at combining skill development, livelihood promotion, and credit access to enable women to become self-reliant (swavalambi), particularly in rural and semi-urban areas.

Objectives of the Swavalambini Scheme

The primary goals of the scheme are:

1. Economic Empowerment of Women:

To strengthen the financial status of women by enabling them to engage in entrepreneurial activities and sustainable livelihoods.

2. Skill Enhancement and Training:

To provide market-oriented skill development and vocational training tailored to local contexts and economic opportunities.

3. Access to Credit and Financial Support:

To facilitate credit linkages with banks and financial institutions, especially through microfinance, SHG bank linkages, and priority sector lending, enabling women to launch or expand their enterprises.



4. Promoting Self-Help Groups (SHGs):

To build on the existing network of Self-Help Groups under the National Rural Livelihood Mission (NRLM) and strengthen their capacity for income generation.

13. India's Comprehensive Strategy to Democratise Artificial Intelligence

Artificial Intelligence (AI) is increasingly recognised as a transformative technology with the potential to accelerate economic growth, improve public services, and strengthen governance systems. However, AI also poses challenges related to equity, access, ethics, and governance. To ensure that AI benefits are widely shared across society — and not limited to a few technology giants or elite groups — India is crafting a comprehensive strategy to democratise AI.

What "Democratising AI" Means

Democratising AI refers to:

- Making AI accessible to diverse segments of society, including small businesses, students, researchers, policymakers and marginalised communities.
- Enabling equitable participation in AI development, deployment, and governance.
- Ensuring AI systems are ethical, transparent, and accountable.
- Reducing asymmetries in AI capabilities between different groups, sectors and regions.

This approach goes beyond mere technology adoption — it integrates capacity building, policy frameworks, ethical standards, and ecosystem development.

Strategic Pillars of India's AI Strategy

India's plan to democratise AI rests on multiple synchronised pillars:

1. Building Digital and Data Infrastructure

- **Public Digital Platforms:** Leveraging India's unique Digital Public Infrastructure (DPI) — such as Aadhaar, UPI, DigiLocker, and CoWIN — to accelerate AI usage in governance and services.
- **Data Ecosystems:** Promoting interoperable and privacy-preserving data frameworks that support research without compromising individual rights.
- **Cloud and Compute Access:** Facilitating access to cloud computing resources and shared AI platforms so that smaller entities and researchers can develop and deploy models without prohibitive costs.

2. Capacity Building and Skills Development

- **Education and Curriculum Integration:** Introducing AI concepts in school and university curricula to prepare future workforces.
- **Upskilling Programmes:** Expanding national programmes on digital literacy, AI specialisation, and skills training for government employees, students, and industry professionals alike.
- **Research Ecosystems:** Supporting academic and institutional research in AI with grants, fellowships, and collaborative platforms.



3. Inclusive Innovation and Startup Support

- **AI Innovation Hubs:** Establishing networked hubs and innovation centres across regions to nurture startups and AI projects addressing local problems.
- **Funding and Incentives:** Providing financial incentives, grants, and incubation support for AI startups working on socially relevant applications — such as healthcare, agriculture, education and disaster management.
- **Open-Source Models:** Encouraging development and adoption of open-source AI tools that are freely accessible to innovators and developers.

4. Responsible and Ethical AI Governance

- **Guidelines and Frameworks:** Formulating ethical standards and operational guidelines for AI deployment in sensitive domains.
- **Algorithmic Transparency:** Promoting explainable AI systems, especially in government services, to ensure accountability and public trust.
- **Bias and Fairness Measures:** Embedding safeguards against discriminatory outcomes by auditing datasets, models, and decision-making processes.

5. Sectoral Integration for Public Good

India's strategy emphasises using AI for development priorities, such as:

- **Agriculture:** Predictive analytics for crop patterns, pests, and weather impacts.
- **Healthcare:** AI in diagnostics, telemedicine, drug discovery, and resource optimisation.
- **Education:** Personalised learning platforms, automated assessment tools, and multilingual AI tutors.
- **Governance:** Automated grievance redressal, real-time monitoring, and policy simulation tools.

Significance of Democratising AI for India

1. Inclusive Development

AI democratisation ensures that benefits reach across income groups, geographic regions, and social strata — reducing digital inequality rather than deepening it.

2. Economic Competitiveness

By empowering small businesses, startups, and researchers with access to AI tools and infrastructure, India can enhance productivity, innovation, and global competitiveness.

3. Social Impact

AI can be harnessed to tackle entrenched social challenges — such as health access in rural areas, education gaps, disaster response, and environmental monitoring — delivering tangible public good outcomes.

4. Ethical and Trustworthy AI

Focusing on ethics, privacy, and accountability helps build public trust in AI systems, particularly those used in governance and public services.



Challenges and Way Forward

While the strategy is comprehensive, India faces structural challenges:

- **Data Quality and Access:** Ensuring representative and clean datasets for effective AI models while protecting individual privacy.
- **Infrastructure Gaps:** Bridging urban–rural digital divides and ensuring equitable access to high-speed connectivity and compute resources.
- **Skill Mismatch:** Scaling AI education and reskilling initiatives to meet demand across sectors.
- **Regulatory Coherence:** Harmonising AI governance frameworks with data protection, competition, and consumer protection laws.

Addressing these challenges will require collaborative governance, including central and state governments, industry, academia, and civil society.

India's strategy to democratise AI aims to make artificial intelligence accessible, inclusive, ethical, and beneficial for all segments of society. By building infrastructure, enhancing skills, encouraging innovation, and embedding responsible AI governance, India seeks to harness AI not just as a technology for elite sectors, but as a transformational tool for national development, social equity, and global participation.

14. PM-Suraj Portal — Overview, Objectives and Significance

PM-Suraj (Pradhan Mantri – Survey of Regions Under Jamabandi) is a digital initiative launched by the Department of Land Resources, Ministry of Rural Development, Government of India. It is designed to digitise and streamline land records across rural India, improve transparency, and empower citizens with easy access to land-related information.

The name SURAJ stands for "Survey of Regions Under Jamabandi" — referring to the traditional jamabandi record, which is the primary document that reflects land ownership, rights, and agrarian transactions in rural areas.

Why the PM-Suraj Portal Was Introduced

Land records in India have traditionally been managed in paper form, often resulting in:

- Fragmented and outdated information,
- Fraud and forgery,
- Lengthy dispute resolution processes,
- Poor transparency and accessibility for landowners.

Digitisation of land records was therefore identified as a priority for improving governance, reducing litigation, and enhancing productivity and investment in land-based sectors. PM-Suraj aims to provide an end-to-end solution to capture, update, verify and make land records accessible to all stakeholders.

Core Features of the Portal

1. Unified Land Records Repository

The portal creates an integrated platform to store and update jamabandi (Record of Rights), including information on:

- Land ownership and rights,



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- Agricultural land details,
- Mutation entries and transactions,
- Historical record trails.

2. Real-Time Updates and Integration

PM-Suraj enables real-time update and synchronisation with state land records systems, ensuring:

- Land records are consistently updated across jurisdictions.
- Dependence on antiquated manual processes is reduced.
- Stakeholders view the latest official information from one portal.

3. Citizen Access and Transparency

It provides citizens with:

- Online access to their land records,
- Transparency of land transactions,
- Easy verification of ownership and rights without intermediaries.

4. Dispute Tracking and Redressal

The portal supports:

- Tracking of ongoing disputes,
- Official status updates on litigations and appeals related to land,
- Documentation of case outcomes to reduce future conflicts.

5. Geospatial Mapping

Integration with geospatial data allows:

- Accurate mapping of land parcels,
- Demarcation of boundaries,
- Harmonisation with digital cadastral maps.

Objectives of the PM-Suraj Portal

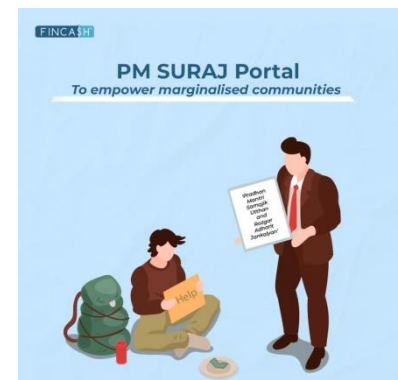
The key aims include:

1. Modernisation of Land Records

To bring land records into a digital, standardised, and easily retrievable format, reducing errors and fraud associated with physical records.

2. Transparency and Accountability

To ensure that land ownership, rights, and transactions are visible to citizens and government agencies alike, improving trust and service delivery.





3. Ease of Doing Business

By simplifying access to verified land records, the portal facilitates:

- Loan processing,
- Property transactions,
- Agricultural planning,
- Urban and rural development initiatives.

4. Dispute Reduction

Numerous land conflicts in India are rooted in unclear or inconsistent documentation. A standardised digital record helps reduce ambiguity and legal disputes.

Significance for Governance and Society

1. Citizen Empowerment

Access to accurate and official land records without intermediaries empowers landowners, reduces rent-seeking behaviour, and enhances confidence in public systems.

2. Agricultural and Rural Development

Reliable land information is critical for:

- Agricultural planning and crop management,
- Government subsidies and entitlements,
- Rural infrastructure projects.

3. Legal and Investment Certainty

Standardised records promote confidence among investors, financial institutions, and local communities — vital for economic activity dependent on land as an asset.

Challenges and Considerations

Despite its potential, effective implementation of PM-Suraj requires:

1. Data Quality Assurance

Ensuring that digitised records are:

- Accurate,
- Verified against legal documents, and
- Free from legacy errors in paper records.

2. Interoperability with State Systems

Land being a state subject under the Indian Constitution means:

- Unified standards must align with diverse and existing state land record databases.



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- Technical and administrative coordination across Centre and states is crucial.

3. Security and Privacy

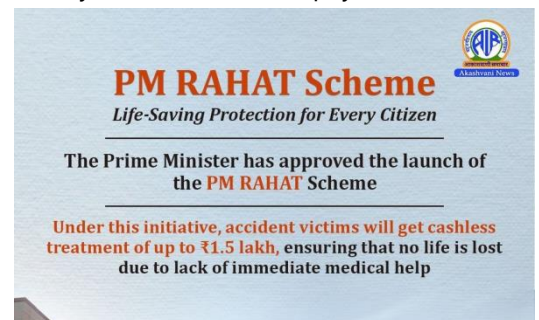
Protection of land ownership data from misuse or breaches is essential, involving robust cyber-security practices.

The PM-Suraj Portal represents a major step in digitising land records in rural India, aligning with broader goals of good governance, transparency, citizen empowerment, and economic development. By standardising and modernising land documentation, the portal not only facilitates administrative efficiency but also addresses long-standing issues such as land disputes, opaque ownership trails, and barriers to investment — marking a key reform in Indian public administration.

15. PM RAHAT Scheme

The PM RAHAT Scheme (Road Accident Victim Hospitalisation and Assured Treatment) is a government initiative designed to improve emergency medical care for road accident victims in India. Its core objective is simple: save lives quickly by ensuring victims receive immediate treatment without financial delay or confusion over payment responsibility. The scheme combines emergency response, digital tracking, and hospital reimbursement into one structured system.

- A key feature is cashless treatment up to ₹1.5 lakh for every eligible road accident victim, regardless of the type of road where the accident occurs. This removes the common problem where hospitals hesitate to start treatment because payment is uncertain. Hospitals are financially protected through a clear reimbursement mechanism, making emergency care more predictable and reliable.



- The scheme is linked with the Emergency Response Support System (ERSS) 112, allowing victims or Good Samaritans to call a single emergency number to locate designated hospitals and request ambulance support. This integration aims to reduce response time and streamline coordination between emergency services and healthcare providers.
- Technologically, the scheme merges the Electronic Detailed Accident Report (eDAR) platform with the Transaction Management System (TMS 2.0) to manage claims and data flow efficiently. Funding comes through the Motor Vehicle Accident Fund. If the offending vehicle is insured, insurers contribute; if it is uninsured or a hit-and-run case, the government covers the cost through budgetary allocations.

A grievance redressal mechanism is also included, where district-level officers handle complaints, ensuring accountability. Overall, the scheme focuses on faster intervention, reduced financial stress on victims, and a more organized emergency healthcare ecosystem for road accidents.

16. PM-DAKSH Yojana

A Central Sector Scheme launched to provide free skill training to vulnerable groups -SCs, OBCs, EWS, De-notified Tribes, Safai Karamcharis, and transgenders. The core aim is employability through structured vocational programs. Recent concern: placement rates are weak, with less than half of trained candidates getting jobs, which raises questions





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about training quality and industry linkage. Institutes are expected to ensure minimum placement outcomes, otherwise penalties apply. It has now been merged with PM Kaushal Vikas Yojana for better integration.

17. India-AI Impact Summit 2026

The India-AI Impact Summit 2026 was organised in New Delhi by the Ministry of Electronics and Information Technology under the broader IndiaAI Mission, marking one of the first large-scale global AI summits led by a Global South country. The summit represents a strategic shift in global AI discourse - moving away from narrow debates on AI risk toward a development-centred approach that emphasises inclusive growth, governance innovation and societal impact.

Why in News?

The summit highlighted India's attempt to position itself as a bridge between technology-rich developed nations and development-focused emerging economies. Instead of focusing only on AI safety regulation, the event promoted AI as a tool for solving real problems in healthcare, agriculture, governance and climate resilience.

Core Philosophy of the Summit

The framework of the summit was built around:

Three Sutras (Guiding Pillars)

- People - AI for inclusion, healthcare access and education.
- Planet - AI for sustainability and climate adaptation.
- Progress - AI as a driver of economic growth and efficient governance.

Seven Working Themes

These included health, agriculture, trusted AI, science, inclusion, democratisation of AI resources and economic development.

The messaging is clear: AI must deliver outcomes, not just technological breakthroughs.

Key Institutional Frameworks Behind the Summit

The summit is linked with India's digital governance ecosystem:

- Software Technology Parks of India - innovation and startup support.
- Digital India - digital infrastructure backbone.
- The IndiaAI Mission under MeitY providing compute resources, datasets and policy coordination.

This integration signals that India sees AI as part of governance architecture, not just private-sector innovation.

Major Highlights & Expected Outcomes

The summit aimed to produce tangible deliverables rather than declarations.

Important outcomes discussed:

- Promotion of AI commons - wider access to datasets, models and compute resources for developing nations.
- Global partnerships on AI governance and ethics.



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- Expansion of AI applications in public service delivery.
- Strengthening India's AI safety and standards ecosystem.

Why This Summit Matters

1. Voice of the Global South

Most global AI discussions have historically centred around regulation concerns in advanced economies. India's framing attempts to shift attention toward development challenges such as healthcare gaps, agricultural inefficiency and language barriers.

2. Digital Public Infrastructure (DPI) Model

India showcased its DPI ecosystem - such as Aadhaar-like digital identity systems and unified payments models - as a foundation for inclusive AI deployment.

3. Strategic Diplomacy

By hosting such a summit, India positions itself as a geopolitical intermediary between technology producers and technology users.

AI and India's Development Strategy

The summit emphasised practical deployment rather than abstract innovation.

AI for People

- Healthcare diagnostics in areas with doctor shortages.
- Adaptive learning systems for education.
- Real-time language translation tools improving digital inclusion.

AI for Planet

- Crop and weather prediction models.
- Smart energy management for renewable integration.
- Flood forecasting systems using data models.

AI for Progress

- Productivity improvements in governance.
- Fraud detection in financial systems.
- Economic value creation projected through AI adoption.

IndiaAI Mission - Backbone of the Strategy

Approved in 2024 with a large public investment, the mission aims to create sovereign AI capability.

Core pillars include:

- High-end compute infrastructure.



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- National dataset repositories.
- Indigenous foundation models.
- Skill development and startup financing.
- Responsible AI frameworks.

The underlying goal is digital sovereignty - reducing dependence on foreign AI ecosystems

Challenges Ahead

- High computational costs and energy demand.
- Lack of high-quality multilingual datasets.
- Digital divide across regions.
- Need for stronger institutional safeguards against bias and misuse.

The India-AI Impact Summit 2026 represents a deliberate attempt to redefine global AI discussions around development and inclusivity rather than only risk management. If India can translate summit vision into scalable implementation, it could emerge as a model for AI deployment in the Global South - but institutional execution, not rhetoric, will decide the outcome.

18. Food Safety and Standards Authority of India (FSSAI)

The Food Safety and Standards Authority of India (FSSAI) is India's apex food regulatory body established under the Food Safety and Standards Act, 2006 to create a unified, science-based framework for food safety regulation. It functions under the Ministry of Health and Family Welfare and is responsible for setting standards, regulating food businesses, and ensuring the availability of safe and wholesome food for consumers.

The recent focus on FSSAI emerged after the Supreme Court of India pushed for stronger front-of-pack food labelling norms to help consumers make healthier choices, highlighting the growing public-health angle of food regulation.

Legal and Institutional Background

Before the 2006 Act, food regulation in India was fragmented across multiple laws and departments. The Food Safety and Standards Act consolidated these laws and established a single authority for scientific standard-setting and enforcement.

Core legal foundation

- Food Safety and Standards Act, 2006.
- Establishes a single-line regulatory system.
- Focuses on science-based standards rather than multiple overlapping controls.

Reality check: The creation of FSSAI was less about bureaucracy and more about fixing regulatory chaos that previously allowed inconsistent standards and weak enforcement.





Mandate and Key Functions

FSSAI's role goes far beyond licensing restaurants. Its mandate spans the entire food chain - from production to consumer plate.

Major functions

- Setting standards for food products and additives.
- Regulating manufacture, storage, distribution, sale, and import of food.
- Licensing and registration of food businesses.
- Accreditation and monitoring of food testing laboratories.
- Surveillance, inspection, and risk assessment.
- Consumer awareness campaigns on food safety and nutrition.

Operational ecosystem

- Referral laboratories for advanced testing.
- State and UT labs for enforcement.
- NABL-approved commercial labs to support compliance.

19. Tidal Flooding

Tidal flooding (also called sunny-day flooding, king tide flooding, or nuisance flooding) refers to the temporary inundation of low-lying coastal areas during high tides, even in the absence of storms or heavy rainfall. Unlike cyclone-induced storm surges, this flooding is driven mainly by tidal cycles and sea-level fluctuations, making it a recurring and increasingly visible coastal phenomenon.

Why in News?

The government of Kerala recently declared tidal flooding as a state-specific disaster, making it eligible for financial assistance under disaster response frameworks. This is significant because it recognises a slow-onset coastal hazard that occurs repeatedly rather than as a single extreme event.

What Exactly is Tidal Flooding?

Tidal flooding occurs when high tides push seawater onto normally dry coastal land. It is usually linked to:

- Gravitational pull during full-moon and new-moon phases.
- Offshore winds and ocean conditions that elevate sea levels.
- Rising baseline sea levels due to climate change.
- Loss of natural barriers such as wetlands or mangroves.

Unlike storm surges, which happen during cyclones, tidal flooding can occur twice daily and becomes more intense during full or new moon cycles.

Causes of Tidal Flooding



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1. Astronomical Tides

Stronger gravitational forces during lunar alignments raise tidal levels beyond usual limits.

2. Sea Level Rise

As mean sea levels rise, it takes less additional water to flood coastal zones. Even ordinary high tides start crossing flood thresholds.

3. Offshore Winds and Ocean Currents

Persistent onshore winds or offshore storms can temporarily push water toward the coast, amplifying tidal effects.

4. Loss of Coastal Buffers

Wetlands, mangroves and sand dunes traditionally absorb excess water; their degradation increases vulnerability.

Global Context

Tidal flooding is no longer rare. International observations show:

- Increasing frequency of high-tide flooding events globally.
- Coastal regions experiencing several-fold increases in flood days compared to past decades.
- Rising sea levels making formerly rare events routine.

This indicates that tidal flooding is becoming a climate-linked adaptation challenge rather than a purely local issue.

Impact on India — Focus on Kerala Coast

Along the coast of Kerala, tidal flooding occurs when water levels in the Arabian Sea temporarily rise above local thresholds, inundating low-lying settlements.

Major impacts include:

- Waterlogging of roads and settlements.
- Saltwater intrusion into agricultural lands.
- Damage to houses and public infrastructure.
- Disruption of fisheries and small coastal businesses.

Because this flooding is repetitive, cumulative economic losses can exceed single disaster events over time.

Kerala Government's Policy Response

The declaration of tidal flooding as a state-specific disaster means:

- Victims may receive assistance similar to aid under the State Disaster Response Fund (SDRF).
- Coastal flooding gains official recognition within disaster planning.
- It sets a precedent for other coastal states facing similar risks.

Kerala has also identified other localised disasters such as coastal erosion, lightning and heatwaves, indicating a move toward region-specific disaster governance.



Why This Topic Matters (Analytical View)

This is where most aspirants stop at definitions — which is a mistake.

Tidal flooding illustrates three bigger policy shifts:

1. Climate Change Becoming a Governance Issue

The problem is not a one-time disaster but a gradual rise in risk requiring long-term planning.

2. Shift from Disaster Response → Risk Management

Repeated minor floods create chronic economic strain, pushing governments toward proactive adaptation.

3. Urban Planning Failure

Many vulnerable settlements lie in reclaimed or poorly planned coastal zones.

Challenges in Managing Tidal Flooding

- Limited long-term coastal zoning enforcement.
- Poor drainage infrastructure in coastal towns.
- High population density in vulnerable areas.
- Lack of detailed local flood mapping.
- Insufficient awareness compared with dramatic events like cyclones.

Tidal flooding represents a new category of climate-linked coastal risk — less dramatic than cyclones but more persistent and economically draining. Kerala's decision to classify it as a state-specific disaster signals a shift toward recognising chronic climate impacts and adapting governance frameworks accordingly.

20. SAHI and BODH Initiatives at the India AI Impact Summit 2026

At the India AI Impact Summit 2026, held at Bharat Mandapam, the Union Health Minister Jagat Prakash Nadda launched two major national initiatives — SAHI (Strategy for AI in Healthcare for India) and BODH (Benchmarking Open Data Platform for Health AI). These initiatives aim to build a structured governance and evaluation ecosystem for Artificial Intelligence in healthcare, ensuring that AI systems are safe, ethical, transparent and accountable before large-scale deployment.

The launch marks India's attempt to shift from isolated AI pilots toward institutionally regulated, evidence-based adoption in the health sector.

What is SAHI?

SAHI is a national guidance framework designed to steer AI adoption across India's healthcare ecosystem. Rather than being just a technology roadmap, it sets governance principles for how AI should be developed, validated and monitored.

Key objectives of SAHI

- Promote ethical, evidence-based and inclusive AI adoption.
- Establish standards for governance, data stewardship, validation and deployment.



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- Ensure AI assists healthcare professionals rather than replacing them.
- Align AI applications with public health priorities and patient safety.

The framework emphasises that healthcare AI must remain human-centric and accountable — a critical concern as AI tools increasingly enter diagnosis and clinical decision systems.

What is BODH?

BODH (Benchmarking Open Data Platform for Health AI) is a technical evaluation platform developed by Indian Institute of Technology Kanpur in collaboration with the National Health Authority.

It acts as a privacy-preserving testing environment where AI models can be evaluated using diverse, anonymised real-world health datasets before deployment at scale.

Key features

- Rigorous benchmarking of AI performance and robustness.
- Bias and generalisability assessment.
- No transfer of raw patient data (privacy-preserving model).
- Designed as a digital public good under the broader digital health ecosystem.

21. National Commission for Scheduled Tribes (NCST)

The National Commission for Scheduled Tribes (NCST) is a constitutional body tasked with safeguarding the rights and interests of the Scheduled Tribes (STs) in India. It was established under Article 338A of the Constitution, which came into effect via the Constitution (89th Amendment) Act, 2003. The NCST replaced the earlier Tribes Advisory Council and serves as a statutory watchdog to ensure enforcement of safeguards guaranteed to STs and to recommend measures for their socio-economic development.

The commission conducts investigations, reviews policies, and can inquire into grievances related to ST rights -both at the national and state levels. Its mandate centres on statutory protection, policy evaluation and rights enforcement for tribal populations scattered across India, particularly in central, eastern and northeastern regions.

Year	Event
1950	Article 338 established Special Officer for SCs and STs to monitor constitutional safeguards.
1990	65th Constitutional Amendment Act created joint National Commission for SCs and STs under Article 338.
1999	Ministry of Tribal Affairs formed to focus exclusively on ST welfare.
2003	89th Constitutional Amendment Act separated NCST (Article 338-A) from National Commission for SCs.
2004	89th Constitutional Amendment Act separated NCST (Article 338-A) from National Commission for SCs.
2004	Independent NCST established for Scheduled Tribes.



Constitutional Basis and Structure

Legal Foundation

- Article 338A: Provides constitutional status to the NCST.
- Replaced the earlier Tribes Advisory Council, significantly strengthening oversight and protections for tribal groups.

Composition

- Chairperson
- Vice-Chairperson
- Three other Members

All are appointed by the President of India and hold office for three years. The Commission also has its own Secretariat to support its functions.

Independent Status

Although funded by the Union Government, the NCST operates independently in performing its statutory functions, with authority to examine issues and complainant cases without requiring prior government sanction.

Primary Functions of the NCST

The National Commission for Scheduled Tribes has a multi-faceted mandate encompassing research, review, grievance redressal and policy recommendation:

1. Safeguard Enforcement

It ensures implementation and enforcement of constitutional and legal safeguards provided to STs, including those in Part XVI (Articles 330–342) of the Constitution.

2. Policy Review and Evaluation

It examines the working of various safeguards and developmental programmes targeted at ST welfare (e.g., education, livelihoods, health, land rights).

3. Inquiry and Grievance Redressal

It can investigate complaints regarding violation of ST rights and recommend corrective measures to the central or state governments.

4. Research and Reporting

It conducts research, surveys and studies on socio-economic conditions of STs and submits annual and special reports to the President of India.

5. Recommendations

It suggests measures for effective implementation of protective and developmental policies, including amendments to existing laws if necessary.

Significance and Role

1. Protection of Tribal Rights



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The NCST acts as a guardian of tribal rights against discrimination, land alienation, displacement without consent and exploitation. It supports enforcement of Article 46 (promotion of educational and economic interests of STs).

2. Policy Accountability

By reviewing implementation, NCST improves policy accountability and flags gaps in central and state programmes, helping refine tribal welfare schemes.

3. Empowerment through Data

Its research and reports provide evidence-based understanding of tribal socio-economic conditions, which can guide targeted initiatives.

Functional Powers

The NCST has powers akin to those of a Civil Court in matters such as:

- Summoning witnesses,
- Requiring production of documents,
- Receiving evidence on affidavits,
- Requisitioning public records.

It does not have direct enforcement power like a court, but its recommendations carry strong moral and administrative weight.

Challenges and Limitations

Even though the NCST is a constitutional body, it sometimes faces constraints:

- Non-binding recommendations: Its suggestions are not legally enforceable unless adopted by the government.
- Resource constraints: Adequate funding, capacity and manpower shortages can limit its reach.
- Data gaps: Lack of granular data on tribal populations can weaken diagnostic accuracy.

These limitations underscore the need for stronger institutional linkages and political will to ensure meaningful implementation.

Relevance in Current Affairs

The NCST gains prominence whenever:

- Tribal land rights cases are in the news.
- Displacement due to infrastructure projects triggers protests.
- Policy debates around affirmative action, education and livelihoods arise.

It also figures in discussions on inclusive growth and social justice, highlighting gaps in delivering constitutional promises to historically marginalised communities.

The National Commission for Scheduled Tribes functions as India's primary institutional safeguard for tribal rights and development. While its constitutional status gives it legitimacy, its actual impact depends on how governments respond to its recommendations and how effectively it bridges policy intent with ground reality.



21. National Agricultural Cooperative Marketing Federation of India (NAFED)

The National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED) is the apex organisation of marketing cooperatives for agricultural produce in India, established with the objective of strengthening farmers' market access, stabilising prices and facilitating fair agricultural trade. It was founded on 2 October 1958, on Gandhi Jayanti, and is registered under the Multi-State Cooperative Societies Act. Its headquarters are in New Delhi, with regional offices in major metro cities and zonal offices across states.

Why NAFED Exists

NAFED was set up to promote co-operative marketing of agricultural produce so that the interests of farmers are protected, intermediaries' influence is reduced, and farmers receive fair, remunerative prices for their products. Farmers and marketing cooperatives form its core membership, giving them a direct voice in decision-making through the General Body.

Objectives of NAFED

The key objectives of the National Agricultural Cooperative Marketing Federation of India are to:

1. Organise, promote and develop marketing, processing and storage of agricultural, horticultural and forest produce.
2. Facilitate trade - including interstate, export and import - of agricultural commodities.
3. Provide technical advice and support for agricultural production and marketing cooperatives.
4. Distribute agricultural inputs such as machinery, implements, seeds and fertilisers.
5. Own and operate warehouses, godowns and cold storage facilities to improve post-harvest handling.
6. Assist cooperative marketing and supply societies with consultancy and market intelligence.
7. Collaborate with international agencies for marketing development and export opportunities.

22. India Joins the Pax Silica Initiative

On 20 February 2026, India formally joined the Pax Silica initiative, a US-led global coalition focused on building secure, resilient and trusted technology supply chains - especially in areas like critical minerals, semiconductors, electronics and artificial intelligence (AI). The signing took place on the sidelines of the India AI Impact Summit 2026 in New Delhi, where India signed the Pax Silica Declaration and a Joint Statement on the India-US AI Opportunity Partnership.

What Is the Pax Silica Initiative?

- Meaning: "Pax" refers to peace, stability and prosperity; "Silica" refers to silicon, the essential element in semiconductor chips and digital





technologies.

- **Origins:** A United States Department of State-led initiative that was launched in December 2025 with an inaugural summit to strengthen technology supply chains worldwide.

- **Objective:** Create trusted, diversified and secure supply chains for next-generation technologies - from critical minerals and semiconductor materials to chip manufacturing and AI systems - and reduce “coercive dependencies” where a few countries (notably China) dominate these ecosystems.

- **Focus Areas:**

1. Critical minerals (rare earths, lithium, silicon) essential for chips and batteries
2. Semiconductor fabrication and advanced electronics
3. AI infrastructure and data technologies
4. Advanced manufacturing and innovation ecosystems
5. Diversified logistics, energy and supply chains
6. Technology governance frameworks for trusted partners

Members & Signatories

Prior to India’s entry, the initiative included several like-minded economies such as Australia, Japan, South Korea, Singapore, UAE, United Kingdom, Greece, Israel and Qatar. India’s accession expands the coalition among trusted partners sharing technology and economic security goals.

Significance of India’s Participation

1. Deepening India–US Strategic Tech Ties

India’s participation solidifies its positioning as a strategic partner in critical technology collaboration with the United States, especially in areas of AI, semiconductors and advanced manufacturing.

2. Securing Supply Chains

India aims to diversify and secure supply chains for critical minerals and components, reducing strategic dependencies - especially on China, which currently dominates rare earth processing and semiconductor ecosystems.

3. Boost to Domestic Tech & Manufacturing

Joining Pax Silica enhances opportunities for:

- Inward technology investments, particularly in AI and chip manufacturing.
- Partnerships for skilled workforce development in the semiconductor industry.
- Integration into global innovation networks and incentives to build technology infrastructure.

4. Economic Security as National Security

The initiative reflects the growing view that economic and technological supply chain resilience is integral to national security and competitiveness in the 21st century.

Strategic Context



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• Pax Silica is part of broader efforts by advanced economies to address vulnerabilities exposed by global value chain disruptions - especially after supply shortages during the pandemic and geopolitical tensions affecting semiconductor flow.

• It also aligns with India's policies to grow its semiconductor mission, AI ecosystem, and reduce reliance on a single source for critical technology components.

India's accession to Pax Silica signals a shift in global technology cooperation frameworks - from purely market-driven supply chains to trusted partnerships among democratic, like-minded economies. It reflects India's aspirations to be part of the global technology governance architecture while balancing its strategic autonomy.

By joining Pax Silica, India has taken a significant step toward securing its technological future, integrating into global supply chains for emerging technologies, and strengthening strategic cooperation with partners on issues that go beyond traditional trade - emphasizing technology, economic security and trusted alliances.

23. Private Member's Bill on Judicial Diversity

A Private Member's Bill was introduced in Parliament aiming to promote judicial diversity - particularly increasing representation of women, Scheduled Castes (SCs), Scheduled Tribes (STs), Other Backward Classes (OBCs), and religious minorities in appointments to higher judiciary (Supreme Court and High Courts). This proposal represents a significant push in legislative discourse on equity and representation in the higher judiciary.

What Is a Private Member's Bill?

- A Private Member's Bill is introduced by an MP who is not a Minister.
- It does not require government approval to be tabled.
- These bills rarely become law but can influence public policy and prompt debate on pressing issues.
- They are distinct from Government Bills, which are introduced by ministers.

This mechanism allows individual MPs to raise issues of significant public importance.

Objective of the Bill on Judicial Diversity

The Bill's primary goals include:

1. Enhancing Representation:

Increase representation of under-represented social groups in the higher judiciary.

2. Gender Balance:

Encourage greater participation of women judges in appointments to High Courts and Supreme Court.

3. Social Inclusion:

Address longstanding inequalities in judicial appointments so that the composition of courts better reflects India's social diversity.

4. Judicial Credibility & Access to Justice:

Promote public confidence by ensuring that the judiciary is seen as representative and inclusive, which strengthens access to justice.



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These goals reflect concerns that the higher judiciary has historically not mirrored the demographic and social diversity of Indian society.

Why Judicial Diversity Matters

1. Democratic Legitimacy

A judiciary that reflects the society it serves enhances legitimacy and trust in the justice system.

2. Substantive Representation

Diverse experiences enrich judicial reasoning and interpretation - especially in cases involving gender, caste, tribal rights, minority rights, and socio-economic justice.

3. Perceptions of Fairness

Visible inclusivity counters perceptions of elitism and promotes confidence among marginalised communities that their perspectives are understood.

4. International Norms

Global democracies increasingly emphasise judicial diversity as part of a rights-based, participatory model of justice.

Proposed Mechanisms (Indicative, Not Final)

While the Bill's specific provisions are subject to legislative debate, typical mechanisms discussed include:

- Reservation or preferential zones in judicial appointments.
- Guidelines for Collegium consideration on diversity criteria.
- Transparency in selection records with diversity metrics publicly available.
- Annual reporting on diversity outcomes for High Courts and the Supreme Court.

These are normative goals rather than strictly enforceable quotas, to balance judicial independence with representational goals.

Constitutional and Legal Dimensions

Judicial Independence

- The judiciary's independence is a constitutional cornerstone.
- Appointment mechanisms (via Collegium or potential reforms) must safeguard merit and autonomy while encouraging diversity.

Collegium System & Reforms

- India's current higher judicial appointment system is governed by the Collegium (Supreme Court judges recommending appointments).



- Debate persists over whether this process should integrate formal diversity criteria without undermining judicial independence.

Equality & Non-Discrimination

- Constitutional guarantees (Articles 14, 15, 16) promote equality and prohibit discrimination, supporting arguments for representational parity.

However, there is analysis cautioning against rigid quotas in the judiciary.

Balancing Merit and Diversity - Real Debate

A serious critique in the ongoing discourse includes:

Merit vs Representation

- Critics argue that merit and competence must remain primary in judicial appointments.
- They caution that fixed quotas may risk perceptions of tokenism or divisive competition.

Judicial Autonomy

- Any mandated quotas or legislative directives may be perceived as intrusion into judicial independence, altering the executive–judiciary balance.

Implementation Challenges

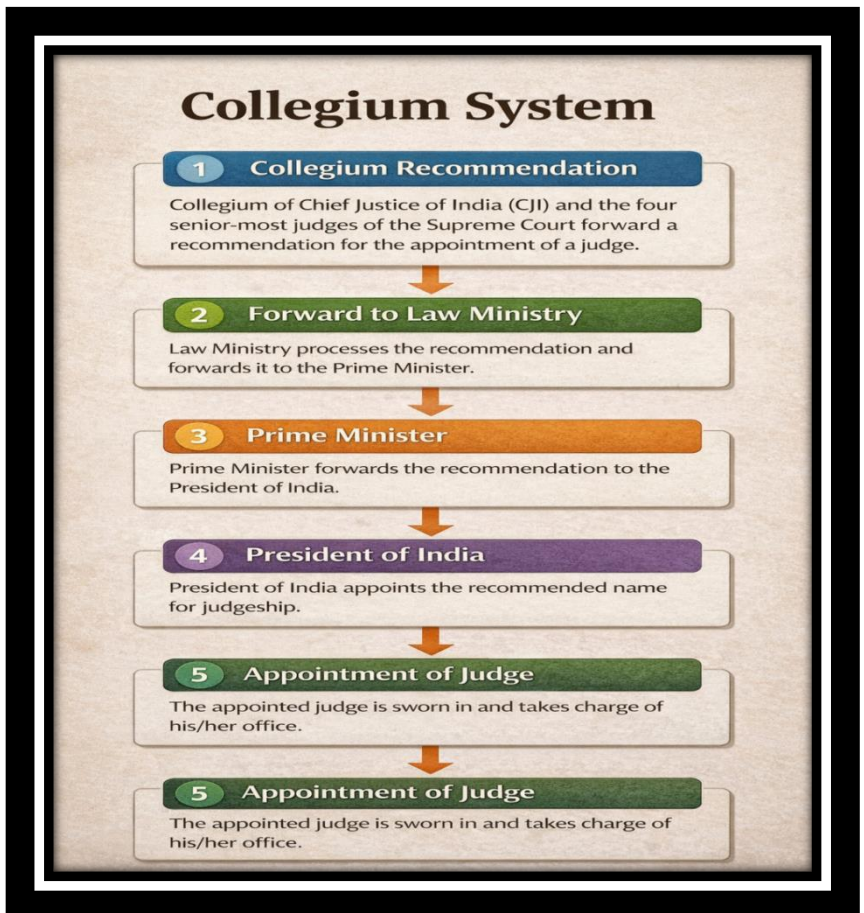
- Criteria for assessing “diversity” must be carefully defined to avoid ambiguity.
- Diversity goals must be meaningful and not symbolic.

Analytical Insight

The judicial diversity debate is not merely about numbers but about democratic justice delivery. A diverse bench can better interpret rights frameworks, especially when adjudicating cases involving gender justice, caste discrimination, minority protections and socio-economic marginalisation. However, policy responses must avoid instrumentalising the judiciary or compromising institutional autonomy.

The current Bill underscores a policy shift from procedural inclusivity to substantive representation - reflecting evolving ideas on social justice and democratic legitimacy.

The Private Member’s Bill on Judicial Diversity brings attention to representation deficits in the higher judiciary and seeks legislative impetus for inclusive judicial appointments. While the Bill’s prospects of becoming law are

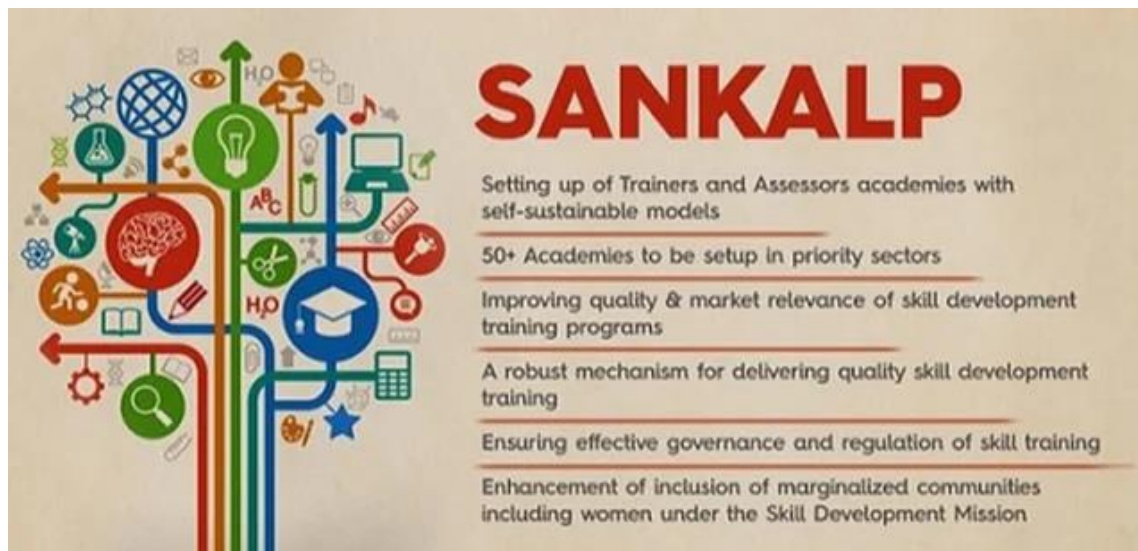




uncertain, it has successfully injected diversity concerns into the national policy discourse, requiring alignment between constitutional principles, social equity goals and institutional independence.

24. SANKALP Scheme - Skill Acquisition & Knowledge Awareness for Livelihood Promotion

The SANKALP scheme (Skill Acquisition and Knowledge Awareness for Livelihood Promotion) is a Centrally Sponsored Scheme launched by the Ministry of Skill Development & Entrepreneurship (MSDE) on 19 January 2018. It was initiated as part of the National Skill Development Mission (NSDM) to strengthen institutional mechanisms for skill development and expand access to quality, market-relevant vocational training especially for marginalised populations such as women, SC/STs and Persons with Disabilities (PwD). The scheme is implemented with loan assistance from the World Bank under a disbursement linked framework to improve efficiency and outcomes in India's skills ecosystem.



Objectives of the SANKALP Scheme

- 1. Enhance Institutional Mechanisms:**
Strengthen national, state and district level institutions to design, coordinate and monitor skill development initiatives.
- 2. Quality Assurance:**
Standardise certification and assessments aligned with the National Skills Qualification Framework (NSQF) and create a pool of quality trainers to boost training outcomes.
- 3. Market Relevance & Employability:**
Improve the match between skills training and labour market demand through evidence-based planning and stronger industry linkages.
- 4. Inclusion:**
Increase participation of women, SC/STs, PwDs and other marginalised communities so that skill training benefits are widely accessible.
- 5. Recognition of Prior Learning (RPL):**



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Facilitate certification of skills already acquired informally, including at the Gram Panchayat level, to formalise and enhance livelihood opportunities.

Key Features & Components

• Outcome-Oriented Approach:

SANKALP focuses on results (outcomes), unlike earlier schemes that emphasised inputs alone, marking a strategic shift in vocational training implementation.

• Institutional Strengthening:

Support to District Skill Committees (DSCs), creation of robust monitoring systems and development of digital platforms like the Skill India Portal to track training activities.

• World Bank Funding:

The scheme has a multi-year agreement with the World Bank for financing (around ₹3,300–₹4,455 crore) with support contingent on achieving Disbursement Linked Indicators (DLIs).

• Skill Gap Studies & Planning:

Emphasis on labour market mapping and evidence-based planning to align training with sectoral employment needs at the district level.

It also underpins flagship initiatives like Pradhan Mantri Kaushal Vikas Yojana (PMKVY) by strengthening overall skills infrastructure.

The SANKALP scheme is a cornerstone of India's capacity building strategy, designed to strengthen institutional mechanisms for vocational training, improve quality, and promote inclusive access to skill development. As India transitions to a knowledge and skills-driven economy, SANKALP's impact on employability and workforce readiness is important - but its success hinges on effective implementation, monitoring and stronger industry linkages.

25. Union Cabinet Approves Renaming of Kerala as "Keralam"

The Union Cabinet, chaired by the Prime Minister, has approved a proposal to change the official name of the State of Kerala to "Keralam", initiating the constitutional process required for altering a state's name. The decision follows a unanimous resolution passed by the Kerala Legislative Assembly in June 2024, which argued that "Keralam" reflects the state's historical, cultural and linguistic identity in Malayalam.



Background of the Name Change



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- The name "Keralam" is the traditional Malayalam name used locally for centuries.
- When states were reorganised on linguistic basis in 1956, the English form Kerala was adopted in the Constitution's First Schedule.
- The State government sought correction so that the official constitutional name aligns with indigenous usage.

Constitutional Procedure for Renaming a State

Renaming a state is governed by Article 3 of the Constitution.

Step-wise Process:

1. State Legislative Assembly Resolution ✓ □ (Kerala – June 2024)
2. Union Cabinet Approval ✓ □ (Feb 2026)
3. President refers Bill to State Legislature for views
4. Introduction of Kerala (Alteration of Name) Bill, 2026 in Parliament
5. Parliamentary approval
6. Amendment of the First Schedule of the Constitution

Only after Parliamentary approval will the name officially become Keralam.

Rationale Behind the Change

Linguistic Identity

- Aligns administrative name with Malayalam linguistic tradition.

Cultural Assertion

- Reflects post-colonial emphasis on indigenous nomenclature.

Historical Continuity

- Linked to the idea of Aikya Kerala (United Kerala) formed for Malayalam-speaking people in 1956.

Administrative Uniformity

- Ensures consistency across official documents and languages.

Part of Wider Renaming Trend in India

India has witnessed several renaming exercises aimed at restoring historical or cultural identity:

- Allahabad → Prayagraj
- Gurgaon → Gurugram
- Rajpath → Kartavya Path
- Aurangabad → Chhatrapati Sambhaji Nagar

The Kerala → Keralam move fits within this broader symbolic decolonisation and localisation trend.



Political & Governance Significance

- Reflects cooperative federalism, as the proposal originated from the state.
- Highlights how identity politics intersects with constitutional procedure.
- Demonstrates Parliament's exclusive authority over state boundaries and names.

Key Debate Areas

- Whether renaming leads to administrative costs (documents, signage, legal updates).
- Concerns about politicisation of identity-based renaming.
- Balance between historical correction vs symbolic governance.

The decision illustrates how constitutional mechanisms accommodate regional identity within a federal framework. Renaming does not alter territorial or political structure but symbolically reshapes national memory, linguistic recognition and cultural representation within the Union of India.

26. India's First National Counter-Terrorism Policy - PRAHAAR

India has unveiled its first comprehensive National Counter-Terrorism Policy and Strategy, titled PRAHAAR, marking a major transition from reactive counter-terror responses to a doctrine-based, preventive national security framework. Released by the Ministry of Home Affairs (MHA) on 23 February 2026, the policy adopts a zero-tolerance approach towards terrorism and establishes a unified strategy integrating intelligence, law enforcement, diplomacy and societal participation.

The policy recognises that terrorism today is evolving beyond traditional attacks into cyber, drone-based, financial and radicalisation-driven threats, requiring coordinated national action rather than fragmented institutional responses.

Meaning of PRAHAAR (Core Framework)

The acronym PRAHAAR represents the seven pillars of India's counter-terror doctrine:

1. P – Prevention of Terror Attacks
 - Intelligence-led proactive policing.
 - Real-time information sharing via Multi-Agency Centre (MAC) and Joint intelligence mechanisms.
2. R – Response (Swift & Proportionate)
 - Local police as first responders.
 - Support from specialised forces like NSG, central agencies and state ATS units.
3. A – Aggregating Internal Capacities
 - Whole-of-government coordination.
 - Standardisation of anti-terror structures across states.
4. H – Human Rights & Rule of Law
 - Counter-terror operations must remain constitutionally compliant.
 - Legal safeguards and judicial oversight ensured.



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5. A – Attenuating Conditions Conducive to Terrorism
 - Counter-radicalisation programmes.
 - Community engagement involving NGOs, educators and religious leaders.
6. A – Aligning International Efforts
 - Cooperation through MLATs, extradition treaties and intelligence partnerships.
 - Denial of global safe havens and terror financing networks.
7. R – Recovery & Resilience
 - Whole-of-society recovery after attacks.
 - Public-private participation in rehabilitation and infrastructure restoration.

Key Terrorism Challenges Identified

The policy highlights emerging and persistent threats:

- Cross-border state-sponsored terrorism
- Global terror networks (ISIS, Al-Qaeda sleeper cells)
- Crime-terror nexus (gangsters, illegal arms, narcotics funding)
- Cyber radicalisation & dark-web recruitment
- Cryptocurrency-based terror financing
- Use of drones and emerging technologies
- Risks from CBRNED materials

(Chemical, Biological, Radiological, Nuclear, Explosive & Digital)

27. Forest Rights Act (FRA) Cells — Strengthening Implementation

To accelerate and standardise the implementation of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 — commonly called the Forest Rights Act (FRA) — the government has operationalised dedicated FRA Cells at both national and state levels. These cells serve as specialised units to ensure timely and effective recognition of land and forest rights for historically marginalised communities, improve monitoring, capacity building and inter-departmental coordination across forest governance systems.

Background: Forest Rights Act (FRA), 2006

- FRA was enacted to correct historical injustices by recognising the individual and community rights of Scheduled Tribes (STs) and Other Traditional Forest Dwellers (OTFDs) over forest lands they have been residing on or depending upon for generations.
- Rights include Community Forest Resource (CFR) rights, individual cultivation rights, habitation rights, and rights to minor forest produce.
- The Act also aims to harmonise tribal rights with biodiversity conservation and sustainable forest management.

Why FRA Cells Are Needed



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Despite the Act's strong legal framework, its implementation faced challenges such as:

- Delays in recognition and vesting of rights
- Administrative bottlenecks in claim verification and settlement
- Inadequate awareness and capacity at local levels
- Coordination gaps among multiple stakeholders (forest, revenue, tribal welfare departments)

The operationalisation of FRA Cells signals a shift from merely enacting a rights-based law to institutionalising governance mechanisms that ensure those rights are realised on the ground. For a socially sensitive statute like FRA, administrative support systems such as FRA Cells are essential to translate legal entitlements into tangible outcomes for marginalised communities, aligning with goals of social justice, inclusion and sustainable environmental governance.

Forest Rights Act Cells — at national and state levels — function as specialised institutional mechanisms to overcome implementation barriers in the FRA framework. By expediting recognition of rights, strengthening inter-departmental coordination, enhancing community awareness and improving monitoring systems, they aim to bridge the gap between statutory promise and ground-level reality.

28. Reforming Tribunals in India — Key Issues and Judicial Outlook

The Supreme Court of India has recently emphasised the need to reform the system of tribunals, raising constitutional concerns about independence, impartiality and accountability. Tribunals are quasi-judicial bodies created by Parliament or state legislatures to adjudicate specialised disputes such as tax, service, environmental and administrative matters. While they were established to provide expert, speedy and cost-effective justice, multiple issues around appointments, powers and judicial review have triggered debates on their effectiveness and constitutional validity.

What Are Tribunals?

Tribunals are statutory bodies that:

- Adjudicate specialised disputes requiring technical expertise
- Reduce the burden on regular courts
- Provide expeditious justice at lower cost
- Form part of the administrative justice system

similarities between tribunals and courts:

- give reasonable notice of proceedings
- all parties have opportunity to present cases
- all parties informed of case
- all parties present evidence and to cross-examine witnesses or test accuracy of evidence against them
- grant adjournments to prevent prejudice
- avoid interactions that suggest that tribunal is prejudicial or biased
- apply law and consider relevant law
- given clear reasons for decision

differences between tribunals and courts:

- not required to follow previous tribunal decisions
- tribunals do not have strict rules for admitting evidence just as long as it is relevant
- little or no disclosure of evidence
- staff to carry out the case with parties or on behalf of parties
- follow less formal or less adversarial procedures
- often disclose their identity to public
- seating arrangements vary in each tribunal
- sitting and standing practice varies
- oath swearing is optional
- tribunals = quasi-judicial—carries out court-like proceedings outside of court system

Examples include:



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- Income Tax Appellate Tribunal (ITAT)
- National Green Tribunal (NGT)
- Central Administrative Tribunal (CAT)
- Armed Forces Tribunal (AFT)

Why Reform Has Been Sought

Despite their intended purpose, tribunals face several constitutional and operational concerns.

1. Independence and Impartiality Concerns

- Appointment processes were often controlled by the executive, creating perceptions of bias.
- The Supreme Court, in cases such as Madras Bar Association v. Union of India (2014), struck down provisions affecting independence and emphasised the need for independent selection mechanisms.

2. Status and Pay Parity

- Inconsistent service conditions and judicial status across tribunals undermine institutional credibility.
- Lack of parity with regular judicial officers affects morale and talent retention.

3. Judicial Review and Delay

- High pendency in some tribunals reduces the promise of speedy justice.
- Decisions are frequently challenged before High Courts, leading to layered litigation and delays.

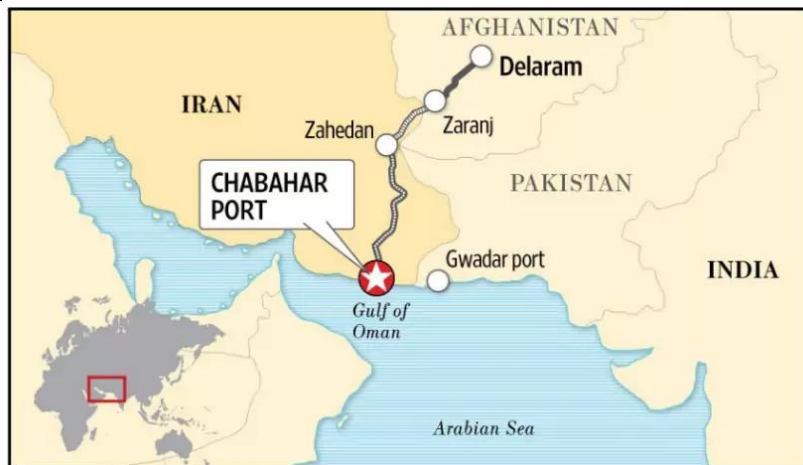
The debate over tribunal reform reflects a broader constitutional tension between administrative efficiency and judicial independence. Tribunals are instruments of specialised justice, but without structural independence, transparent appointments and statutory clarity, they risk becoming extensions of executive control. Sustainable reform requires strengthening institutional design while reaffirming core constitutional principles of separation of powers, rule of law and access to justice.

29. Chabahar Port — Strategic Maritime Node and India's Regional Connectivity Push

Chabahar Port is a deep-sea, oceanic port located in the Sistan and Baluchestan province of Iran, along the Gulf of Oman, offering direct access to the Indian Ocean. This differentiates it from most Iranian ports that are primarily Persian Gulf-oriented and gives Chabahar strategic significance in maritime trade and regional connectivity.

Current News

In early February 2026, India completed its committed financial contribution of \$120 million (for procurement of equipment) for the development of Chabahar Port, fulfilling a part of its long-term engagement under a 10-year contract with Iran first formalised in 2024. Despite this, the initiative faces uncertainty due to geopolitical pressures, especially U.S. sanctions that impact third-country economic engagements with Iran. While a sanctions waiver was previously in place, its future beyond April 2026 remains unclear, and recent developments in the Union Budget 2026–27 omitted a fresh allocation for Chabahar, signalling the challenge of navigating external pressures.



Strategic Importance for India

Chabahar Port holds multidimensional value for India's foreign and economic policy:

1. Connectivity to Afghanistan and Central Asia:

The port provides India with a trade and transit route to landlocked Afghanistan and Central Asian markets by bypassing Pakistan, which historically has constrained direct economic access due to political antagonism. This is part of broader regional connectivity visions such as the International North-South Transport Corridor (INSTC) that links South Asia with Central Asia, Russia and Europe.

2. Geopolitical Leverage:

Chabahar acts as a counterbalance to China-supported infrastructure projects in the region, most notably the Gwadar Port in neighbouring Pakistan, underpinning India's strategic relevance on the Arabian Sea and western Indian Ocean.

3. Economic and Trade Gains:

As a deep-water port capable of handling large vessels, Chabahar enhances maritime trade and offers an economic gateway that can stimulate cargo flows, lower transportation costs, and bolster regional commerce.

Chabahar Port remains a pillar of India's strategy to deepen ties with Iran, enhance regional connectivity, and secure access to Central Asia without reliance on Pakistan-controlled routes. While diplomatic and geopolitical headwinds — particularly related to U.S. sanctions — complicate its development, India's financial fulfilment and continued dialogue with Iran underscore its long-term strategic investment in the port's potential as a connectivity and regional influence hub.

30. Kavach: Enhancing Railway Safety through Indigenous Technology

Kavach is an indigenous Automatic Train Protection (ATP) system developed by Indian Railways to prevent train collisions, signal passing at danger (SPAD), and reduce human error, thereby significantly enhancing safety across the rail network. It represents a major leap in the modernisation of India's railway signalling and safety infrastructure.

What Is Kavach?

Kavach (meaning shield in several Indian languages) is a radio-based train protection and warning system that automates crucial safety actions. It works as a communication and control mechanism between the locomotive and trackside equipment using radio frequency communication, GPS, and digital signalling protocols.



Kavach is a milestone in India's rail safety architecture — an indigenous automatic train protection system that transforms how safety is enforced on tracks. By preventing collisions and signal violations, reducing reliance on human judgment in critical moments, and advancing the rail network's digital transformation, Kavach strengthens both operational safety and strategic resilience of Indian Railways in the 21st century.

31. Shipki La Pass: Strategic Border Passage Between India and China

Shipki La is a high-altitude mountain pass located in the Himalayas on the India–China border, connecting the Indian state of Himachal Pradesh (Kinnaur district) with the Tibet Autonomous Region of China. It lies at an elevation of approximately 3,900 metres above sea level and serves as one of the traditional trading routes between the two countries.



Shipki La pass

- **Location:** Situated in **Kinnaur** district, Himachal Pradesh, on the India-Tibet border.
- **Elevation:** Stands at **3,930 meters (12,894 feet)** above sea level.
- **Geographical Importance:** The **Sutlej River** enters India through this pass.
- **Historical Trade Route:** Used for **Indo-Tibetan trade** since the 15th century.
- **Cultural Significance:** Linked to **Buddhist heritage, folklore, and Kailash Mansarovar pilgrimage.**
- **Closure:** Trade halted after the **1962 Sino-India War**, later affected by Doklam standoff and COVID-19 pandemic.
- **Recent Developments:** Opened for Indian tourists without permits, boosting border tourism.
- **Future Prospects:** Potential revival of trade and religious tourism, enhancing India-Tibet connectivity

Geographical and Strategic Importance

Shipki La overlooks the Sutlej River, which flows from Tibet into India, making it not just a border pass but also an important hydrological and topographical marker. The pass is part of the Greater Himalayan Range and sits near other significant border landmarks, such as Nako Lake and the Spiti Valley region, underlining its significance for both civilian access and military logistics in high-altitude terrain.

Historical Significance



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Traditionally, Shipki La was used as a trade route for local people and merchants between Tibet and the Indian Himalayan region. For centuries, caravans traversed this pass carrying salt, wool, grains, and other commodities under informal exchanges between communities living on both sides of the border.

Strategic and Security Dimensions

Shipki La is located in a stretch of the border known for its challenging terrain, limited infrastructure, and high vulnerability to weather extremes. India has enhanced military deployment and infrastructure development in the area to ensure patrol accessibility and strategic oversight. Proximity to major border areas and the Indo-Tibet frontier underscores Shipki La's continuing relevance in India's border management strategy.

Infrastructure and Connectivity

- Although the pass itself is not open for trade or transit, India has focussed on developing highways and border roads in the region to improve connectivity between interior Himachal Pradesh and frontier outposts. Better connectivity improves quick mobilization of troops and supplies and reduces the logistical disadvantages posed by rugged mountainous terrain.
- Shipki La Pass stands as a symbol of historic Indo-Tibetan exchanges and a key strategic feature on the India-China border. While its traditional trading role has receded due to geopolitical realities, its significance for border security, strategic infrastructure, and military preparedness remains important in India's Himalayan frontier calculus

32. Anti-Defection Law: Purpose, Features, and Challenges

The Anti-Defection Law is a constitutional mechanism under Article 102(2) and Article 191(2) of the Indian Constitution and is operationalised through the Tenth Schedule (added by the 52nd Constitutional Amendment Act, 1985).



Its primary goal is to prevent political defections which may be motivated by the lure of office or material benefits, thereby ensuring stability of governments, predictability in legislative behaviour, and respect for the mandate of the electorate.

Why the Law Was Enacted



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In the decades after India's independence, rampant defections by elected legislators caused the fall of several governments at both central and state levels. This phenomenon, known as "Aya Ram, Gaya Ram" politics, undermined democratic stability and eroded public faith in electoral mandates. To curb opportunistic switching of allegiance by legislators, the Anti-Defection Law was introduced.

Key Provisions

- **Grounds for Disqualification:** A member of Parliament or a state legislature becomes liable for disqualification from membership if they:
 1. Voluntarily give up membership of the political party on whose symbol they were elected;
 2. Vote or abstain from voting contrary to the directives of their party without prior permission.
- **Splits and Mergers:** Originally, if one-third of the legislators of a party split to form a new group it was exempt from disqualification (a "split"), and mergers were protected if two-thirds of members agreed. However, later judicial interpretation and subsequent amendments removed the split exception, leaving only the merger provision (two-thirds).
- **Decision Authority:** The decision on disqualification lies with the Speaker or Chairman of the respective House, and their ruling is subject to judicial review.

Significance

- **Promotes Stability:** By discouraging legislators from switching parties for office or benefits, the law enhances government continuity and reduces horse-trading.
- **Respects Mandate:** It honors the choice of voters by ensuring their elected representative does not defect shortly after election.
- **Party Discipline:** It reinforces collective responsibility and ideological coherence within parties.

Challenges and Criticisms

Despite its intentions, the Anti-Defection Law has been critiqued:

1. **Concentration of Power in the Speaker:**

Since the Speaker decides on disqualification petitions, there are concerns about partisanship, as the Speaker often belongs to the ruling party.

2. **Judicial Delay:**

Although Speaker decisions are subject to judicial review, delays in courts can prolong ambiguity, undermining the law's efficacy.

3. **Inhibits Dissent within Parties:**

The law may stifle legitimate intra-party debate, as legislators fear disqualification for dissenting positions.

4. **Government Arbitrage:**

Parties can resort to re-designating legislators or exploiting procedural loopholes to circumvent the law's spirit.



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The Anti-Defection Law remains central to India's effort to curb opportunistic politics and ensure legislative stability. While its core intent aligns with democratic accountability and governance stability, implementation challenges and procedural ambiguities call for reforms that balance party discipline with individual conscience and legislative independence. A robust and impartial adjudication mechanism, coupled with strengthened internal party democracy, can improve the law's effectiveness without compromising fundamental legislative freedoms.

INTERNATIONAL:

1. United Nations Commission for Social Development (CSocD)

The United Nations Commission for Social Development (CSocD) is a key functional commission of the UN Economic and Social Council (ECOSOC) mandated to promote international cooperation on social development issues. It plays a central role in shaping global norms and policies for inclusive and equitable development, in line with human well-being and dignity.

COMMISSION for SOCIAL DEVELOPMENT

United Nations Headquarters, New York



The Commission provides a forum where governments, civil society, and experts discuss, evaluate, and formulate policies related to social development, and chart collective strategies for progress. Its discussions and outcomes influence social policy frameworks in the UN system as well as national policy priorities.

History and Mandate

- Established in 1946, CSocD is one of ECOSOC's oldest functional commissions.
- It supports the implementation of global commitments made at major UN summits, notably the 1995 World Summit for Social Development held in Copenhagen. This summit pioneered a social development consensus centered on poverty eradication, full employment, and social integration as pillars of a just and equitable society.

CSocD's core mandate includes:

1. Reviewing implementation of agreed social development goals by member states.
2. Providing policy guidance and recommendations on emerging social priorities.
3. Promoting international exchange and cooperation on social issues.
4. Contributing to ECOSOC and the broader UN development agenda, including the SDGs.

Key Functions and Activities

Annual Session

- CSocD meets annually at the UN Headquarters in New York, typically in February. Each session focuses on a priority theme of high relevance to global social challenges.
- The Policy Priority for 2026 is "Affordable housing and social protection systems for all to address homelessness", reflecting global concerns around inequality, urbanization, and social security.

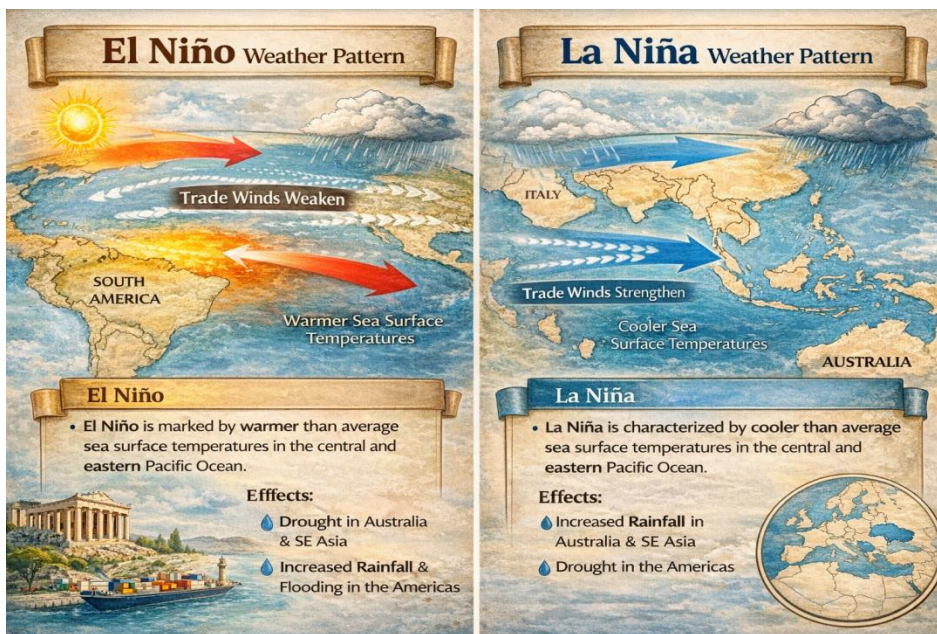


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- The United Nations Commission for Social Development remains a pivotal platform for shaping international social policy and monitoring global progress on key social objectives. By aligning national strategies with collective commitments, CSocD supports a more inclusive and equitable world - a central premise of the 2030 development agenda and the spirit of social justice embedded in the UN framework.

2. El Niño & La Niña Weather Patterns

El Niño and La Niña are two opposite phases of a natural climate phenomenon known as the **El Niño–Southern Oscillation (ENSO)**, which emerges from variations in sea surface temperatures and atmospheric conditions across the tropical Pacific Ocean. These periodic fluctuations have profound impacts on global weather and climate patterns, influencing rainfall, temperatures, storm activity, agriculture, water resources, and economies around the world.



1. Understanding ENSO: The Big Picture

The **El Niño–Southern Oscillation (ENSO)** is a coupled ocean–atmosphere system in the Pacific that oscillates between three states:

- El Niño (warm phase)** - warmer-than-average Pacific sea surface temperatures (SSTs)
- La Niña (cool phase)** - cooler-than-average Pacific SSTs
- Neutral** - near-average conditions

These states arise due to changes in the **trade winds**, **sea surface temperatures**, and the **Walker circulation** - the east-west atmospheric flow over the equatorial Pacific.



2. What Is El Niño?

El Niño (Spanish for “the boy child”) refers to the **abnormal warming** of the central and eastern tropical Pacific Ocean. Historically first noted by Peruvian fishermen around Christmas (“El Niño” linked to the Christ Child), it is now understood as the *warm phase of ENSO*.

Key Features of El Niño

- **Warmer sea surface temperatures** in the central and eastern Pacific.
- **Weakening of trade winds**, which normally blow from east to west.
- Reduction in upwelling of cold, nutrient-rich deep water off South America.
- Can last **9–12 months or longer** and typically recurs every **2–7 years**.

Global Impacts of El Niño

El Niño disrupts global atmospheric circulation, leading to varying regional effects:

- **Droughts and heatwaves** in Australia, Southeast Asia, and parts of India.
- **Flooding and enhanced rainfall** in the western Americas.
- Altered storm patterns, including changes in hurricane frequency.
- Temporary **global temperature increases** because of the warm Pacific waters.

3. What Is La Niña?

La Niña (Spanish for “the little girl”) is the **cool phase of ENSO**, characterized by **below-average sea surface temperatures** in the same region of the Pacific. It is effectively the opposite of El Niño.

Key Features of La Niña

- **Stronger trade winds** than normal.
- Enhanced upwelling of cold nutrient-rich water in the eastern Pacific.
- Often lasts longer than El Niño events, sometimes up to two years or more.

Global Impacts of La Niña

- **Increased rainfall and flood risk** in Southeast Asia, northern Australia, and parts of South Asia, including India.
- **Cooler global temperatures** relative to El Niño phases.



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· **Stronger hurricane activity** in the Atlantic due to favorable atmospheric conditions.

4. How ENSO Influences Weather Patterns

Both El Niño and La Niña modify normal weather patterns through a process called **teleconnections** - distant atmospheric effects that link Pacific ocean changes to weather across the globe.

For example:

- In **El Niño years**, India may experience **weaker monsoons**, reduced rainfall, and heatwaves, hurting agriculture.
- During **La Niña**, monsoon rainfall tends to be **above average**, increasing flood risk, especially in northwest India and Bangladesh.
- El Niño often suppresses Atlantic hurricane formation, while La Niña **enhances** it.

These patterns are not absolute and can vary based on interactions with other climate modes like the **Indian Ocean Dipole (IOD)**.

5. ENSO and India: Monsoons & Agriculture

India's agriculture and economy are *highly sensitive* to ENSO states because they influence the **Southwest Monsoon**, the lifeline of the country's food systems and water supplies:

- **El Niño years** are often associated with **below-normal monsoon rainfall**, increasing drought risk and lowering crop yields.
- **La Niña conditions** typically lead to **enhanced monsoon precipitation**, sometimes resulting in floods, waterlogging, and regional disruptions.

These impacts extend to water resources, hydroelectric power generation, and rural incomes, making ENSO monitoring critical for planning.

6. ENSO, Climate Change, and Extreme Events

While ENSO is a natural cycle, **climate change modifies its impacts**. Warmer global oceans mean that **rainfall and flood events can be more intense** during La Niña, and drought and heat extremes can be exacerbated during El Niño. Recent research attributes intensified rainfall in southern Africa to a combination of La Niña and anthropogenic warming.

Moreover, scientific bodies like the **World Meteorological Organization** have noted possibilities of changing ENSO behavior, including weak or neutral phases that make seasonal prediction more challenging.

7. The Importance of Prediction and Preparedness

Accurate ENSO forecasts - enabled by satellites, ocean buoys, and climate models - are essential for **agricultural planning, water resource management, disaster preparedness, and economic planning**. Early warning of El Niño or La Niña allows governments, farmers, and industries to adapt and mitigate potential negative effects.



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El Niño and La Niña are powerful climate patterns that arise from changes in Pacific sea surface temperatures and atmospheric circulation. Together they shape seasonal weather extremes, influence monsoons, drive floods and droughts, and interact with broader climate change drivers. Understanding these patterns is crucial for climate resilience, agricultural planning, and disaster management around the world.

3. East China Sea - A Strategic and Contested Maritime Space

The East China Sea (ECS) is a marginal sea of the Pacific Ocean located between China, Japan, Taiwan, and South Korea. It is a key geopolitical zone because of its strategic location, rich natural resources, and overlapping maritime claims. The region has been a flashpoint in East Asian geopolitics, particularly over territorial sovereignty, maritime rights under UNCLOS, and access to hydrocarbons.

Geographical Overview

The East China Sea extends:

- From the Korea Strait in the north
- Southward toward the Taiwan Strait
- Bounded by the Ryukyu Islands in the east

It connects to the South China Sea via Taiwan Strait and to the Philippine Sea via the Ryukyu archipelago. Its continental shelves are believed to be rich in hydrocarbons, marine fishery resources, and seabed minerals, making it economically and strategically significant.



Key Issues in the East China Sea

1. Sovereignty Dispute Over the Senkaku/Diaoyu Islands

A major flashpoint is the territorial dispute between Japan and China (and to a lesser extent Taiwan) over a group of uninhabited islets known as:

- Senkaku Islands (in Japan)
- Diaoyu Islands (in China)



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Japan administers these islands, but China and Taiwan also assert sovereignty, citing historical records and maps. This dispute is central to broader Sino–Japanese strategic rivalry, and has periodically led to naval encounters, political tensions, and mutual military posturing.

2. EEZ and Maritime Boundaries

Under the United Nations Convention on the Law of the Sea (UNCLOS):

- Coastal states can claim a 200-nautical-mile Exclusive Economic Zone (EEZ).
- In semi-enclosed seas like the ECS, overlapping EEZs require bilateral delimitation.

Japan and China have overlapping EEZ claims in the ECS. Although they signed a 2008 agreement to shelve disputes and pursue joint development, progress has been limited. The absence of a final EEZ boundary has complicated resource exploitation.

3. Hydrocarbon Resources

The ECS continental shelf has potential oil and gas reserves, but exploration is constrained by unresolved boundary claims. Both Japan and China have expressed interest in drilling in overlapping areas, making resource competition a driver of strategic tension.

4. Freedom of Navigation & Military Posturing

The ECS is a major shipping lane linking Northeast Asia to Southeast Asia.

- Japan, China, and U.S. naval assets routinely operate in the region.
- China's maritime militia and coast guard have increasingly appeared near contested features.
- Japan and U.S. conduct joint patrols, stressing freedom of navigation.

This has raised the spectre of miscalculation between major powers.

Strategic Significance

Regional Security

The ECS stretches across key states - China, Japan, South Korea, and Taiwan - making it vital to:

- Balance of power in East Asia
- US alliance network (Japan & South Korea)
- China's maritime strategy

The dispute over the Senkaku/Diaoyu Islands intersects with:

- Japan–US Security Treaty
- China's Anti-Access/Area Denial (A2/AD) posture
- Taiwan Strait dynamics



International Law Dimensions

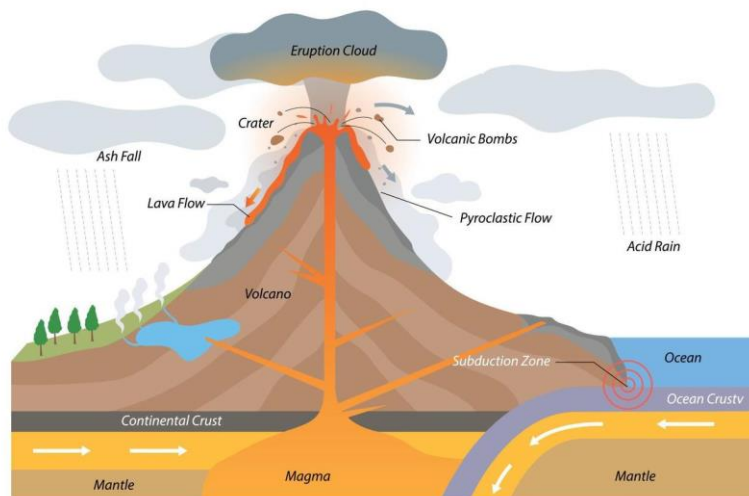
Under UNCLOS:

- Sovereignty over islands affects the extent of EEZs.
- Artificial platforms and resource exploration must respect maritime jurisdiction.
- Dispute resolution mechanisms (e.g., arbitration) exist but require consent.

While China initially rejected third-party adjudication in many disputes, Japan has at times favored legal mechanisms. However, both countries have avoided escalation to formal legal arbitration, preferring bilateral negotiation.

4. Fuego Volcano: Recent Activity and Geological Overview

Fuego Volcano - formally known as **Volcán de Fuego** - is an active stratovolcano in **Guatemala**, Central America, and one of the most persistently explosive volcanoes in the region. Its name, *Fuego*, literally means “**fire**” in Spanish, reflecting its volatile character and frequent eruptions that have shaped both its geology and human settlement patterns around it. (Source: general knowledge/background)



VOLCANIC ERUPTION

Fuego forms part of the **Central American Volcanic Arc**, a chain of volcanoes produced by the **subduction of the Cocos Plate beneath the Caribbean Plate**. This tectonic process generates magma that fuels frequent volcanic eruptions across Guatemala, El Salvador, Nicaragua, and Costa Rica.

Stratovolcanoes like Fuego are characterised by:

- **Steep flanks derived from layered lava and pyroclastic deposits;**
- **Explosive eruption styles** driven by gas-rich magma;
- **Lava flows interspersed with ash, cinders, and volcanic bombs.**



Hazards and Monitoring

Fuego's eruptions pose multiple hazards:

- **Pyroclastic flows:** fast, hot avalanches of gas and fragmented rock that can devastate communities;
- **Ashfall:** affecting air quality, disrupting aviation, and contaminating water supplies;
- **Lahars:** volcanic mudflows triggered by rainfall mixing with ash and debris.

To mitigate risks, agencies use **seismic monitoring, satellite imagery, gas emission data, and ground patrols** to track changes in activity and forecast possible escalations.

Human Impact and Preparedness

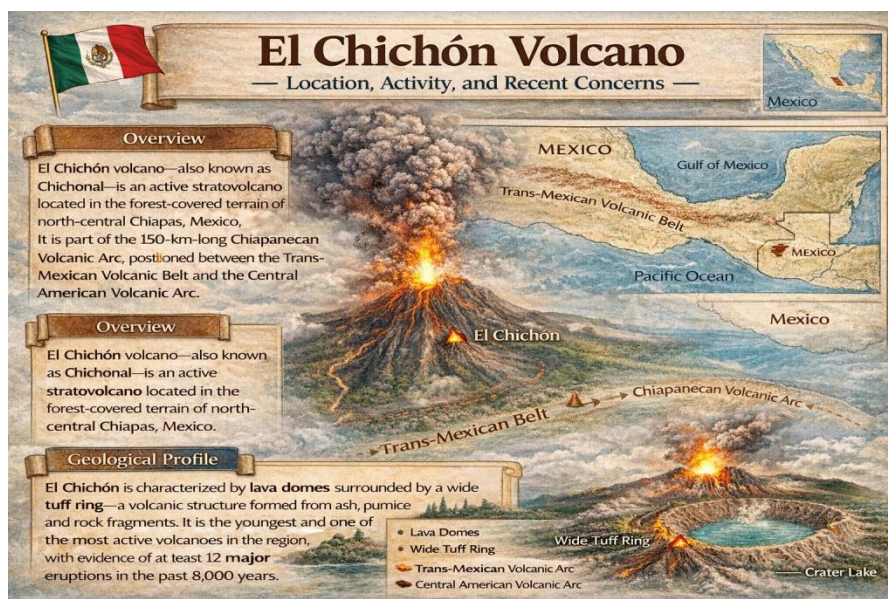
Communities near Fuego are accustomed to living with volcanic risk. Local disaster management authorities work with residents on **evacuation preparedness, early warning systems, and public awareness campaigns**. Despite periodic eruptions, many continue to live in the surrounding highlands due to agricultural livelihoods and historical settlement patterns.

5. El Chichón Volcano - Location, Activity, and Recent Concerns

El Chichón volcano—also known as *Chichonal*—is an **active stratovolcano** located in the **forest-covered terrain of north-central Chiapas, Mexico**, forming part of the **150-km-long Chiapanecan Volcanic Arc** between the **Trans-Mexican Volcanic Belt** and the **Central American Volcanic Arc**.

Geological Profile

El Chichón is characterised by **lava domes surrounded by a wide tuff ring**—a volcanic structure formed from ash, pumice and rock fragments. It is the **youngest and one of the most active volcanoes in the region**, with evidence of at least **12 major eruptions in the past 8,000 years**.





Historic Eruption of 1982

The volcano became globally known following a **series of powerful explosive eruptions between March 28 and April 4, 1982**-its most recent major activity. These eruptions were **Plinian in nature**, ejecting vast volumes of ash, sulfur dioxide and tephra high into the atmosphere.

- The 1982 activity destroyed the summit lava dome and formed a new **caldera about 1 km wide**, now occupied by an acidic crater lake.
- The eruption was **Mexico's largest volcanic disaster in modern history**, with pyroclastic flows and surges devastating areas around the volcano and leading to **around 1,900 deaths and widespread destruction of villages**.
- Ash and sulfur emissions affected agriculture and infrastructure over vast regions, highlighting the wide-ranging impacts of explosive volcanic eruptions.

Why It Matters

The 1982 eruption has been studied extensively because it showed how even **relatively small volcanoes** can produce highly explosive and deadly events. Large amounts of sulfur dioxide and particulates injected into the stratosphere had **measurable effects on climate patterns**, including regional cooling in the Northern Hemisphere, underscoring the **global atmospheric impact of volcanic eruptions**.

El Chichón is a volcano with a **violent past and an active present**. While recent signs do not unequivocally point to an imminent eruption, the unusual crater changes have underscored the need for vigilant observation and disaster preparedness in volcanic regions

6. Colombo Security Conclave (CSC) - Strengthening Maritime and Regional Security Cooperation

The Colombo Security Conclave (CSC) is a multilateral security platform comprising four Indian Ocean littoral states - India, Sri Lanka, Maldives, and Mauritius. It was initiated in 2011 (first meeting held in Colombo) with the shared objective of enhancing maritime security cooperation in the Indian Ocean Region (IOR), promoting peace, and addressing non-traditional security threats.

Why It Matters

The Indian Ocean is a strategic space vital for global trade, energy shipments, and connectivity. More than two-thirds of the world's maritime oil and a significant share of container traffic flow through these waters. With rising geopolitical competition and evolving security threats - including piracy, terrorism, trafficking, and illegal fishing - littoral states have recognised the need for collaborative security frameworks.

Objectives of the Colombo Security Conclave

The key aims of the CSC are:

1. Enhancing Maritime Security Cooperation:
Improve information sharing, joint patrols, coordinated responses, and maritime domain awareness among member states to secure the IOR against asymmetric threats.



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2. Addressing Non-Traditional Threats:
Focus on issues such as piracy, arms trafficking, human smuggling, narcotics trade, and maritime terrorism, which pose significant risks to regional stability.
3. Building Trust and Capacity:
Facilitate capacity building through training, exercises, and exchanges to strengthen law enforcement and surveillance capabilities of member states.
4. Promoting Rule-Based Order:
Reinforce commitment to international law, freedom of navigation, and peaceful resolution of disputes.

The Colombo Security Conclave is a key regional initiative that promotes collaborative maritime security in the Indian Ocean Region, particularly among smaller littoral states facing asymmetric security challenges. By institutionalising dialogue, information sharing, capacity building, and joint responses to emerging threats, the CSC complements broader regional security architectures and reinforces India's vision of a stable, secure, and rules-based Indian Ocean, benefitting all stakeholders.

7. Agricultural Safeguards in the India-US Interim Trade Agreement: Balancing Trade Liberalisation and Farmer Protection

India and the United States have been negotiating a bilateral interim trade agreement to improve market access and ease trade tensions. A key agenda item has been agriculture - a politically sensitive and economically significant sector for both countries. As part of this negotiation, agricultural safeguards have emerged as critical tools to balance trade liberalisation with domestic farmer interests.

What Are Agricultural Safeguards?

Agricultural safeguards are temporary, emergency trade measures that a country can impose to protect its domestic agricultural producers from sudden import surges that may disrupt prices, incomes, or production stability. These measures are designed to provide policy space to address short-term imbalances without violating international trade rules.

Safeguards can include:

- Temporary import tariffs or quota increases with compensation mechanisms
- Trigger levels for imports beyond which protective measures activate
- Price bands or tariffs tied to world price fluctuations

Their purpose is to allow countries to proceed with trade liberalisation while retaining a backstop to shield vulnerable domestic sectors.

Why Agriculture Safeguards Are Central in India-US Talks

1. Domestic Sensitivity

Agriculture in India is a politically charged sector, employing over half the workforce and feeding millions of smallholder and marginal farmers. Any trade agreement that potentially exposes Indian producers to a flood of cheaper imports - particularly from highly subsidised US agribusiness - raises concerns about income loss and rural distress.

2. US Export Interests



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The United States seeks greater market access for its agricultural products such as pulses, oilseeds, dairy and wheat. These products often benefit from significant domestic subsidies and scale advantages, giving American exporters a competitive edge. Without safeguards, India's markets could be inundated with imports, depressing local prices and undermining farmers' incomes.

3. WTO Compatibility

Safeguards discussed are intended to be consistent with World Trade Organization (WTO) rules, particularly the Agreement on Safeguards and the Peace Clause in agriculture under the WTO's Agreement on Agriculture. This ensures that India can impose relief measures temporarily if import surges injure domestic producers.

How Safeguards Could Work in Practice

Negotiators are considering mechanisms where:

- Import surges beyond a pre-determined trigger level could activate additional tariffs for a limited period.
- Tariffs could rise gradually rather than abruptly, providing time for adjustment.
- Data thresholds based on import volumes or price anomalies could automate safeguards, reducing discretionary policy risks.

These tools aim to balance:

- Trade liberalisation and compliance with treaty obligations, and
- Protection of domestic production structures and rural livelihoods.

Significance for India

Agricultural safeguards in the interim trade agreement are significant for several reasons:

1. Protecting Farmer Incomes

Safeguards provide a cushion against sudden import shocks that could depress domestic farmgate prices and disrupt rural economies.

2. Policy Space Preservation

India seeks to retain policy autonomy to support agricultural development, including programmes like Minimum Support Price (MSP), public procurement, and rural credit, without feeling forced into unfavorable liberalisation.

3. WTO-Consistent Framework

A safeguards regime aligned with WTO rules allows India to pursue trade facilitation while preserving legal avenues to respond to market disruptions without retaliation.

4. Precedent for Future Agreements

How India negotiates agricultural safeguards with the US could influence future trade pacts - including regional agreements and free trade agreements (FTAs) - especially where agriculture is a politically sensitive pillar.



Challenges and Considerations

While safeguards provide protection, they also pose challenges:

1. Defining Trigger Thresholds

Accurately determining import triggers that reflect genuine disruption rather than normal fluctuations requires rigorous data and transparent criteria.

2. WTO Scrutiny

Safeguard measures, if perceived as disguised protectionism, can be challenged at the WTO dispute settlement mechanism, requiring India to justify them as temporary relief in line with agreed norms.

3. Administrative Capacity

Implementation requires robust monitoring systems, trade data analytics, and institutional capacity to identify surges and administer countervailing measures promptly.

Agricultural safeguards in the India–US interim trade agreement embody a delicate balancing act - promoting trade liberalisation while protecting domestic farmers and securing policy autonomy. They exemplify India's broader trade strategy of leveraging WTO-compatible mechanisms to manage market openness without compromising rural livelihoods or economic stability. As negotiations progress, the design and implementation of such safeguards will be critical in shaping India's agricultural trade policy in a globalised framework.

8. International Energy Agency (IEA)

The International Energy Agency (IEA) is a Paris-based autonomous intergovernmental organisation established in 1974 in response to the international energy crisis following the 1973 oil embargo. Its primary mission is to promote energy security, economic growth, environmental sustainability and global energy policy cooperation among its member countries and partners. Although originally focused on oil supply security, the IEA's role has expanded over decades to encompass renewables, energy efficiency, climate change mitigation, clean energy transitions and data analysis. (Vision text)

Genesis and Background

- The IEA was created under the framework of the Organisation for Economic Co-operation and Development (OECD) in response to the Yom Kippur War and Arab oil embargo that disrupted global oil supplies.
- Its formation marked a shift from unilateral national policies toward a coordinated multilateral approach to energy security among consumer nations.
- Over time, its membership and mandate expanded beyond oil to address broader energy policy and climate concerns.

Membership & Structure

- Founding Members: Initially, energy-importing OECD countries like the United States, Japan, European nations and others.
- Current Membership: Includes over 30 member countries and an increasing number of associate partners from Africa, Asia and the Middle East.



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• Membership reflects a blend of major energy consumers and emerging economies, making IEA a key forum for energy cooperation.

Governing Bodies:

- IEA Governing Board: Oversees policies and initiatives.
- Secretariat: Headquartered in Paris, France, led by an Executive Director.

9. Place in News: Eritrea — Geography, Context, and Strategic Relevance

Location and Basic Facts

Eritrea is a sovereign country in the Horn of Africa, bordered by:

- Red Sea to the northeast
- Sudan to the west
- Ethiopia to the south
- Djibouti to the southeast

Its capital and largest city is Asmara, renowned for its Italian colonial era architecture and cultural heritage. The country's long coastline along the Red Sea gives it significant access to one of the world's most important maritime arteries.



Historical Background

Eritrea's modern history has been shaped by colonialism and a protracted struggle for independence:

- Colonised by Italy in the late 19th century, it later passed under British administration after World War II.



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- In the 1950s, Eritrea was federated with Ethiopia, but attempts by Ethiopia to fully annex it ignited decades of armed resistance.
- After a long liberation struggle, Eritrea secured formal independence from Ethiopia in 1993 following a referendum.

10. Greece: Key Facts, Recent Developments, and Strategic Importance

Greece is a nation located at the crossroads of South-Eastern Europe and the Eastern Mediterranean. It is characterised by a mountainous mainland and an extensive coastline dotted with thousands of islands, giving it a strategic position in the Mediterranean Sea. Athens is the capital and largest city.

Political and Economic Background

Greece is a parliamentary republic and a long-standing member of key multilateral institutions such as the European Union (EU), the Eurozone, and the North Atlantic Treaty Organization (NATO). Its economy has historically been dependent on services (including tourism and shipping), with gradual diversification into manufacturing and technology sectors.



Science, Infrastructure, and Culture

Greece is also known for its cultural heritage as the cradle of Western civilisation, with rich contributions to philosophy, democracy, art, and science. Its archaeological sites, literary traditions, and classical history continue to shape global cultural discourse.

Strategic Importance

- **Maritime Routes:** Greece's location enables control over critical sea lanes connecting Europe, Asia, and Africa. **Energy Corridor Potential:** The Eastern Mediterranean is emerging as an energy hub with offshore natural gas discoveries; Greece's ports and logistics infrastructure could play a pivotal role in energy exports.
- **Regional Diplomacy:** Greece often acts as a mediator in EU foreign policy, balancing ties between Western powers and regional actors.

Greece remains significant on multiple fronts—economically, politically, culturally, and strategically. Its evolution from a debt-strained economy to a stabilising EU player, and its active engagement in Mediterranean security and regional diplomacy, underscore why it frequently features in international current affairs.



SPORTS:

1. Carlos Alcaraz won the Career Grand Slam:

The Australian Open is a Grand Slam hard-court tennis tournament held every January at Melbourne Park, Australia. In 2026, it made global headlines because Carlos Alcaraz defeated Novak Djokovic, completed a Career Grand Slam, and effectively marked a new era in men's tennis.

What is the Australian Open?

The Australian Open is one of the four Grand Slam tennis tournaments, alongside the Wimbledon, French Open, and US Open.

It marks the start of the global tennis calendar every year and is considered the most physically demanding Slam because it is played in peak summer conditions.

Key facts

- Sport: Tennis
- Surface: Hard court (Plexicushion → now GreenSet)
- Category: Grand Slam (2000 ranking points for singles winner)
- Time: January (mid-late)
- Established: 1905
- Nickname: The Happy Slam (player-friendly facilities, but brutal weather)

Where is it hosted?

- City: Melbourne, Australia
- Venue: Melbourne Park
- Main Stadium: Rod Laver Arena

Why Melbourne Park matters:

- Retractable roofs on main courts → matches continue despite heat or rain
- One of the most advanced tennis complexes in the world
- Regular night matches → global prime-time broadcasting

Current News (2026 Australian Open)

Men's Singles Champion – 2026

- Winner: Carlos Alcaraz
- Runner-up: Novak Djokovic
- Final Score: 2–6, 6–2, 6–3, 7–5

Why this final is historic (no exaggeration):

- Alcaraz won his first Australian Open
- He became the youngest male player ever to complete a Career Grand Slam



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- Djokovic lost his first Australian Open final (ended his perfect finals record in Melbourne)
- Clear generational shift in men's tennis

Strategic significance in tennis history:

- Confirms Alcaraz as the dominant post-Big-Three figure
- Signals the closing chapter of Djokovic's Melbourne-era dominance
- Reinforces Australian Open's role as the trend-setter Slam for the season

Why the Australian Open matters globally

- Sets the tone for the entire tennis year
- Often reveals new champions or power shifts
- Tests endurance more than any other Slam due to heat + hard courts
- Huge soft-power and tourism asset for Australia

2. Winter Olympics 2026 – Medal Table & Highlights

- The **2026 Winter Olympics** are being hosted in **Milan and Cortina d'Ampezzo, Italy**.
- **Norway finished at the top of the medal table**, winning the highest number of gold medals and continuing its dominance in Winter Olympic sports.
- The Games featured sports such as **alpine skiing, biathlon, ice hockey, figure skating, and cross-country skiing**.
- Several athletes set records, including standout performances in **cross-country skiing and alpine skiing events**.
- The event highlighted **Europe's strong presence in winter sports**, especially countries like Norway, Germany, and Sweden.

3. Jammu & Kashmir Cricket – First Ranji Trophy Final in 66 Years

- The **Jammu & Kashmir cricket team reached the Ranji Trophy final** for the first time in **66 years**.
- This achievement marks a **historic milestone for cricket development in the region**.
- The team defeated stronger domestic sides during the tournament to reach the final.
- The success reflects **improved grassroots cricket infrastructure and talent development** in Jammu & Kashmir.
- It has generated significant enthusiasm and support for cricket across the Union Territory.

4. Smriti Mandhana – BBC Indian Sportswoman of the Year 2025

- Indian cricketer **Smriti Mandhana** won the **BBC Indian Sportswoman of the Year 2025** award.
- She played a crucial role in **India's success in international women's cricket competitions**.
- Mandhana is known for her **consistent batting performances and leadership in the Indian women's team**.
- The award recognises **outstanding achievements by Indian women athletes across sports**.
- Other categories included **Emerging Player, Para-Sportswoman, and Lifetime Achievement awards**.

5. Magnus Carlsen – 2026 FIDE Freestyle World Champion

- **Magnus Carlsen of Norway** won the **inaugural FIDE Freestyle Chess World Championship 2026**.
- He defeated **Fabiano Caruana of the USA** in the final with a score of **2.5–1.5**.



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- The tournament was held in **Weissenhaus, Germany**.
- The championship featured the **Freestyle Chess format (Chess960)** where starting positions are randomized.
- This victory added another major title to Carlsen's career, strengthening his status as one of the **greatest chess players in history**.

6. Asian Rifle/Pistol Championship 2026 – India's Performance

- The **Asian Rifle/Pistol Championship 2026** was held at the **Dr. Karni Singh Shooting Range, New Delhi**.
- Indian shooters dominated the tournament with **39 gold, 15 silver, and 12 bronze medals after seven days**.
- India led the medal standings with **66 total medals at that stage of the competition**.
- Young shooters like **Prachi Gaikwad** and several junior teams delivered outstanding performances.
- The event showcased **India's growing strength in shooting sports ahead of future international competitions**.

7. Elena Rybakina – Australian Open 2026 Women's Champion

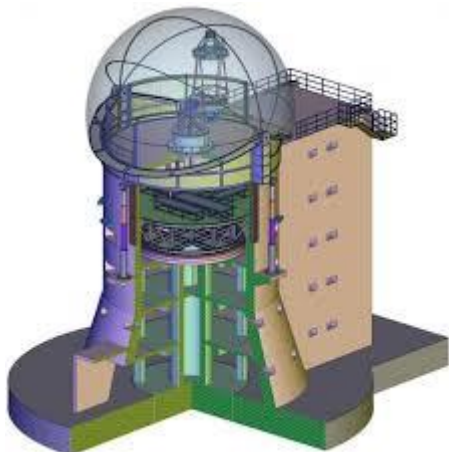
- **Elena Rybakina of Kazakhstan** won the **Australian Open 2026 Women's Singles title**.
- The tournament took place at **Melbourne Park, Australia**.
- Rybakina delivered dominant performances throughout the tournament to reach the final.
- Her victory further strengthened her position among the **top players in women's tennis**.
- The Australian Open is the **first Grand Slam tournament of the tennis calendar each year**.

SCIENCE AND TECHNOLOGY:

1. National Large Solar Telescope (NLST) – Overview, Features, and Significance

What is the National Large Solar Telescope?

The National Large Solar Telescope (NLST) is an ambitious ground-based solar observatory project being developed in India to study the Sun with unprecedented resolution and detail. It is designed to be one of the largest and most advanced solar telescopes in the world, enabling high-precision observations of solar dynamics, magnetic fields, and transient phenomena such as solar flares and coronal mass ejections (CMEs).





Key Features of NLST

1. High Angular Resolution

The NLST is expected to feature a large aperture mirror — significantly larger than existing Indian solar telescopes — which will allow it to observe extremely fine structures on the Sun's surface and atmosphere. This high resolution is critical for understanding:

- Small-scale magnetic activity
- Sunspot formation
- Plasma motions within the solar chromosphere and corona

2. Adaptive Optics

To overcome distortions caused by Earth's atmosphere, it will employ adaptive optics systems. These systems dynamically adjust mirror shapes to compensate for atmospheric turbulence, yielding sharper and clearer images than conventional telescopes.

3. Multi-Wavelength Observations

NLST will be capable of observing the Sun in different wavelengths (visible, infrared, etc.) to probe various layers of the solar atmosphere — from the photosphere to the corona — facilitating comprehensive solar research.

Scientific Objectives

1. Understanding Solar Magnetism

The Sun's magnetic field drives most solar activity. NLST will study:

- Magnetic field generation and topology
- Sunspot evolution
- Magnetic reconnection processes linked to solar flares and CMEs

2. Solar Variability and Space Weather

With precise measurement capabilities, the telescope will:

- Track subtle changes in solar irradiance
- Investigate mechanisms behind space weather events
- Provide data to improve models that forecast solar storms that can impact Earth's satellites, communications, navigation systems, and power grids.

3. Solar Atmosphere Dynamics

NLST will allow scientists to analyse:

- Chromospheric turbulence and wave propagation
- Temperature gradients and heating mechanisms of the solar corona, which is much hotter than the Sun's surface — a long-standing mystery in solar physics.



Strategic and Scientific Significance

1. Positioning India in Cutting-Edge Solar Research

Once completed, NLST will place India among the elite group of nations with world-class solar observatories. It complements global facilities such as the Daniel K. Inouye Solar Telescope (USA) and others, enabling collaborative and comparative research.

2. Contribution to Space Weather Forecasting

Understanding solar activity is key to predicting space weather, which affects:

- Satellite health and operations
- Radio communications
- GNSS navigation
- Terrestrial power infrastructure

NLST's data will help build more accurate forecasting models critical for technological societies.

3. Boost to Indigenous Science and Technology

The project will drive advancements in:

- Precision optics and mirror fabrication
- High-speed imaging and data processing
- Atmospheric correction technologies
- Collaborative scientific software and modelling efforts

This boosts India's research and development ecosystem and creates opportunities for scientists and engineers.

Collaboration and Implementation

The Indian Institute of Astrophysics (IIA), backed by institutions such as the Department of Science and Technology (DST) and international scientific partners, is leading the NLST initiative. Site selection prioritises high altitude and stable atmospheric conditions, likely in the Himalayan region, to minimise atmospheric distortions and maximize observational clarity.

Challenges and Future Prospects

1. Technical Complexity

Building and commissioning a large solar telescope with adaptive optics and multi-wavelength capabilities is technically demanding and requires sustained funding, expertise, and infrastructure, including real-time data processing facilities.

2. Data Analysis and Modelling

Solar observations generate large datasets that need advanced computational resources and skilled workforce for analysis and interpretation.



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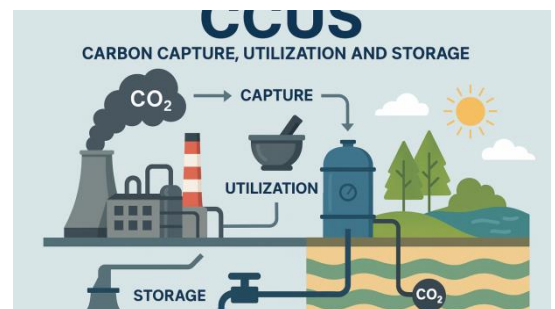
Despite these challenges, the potential scientific returns — in terms of understanding solar physics and its impact on Earth and technological systems — make NLST a landmark project for India's scientific community.

The National Large Solar Telescope represents a major leap in India's space and astrophysics research capabilities. By providing detailed insights into solar dynamics, magnetic fields, and space weather phenomena, NLST will not only contribute significantly to fundamental science but also strengthen practical applications in space weather forecasting and technological resilience. In doing so, it will elevate India's contributions to global solar physics and foster a new generation of researchers and technologies in advanced observational astronomy.

2. Carbon Capture, Utilization and Storage (CCUS)

As countries pursue net-zero emissions targets, technological solutions are becoming increasingly important alongside renewable energy expansion. Carbon Capture, Utilization and Storage (CCUS) has emerged as a key approach for reducing emissions from industries where decarbonization is technically difficult.

- CCUS involves capturing carbon dioxide emissions from industrial facilities or power plants, transporting the captured CO₂, and either storing it underground or converting it into useful products. The technology is particularly relevant for hard-to-abate sectors such as steel, cement, chemicals, and refining, where emissions arise from industrial processes rather than energy consumption alone.
- Globally, deployment of CCUS is expanding but remains limited. Around 50 million tonnes of CO₂ capture capacity is currently operational worldwide, with projects under development that could significantly expand capacity by 2030. This indicates growing momentum, yet current progress still falls short of levels required for global climate goals.
- For developing economies like India, CCUS offers a potential pathway to reduce emissions while sustaining industrial growth. The technology can help industries comply with emerging carbon regulations and maintain export competitiveness. However, major barriers persist: high capital and operational costs, energy intensity, infrastructure requirements for transport and storage, and regulatory concerns related to long-term monitoring and liability.
- Critics argue that overdependence on CCUS may delay transition away from fossil fuels, while supporters view it as a pragmatic bridge technology that complements renewables and energy efficiency measures rather than replacing them.



CCUS represents a complex yet important component of global decarbonization strategies. Its relevance in current affairs lies in balancing economic development with climate responsibilities, especially for industrializing nations seeking sustainable pathways toward low-carbon growth.

3. Quorum Sensing

What it is:

Quorum sensing is a biological communication system used by bacteria to coordinate collective behaviour. Instead of acting as isolated cells, bacteria release and detect chemical signalling molecules called **autoinducers**. As bacterial population density increases, the concentration of these molecules rises. When a threshold ("quorum") is reached, genes are switched on collectively, triggering group behaviour such as biofilm formation, virulence, light production, or antibiotic resistance.



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In simple terms: bacteria “count” how many neighbours exist before taking expensive or risky actions.

Why it occurs:

Single bacteria are weak and inefficient at tasks like attacking a host or building protective biofilms. Acting together increases survival chances. Quorum sensing evolved because coordinated action conserves energy -there’s no point producing toxins or building structures if only a few bacteria are present.

This system also helps bacteria distinguish friendly vs competing species by decoding mixed chemical signals in complex environments such as soil, oceans, or the human body.

The topic appears frequently in science & technology updates because researchers are exploring **quorum-sensing inhibitors** as alternatives to antibiotics. Instead of killing bacteria directly (which drives resistance), scientists aim to disrupt their communication so they cannot organize infections.

Quorum sensing shows that even single-celled organisms function as organized societies -a reminder that biology often operates through collective intelligence rather than isolated action.

4.C-DOT – Synergy Quantum Partnership on Quantum-Safe Security Tool

The Centre for Development of Telematics (C-DOT), the telecom R&D institution under the Department of Telecommunications (DoT), has partnered with Synergy Quantum India Pvt Ltd to develop an automated tool aimed at identifying and reporting quantum-vulnerable cryptographic algorithms in digital systems. The initiative reflects growing concern that future quantum computers could break current encryption standards, making existing communication and data security systems vulnerable.

What is the New Tool About?

The proposed system will scan devices and networks to detect cryptographic algorithms that may be vulnerable to quantum attacks and help organizations plan migration toward quantum-safe security.

Core functions of the tool:

- Automated scanning of devices and software libraries.
- Identification of cryptographic mechanisms in use.
- Classification into quantum-safe vs quantum-vulnerable algorithms.
- Generation of detailed vulnerability reports showing exact locations of weak encryption.

This moves cybersecurity from reactive defence toward proactive quantum readiness.

Why This Partnership Matters (Context)

Current encryption systems such as RSA and ECC rely on mathematical complexity, which future quantum computers could potentially solve much faster. Quantum-safe security aims to protect communications before large-scale quantum computers become operational.

Key context:

- Quantum computers threaten present-day public-key cryptography.



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- Nations are moving toward post-quantum cryptography (PQC) and quantum key distribution (QKD).
- India's telecom and strategic sectors need early preparedness due to long infrastructure life cycles.

C-DOT already works on Quantum Key Distribution (QKD) technologies that provide security based on quantum mechanics rather than computational difficulty.

Key Features of the Collaboration

The partnership aims to deliver a commercially deployable platform for government and industry use.

Major components expected include:

- Web-based black-box scanning system.
- Network traffic assessment for cryptographic risks.
- Agent-based scanning of software libraries.
- Central control software for coordinated assessment and reporting.

This is significant because most organisations currently do not even know where vulnerable encryption exists inside their systems.

Strategic Significance for India

This is not just a technology project — it has strategic implications.

1. Cybersecurity & National Security

- Critical sectors like defence, telecom, banking and governance rely on encrypted communication.
- Quantum-safe transition prevents future cyber compromises.

2. Technological Sovereignty

- Supports Atmanirbhar Bharat by developing indigenous quantum security solutions instead of importing sensitive tech.

3. Telecom Infrastructure Resilience

- Helps future-proof 5G/6G and national digital infrastructure against next-generation threats.

Broader Global Trend

Globally, countries are moving toward hybrid security models combining PQC and QKD because pure quantum systems are difficult to deploy at scale.

- Hybrid frameworks combine classical encryption with quantum-safe layers.
- Migration planning is now considered urgent because encrypted data stolen today could be decrypted later ("harvest now, decrypt later" risk).

Challenges and Limitations



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- Quantum computing capable of breaking encryption is not yet mainstream — risk is long-term but real.
- Large-scale migration to quantum-safe standards will be expensive and slow.
- Legacy systems across government and industry may not support easy upgrades.
- Standards for post-quantum cryptography are still evolving globally.

5. Moist Heatwave Phenomenon

- Research indicates **moist heatwaves** occur when **high temperatures + high humidity** combine — measured by **wet bulb temperature**.
- These are **more lethal** than classic heatwaves as sweating doesn't cool the body.
- Timing is linked to **active/break phases of the southwest monsoon**, enabling **early prediction** weeks ahead.

6. Made-in-India Humanoid Robot Debuts at LogiMAT 2026

- Indian robotics company **Addverb** unveiled a **wheeled humanoid robot called "Elixis-W"** at **LogiMAT India 2026** held in Mumbai.
- The robot is designed mainly for **industrial and warehouse operations**, especially for repetitive or hazardous tasks.
- It combines **mobility, dexterity, and artificial intelligence** to operate autonomously in complex environments.
- The system aims to improve **safety, productivity, and human-robot collaboration on factory floors**.
- The launch highlights **India's growing capabilities in advanced robotics and industrial automation**.

7. ICMR Advances Development of Kyasanur Forest Disease (KFD) Vaccine

- The **Indian Council of Medical Research (ICMR)** is developing an **improved vaccine for Kyasanur Forest Disease (KFD)**.
- KFD is a **viral hemorrhagic fever transmitted by ticks**, mainly found in the **Western Ghats region** of India.
- The vaccine is being developed **jointly by ICMR-National Institute of Virology (NIV) and Indian Immunologicals Limited (IIL)**.
- The new vaccine is a **two-dose adjuvanted inactivated vaccine**, administered **28 days apart**.
- **Phase-I human clinical trials have begun** after approval from the **Central Drugs Standard Control Organization (CDSCO)**.

8. AlphaGenome – AI Tool to Predict DNA Mutations

- **AlphaGenome** is an **advanced artificial intelligence model developed by Google DeepMind** to analyse DNA.
- It can read **up to one million base pairs of DNA at a time** and predict how mutations affect gene activity.
- The model studies both **coding and non-coding regions of DNA**, giving a more complete understanding of genetic regulation.
- It predicts processes such as **gene expression, transcription factor binding, chromatin accessibility, and genome structure**.
- The technology could help **identify genetic causes of diseases and support personalised medicine and gene therapy**.



MISCELLANEOUS

1. Continental Mantle Earthquakes - Meaning, Causes and Significance

What Are Continental Mantle Earthquakes?

Continental mantle earthquakes are seismic events that originate deep beneath continental crust, in the upper portion of the Earth's mantle - typically below where normal crustal earthquakes occur. These earthquakes take place at depths greater than those of regular crustal faults (which are usually within the upper 20–30 km of the Earth's outer layer) and can extend into the upper mantle, tens to hundreds of kilometres below the surface.

Unlike the more common shallow earthquakes generated by movement along fractures in the crust, continental mantle earthquakes occur at depths where different pressure-temperature conditions and rock properties apply, making their causes and behaviour distinct.

Why They Occur

Several mechanisms can trigger earthquakes in the continental mantle:

1. Tectonic Stress Transmission

Tectonic forces acting on plates don't stop abruptly at crustal boundaries - they can be transmitted downward into the more rigid mantle lithosphere beneath continental regions, especially where the lithosphere is thick and cold.

2. Lithospheric Heterogeneities

The continental mantle may contain zones with varying compositions, temperatures or past deformation history. These heterogeneities can act as stress concentrators, making the mantle susceptible to brittle failure under tectonic loading.

3. Ancient Fault Zones

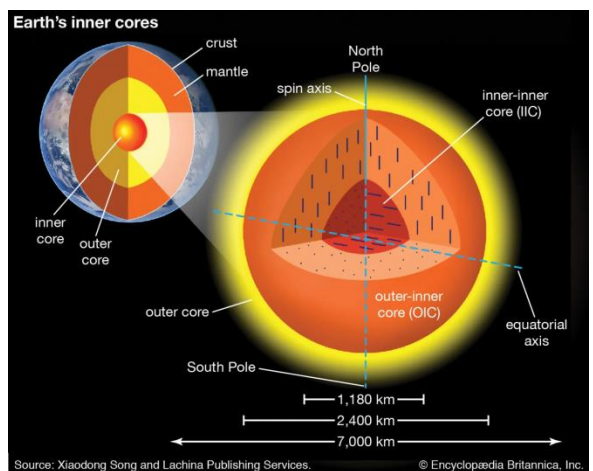
Pre-existing faults or shear zones that extend from the crust into the mantle can be sites of deep seismicity when reactivated by ongoing tectonic stresses.

4. Thermal and Phase Changes

Changes in temperature, pressure, or mineral phase transitions at depth can alter mechanical properties and induce stress redistributions that lead to mantle earthquakes.

Overall, while mantle rocks are ductile at great depths, the upper portions of the mantle below cold, rigid continental lithosphere can behave in a brittle manner under certain conditions, facilitating deep seismic slip.

How They Differ from Other Earthquakes



Source: Xiaodong Song and Lachina Publishing Services. © Encyclopædia Britannica, Inc.

Feature	Shallow Crustal Earthquakes	Continental Mantle Earthquakes
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Depth	Typically < 30 km	Tens to hundreds of km below surface
Cause	Fault slip in crust	Deep lithospheric stress, heterogeneities
Frequency	Common	Relatively rare
Energy Propagation	Strong surface shaking	Complex wave propagation due to depth
Association	Plate boundary faults	Deep intraplate zones, continental roots

Significance in Geoscience and Hazard Assessment

1. Expands Understanding of Seismicity

The existence of continental mantle earthquakes broadens seismological insights beyond shallow crustal earthquakes and deep subduction zone quakes - showing that seismicity can occur over a wide range of depths due to diverse geological processes.

2. Challenges in Prediction and Modelling

Earthquake hazards assessments typically focus on shallow seismic sources. Continental mantle events - especially in stable continental interiors - can create unexpected seismic risks because they don't conform to traditional surface fault maps or historical patterns.

3. Indicators of Deep Lithospheric Processes

These earthquakes act as probes into mantle dynamics, helping scientists infer properties like:

- Lithospheric thickness and rigidity
- Stress transmission from surface tectonics
- Mantle heterogeneities

Seismic studies of continental mantle earthquakes improve models of continental lithosphere evolution and tectonic stability.

Examples and Research Importance

Global seismic networks have documented continental mantle earthquakes in regions with old, thick lithosphere - such as parts of:

- Central Asia
- North America
- Africa

Studying these events helps distinguish between brittle failure in cold, rigid mantle lithosphere and ductile deformation at greater depths.

Continental mantle earthquakes are a special class of deep tremors occurring beneath continental crust, often in rigid lithospheric mantle zones. Their study enriches our understanding of deep Earth dynamics, stress distribution and seismic behaviour beyond shallow crustal faults. Although less frequent and more complex than typical earthquakes, their recognition is important for comprehensive seismic hazard assessment, advancing geophysical science, and refining models of the Earth's interior.



2. Nebular Hypothesis — Origin of the Solar System

The Nebular Hypothesis is the most widely accepted scientific theory explaining the formation of the solar system. It proposes that the Sun, planets, moons, asteroids, and other bodies evolved from a giant rotating cloud of gas and dust called a nebula.

Historical Origins

The idea traces back to 18th-century philosophers, but it was refined scientifically in the 20th century with contributions from scientists like Immanuel Kant, Pierre-Simon Laplace, and later astrophysicists, as observational astronomy advanced. Today's modern version integrates principles of gravity, angular momentum, and astrophysical observations.

Core Tenets of the Nebular Hypothesis

1. Collapse of a Primordial Gas Cloud

According to the hypothesis:

- The solar system began as a diffuse, rotating nebula, primarily composed of hydrogen, helium and heavier elements from earlier generations of stars.
- Some external disturbance — possibly a nearby supernova shock wave — triggered its gravitational collapse, causing the nebula to contract.

2. Formation of a Rotating Disc

As the cloud collapsed:

- It spun faster due to conservation of angular momentum.
- The cloud flattened into a protoplanetary disc with most material concentrated in the centre, where the temperature and pressure were highest.

3. Birth of the Sun

At the centre of this disc, matter continued to accumulate, increasing pressure and temperature until nuclear fusion began, giving birth to the Sun — the central star of the solar system.

Planet Formation Process

1. Accretion of Planetesimals

In the cooler outer regions of the disc:

- Dust and ice grains collided and stuck together.
- Over time, these particles grew into larger bodies called planetesimals — the building blocks of planets.

2. Differentiation Between Terrestrial and Jovian Planets



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- Inner Solar System:
Higher temperatures meant that only rock and metal could condense.
This led to the formation of small, dense, rocky planets (Mercury, Venus, Earth, Mars).
- Outer Solar System:
Cooler temperatures allowed volatiles, ices, and gases to remain stable, enabling accretion of massive planets like Jupiter and Saturn with thick atmospheres.
Ice giants like Uranus and Neptune also formed in these outer regions.

Significance in Astronomy

The nebular hypothesis is significant because it:

- Provides a coherent physical framework for how stars and planetary systems form.
- Explains the structure, rotation and distribution of solar system bodies.
- Serves as the basis for understanding exoplanetary systems observed in the universe, many of which also show disc structures and planetary formation processes.

The Nebular Hypothesis remains the cornerstone of modern cosmology's explanation for solar system formation. Its principles — collapse of a primordial gas cloud, formation of a rotating disc, central star ignition, and accretion of planets — align with astronomical observations and the physical laws of gravity and angular momentum. Although enhanced by modern refinements, the core idea continues to shape our understanding of how stars and planets come into being across the universe.

3.Thwaites Glacier — Overview and Why It Matters

Thwaites Glacier is a vast ice mass located in West Antarctica, roughly the size of Florida (about 192,000 square kilometres). It is often nicknamed the "Doomsday Glacier" because of its critical influence on global sea-level rise. Although not the largest glacier in Antarctica, its structure and position make its stability crucial for the future of global coastlines.

What Recent Studies Show

Recent scientific research — including updated satellite data and field measurements — indicates that Thwaites Glacier is melting faster than previously estimated, and certain parts of its ice shelf and grounding zone (where the glacier transitions from land to floating ice) are retreating rapidly. Scientists now warn that:

- The base of the glacier is thinning due to warm ocean water intrusion.
- Sections of the ice that were once thought stable are on the verge of structural collapse.
- The glacier's retreat is self-reinforcing: as more ice thins and floats, more warm water can get underneath, accelerating melt.

This has raised alarms because Thwaites is not an isolated ice body — it buttresses neighbouring glaciers, meaning that its collapse could destabilise a much larger portion of the West Antarctic Ice Sheet.

Why Thwaites Is Critical for Sea Level

Thwaites Glacier alone holds enough ice to raise global sea levels by about 65 centimetres if it were to melt completely. However, its collapse could trigger chain reactions that destabilise adjacent glaciers, potentially adding



several metres of sea-level rise over centuries. Even partial collapse could accelerate sea-level rise in the coming decades.

Why This Is No Longer a Distant Threat

Earlier scientific models suggested Thwaites might destabilise over centuries. However, new evidence shows that parts of the glacier are changing now, and threshold tipping points could be nearer than expected. While the exact timeline is uncertain, watches by scientists warn that significant sea-level contributions may begin within decades rather than centuries.

Thwaites Glacier is a bellwether of Antarctic ice stability. Its potential collapse represents one of the most consequential climate tipping points for humanity, with direct implications for sea-level rise, coastal vulnerability, and global climate resilience. The latest scientific assessments highlight both the urgency of accelerated climate action and the importance of ongoing polar research to refine predictions and inform policy responses.



Arctic Warming and Invasive Species Threat

Climate change is transforming ecosystems worldwide, but the Arctic region is experiencing particularly rapid environmental change. Rising temperatures are not only accelerating ice melt but also increasing the vulnerability of Arctic ecosystems to invasive species, creating new ecological challenges.

- Historically, the Arctic's extreme cold and short growing seasons acted as natural barriers against non-native plants and organisms. However, warming temperatures are expanding suitable habitats, enabling species from lower latitudes to survive and spread. Scientific projections suggest thousands of plant species could potentially establish under future Arctic climate conditions, signalling significant ecological risk.
- Human activity further amplifies this threat. Increased shipping routes, tourism, and scientific expeditions create pathways for accidental introduction of species through contaminated cargo, ballast water, or equipment. Studies show that shipping networks play a significant role in potential biological invasions across the Arctic region.
- Regions such as Greenland, Iceland, and Svalbard are considered high-risk zones due to warming trends and growing connectivity. Invasive species can disrupt fragile tundra ecosystems by outcompeting native vegetation, altering soil processes, and affecting food chains that support Arctic wildlife. These changes may also influence carbon cycling and permafrost stability, indirectly affecting global climate systems.
- The issue demonstrates how climate change triggers secondary ecological effects that extend beyond temperature rise itself, making conservation management more complex.

Arctic warming and invasive species threats highlight the interconnected nature of climate change and biodiversity loss. Preventive monitoring, international cooperation, and strict biosecurity measures are essential to protect Arctic ecosystems, making this a significant topic in contemporary environmental governance and global climate policy.



4. Himalayan Tahr

What it is:

The Himalayan tahr (*Hemitragus jemlahicus*) is a large mountain ungulate belonging to the goat-antelope family. It is native to the rugged slopes of the Himalayas, especially in countries like India, Nepal and Bhutan. It has a thick reddish-brown coat, powerful limbs, and rubber-like hooves adapted for climbing steep rocky terrain.

Males develop heavy manes and curved horns, making them highly recognizable alpine herbivores.

Why it occurs (ecological role):

The Himalayan tahr evolved as a specialist grazer in high-altitude ecosystems where survival requires balance, agility, and temperature tolerance. Its adaptations allow it to use steep cliffs that predators struggle to reach.

Ecologically, tahrs help maintain alpine grasslands through controlled grazing, influencing plant regeneration and nutrient cycles. When populations decline, grassland dynamics can shift significantly.

Why it is in news:

The species often enters current affairs due to conservation monitoring, habitat pressures, and climate change concerns affecting Himalayan biodiversity. Development activities, hunting, and habitat fragmentation continue to threaten populations in some regions. Conservation authorities track population trends because mountain ecosystems are fragile early indicators of environmental stress.

Why it matters:

The animal matters less as a random fact and more as a case study linking biodiversity conservation, fragile mountain ecology, and climate vulnerability. It also highlights the broader issue of conserving high-altitude fauna that depend on narrow ecological niches.

The Himalayan tahr is not just a mountain goat -it is a marker species for the ecological health of the Himalayan alpine zone, where climate and human pressures are increasing rapidly.

5. White-rumped Vulture

What it is:

The White-rumped Vulture (*Gyps bengalensis*) is a medium-sized Old World vulture native to South and Southeast Asia. It is recognized by its dark body, bare head and neck, and a distinctive white patch on the lower back that gives it its name. It mainly feeds on animal carcasses, making it a natural scavenger essential for ecosystem sanitation. Historically, it was extremely abundant across the Indian subcontinent, once considered one of the world's most numerous large birds of prey.

Why it occurs

The species is frequently in current affairs because of conservation actions and rescue incidents. Its population collapsed dramatically during the 1990s–2000s due to a veterinary painkiller, diclofenac, used in cattle. When vultures



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fed on contaminated carcasses, the drug caused fatal kidney failure. This triggered one of the fastest known declines of any bird species.

Recent policy actions - such as bans on harmful veterinary drugs including nimesulide, ketoprofen and aceclofenac - are aimed at reversing this decline, which is why the species continues to appear in environmental news.

Conservation status and significance:

The White-rumped Vulture is classified as Critically Endangered and protected under India's Wildlife (Protection) Act. Global numbers have fallen from millions in the 1980s to a few thousand mature individuals today.

Ecologically, vultures are indispensable because they rapidly dispose of carcasses, preventing spread of disease and reducing feral scavenger populations. Their decline has been linked to wider public-health risks such as increases in stray dogs and associated diseases.

This species is a textbook example of how a single human intervention - veterinary medicine - can destabilize an entire ecological system, and how policy, science and conservation must work together to reverse biodiversity collapse.

5. G4 Grouping

The **G4 Grouping** consists of India, Brazil, Germany, and Japan, which collectively advocate reform of the United Nations Security Council. The group demands expansion of both permanent and non-permanent categories to reflect contemporary geopolitical realities.

Core objectives

- Expansion of UNSC membership.
- Greater representation of developing countries.
- Reform for legitimacy and effectiveness of global governance

Default Loss Guarantees (DLGs)

A **Default Loss Guarantee (DLG)** is a contractual arrangement in digital lending where one entity guarantees a portion of loan losses for a regulated lender. The Reserve Bank of India allows such arrangements under regulatory safeguards to manage risk in digital lending ecosystems.

Key regulatory features

- Applicable to banks and NBFCs in digital lending.
- Guarantee amount capped (to avoid excessive risk transfer).
- Designed to prevent hidden credit risk practices.

6. Malabar Pied Hornbill

The **Malabar Pied Hornbill (Anthracoceros coronatus)** is a large frugivorous hornbill species found in India's forested and riverine landscapes, especially in parts of the Western Ghats and eastern-central India. It plays an important ecological role as a seed disperser, helping forest regeneration. The species is currently classified as **Near**



Threatened globally and is protected under **Schedule-I of the Wildlife Protection Act**, indicating high conservation priority.

Key points

- Habitat: Forests and plantations, often near riverine ecosystems.
- Ecological role: Seed dispersal and maintenance of forest biodiversity.
- Conservation concern: Habitat loss and decline of mature nesting trees

7. Ol Chiki Script

Ol Chiki is the indigenous script developed in **1925 by Pandit Raghunath Murmu** specifically for the **Santali language**, which belongs to the Austroasiatic language family. Before its creation, Santali was written using scripts like Roman, Bengali, Odia and Devanagari, which could not accurately represent its sounds. The script is now a strong symbol of tribal linguistic identity and cultural preservation.

Key points

- Developed to give Santali a dedicated writing system.
- Transitioned Santali from primarily oral tradition to structured written literature.
- Santali language is included in the **Eighth Schedule** of the Indian Constitution.

8. Indian Scientists Observe Shock Waves Triggered by a Coronal Mass Ejection (CME)

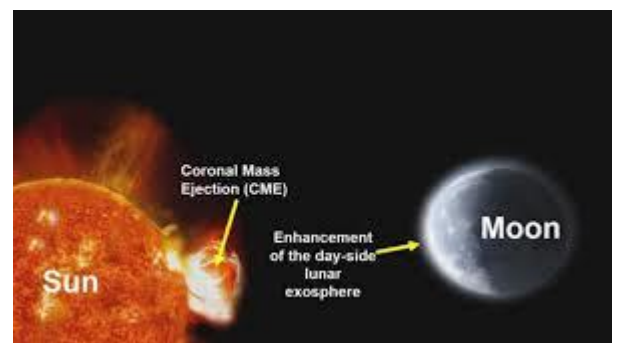
Indian scientists have observed **shock waves generated by a powerful Coronal Mass Ejection (CME)** from the Sun, enhancing understanding of **space weather processes** and their interaction with Earth's magnetic environment.

A **Coronal Mass Ejection (CME)** is a massive burst of **solar plasma and magnetic fields** expelled from the Sun's **corona (outer atmosphere)**. When directed toward Earth, CMEs can generate **shock waves in the solar wind** (streams of charged particles), affecting satellites, communication systems, navigation networks, and power infrastructure.

These observations were made using **space-based instruments** that detect abrupt changes in the **interplanetary medium**, including variations in magnetic field strength, plasma density, and particle velocity. Studying such shock fronts improves predictive capabilities for **geomagnetic storms**.

What is a Coronal Mass Ejection (CME)?

- A CME is a large-scale ejection of **plasma and embedded magnetic fields** from the solar corona.
- It carries energetic **charged particles**, mainly electrons and protons.
- When Earth-directed, it can **compress the magnetosphere**, leading to geomagnetic disturbances.
- CMEs are often associated with **solar flares and active sunspot regions**, though they can also occur independently.





Shock Waves in Space Weather

Formation:

- When a CME travels faster than the surrounding solar wind, it produces a **shock wave**, similar to a sonic boom in a plasma medium.
- The shock propagates through the heliosphere and disturbs magnetic fields and particle populations.

Detection:

- Satellites monitoring the solar wind detect sudden increases in:
 - Magnetic field intensity
 - Plasma density
 - Particle velocity
- These abrupt changes indicate the passage of a **shock front**.

Significance

1. Space Weather Forecasting

Shock waves influence the timing and intensity of geomagnetic storms. Improved understanding enhances early-warning systems.

2. Satellite and Communication Safety

Geomagnetic disturbances can:

- Disrupt satellite functioning
- Affect GPS accuracy
- Interfere with radio communication

3. Power Grid Protection

Strong geomagnetic storms can induce electric currents in transmission lines, risking transformer damage and large-scale blackouts.

4. Scientific Advancement

Observations contribute to deeper insights into:

- Solar wind dynamics
- Plasma physics
- Sun–Earth coupling mechanisms

Space Weather Impacts

- **Geomagnetic storms:** Disturb Earth's magnetic field
- **Auroras:** Visible at lower latitudes during strong events
- **Satellite drag:** Increased atmospheric drag on low-Earth orbit satellites
- **Communication disruption:** HF radio and GPS signal disturbances

This development strengthens India's contribution to **heliophysics research** and enhances preparedness against technology-disrupting space weather events.



9. Him-CONNECT Initiative

- Launched during the **World Sustainable Development Summit (WSDS)** by **Ministry of Environment, Forest & Climate Change**.
- Aims to **bridge research and action** on **Himalayan sustainability** — connects scientists, start-ups, policymakers, investors.
- Focus on translating Himalayan research into **scalable solutions**.

10. Intergovernmental Oceanographic Commission (IOC) – Integrated Ocean Carbon Research 2026

- **IOC of UNESCO** released **Integrated Ocean Carbon Research (IOC-R) Report**.
- Highlights ocean's role as a **major carbon sink**:
 - Cold waters dissolve CO₂ and transport it deep ("**solubility pump**").
 - **Land–Ocean–Ice exchange** critical for global carbon distribution.
- India is a **member of IOC (152 countries)**