



SHAPING TALENT SINCE 2009

# MONTHLY CURRENT AFFAIRS

FOR UPSC CIVIL SERVICE EXAMINATION

## MAY 2026



$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

# TABLE OF CONTENTS

- India's Buddhist Heritage
- Exposition of the Holy Relics of the Tathagata
- Bhojshala-Kamal Maula Complex
- Leiden Plates (Chola-Era Copper Plates)
- Somnath Amrit Parv
- Neanderthals
- India's Demographic Transition
- Rising Screen Time in Children: A Developmental and Public Health Concern
- Baiga Tribe
- Giritiya Communities
- Oil Spill Contingency Plan (OSCP)
- INCOIS Expands Coastal Flood Monitoring for 'Kallakkadal' Surges
- IMD's New Block-Level Monsoon Forecast System
- Rainbow Cloud
- Special Intensive Revision (SIR) Exercise: Constitutionally Valid
- Strengthening Panchayats and Urban Local Bodies
- Online Gaming Rules, 2026
- Reservation in Private Schools Under RTE Act
- Citizenship (Amendment) Rules, 2026
- Expansion of "Acid Attack Victims" Definition
- Bail is the Rule and Jail is the Exception
- BCCI is Not a Public Authority Under RTI
- Peaceful Protest is a Constitutional Right
- SC's Revival of Section 124A (Sedition)
- Education in Mother Tongue
- Tribal Exemption Under the Uniform Civil Code (UCC)
- Right to Safe Travel
- India's First Paperless Judiciary
- Committee on Empowerment of Women (2026-27)
- SHE-MARTs Initiative
- 3rd India-Nordic Summit
- India-UAE: Evolving Strategic Partnership
- UAE Exit from OPEC

# TABLE OF CONTENTS

- India Abstains on Vanuatu-Led UN Climate Resolution
- Indian War Memorial in Seoul
- BEA Global Forum (2026-27)
- Tuareg Rebels
- International Big Cat Alliance (IBCA)
- Kimberley Process Intersessional Meeting 2026
- India's R&D Ecosystem
- State of India's Labour Market
- NITI Aayog Launches DPI@2047 Roadmap
- RBI Cancels Banking Licence of Paytm Payments Bank
- India's First Green Methanol Plant
- Mission on Arunachal Kiwi
- Mizoram Ginger Mission
- Padma Doree Initiative
- SEHAT Initiative
- LEADS Report 2025
- India's First Mega Greenfield Shipyard
- Withholding Tax
- Electronic Gold Receipts (EGRs)
- Ecocide
- E100 Fuel
- Palamu Tiger Reserve (PTR)
- Ganges Softshell Turtle
- Brain Death Certification
- Mission Drishti
- First-Ever Malaria Treatment for Infants
- Massive Stars Trigger Birth of New Stars
- Massive Stars Trigger Birth of New Stars
- SMILE Mission
- UMMID Programme
- Cyborg Botany
- Vela Supercluster
- JANANI Portal
- India's First Alzheimer's Disease-Modifying Therapy
- Ebola Outbreak in DR Congo

# TABLE OF CONTENTS

- Hantavirus
- Zwan-Wolf Effect
- Pathfinder: India's First Orbital Data Centre Satellite
- Kuki-Zo Group Talks
- Smart Border Project
- Chief of Defence Staff (CDS)
- Kalam & Kavach 3.0
- TARA Glide Weapon System
- INS Mahendragiri
- Operation WHITE STRIKE
- Project Deepak
- Abhay
- Pragati 2026 Military Exercise
- NEET Paper Leak Controversy: Ethics, Governance and Public Trust
- Syama Prasad Mookerjee
- Veera Pasi
- Whitley Awards 2026
- Subhas Chandra Bose Aapda Prabandhan Puraskar 2026
- International Booker Prize 2026
- Agricola Medal 2026
- World Press Freedom Index 2026
- World Migration Report 2026

# India's Buddhist Heritage

**Context:** On Buddha Purnima, attention has shifted towards leveraging India's Buddhist heritage for cultural diplomacy, tourism growth, and economic development. Government initiatives such as the Buddhist Circuit have shown intent, but challenges remain.

## Buddhism as a Global Civilisational Tradition

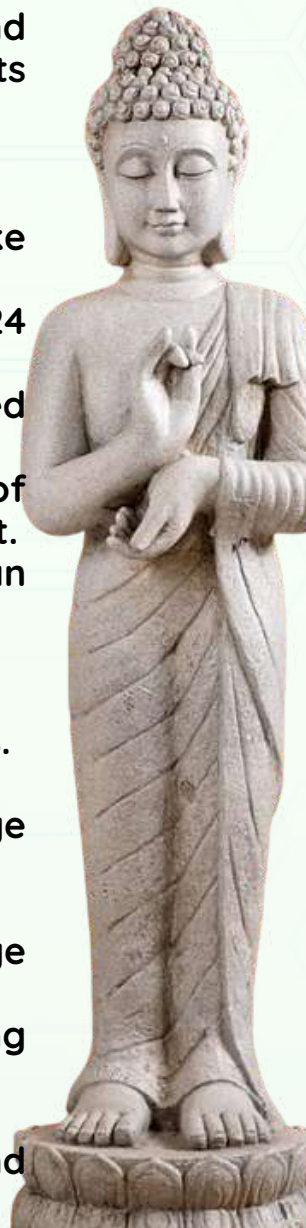
- Buddhism spread across Asia by adapting to local cultures while retaining its Indian roots.
- In Sri Lanka, it evolved into the Theravada tradition, preserving early Buddhist teachings.
- In Tibet, it developed into Vajrayana, incorporating rituals and esoteric practices.
- In China and Japan, it evolved into Chan and Zen Buddhism, emphasizing meditation and direct insight.
- Despite regional variations, Buddhism retained Indian elements such as Pali and Sanskrit texts, Abhidharma philosophy, and Jataka tales.
- India's Buddhist sites such as Bodh Gaya, Sarnath, and Kushinagar remain important pilgrimage centres for Buddhists worldwide.

## Significance of India's Buddhist Heritage

- **Spiritual Diplomacy:** Strengthens cultural ties with countries like Sri Lanka, Japan, Thailand, and South Korea.
- **Tourism Potential:** Around 7.3 lakh tourists visited India in 2024 from four major Buddhist countries.
- **Relic Diplomacy:** Display of Buddhist relics abroad has enhanced India's cultural outreach.
- **Economic Contribution:** Buddhist sites attract nearly 6% of foreign tourist arrivals and support tourism-related employment.
- **Geopolitical Importance:** Enhances India's image as a custodian of shared Asian heritage and strengthens regional influence.

## Key Challenges

- Lack of an integrated Buddhist tourism circuit linking major sites.
- Limited international connectivity, especially at Gaya Airport.
- Poor last-mile transport and infrastructure at pilgrimage destinations.
- Inadequate hospitality facilities and tourist services.
- Absence of a dedicated authority for Buddhist heritage management.
- Weak coordination between the Centre, States, and neighbouring countries.
- Logistical hurdles in the India-Nepal Buddhist Circuit.
- Limited promotion of Buddhist studies, Pali research, and academic engagement.



## Way Forward

- **Dedicated Authority:** Establish a Buddhist Heritage and Pilgrimage Development Authority for coordinated planning and management.
- **Infrastructure Development:** Upgrade Gaya Airport, improve rail connectivity, and strengthen last-mile transport.
- **Ease of Travel:** Introduce fast-track pilgrim visas and improve India-Nepal circuit integration.
- **Community Participation:** Generate local employment through tourism and hospitality.
- **Knowledge Revival:** Promote Pali studies, Buddhist research, fellowships, and digital archives.
- **Global Branding:** Position India as the “Global Home of Buddhism.”

**Conclusion:** India’s Buddhist heritage represents a living civilisational legacy. Developing an integrated and globally connected Buddhist ecosystem can boost tourism, strengthen diplomacy, preserve cultural heritage, and enhance India’s soft power.

# Exposition of the Holy Relics of the Tathagata

**Context:** The Union Home Minister inaugurated a special exposition of Lord Buddha’s sacred relics in Leh, Ladakh, on the occasion of Buddha Purnima, marking 75 years since the relics were last displayed in the region.

## About the Exposition

- Tathagata is a revered title of Gautama Buddha, meaning “one who has thus come or gone,” symbolizing enlightenment and liberation.
- Theme: “Peace Beyond Borders.”
- The relics originate from Piprahwa, identified with ancient Kapilavastu through excavations by William Claxton Peppe in 1898.

## Important discoveries included:

- Mauryan Brahmi-inscribed soapstone casket
  - Crystal casket
  - Bone fragments and ashes
  - Precious objects linked to the original stupa built after Buddha’s Mahaparinirvana.
- 
- Such exhibitions are organized by the Ministry of Culture to promote cultural diplomacy and people-to-people connections.
  - The sacred relics were also exhibited in Thailand (2024), Vietnam (2025), and Sri Lanka (2026).



# Bhojshala-Kamal Maula Complex

**Context:** The Madhya Pradesh High Court ruled that the disputed Bhojshala-Kamal Maula Complex is a temple dedicated to Goddess Vagdevi (Saraswati).



## Key Highlights of the Verdict

- **Protected Monument:** The complex will continue to be protected under the Ancient Monuments and Archaeological Sites and Remains (AMASR) Act, 1958.
- **ASI Oversight:** The Archaeological Survey of India will supervise the site's preservation, conservation, and regulation of religious access.
- **Repatriation of Saraswati Idol:** The Union Government has been directed to make efforts to bring back the Saraswati idol taken to the United Kingdom in the late 19th century.
- **Restriction on Namaz:** The court ruled that namaz will not be permitted within the disputed complex.
- **Alternate Mosque Land:** The Muslim community may seek alternate land from the Madhya Pradesh government for the construction of a mosque.

# Leiden Plates (Chola-Era Copper Plates)

**Context:** During Prime Minister Narendra Modi's visit to the Netherlands, the Dutch government returned the historic Leiden Plates to India.



## About Leiden Plates (Anaimangalam Plates)

- The Leiden Plates are 11th-century Chola-era copper plate inscriptions that record land grants, religious donations, and maritime connections of the Chola Empire.



- **Composition:** Consist of 21 copper plates (around 30 kg) bound by a bronze ring carrying the royal seal of the Chola dynasty.
- **Bilingual Inscriptions:** Written in both Tamil and Sanskrit, reflecting the administrative and cultural excellence of the Cholas.
- **Associated Rulers:** The grants were initiated by Rajaraja Chola I and formally executed by Rajendra Chola I.
- **Buddhist Connection:** The inscriptions mention grants to the Chudamani Vihara, a Buddhist monastery built by the Srivijaya Kingdom.
- **Significance:** Provide evidence of Chola maritime diplomacy, overseas trade links, and religious pluralism.

## Somnath Amrit Parv

**Context:** Prime Minister Narendra Modi participated in the concluding ceremony of Somnath Amrit Parv.

### About Somnath Amrit Parv

- Commemorates 75 years of the reopening of the reconstructed Somnath Temple in 1951.
- Also marks 1000 years since the first major attack on the temple in 1026 CE.
- **Location:** Somnath Temple, Gujarat.
- **Theme:** Faith, resilience, cultural continuity, and civilisational pride.

### About Somnath Temple

- Located at Prabhas Patan on the Saurashtra coast of Gujarat.
- One of the 12 Jyotirlingas of Lord Shiva mentioned in the Shiva Purana.
- Known as a symbol of India's cultural resilience due to its repeated destruction and reconstruction over centuries.
- The first major recorded attack was carried out by Mahmud of Ghazni in 1026 CE.
- After Independence, reconstruction was initiated by Sardar Vallabhbhai Patel and the temple was inaugurated in 1951 by Rajendra Prasad.
- Built in the Kailash Mahameru Prasad style, a branch of the Nagara style of North Indian temple architecture.
- Features a 150-foot shikhar, grand mandapas, and a structure facing the Arabian Sea.



# Neanderthals

**Context:** A recent study suggests that Neanderthals may have performed the world's earliest known dental procedure nearly 59,000 years ago.



## Key Highlights

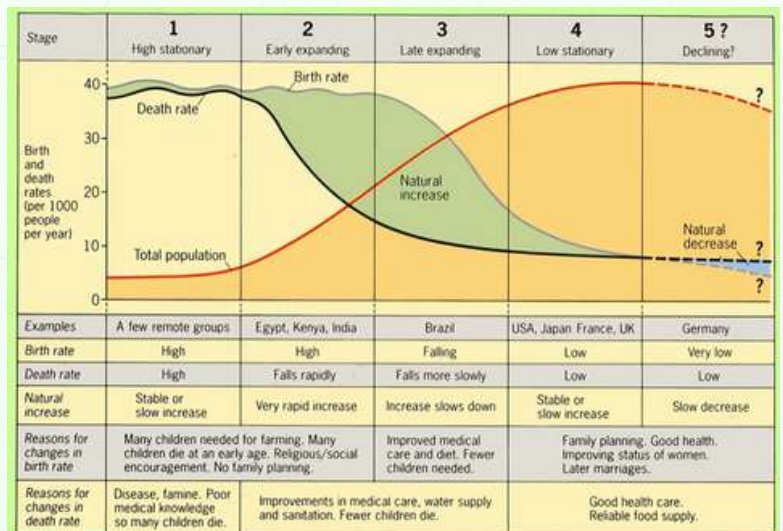
- An ancient molar tooth discovered in Chagyrskaya Cave contained a deep hole believed to have been deliberately drilled.
- The finding indicates that Neanderthals possessed advanced problem-solving abilities, healthcare practices, and social cooperation.

## About Neanderthals

- Neanderthals (*Homo neanderthalensis*) were an extinct human species closely related to modern humans (*Homo sapiens*).
- The name *Homo neanderthalensis* means “Human from the Neander Valley.”
- Named after the Neander Valley, where the first major Neanderthal fossil was discovered in 1856.
- Lived between 400,000 and 40,000 years ago during the Middle and Late Pleistocene period.
- Had strong, muscular bodies, large brains, broad noses, and adaptations suited to cold climates.
- Used advanced stone tools and controlled fire for hunting, cooking, and survival.

# India's Demographic Transition

**Context:** The Sample Registration System (SRS) Statistical Report 2024 highlights India's shift from population explosion to demographic stabilisation, marked by declining fertility and birth rates, and rising life expectancy.



## About Demography

- Demography is the study of population size, structure, distribution, and changes due to births, deaths, and migration.
- The Demographic Transition Model (DTM) explains the shift from high birth and death rates to low birth and death rates during development.
- India is currently in late Stage 3 and moving towards Stage 4 of demographic transition, though states are at different stages.

## Key Demographic Trends (SRS 2024)

- Total Fertility Rate (TFR): Remained at 1.9, below the replacement level of 2.1 for the fifth consecutive year.
- Crude Birth Rate (CBR): Declined from 21 (2014) to 18.3 per 1,000 population (2024).
- Crude Death Rate (CDR): Stood at 6.4 per 1,000 population.
- Life Expectancy: Increased to around 72 years.
- Infant Mortality Rate (IMR): Declined to 24 per 1,000 live births.
- Under-Five Mortality Rate (U5MR): Reduced to 28 per 1,000 live births.
- Sex Ratio at Birth (SRB): Improved slightly to 918 girls per 1,000 boys.

## Factors Driving the Transition

- Female Education: Higher literacy delays marriage and reduces fertility rates.
- Family Planning: Better access to contraceptives and reproductive healthcare.
- Urbanisation: Rising living costs and nuclear families encourage smaller family sizes.
- Lower Child Mortality: Improved healthcare, nutrition, and immunisation programmes such as Mission Indradhanush.

## Significance of India's Demographic Dividend

- India remains one of the world's youngest major economies with a median age of 29.2 years.
- Around 65% of the population is below 35 years, offering a large working-age workforce.
- The demographic dividend is expected to peak between 2030-2041 and gradually close by 2055.
- A young population can boost consumption, savings, innovation, and economic growth.

## Key Challenges

- Ageing Population: Rising elderly population may increase pressure on pensions and social security systems.
- Skewed Sex Ratio: Persistent son preference may lead to social imbalances and marriage-related issues.
- Youth Unemployment: Growing mismatch between skills possessed and industry requirements.
- Regional Divide: Southern states have achieved population stabilisation, while states like Bihar and Uttar Pradesh continue to record higher fertility rates.
- Migration Pressures: Large-scale migration from northern to southern states strains urban infrastructure.

- **Health Burden:** Increasing prevalence of non-communicable diseases (NCDs) such as diabetes, cancer, and heart diseases.
- **Rural Healthcare Gaps:** Significant disparities in access to quality healthcare services.

### Way Forward

- **Skill Development:** Modernise vocational education and expand employment opportunities through initiatives like PLI Scheme.
- **Increase Female Labour Force Participation:** Improve childcare facilities, workplace safety, and flexible work options.
- **Develop a Silver Economy:** Strengthen pension systems and geriatric healthcare services.
- **Support Migrant Workers:** Promote inclusive urban planning and balanced fiscal policies.
- **Strengthen Healthcare:** Focus on preventive care, NCD screening, palliative care, and elderly healthcare.
- **Improve Data Systems:** Conduct the Census and strengthen civil registration systems for better policy planning.

**Conclusion:** India's demographic challenge is shifting from population control to managing ageing, regional disparities, and workforce transformation. Effective investments in education, healthcare, skills, employment, and social security are crucial to fully harness the demographic dividend and ensure sustainable development.

## Rising Screen Time in Children: A Developmental and Public Health Concern

**Context:** A recent study by All India Institute of Medical Sciences found that excessive screen exposure before the age of one year is associated with a higher risk of autism-like symptoms by age three.

### Key Findings of the Study

- Conducted on 250 children (3-6 years), including 150 children with autism and 100 with normal developmental milestones.
- Children exposed to screens at an early age showed a greater likelihood of developing autism-like symptoms.
- Doctors recommend no screen exposure below 18 months, and ideally none before the age of 3 years.
- The study found a correlation, not a direct causal relationship, between screen exposure and autism.

### About Screen Time

- Refers to the time spent using digital devices such as smartphones, televisions, tablets, and computers.

## How Excessive Screen Time Affects Brain Development

- **Early Brain Development (0-3 years):** Early childhood is a critical period of rapid brain growth and neural development.
- **Excessive screen use** reduces real-life interactions essential for cognitive and emotional development.
- **Language Development:** Passive screen viewing limits communication with caregivers, leading to delayed speech and weaker language skills.
- **Sleep Disruption:** Blue light from screens suppresses melatonin production, affecting sleep quality and brain development.
- **Dopamine Dependency:** Instant rewards from digital content can promote addictive behaviour and reduce interest in real-world activities.

## Major Concerns

- Reduced attention span, memory retention, and critical thinking abilities.
- Increased risk of obesity, poor posture, vision problems, and sleep disorders.
- Higher levels of irritability, anxiety, depression, and emotional instability.
- Weakening of social skills, empathy, and interpersonal communication.
- Negative impact on academic performance due to distractions from gaming and social media.
- Exposure to harmful or age-inappropriate online content.
- Development of screen addiction and dependency from an early age.

## Government Initiatives

- **State-Level Policies:** Karnataka's proposed Digital Detox Policy (2026) recommends limiting recreational screen time and restricting social media access for minors.
- **Digital Well-being in Education:** NCERT and CBSE promote cyber safety and digital citizenship under NEP 2020.
- **School Interventions:** Introduction of tech-free periods, no-gadget hours, and increased sports activities.
- **Health Guidelines:** The Indian Academy of Pediatrics (IAP) advises no screen exposure below 2 years and limited use thereafter.
- **Mental Health Support:** Research and counselling support through institutions like National Institute of Mental Health and Neurosciences and Tele-MANAS.

## Way Forward

- Enforce age-appropriate screen time guidelines.
- Increase parental awareness and promote mindful digital habits.
- Integrate screen-time counselling into Anganwadi and child healthcare services.
- Regulate digital platforms to reduce addictive features and strengthen child-safe modes.
- Promote outdoor activities, sports, and experiential learning through initiatives like Khelo India.
- Introduce digital detox periods and no-gadget hours in schools.
- Encourage further research and integrate findings into child health and education policies.

**Conclusion:** Excessive screen time during early childhood poses significant developmental, behavioural, and public health challenges. A balanced approach involving parents, schools, healthcare systems, and policymakers is essential to ensure healthy childhood development in the digital age.

## Baiga Tribe

**Context:** Recently, children belonging to the Baiga tribe were rescued from a human trafficking network in Kabirdham District.

### About Baiga Tribe

- The Baiga are a highly marginalized tribal community recognized as one of India's 75 Particularly Vulnerable Tribal Groups (PVTGs).

### Geographical Distribution

- Primarily inhabit the Satpura and Maikal hill ranges of central India.
- Largest population is found in Madhya Pradesh, especially in the Baiga-Chak region of Mandla and Balaghat districts.

### Economy and Livelihood

- Traditionally practice Bewar (Dahiya), a form of slash-and-burn shifting cultivation.
- Follow a religious belief that prohibits ploughing, as they consider it an injury to Mother Earth.

### Social and Cultural Features

- Staple food includes coarse grains such as kodo millet and kutki.
- Pej, a drink made from maize or rice water, is a common part of their diet.
- Depend significantly on forest produce, fishing, and small game for subsistence.
- Live-in relationships are socially accepted within the community.
- Marriage customs often involve a reverse dowry, where the groom compensates the bride's family.
- Major sub-groups include Bihwar, Narotia, Bharotiya, and others.

### Key Fact

- The Baiga are known for their close association with forests, distinctive cultural traditions, and traditional ecological knowledge.



# Girmitiya Communities

**Context:** External Affairs Minister S. Jaishankar began an official visit to Jamaica, Suriname, and Trinidad and Tobago, countries with significant Girmitiya-descendant populations.



## About Girmitiyas

- Girmitiyas were Indians taken by European colonial powers, particularly the British, to overseas colonies as indentured labourers during the 19th and early 20th centuries.
- The system emerged after the abolition of slavery to meet labour demands on plantations producing sugar, tea, rubber, and other cash crops.
- Indian labourers were transported to regions such as the Caribbean, Fiji, Mauritius, Africa, and Southeast Asia.
- The term “Girmitiya” is derived from the word “agreement”, which was pronounced as “girmit” by Indian labourers who signed employment contracts.

## Significance

- Girmitiya communities have preserved Indian cultural traditions, languages, and customs abroad.
- They continue to serve as an important cultural and historical link between India and several countries across the world.

# Oil Spill Contingency Plan (OSCP)

**Context:** Recent shipwrecks of MSC Elsa 3 and MV Wan Hai 503 off the Kerala coast highlighted the risk of marine oil spills, prompting efforts to formulate an Oil Spill Contingency Plan (OSCP).



### About Oil Spill Contingency Plan (OSCP)

- A State-level emergency response framework to prevent, manage, and mitigate marine oil spill disasters along Kerala's coastline.
- Prepared by the Kerala State Pollution Control Board under the directions of the National Green Tribunal.
- The Indian Coast Guard will act as the nodal coordinating agency for implementation and response.

### Coverage of the Plan

- Marine oil spills occurring within 12 nautical miles (24 km) of Kerala's coastline.
- River systems extending up to 40 km inland or until tidal influence is observed.

### Key Features

- **Environmental Mapping:** Identifies Environmentally Sensitive Index (ESI) zones, fragile coastal ecosystems, fishing areas, and vulnerable marine habitats.
- **Emergency Response Mechanism:** Defines crisis-management protocols, chain of command, and departmental responsibilities during oil spill incidents.
- **Shoreline Clean-up:** Provides guidelines for shoreline restoration, equipment deployment, oil assessment, and containment operations.
- **Wildlife Protection:** Includes wildlife rescue measures and biodiversity conservation strategies during spill events.

### National Oil Spill Disaster Contingency Plan (NOS-DCP)

- India's apex framework for preparedness and response to marine oil spill incidents.
- Prepared by the Indian Coast Guard and approved in 1993.
- Revised periodically to align with international maritime and environmental standards.
- The 2014-15 revision expanded coverage to include Hazardous and Noxious Substances (HNS) incidents.
- The Indian Coast Guard serves as the nodal authority for coordination and implementation within India's Exclusive Economic Zone (EEZ).
- The Director General of the Indian Coast Guard chairs the NOS-DCP Committee.

## INCOIS Expands Coastal Flood Monitoring for 'Kallakkadal' Surges

**Context:** The Indian National Centre for Ocean Information Services has installed a second Coastal Flood Monitoring System (CFMS) to enhance forecasting of dangerous Kallakkadal swell surges.



## What is Kallakkadal?

- Kallakkadal refers to sudden and powerful swell surges that cause unexpected coastal flooding, particularly along the Kerala coast.
- These surges have wave periods ranging from 30 to 300 seconds, significantly raising coastal water levels.
- The term comes from Malayalam words:
  - Kallan - thief
  - Kadal - sea
- It describes “thief-like” waves that strike coastal areas without warning.

## Causes and Characteristics

- Triggered by long-period ocean swells generated by distant storms in the southern Indian Ocean.
- These swells can travel nearly 10,000 km before reaching the Indian coastline.
- Most common during the pre-monsoon season, especially along Kerala's coast.

## Impact

- Causes sudden coastal flooding and sea inundation.
- Threatens fishing communities, coastal infrastructure, harbours, and low-lying coastal areas.
- Can disrupt livelihoods and increase disaster risks in coastal regions.

## Why was Kollam Chosen?

- Kollam frequently experiences swell surge events and is highly vulnerable to coastal flooding.
- The site will help scientists study nearshore wave dynamics and improve coastal flood forecasting models.



# IMD's New Block-Level Monsoon Forecast System

**Context:** The India Meteorological Department has launched a high-resolution forecasting system capable of providing block-level monsoon forecasts across major rainfed regions of India.

## Significance

- Supports climate-resilient agriculture in rainfed regions.
- Improves weather-based decision-making for farmers and local administrations.
- Strengthens India's weather forecasting and early warning capabilities.

## Key Features

- **Block-Level Forecasting:** Monsoon forecasts will now be issued for around 3,196 blocks across 15 States and 1 Union Territory.
- **First-of-its-Kind Initiative:** This is the first time monsoon arrival forecasts are being generated at the block level in India.
- **Hyper-Local Predictions:** The system provides highly localized weather forecasts, recognizing that rainfall patterns can vary significantly even within the same district.
- **Improved Agricultural Planning:** The forecasts will help farmers make informed decisions regarding sowing, irrigation, and crop management.
- **Enhanced Disaster Preparedness:** More accurate local forecasts can improve preparedness for extreme weather events and reduce climate-related risks.

## Rainbow Cloud

**Context:** A rare rainbow cloud phenomenon was recently observed in Indonesia.

### About Rainbow Clouds

- Rainbow clouds are formed due to a phenomenon known as cloud iridescence.
- Cloud iridescence occurs when sunlight is diffracted by very small water droplets or tiny ice crystals present in clouds.
- The diffraction process separates sunlight into different colours, producing pastel shades and rainbow-like patterns on the cloud surface.
- The phenomenon is most visible when cloud particles are extremely small and nearly uniform in size.
- Rainbow clouds are usually seen near the Sun and are often observed in thin clouds such as altocumulus, cirrocumulus, or lenticular clouds.

### Key Fact

- Unlike a rainbow, which is formed by refraction and reflection of sunlight in raindrops, a rainbow cloud is formed mainly through diffraction of light by cloud particles.



# Special Intensive Revision (SIR) Exercise: Constitutionally Valid

**Context:** The Supreme Court of India upheld the constitutional validity of the Special Intensive Revision (SIR) of electoral rolls conducted by the Election Commission of India.

## Key Highlights of the Supreme Court Judgment

- **No Conflict with Law:** The SIR process does not violate the Representation of the People Act, 1950 or related rules.
- **Supports Free and Fair Elections:** Accurate electoral rolls are essential for maintaining electoral integrity and democratic participation.
- **ECI's Powers Upheld:** The ECI can conduct a Special Intensive Revision if it acts within legal limits, records reasons, and follows due process.
- **Validity of SIR:** The Court held that the exercise satisfies the test of proportionality, as it has a rational objective and adequate safeguards.
- **Residual Powers of ECI:** The Commission can design suitable documentation and verification procedures for SIR.
- **Citizenship Determination Not Final:** ECI's findings are limited to electoral purposes and do not constitute a final decision on citizenship status.
- **Reference to Competent Authority:** Cases involving doubts about eligibility must be referred to the appropriate government authority.

## Judicial Stand on ECI's Powers

- In *Mohinder Singh Gill v. Chief Election Commissioner*, the Supreme Court affirmed ECI's broad powers under Article 324 to ensure free and fair elections.
- The Court recognised ECI's authority to act where existing laws do not specifically address a situation.
- Judicial intervention in election matters remains limited due to Article 329(b).

## Need for Special Intensive Revision (SIR)

- Removes duplicate, fake, and outdated voter entries.
- Identifies deceased, shifted, and ineligible voters.
- Facilitates inclusion of new and previously omitted eligible voters.
- Strengthens free and fair elections through accurate electoral rolls.
- Addresses changes caused by migration, urbanisation, and population mobility.
- Enhances public confidence in the electoral process.
- Improves election management and logistical planning.

## Concerns Associated with SIR

- Risk of wrongful exclusion of genuine voters, especially migrants, elderly persons, and vulnerable groups.
- Documentation requirements may burden economically weaker sections.
- Possibility of verification errors and arbitrary deletions.
- Concerns regarding indirect citizenship-related scrutiny.
- Administrative and logistical challenges in verifying large voter populations.

- Time constraints if revisions are conducted close to elections.
- Digital literacy gaps may hinder online verification and corrections.
- Political controversies over alleged selective deletions.
- Potential impact on universal adult suffrage under Article 326.

### Way Forward

- Strengthen safeguards such as notice, hearing, and appeal mechanisms.
- Ensure inclusive verification for vulnerable and marginalized groups.
- Use technology to improve accuracy and prevent duplication.
- Increase transparency in verification and deletion procedures.
- Expand voter awareness through SVEEP campaigns.
- Improve training and capacity of Booth Level Officers (BLOs).
- Establish fast-track grievance redressal mechanisms.
- Balance electoral roll purity with democratic inclusion and voting rights.

**Conclusion:** The Supreme Court's verdict reaffirms the ECI's authority to maintain accurate electoral rolls while emphasizing procedural fairness. The challenge lies in balancing electoral integrity with the constitutional guarantee of inclusive democratic participation.

## Strengthening Panchayats and Urban Local Bodies

**Context:** The debate on Indian federalism is increasingly focusing on the third tier of government—Panchayats and Urban Local Bodies (ULBs). Former Chief Economic Advisor Arvind Subramaniam described them as the “stepchild of Indian federalism” due to excessive state control.

### Why Are Local Bodies Often Ignored in Federalism Debates?

- Discussions on federalism largely focus on Centre-State relations, overlooking local governments.
- State governments retain significant control over appointments, finances, and administration of local bodies.
- Many ULBs have weak revenue bases and depend heavily on state grants.
- Several states have not fully implemented the 73rd and 74th Constitutional Amendments.
- Local bodies are often treated as implementing agencies rather than autonomous institutions.
- Weak urban governance has contributed to issues such as pollution, traffic congestion, and poor service delivery.



## Key Challenges

- **Weak Administrative Autonomy:** Municipal staff and commissioners remain largely accountable to state governments.
- **Poor Revenue Generation:** ULBs' own tax revenue remains around 0.3% of GDP.
- **Low Public Expenditure:** Spending by local bodies remains below 1% of GDP.
- **High Fiscal Dependence:** Dependence on grants limits decision-making autonomy.
- **Incomplete Devolution:** Functions listed under the 11th and 12th Schedules are not fully transferred in many states.
- **Capacity Deficit:** Lack of trained planners, engineers, and financial experts affects governance quality.
- **State Dominance:** Local bodies often function as subordinate administrative units rather than self-governing institutions.

## E-Governance Initiatives

- **e-Gram Swaraj Portal:** Facilitates online planning, budgeting, and accounting in Panchayats.
- **Smart Cities Mission:** Promotes technology-driven urban governance.
- **SVAMITVA Scheme:** Uses drone technology for rural property mapping and ownership records.

## Way Forward

- **Complete Devolution of Powers:** Fully implement the 73rd and 74th Constitutional Amendments.
- **Strengthen Fiscal Autonomy:** Improve property tax collection, user charges, and local revenue generation.
- **Independent Local Cadre:** Give local bodies greater control over appointments and personnel management.
- **Reduce State Control:** States should act as facilitators rather than controllers.
- **Competitive Sub-Federalism:** Encourage cities to compete in governance and service delivery.
- **Reform Urban Schemes:** Focus on institutional strengthening alongside infrastructure development.

## 2nd ARC Recommendations

- Ensure effective implementation of the Panchayats (Extension to Scheduled Areas) Act (PESA), 1996.
- Create Gram Panchayats of appropriate size for efficient administration.
- Remove mandatory approval requirements for Panchayat budgets by higher authorities.
- Clearly assign functions and responsibilities under the Eleventh Schedule through activity mapping.

**Conclusion:** A strong third tier is essential for deepening Indian federalism. Empowering Panchayats and Urban Local Bodies through greater financial, administrative, and functional autonomy can improve governance, service delivery, and support India's long-term urban and economic development.

# Online Gaming Rules, 2026

**Context:** The Government of India has notified the Promotion and Regulation of Online Gaming Rules, 2026, effective from 1 May 2026, to implement the Promotion and Regulation of Online Gaming Act, 2025.



## About Online Gaming Categories

The new framework classifies online games into three categories:

- **Online Social Games:** Games played for entertainment or education without monetary stakes or deposits.
- **E-sports:** Competitive skill-based games played in organized tournaments.
- **Online Money Games:** Games involving deposits, betting, or monetary rewards based on outcomes.
  - These games are prohibited under the 2025 Act and 2026 Rules.

## Key Provisions of the Rules

- **Online Gaming Authority of India (OGAI):** Established as the sector regulator.
- Includes representatives from Ministries such as Home Affairs, Finance, and Law.
- **Risk-Based Registration System:** Only selected categories (e.g., e-sports and high-impact games) require formal determination of legal status.
- **Role of Financial Intermediaries:** Banks and payment gateways must verify a game's legal status before processing transactions.
- **OGAI can block payments to unauthorized platforms.**
- **User Safety Measures:** Mandatory age verification, parental controls, time limits, and monitoring mechanisms.
- **Special focus on protecting minors and vulnerable users.**
- **Data Localisation:** User data and gaming traffic related to social games and e-sports must be stored within India.
- **Two-Tier Grievance Redressal System:** Complaints first addressed by the gaming platform.
- **Appeals can be escalated to OGAI and a designated Appellate Authority.**

## Significance

- Enhances transparency, accountability, and consumer protection in online gaming.
- Strengthens regulation of digital gaming platforms.
- Reinforces the ban on real-money online gaming in India.

# Reservation in Private Schools Under RTE Act

**Context:** In *Lucknow Public School vs State of Uttar Pradesh (2026)*, the Supreme Court of India upheld the mandatory admission of children under the Right to Education (RTE) Act, reaffirming the 25% reservation in private schools.

## Key Observations of the Supreme Court

- Denial of admission to eligible children violates Article 21A, making the Right to Education a legally enforceable fundamental right.
- Private unaided neighbourhood schools are obligated to admit students allotted by the State.
- Schools cannot challenge the eligibility decisions made by competent authorities.
- Effective implementation of the RTE Act is essential for achieving universal and inclusive elementary education.
- Refusal or delay in admission would undermine the constitutional guarantee of education.

## Rationale Behind 25% Reservation

- **Social Integration:** Promotes interaction among children from diverse socio-economic backgrounds.
- **Access to Quality Education:** Enables disadvantaged children to study in better educational environments.
- **Substantive Equality:** Helps reduce structural inequalities and create equal opportunities.
- **Shared Responsibility:** Encourages participation of both public and private sectors in achieving educational inclusion.

## Key RTE Provisions

- **Section 12(1)(c):** Mandates private unaided schools to reserve 25% seats for children from Economically Weaker Sections (EWS) and disadvantaged groups.
- **State Reimbursement:** Governments reimburse schools based on per-child expenditure.
- **Neighbourhood School Concept:** Guarantees free and compulsory education to children aged 6-14 years in nearby schools.

## Significance

- Strengthens the constitutional right to education.
- Promotes inclusive and equitable schooling.
- Reinforces the role of private schools in achieving universal elementary education.

## Evolution of Right to Education (RTE)

- Constitutional Basis: Article 45 (DPSP): Promotes education for children.
- Article 39(f): Focuses on child development and dignity.
- 86th Constitutional Amendment Act, 2002: Inserted Article 21A, making education a Fundamental Right for children aged 6-14 years.
- Added Article 51A(k), making it a duty of parents/guardians to provide educational opportunities to children.
- Right to Education Act, 2009: Operationalized Article 21A.
- Introduced 25% reservation in private schools, infrastructure norms, teacher qualifications, and pupil-teacher ratio standards.
- RTE (Amendment) Act, 2019: Modified the no-detention policy.
- Allowed examinations in Classes 5 and 8, with provisions for detention after remedial support if learning outcomes are not achieved.

# Citizenship (Amendment) Rules, 2026

**Context:** The Central Government notified the Citizenship (Amendment) Rules, 2026, introducing digital reforms and new compliance measures for OCI registration and citizenship-related services.

## Key Highlights of the Rules

- Digital OCI Services: OCI registration and renunciation processes have been made fully online.
- Applications must be submitted through the official OCI portal.
- e-OCI System: Introduction of electronic OCI (e-OCI) cards, which may be issued in digital or physical form.
- Requirement for duplicate document submission has been removed.
- Rules for Minor Applicants: Minors cannot simultaneously hold an Indian passport and a foreign passport.
- Reinforces India's principle of single citizenship.
- Appeal and Safeguards: Applicants are entitled to a hearing in cases of rejection or review.
- Appeals will be decided by an authority higher than the original decision-making authority.

### OCI vs NRI

Aspect	OCI (Overseas Citizen of India)	NRI (Non-Resident Indian)
Citizenship Status	Foreign citizen with OCI status	Indian citizen living abroad
Political Rights	No voting rights; cannot contest elections	Full political rights (subject to registration)
Government Employment	Not eligible for government jobs or constitutional posts	Eligible for most jobs except restricted positions
Economic Rights	Can invest and own property (except agricultural land)	Enjoys full economic rights as an Indian citizen
Passport	Holds a foreign passport	Holds an Indian passport

## Citizenship in India

### Constitutional Provisions (Articles 5-11)

- Part II of the Constitution deals with citizenship at the commencement of the Constitution.
- Articles 5-8: Citizenship based on domicile, migration, and descent.
- Article 9: Voluntary acquisition of foreign citizenship results in loss of Indian citizenship.
- Article 11: Empowers Parliament to regulate citizenship through law.

### Citizenship Act, 1955

- Governs acquisition and loss of citizenship after 26 January 1950.
- Citizenship can be acquired through:
  - Birth
  - Descent
  - Registration
  - Naturalisation
  - Incorporation of territory
- Citizenship can be lost through:
  - Renunciation
  - Termination
  - Deprivation

### Important Amendments

- 1986 Amendment: Restricted citizenship by birth; required at least one parent to be an Indian citizen.
- 2003 Amendment: Introduced the OCI scheme and strengthened provisions against illegal migration.
- 2005 Amendment: Expanded OCI eligibility to Persons of Indian Origin (PIOs).
- 2015 Amendment: Merged PIO and OCI schemes into a single OCI framework.
- 2019 Amendment (CAA): Provided a pathway to citizenship for persecuted non-Muslim minorities from Pakistan, Afghanistan, and Bangladesh.

### Significance

- Simplifies and digitizes OCI-related services.
- Enhances transparency and ease of access for applicants.
- Strengthens compliance with India's single-citizenship framework.
- Improves procedural fairness through a structured appeal mechanism.

## Expansion of “Acid Attack Victims” Definition

**Context:** The Supreme Court of India expanded the definition of acid attack victims under the Rights of Persons with Disabilities (RPwD) Act, 2016 to include survivors of forcible acid ingestion.

## Key Observations of the Supreme Court

- **Broader Definition:** Acid attack victims include both those subjected to acid throwing and those forcibly made to ingest acid.
- **Recognition of Internal Injuries:** Victims suffering serious internal injuries, even without visible disfigurement, are entitled to legal protection and benefits.
- **Retrospective Effect:** The expanded definition will apply retrospectively from 2016, allowing past victims of acid ingestion to claim disability-related benefits.

## Rights of Persons with Disabilities (RPwD) Act, 2016

- A comprehensive law aimed at protecting the rights, dignity, and inclusion of persons with disabilities.
- Enacted to implement the United Nations Convention on the Rights of Persons with Disabilities, ratified by India in 2007.
- Replaced the Persons with Disabilities Act, 1995.

## Key Provisions of the RPwD Act, 2016

- **Expanded Disability Categories:** Increased recognized disabilities from 7 to 21 categories.
- **Rights-Based Approach:** Focuses on equality, dignity, non-discrimination, and full participation in society.
  - **Reservation Benefits:** 4% reservation in government jobs.
  - 5% reservation in higher educational institutions for persons with benchmark disabilities.
- **Institutional Mechanisms:** Establishes Central and State Advisory Boards and appoints Chief Commissioners for monitoring implementation.
- **Accessibility Measures:** Promotes accessible public buildings, transport, and information systems under the Accessible India Campaign.

## Significance of the Judgment

- Expands legal protection for acid attack survivors.
- Recognizes both visible and invisible disabilities.
- Strengthens the rights-based framework of disability law.
- Ensures greater access to welfare benefits, rehabilitation, and social justice for victims.

# Bail is the Rule and Jail is the Exception

**Context:** The Supreme Court of India recently reaffirmed that “bail is the rule and jail is the exception”, even in cases under the Unlawful Activities (Prevention) Act.



## Key Observations of the Supreme Court

- **Constitutional Principle:** The right to bail flows from Articles 21 and 22 of the Constitution, protecting personal liberty.
- **Right to Speedy Trial:** Prolonged detention without timely trial violates the fundamental right to a speedy trial under Article 21.
- **Judicial Discipline:** Smaller benches cannot disregard or dilute judgments delivered by larger benches.
- **No Endless Detention:** The existence of a prima facie case alone cannot justify indefinite pre-trial detention under Section 43D(5) of UAPA.

## About Bail

- Bail is the temporary release of an accused person pending trial, based on the principle that a person is presumed innocent until proven guilty.

## Types of Bail

- **Regular Bail:** Granted under Sections 480 and 483 of the Bharatiya Nagarik Suraksha Sanhita (BNSS).
- **Anticipatory Bail:** Granted before arrest in anticipation of being accused of a non-bailable offence.
- **Interim Bail:** Temporary bail granted until the final disposal of a bail application.
- **Default Bail:** A statutory right available when the investigation is not completed within the prescribed time limit.

## Significance

- Reinforces the protection of personal liberty.
- Upholds the principle of “innocent until proven guilty.”
- Ensures that stringent laws do not override constitutional rights.
- Highlights the importance of speedy trials and judicial fairness.

# BCCI is Not a Public Authority Under RTI

**Context:** The Central Information Commission ruled that the Board of Control for Cricket in India is not a “public authority” under the Right to Information Act.

## Key Observations of the CIC

- **No Substantial Government Control:** BCCI operates independently without deep or pervasive government control over its administration, finances, or management.
- **Not Covered Under Section 2(h):** BCCI does not meet the definition of a public authority under Section 2(h) of the RTI Act, as it is neither established by the Constitution nor substantially funded by the government.
- **Private Autonomous Body:** BCCI is a private organization registered under the Tamil Nadu Societies Registration Act, 1975.
- **Public Functions ≠ Public Authority:** Merely performing public functions, such as managing cricket, does not automatically bring an organization under the RTI Act.

## Section 2(h) of the RTI Act

- Defines a public authority as a body established:
  - By the Constitution,
  - By a law made by Parliament or a State Legislature, or
  - Through government notification/order.
- Such bodies are required to provide information under the RTI Act.

## Important Judicial Precedents

- **Zee Telefilms Ltd. v. Union of India** Supreme Court held that BCCI is not a “State” under Article 12 due to the absence of deep government control.
- **BCCI v. Cricket Association of Bihar** Ruled that BCCI can be subjected to writ jurisdiction under Article 226 because it performs public functions.
- **BCCI v. Cricket Association of Bihar** Directed implementation of Lodha Committee reforms to improve transparency and accountability.
- **Thalappalam Cooperative Bank v. State of Kerala** Clarified that performing public functions alone does not make an institution a public authority unless there is substantial government control or financing.
- **BCCI v. Reepak Kansal** Reaffirmed BCCI’s exclusive authority to represent India in international cricket administration.

## Article 12 of the Constitution

- Defines “State” to include:
  - Government and Parliament of India,
  - State Governments and Legislatures,
  - Local authorities, and
  - Other authorities under government control.

## Significance

- Reinforces the distinction between public functions and public authority status.
- Clarifies the scope of the RTI Act.
- Affirms BCCI’s autonomous character while maintaining judicial oversight through writ jurisdiction.

# Peaceful Protest is a Constitutional Right

**Context:** The Supreme Court of India reiterated that peaceful protest is a constitutional right, but demonstrations should not disrupt public order or inconvenience the general public.

## Key Highlights of the Judgment

- **Right to Protest:** Citizens have the right to express dissent through peaceful and lawful protests in a democracy.
- **Public Order:** Protests should not create law-and-order issues, threaten peace, or obstruct public convenience.
- **Balanced Approach:** The right to protest must be balanced with the rights of commuters and residents to carry on their daily lives without disruption.





**Right to Protest in India:** The right to protest is an implied fundamental right derived from the freedoms of speech, expression, association, and peaceful assembly guaranteed by the Constitution.

### Constitutional Provisions

- Article 19(1)(a) - Freedom of Speech and Expression Allows citizens to express opinions, criticism, and dissent against government actions.
- Article 19(1)(b) - Right to Peaceful Assembly Guarantees the right to assemble peacefully and without arms for demonstrations and protests.
- Article 19(1)(c) - Right to Form Associations Enables citizens to form unions, groups, and organizations to pursue common causes.
- Articles 19(2) & 19(3) - Reasonable Restrictions The State may impose restrictions in the interests of sovereignty, integrity, security, and public order.
- Article 51A - Fundamental Duties Citizens must safeguard public property and avoid violence during protests.

### Important Judicial Precedents

- Himat Lal K. Shah vs Commissioner of Police The State can regulate public meetings but cannot impose arbitrary bans on assemblies.
- Ramlila Maidan Incident Case Recognized peaceful protest as a fundamental democratic right.
- Mazdoor Kisan Shakti Sangathan vs Union of India Held that protests should be conducted in designated places while balancing public convenience.
- Amit Sahni vs Commissioner of Police (Shaheen Bagh Case) Ruled that public spaces cannot be occupied indefinitely and protest rights must coexist with the rights of commuters.

### Significance

- Strengthens democratic values and citizens' right to dissent.
- Reinforces the balance between individual freedoms and public order.
- Clarifies that peaceful protests are protected, but cannot override the rights of others.

# SC's Revival of Section 124A (Sedition)

**Context:** The Supreme Court of India clarified that lower courts may continue trials under the repealed Section 124A (Sedition) of the IPC if the accused voluntarily consents, despite the provision's constitutional validity still being under challenge.

## Historical and Legal Background

- **Colonial Origin:** Section 124A was drafted by Thomas Babington Macaulay and added to the IPC in 1870.
- **2022 Suspension:** In *S.G. Vombatkere v. Union of India*, the Supreme Court temporarily suspended the use of the sedition law, directing governments not to register new cases or continue investigations.
- **2026 Clarification:** In *Kamran v. State of Madhya Pradesh*, the Court allowed trials to proceed for accused persons who consent, citing the right to a speedy trial.

### Shift from IPC Section 124A to BNS Section 152

Feature	Section 124A (IPC)	Section 152 (BNS)
Nature of Offence	Sedition	Acts endangering sovereignty, unity, and integrity of India
Core Offence	Bringing hatred, contempt, or disaffection against the Government	Subversive, separatist, or sovereignty-threatening activities
Communication Modes	Spoken/written words, signs, visible representations	Words, signs, electronic communication, or financial means
Punishment	Life imprisonment or up to 3 years with fine	Life imprisonment or up to 7 years with fine



## Key Constitutional and Legal Concerns

### 1. Constitutionality Still Pending

- The validity of Section 124A remains under consideration by a larger bench of the Supreme Court.
- Convictions under a law later declared unconstitutional could become legally unsustainable.

### 2. Challenges in Joint Trials

- Criminal cases often involve multiple accused.
- If some accused consent to trial while others rely on the 2022 stay, it may create procedural complications and inconsistent outcomes.

### 3. Chilling Effect on Free Speech

- Sedition laws have long been criticized for discouraging dissent and free expression.
- Critics argue that allowing trials to continue may revive fears associated with the colonial-era provision and affect Article 19(1)(a) rights.

## Significance

- Balances the right to a speedy trial with ongoing constitutional scrutiny of the sedition law.
- Highlights the transition from the colonial-era sedition framework to the new provisions under the Bharatiya Nyaya Sanhita.
- Reopens debate on national security, free speech, and the future of sedition-related offences in India.

## Education in Mother Tongue

**Context:** The Supreme Court of India directed Rajasthan to recognize Rajasthani for educational purposes and promote mother tongue-based education at the primary level.



## About Rajasthani Language

- Rajasthani is an Indo-Aryan language group spoken mainly in Rajasthan, with major dialects such as Marwari, Mewari, Shekhawati, and Harauti.
- It has a rich tradition of folk literature, ballads, devotional poetry, theatre, and oral narratives.
- Though often grouped under Hindi for administrative purposes, many scholars consider it a distinct language.
- The Sahitya Akademi recognizes Rajasthani as an independent literary language.
- It is currently not included in the Eighth Schedule of the Constitution.

## Background of the Case

- The petition sought inclusion of Rajasthani in the REET examination and the introduction of mother tongue-based education in Rajasthan.
- The State argued that the absence of Eighth Schedule status limited policy support.
- The Court held that lack of policy cannot be a reason to deny constitutional rights.

## Supreme Court Directions

- Rajasthan must formulate a policy on mother tongue-based education in line with NEP 2020.
- Rajasthani should be recognized as a local and regional language for educational purposes.
- The language should be gradually introduced as both a subject and medium of instruction at the foundational stage.

## Key Judicial Observations

- **Language and Identity:** Language is closely linked to identity, culture, and self-expression.
- **Quality Education:** Learning in an unfamiliar language affects comprehension and educational outcomes.
- **Effective Implementation:** Constitutional rights must be supported by practical policy measures to be meaningful.

## Constitutional and Legal Basis

- **Article 21A:** Right to Education includes access to quality education through a language understood by the child.
- **Article 19(1)(a):** Freedom of speech and expression includes the right to receive information in a meaningful language.

- Article 350A: Directs states to provide adequate facilities for primary education in the mother tongue of linguistic minority children.
- Article 14: Excluding a regional language without valid justification may amount to arbitrary discrimination.

### Important Judicial Precedents

- State of Karnataka v. Associated Management of English Medium Primary and Secondary Schools Recognized the right of parents and children to choose the medium of instruction.
- English Medium Students Parents Association v. State of Karnataka Held that forcing students to study in their mother tongue against parental choice is unreasonable.
- Ahmedabad St. Xavier's College v. State of Gujarat Upheld the rights of linguistic and religious minorities to establish educational institutions and choose their medium of instruction.

### Role of NEP 2020

- Recommends teaching in the mother tongue/home language/regional language at least up to Grade V, and preferably up to Grade VIII.
- Emphasizes that children learn concepts better in familiar languages, improving comprehension and cognitive development.

### RTE Act Provision

- Section 29(2)(f) of the Right to Education Act, 2009 states that, as far as practicable, the medium of instruction should be the child's mother tongue.

### Significance

- Improves learning outcomes and conceptual understanding.
- Promotes linguistic diversity and cultural preservation.
- Strengthens constitutional values of equality, dignity, and inclusiveness.
- Enhances access to quality education through a familiar language.

## Tribal Exemption Under the Uniform Civil Code (UCC)

**Context:** Recently, the Union Home Minister stated that all tribal communities will remain outside the ambit of the Uniform Civil Code (UCC), ensuring protection of their constitutional and cultural rights.

- Tribal Customary Rights and UCC
- Tribal customary rights are traditional, unwritten systems that govern matters such as marriage, divorce, adoption, inheritance, and land ownership within tribal communities.
- Article 44 of the Constitution directs the State to strive for a Uniform Civil Code for all citizens.
- A uniform civil law may conflict with distinct tribal customs and traditions, raising concerns over preservation of tribal identity and culture.

## Constitutional Safeguards for Tribal Communities

### Fifth Schedule (Article 244(1))

- Applies to Scheduled Areas in 10 states across Central and Peninsular India.
- Empowers Governors to modify, suspend, or restrict the application of laws that may adversely affect tribal customs, land, or interests.

### Sixth Schedule (Article 244(2))

- Applies to tribal areas of Assam, Meghalaya, Tripura, and Mizoram.
- Provides substantial autonomy through Autonomous District Councils (ADCs).
- ADCs can make laws relating to marriage, inheritance, and social customs.

### Special Constitutional Provisions

- Article 371A (Nagaland): Parliamentary laws concerning Naga customary practices, religious and social customs, and land ownership do not apply unless approved by the State Assembly.
- Article 371G (Mizoram): Similar protection is provided for Mizo customary laws, social practices, and land-related matters.

### Significance

- Protects tribal cultural identity and traditional governance systems.
- Preserves constitutional guarantees granted to indigenous communities.
- Balances the goal of legal uniformity with India's cultural and social diversity.

**Conclusion:** The exemption of tribal communities from the UCC reflects the Constitution's commitment to safeguarding indigenous traditions, autonomy, and cultural heritage while respecting the diversity of India's legal and social framework.

## Right to Safe Travel

**Context:** The Supreme Court has ruled that protection from road accidents and safe travel on highways are integral parts of the Right to Life under Article 21 of the Constitution.

### Supreme Court Directions on Road Safety

- **Highway Safety Measures:** No new dhabas, eateries, or commercial establishments can be constructed or operated within the right-of-way of National Highways.
- **Parking of heavy vehicles on highways** is prohibited except in designated parking zones.
- **Removal of Illegal Structures:** District authorities have been directed to remove unauthorized constructions along highways within 60 days to reduce accident risks.
- **Institutional Mechanism:** Establishment of District Highway Safety Task Forces across the country for effective monitoring and enforcement of road safety measures.

## Article 21 and Expanding Scope of Right to Life

- Article 21 states: “No person shall be deprived of his life or personal liberty except according to procedure established by law.”
- Over time, the Supreme Court has expanded Article 21 beyond mere survival to include several fundamental human rights.

## Rights Recognized Under Article 21

### Personal Rights

- Right to dignity
- Right to privacy (K.S. Puttaswamy v. Union of India)
- Right to a fair trial

### Socio-Economic Rights

- Right to livelihood (Olga Tellis v. Bombay Municipal Corporation)
- Right to health
- Right to education

### Environmental Rights

- Right to clean air
- Right to clean water

### Other Rights

- Right to die with dignity
- Limited right to internet access
- Right to safe travel on roads and highways

**Significance:** The judgment further broadens the scope of Article 21 by recognizing road safety as a constitutional obligation, placing greater responsibility on authorities to ensure safer highways and reduce accident-related fatalities.

## India's First Paperless Judiciary

**Context:** The Supreme Court declared Sikkim as India's first paperless State judiciary, marking a significant step towards digital justice delivery.

### About Paperless Judiciary

- A paperless judiciary is a fully digital court system where filing, hearings, records, and case management are conducted electronically without physical paperwork.

### Key Features

- **E-Filing and Digital Records:** Cases, affidavits, and evidence are filed online, reducing paperwork and procedural delays.
- **Virtual Hearings:** Court proceedings are conducted through video conferencing, allowing remote participation by judges, lawyers, and litigants.
- **Real-Time Case Tracking:** Digital platforms enable instant access to case status, court orders, and judgments, improving transparency and accessibility.

### Significance

- Enhances efficiency and speed in justice delivery.
- Reduces administrative costs and paper consumption.
- Improves transparency, accessibility, and ease of access to judicial services.
- Supports the broader goal of digital governance and e-courts in India.

# Committee on Empowerment of Women (2026-27)

**Context:** Lok Sabha Speaker Om Birla constituted the Committee on Empowerment of Women for 2026-27. Daggubati Purandeswari has been appointed as its Chairperson.

**About the Committee on Empowerment of Women**

- **Establishment:** Constituted for the first time on 29 April 1997 during the 11th Lok Sabha.
- **Composition:** The committee has 30 members:
  - 20 members nominated by the Speaker from the Lok Sabha.
  - 10 members nominated by the Chairman from the Rajya Sabha.
- **Tenure:** The committee has a one-year term and is reconstituted annually.

**Functions**

- Examines government policies, programmes, and initiatives related to the welfare, development, and empowerment of women.
- Reviews measures taken by various ministries and departments for advancing women's rights and opportunities.
- Functions on a non-partisan basis, with members working collectively beyond party affiliations to promote gender empowerment.

**Significance**

- Strengthens parliamentary oversight of women-centric policies.
- Helps ensure effective implementation of programmes aimed at gender equality and women's welfare.
- Provides recommendations to improve the socio-economic and political empowerment of women in India.

## SHE-MARTs Initiative

**Context:** The Ministry of Rural Development held a consultation in Bhubaneswar to operationalise the SHE-MARTs initiative.

**About SHE-MARTs**

- SHE-MART stands for Self Help Entrepreneurs - Marketing Avenues for Rural Transformation.
- Announced in: Union Budget 2026-27.
- **Nodal Ministry:** Developed by the Ministry of Rural Development under the Deendayal Antyodaya Yojana - National Rural Livelihoods Mission (DAY-NRLM).



## Objective

- To create women-led rural marketing ecosystems.
- To enhance enterprise growth, branding, and market access for products made by Self-Help Groups (SHGs).
- To strengthen women's economic empowerment and rural entrepreneurship.

## Significance

- Promotes market linkages for SHG products.
- Improves income-generation opportunities for rural women.
- Supports inclusive rural development through women-led enterprises.
- Contributes to the goal of sustainable livelihoods and rural transformation.

# 3rd India-Nordic Summit

**Context:** The 3rd India-Nordic Summit was held in Oslo with participation from India and leaders of Denmark, Norway, Finland, Iceland, and Sweden.



## Key Highlights

- **Green Technology Partnership:** India and Nordic countries agreed to establish a Trusted Green Technology and Innovation Strategic Partnership.
- **Support for India:** Nordic nations reiterated support for India's permanent membership in a reformed United Nations Security Council and its bid to join the Nuclear Suppliers Group.
- **Trade & Investment:** Leaders welcomed the implementation of the India-EFTA Trade and Economic Partnership Agreement (TEPA) and progress on the India-EU FTA.
  - EFTA countries aim to invest USD 100 billion in India and create 1 million jobs.
- **Connectivity:** Emphasis on strengthening links between the Nordic region and the Indo-Pacific through the India-Middle East-Europe Economic Corridor (IMEC).
- **Maritime Cooperation:** Enhanced collaboration under MAHASAGAR and the Indo-Pacific Oceans Initiative (IPOI).
- **Green Energy:** Cooperation in green hydrogen, carbon capture, low-emission technologies, and critical minerals.
- **Blue Economy:** Joint efforts in sustainable shipping, shipbuilding, and ship recycling.
- **AI & Digitalisation:** Focus on inclusive AI, trusted digital infrastructure, and safe, transparent AI governance.
- **Space Cooperation:** Welcomed collaboration between Indian Space Research Organisation and the Norwegian Space Agency, including support for a Swedish payload in India's Venus Orbiter Mission.

## Importance for India

- Access to advanced technologies in AI, telecom, cybersecurity, renewable energy, and defence.
- Strengthens India's green transition and blue economy ambitions.
- Enhances trade, investment, and innovation partnerships.
- Supports India's strategic engagement in the Indo-Pacific and Arctic regions.

## Challenges

- Geographical distance and limited connectivity.
- Relatively low trade and investment volumes.
- Regulatory and market-access barriers.
- Differences in environmental and sustainability standards.
- Slow progress in the India-EU FTA.

## Way Forward

- Improve air, maritime, and digital connectivity.
- Deepen cooperation in clean energy, semiconductors, fintech, healthcare, and innovation.
- Accelerate India-EU FTA negotiations.
- Expand academic exchanges, research partnerships, and startup collaboration.
- Promote adoption of global sustainability and ESG standards.

### Nordic vs Scandinavian Countries

Basis	Nordic Countries	Scandinavian Countries
Meaning	Broader Northern European grouping	Narrower cultural-geographical grouping
Countries	Denmark, Finland, Iceland, Norway, Sweden	Denmark, Norway, Sweden
Scope	Includes North Atlantic islands	Mainly Scandinavian Peninsula and Denmark
Cooperation	Through the Nordic Council	No separate political institution

**Significance :** The summit reflects India's growing focus on green technology, innovation, sustainable development, maritime cooperation, and strategic diversification of global partnerships.



# India-UAE: Evolving Strategic Partnership

**Context:** India and the UAE signed several key agreements during the Prime Minister's visit, further strengthening their Comprehensive Strategic Partnership.

## Key Agreements

- **Strategic Petroleum Reserves:** Agreement between Indian Strategic Petroleum Reserves Ltd. and ADNOC for energy cooperation.
- **LPG Supply Agreement:** Long-term arrangement to strengthen India's energy security.
- **Strategic Defence Partnership:** Cooperation in defence manufacturing, military training, maritime security, cyber defence, and innovation.
- **Infrastructure Investment:** UAE announced investments worth \$5 billion in Indian infrastructure projects.
- **Supercomputing Collaboration:** Partnership between C-DAC and UAE's G42 to establish eight Exaflop Supercomputer Clusters.

## Importance of India-UAE Relations

### Energy Security

- UAE is one of India's major suppliers of crude oil and LPG.
- Strategic energy partnerships help ensure long-term energy stability.

### Trade and Investment

- Bilateral trade has crossed \$85 billion, boosted by the India-UAE CEPA.
- UAE sovereign funds are investing heavily in infrastructure, logistics, renewable energy, and fintech.

### Defence and Strategic Cooperation

- Growing collaboration in maritime security, cyber defence, and military training.
- Supports security of vital Sea Lanes of Communication (SLOCs) in the Indian Ocean Region.

### Gateway to Global Markets

- UAE serves as a strategic link connecting India with West Asia, Africa, and Europe.
- Enhances trade, connectivity, and regional economic integration.

### Technology and Digital Partnership

- Cooperation in AI, supercomputing, fintech, and digital infrastructure.
- Exaflop Supercomputer project will strengthen research, innovation, and data-processing capabilities.

### Indian Diaspora

- Over 3.5 million Indians reside in the UAE.
- The diaspora contributes significantly through remittances and acts as a bridge between the two countries.

### Maritime and Blue Economy Cooperation

- Projects like the Vadinar ship repair cluster support the Sagarmala Programme.
- Strengthens India's position as a hub for shipbuilding, ship repair, and maritime trade.

**Conclusion:** India-UAE relations have evolved into a comprehensive partnership covering energy, trade, defence, technology, infrastructure, and maritime cooperation. The growing collaboration supports India's economic growth, energy security, technological advancement, and strategic interests in the Gulf and the Indian Ocean region.

## UAE Exit from OPEC

**Context:** The United Arab Emirates (UAE) announced its withdrawal from the Organization of the Petroleum Exporting Countries (OPEC) with effect from 1 May 2026, ending nearly six decades of membership.

### Why Did UAE Leave OPEC?

- **Production Restrictions:** OPEC quotas limited UAE's oil production despite major investments to increase capacity to 5 million barrels per day (bpd) by 2027. UAE's quota remained around 3.4 million bpd.
- **Economic Diversification:** Higher oil revenues are needed to support UAE's transition towards a knowledge-based economy focused on technology, education, and services.
- **Geopolitical Challenges:** Disruptions in the Strait of Hormuz and regional tensions reduced export flexibility while OPEC's consensus-based system limited independent decision-making.
- **Greater Policy Autonomy:** Leaving OPEC allows the UAE to independently determine production levels and align energy policies with national interests.

### Impact of UAE's Exit

- **Reduced OPEC Influence:** The departure of a major producer weakens OPEC's ability to control global oil supply and prices.
- **Higher Oil Supply:** UAE may increase production after exiting quota restrictions, potentially putting downward pressure on oil prices.
- **Greater Market Volatility:** Reduced coordination among producers could lead to fluctuations in global oil prices.
- **Benefits for Importers:** Countries like India may gain from diversified supply sources and potentially lower oil prices.
- **Pressure on OPEC+:** The exit may create tensions within the OPEC+ alliance and raise concerns about its long-term effectiveness.

### About OPEC

- OPEC is a permanent intergovernmental organization that coordinates petroleum policies among major oil-exporting countries.
- **Established:** 1960 at the Baghdad Conference.
- **Headquarters:** Vienna
- **Founding Members:** Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela.
- Holds nearly 80% of global proven oil reserves and accounts for around 30-40% of global oil production.

## About OPEC+

- OPEC+ is an expanded alliance of OPEC members and major non-OPEC producers.
- Formed: 2016 to stabilize oil markets amid falling prices.
- Key non-OPEC members include Russia, Kazakhstan, Oman, and Mexico.
- Controls nearly 50-60% of global oil output.

**Conclusion:** UAE's exit reflects its pursuit of greater energy independence and economic diversification. The move could reshape global oil governance, weaken OPEC's market influence, and create new opportunities for major energy-importing countries like India.

# India Abstains on Vanuatu-Led UN Climate Resolution

**Context:** India abstained from voting on a United Nations General Assembly (UNGA) resolution supporting the International Court of Justice (ICJ) advisory opinion on countries' climate obligations.

## About the Resolution

- Introduced by Vanuatu and backed by several countries, particularly Small Island Developing States (SIDS).
- Called for:
  - Stronger national climate action plans.
  - Limiting global warming to 1.5°C.
  - Phasing out fossil fuel subsidies.
- Voting Outcome: Adopted with 141 votes in favour, 8 against, and 28 abstentions.

## About Vanuatu

- A Pacific island nation located in the South Pacific Ocean, east of Australia.
- Capital: Port Vila.
- Comprises about 80 volcanic islands.
- Among the world's most climate-vulnerable countries, facing sea-level rise, cyclones, and extreme weather events.

## About the ICJ Advisory Opinion

- First time the International Court of Justice examined states' legal responsibilities regarding climate change.
- Key observations:
  - Countries have legal obligations to protect the global climate system.
  - States that fail to meet these obligations may incur legal responsibility and could be required to provide reparations.
- The opinion is advisory and non-binding, meaning it does not automatically create enforceable legal obligations.

## Why Did India Abstain?

- **Climate Finance Concerns:** The resolution did not sufficiently emphasize the responsibility of developed countries to provide climate finance, technology transfer, and capacity-building support to developing nations.
- **Protection of UNFCCC Framework:** India argued that climate negotiations should continue under the established framework of the United Nations Framework Convention on Climate Change and the Paris Agreement.
- **Concerns Over New Obligations:** India expressed concern that the resolution could indirectly create binding or quasi-binding climate obligations for developing countries beyond what has been agreed multilaterally.

## Significance

- Highlights the growing role of international legal institutions in climate governance.
- Reflects the continuing debate between climate responsibility and climate equity, particularly regarding the principle of Common But Differentiated Responsibilities (CBDR).
- Demonstrates developing countries' concerns that climate action must be accompanied by adequate financial and technological support from developed nations.

# Indian War Memorial in Seoul

**Context:** Defence Minister Rajnath Singh and South Korean Minister Kwon Oh-eul inaugurated the Indian War Memorial in Seoul to mark the 75th anniversary of the Korean War and honour India's contribution.



## About the Memorial

- Built by India's Ministry of Defence at Imjingak Park, Seoul.
- Commemorates India's role in the Korean War (1950–53).
- Honors the service of:
  - 60 Para Field Ambulance of the Indian Army.
  - Custodian Force of India (CFI).

## Korean War (1950–53)

- Fought between North Korea and South Korea.
- Resulted in the division of the Korean Peninsula along the Demilitarised Zone (DMZ).

## India's Contribution

- India did not send combat troops but deployed the 60th Parachute Field Ambulance, a 627-member medical unit.
- It became the largest medical support contingent during the war.
- The unit earned the title "Maroon Angels" for its humanitarian service.

## Hind Nagar

- Established by the Custodian Force of India (CFI) in 1954.
- Served as a camp for around 22,000 Prisoners of War (POWs) before their repatriation.

## Significance

- Reflects India's humanitarian role in global conflicts.
- Strengthens India-South Korea historical and strategic ties.

# BEA Global Forum (2026-27)

**Context:** Dr. Bhaskar Jyoti Sonowal of Assam has been elected President of the BRICS Entrepreneurs Alliance (BEA) Global Forum for 2026-27, highlighting India's growing role in BRICS+ initiatives.

## About BRICS Entrepreneurs Alliance (BEA)

- A business platform under BRICS+ that connects entrepreneurs, industry leaders, and policymakers from member countries.
- Established: September 2025 during the II BRICS Forum on Traditional Values in Brazil.
- BRICS+ refers to the expanded grouping of BRICS countries and partner nations.

## Organisational Structure

- **General Council:** Representatives from all national chapters.
- **Global President:** Selected annually in line with the BRICS chairmanship.
- **Secretary General:** Oversees long-term coordination and administration.
- **National Chapters:** Country-level bodies comprising entrepreneurs and business leaders.

## Key Functions

- **Business Collaboration:** Promotes cooperation and networking among BRICS+ entrepreneurs.
- **Partner Verification:** Maintains a credible registry for reliable business partnerships.
- **Business Support:** Provides market insights, regulatory guidance, and networking opportunities.
- **Capacity Building:** Organises training programmes, workshops, and knowledge-sharing initiatives.

## Significance

- Strengthens economic cooperation among BRICS+ countries.
- Enhances India's leadership role in emerging global business platforms.
- Promotes entrepreneurship, innovation, and cross-border investments.

# Tuareg Rebels

**Context:** A major offensive by Tuareg rebels has triggered Mali's worst security crisis in nearly 15 years.

## About Tuareg Rebels

- Tuaregs are a nomadic ethnic group inhabiting the Sahara region, mainly in Mali and Niger.
- They have long demanded greater autonomy or independence for Azawad, a region in northern Mali.
- Their demands stem from perceived political marginalisation and neglect of their cultural identity.

## Major Uprisings

- Tuareg rebellions have occurred several times since the 1960s.
- The most significant uprising took place in 2012, led by the National Movement for the Liberation of Azawad (MNLA).

## Azawad Declaration

- In 2012, Tuareg rebels declared Azawad an independent state.
- The declaration did not receive international recognition and soon collapsed.

## Significance

- The ongoing conflict continues to challenge peace and stability in the Sahel region.
- It highlights issues of ethnic identity, governance, and security in West Africa.



# International Big Cat Alliance (IBCA)

**Context:** Saudi Arabia has become the newest member of the International Big Cat Alliance (IBCA).

## About IBCA

- IBCA is a global intergovernmental alliance dedicated to the conservation of seven big cat species:
  - Tiger, Lion, Leopard, Snow Leopard, Cheetah, Jaguar, Puma
- India is home to Tiger, Lion, Leopard, Snow Leopard, and Cheetah.



## Key Facts

- Launched: 9 April 2023 during the 50th anniversary of Project Tiger.
- Status: Became a treaty-based intergovernmental organisation in January 2025.
- Headquarters: New Delhi, India.
- Budget Allocation: ₹150 crore (2023-24 to 2027-28).

## Objectives

- Promote international cooperation for big cat conservation.
- Facilitate knowledge sharing on conservation challenges and best practices.
- Strengthen the capacity of range countries for effective wildlife management.
- Raise global awareness about big cat conservation.
- Mobilise financial and technical resources through international partnerships.

## Membership

- Open to all UN member countries, especially the 95 big cat range countries.
- As of May 2026, IBCA has 26 member countries, including India, Bhutan, Nepal, Russia, Cambodia, Sri Lanka, and Saudi Arabia.

## Organisational Structure

- Assembly: Highest decision-making body comprising all member states.
- Secretariat: Permanent headquarters located in New Delhi.
- Director-General: Chief executive and administrative head of the alliance.

# Kimberley Process Intersessional Meeting 2026

Context: India hosted the Kimberley Process (KP) Intersessional Meeting 2026 in Mumbai during its Chairship.

## About the Kimberley Process (KP)

- The Kimberley Process is a global initiative aimed at preventing the trade of conflict (blood) diamonds.
- Conflict diamonds are rough diamonds mined in war zones and sold to finance armed conflicts.
- Objective: To promote peace, protect diamond-producing communities, and ensure a transparent diamond supply chain.
- Permanent Secretariat: Gaborone, Botswana.



## Membership & Governance

- KP has 60 Participants, representing 86 countries (the European Union is treated as one participant).
- Civil society groups and industry bodies participate as Observers.
- The World Diamond Council (WDC) represents the global diamond industry.
- The KP Chair serves a one-year term, assisted by a Vice-Chair who becomes the next Chair.
- Two official meetings are held annually:
  - Intersessional Meeting
  - Plenary Meeting

## Kimberley Process Certification Scheme (KPCS)

- Established in 2003 under UN General Assembly Resolution 55/56 (2000).
- Ensures that exported rough diamonds are certified as conflict-free.
- Prevents conflict diamonds from entering the global diamond market.

## India and KP 2026

- India assumed the Chairship of KP on 1 January 2026.
- Theme of India's Chairship: 3Cs - Credibility, Compliance, and Consumer Confidence

# India's R&D Ecosystem

**Context:** A high-level panel constituted by NITI Aayog released the "Ease of Doing R&D" Report, highlighting key challenges in India's research ecosystem and recommending major reforms.

## Key Findings of the Report

- India's Gross Expenditure on Research & Development (GERD) remains stagnant at 0.6-0.7% of GDP, much lower than:
  - China - 2.6%
  - USA - 3.4%
  - South Korea - 5.3%
- The report recommends increasing GERD to 2% of GDP, simplifying grant procedures, restoring the 5% GST slab on R&D procurement, and strengthening support for State universities.

## Major Recommendations

- **ROPE Framework (Removing Obstacles and Promoting Enablers):** Reduce administrative delays and regulatory bottlenecks.
- **Research to Commercialisation:** Promote innovation that translates laboratory research into market-ready products.
- **Private Sector Participation:** Encourage industry investment and CSR funding for research and innovation.
- **Trust-Based Governance:** Shift from excessive compliance to an outcome-oriented research ecosystem.
- **Simplified Systems:** Streamline procurement, grant approvals, and research administration.

## Key Challenges in India's R&D Ecosystem

- **Low R&D Spending:** Heavy dependence on government funding and limited private-sector participation.
- **Funding Concentration:** Most research funding is concentrated in premier institutions like IITs, while State universities receive limited support.
- **Fragmented Governance:** Overlapping roles of multiple research agencies lead to duplication and inefficiency.
- **Delays in Grants & Procurement:** Slow fund disbursement and rigid procedures hinder research activities.
- **Weak Industry-Academia Linkages:** Limited technology transfer and commercialization of research outcomes.
- **Bureaucratic Burden:** Excessive paperwork and compliance requirements reduce research productivity.

## Consequences

- Reduced global competitiveness in emerging technologies such as AI, semiconductors, biotechnology, and defence technology.
- Brain drain of talented researchers.
- Weak patent and innovation ecosystem.
- Regional disparities in research infrastructure.
- Slower progress towards Atmanirbhar Bharat.
- Declining attractiveness of research careers.

## Way Forward

- Increase R&D expenditure to 2% of GDP.
- Strengthen State universities and regional research institutions.
- Promote industry-academia collaboration and technology transfer.
- Introduce single-window digital systems for grants and procurement.
- Expand fellowships and create attractive research career pathways.
- Establish a National Institute for Science Policy & Governance (NISPG) for long-term science policy planning.

## Important Government Initiatives

- **Anusandhan National Research Foundation (ANRF):** Strengthens research funding and industry-academia collaboration.
- **National Quantum Mission (NQM):** Promotes quantum computing, communication, and sensing technologies.
- **National Supercomputing Mission (NSM):** Develops indigenous high-performance computing infrastructure.
- **Atal Innovation Mission (AIM):** Encourages innovation, startups, and entrepreneurship through incubation and tinkering labs.

**Conclusion:** A robust and inclusive R&D ecosystem is essential for India's technological self-reliance, innovation-led growth, and global competitiveness. Strengthening funding, governance, and research infrastructure will be crucial for achieving these goals.

# State of India's Labour Market

**Context:** The Periodic Labour Force Survey (PLFS) 2025 shows improvement in employment indicators, while highlighting challenges related to skills, women's participation, and quality job creation.

## Key Highlights of PLFS 2025

- Labour Force Participation Rate (LFPR): 59%
- Workforce Participation Rate (WPR): 57%
- Unemployment Rate: 3%
- Formal Employment Rising: Regular salaried jobs increased from 22% to 24%.
- Higher Female Participation: Women's workforce participation, especially in rural areas, has improved.
- Structural Shift: Agriculture's share in employment declined to 43%, while manufacturing and services expanded.
- Women's Earnings: Female wages grew faster than men's, though wage gaps persist.

## Major Challenges

- Education-Employment Gap: Around 5 million graduates enter the labour market annually, but only about 2.8 million find jobs.
- Low Skill Training: Only 4% of people aged 15-59 have received formal vocational or technical training.
- Gender Barriers: Unpaid care work and household responsibilities continue to restrict women's employment opportunities.
- High NEET Population: Nearly 25% of youth (15-29 years) are Not in Education, Employment, or Training (NEET).
- Informality and Wage Gaps: Women earn significantly less than men across salaried, casual, and self-employed work categories.

## Way Forward

- Strengthen industry-oriented skilling, apprenticeships, and vocational education.
- Promote women's employment through childcare support, safe transport, flexible work arrangements, and equal pay.
- Expand labour-intensive sectors such as textiles, electronics, food processing, and green manufacturing.
- Improve formalisation, social security coverage, health insurance, and pension benefits for workers.

**Conclusion:** India's demographic dividend can be fully realised only through quality job creation, skill development, and greater participation of women and youth in the workforce.

# NITI Aayog Launches DPI@2047 Roadmap

**Context:** NITI Aayog has launched the DPI@2047 Roadmap to guide India's next phase of digital transformation and support the vision of Viksit Bharat 2047.

**What is Digital Public Infrastructure (DPI)?**

- DPI refers to foundational digital systems that enable secure and seamless interactions among citizens, businesses, and governments.
- It functions as a digital public good, ensuring wide accessibility and supporting multiple services across sectors.

**Core Pillars of DPI**

- **Digital Identity:** Ensures accurate beneficiary identification and service delivery.
- **Digital Documents:** Enables secure storage, access, and verification of official documents.
- **Data Exchange & Consent:** Facilitates consent-based data sharing while protecting privacy.
- **Digital Payments:** Supports fast, secure, and low-cost financial transactions.
- **Interoperable Platforms:** Allows different service providers to operate on common digital infrastructure.

**DPI 2.0: Next Phase of Digital Transformation**

- Focuses on sector-specific applications and inclusive growth.
- Targets key sectors such as:
  - MSMEs
  - Agriculture
  - Education
  - Health
- Also aims to strengthen credit access, decentralized energy systems, and welfare delivery.

**Key Execution Priorities**

- District-led demand aggregation.
- Promotion of technology entrepreneurship.
- Leveraging Artificial Intelligence (AI).
- Better use of data, digital transactions, human capacity, and AI democratization.

**About DPI@2047 Roadmap**

- A strategic framework for using DPI as a driver of inclusive and productivity-led growth.
- Developed by NITI Aayog in partnership with EkStep Foundation and Deloitte.

**Two-Phase Strategy**

- **DPI 2.0 (2025–2035):** Focus on livelihood-led growth at scale.
- **DPI 3.0 (2035–2047):** Focus on achieving broad-based prosperity and inclusive development.

**Significance:** The roadmap seeks to harness India's digital infrastructure to improve governance, enhance service delivery, boost economic productivity, and accelerate the journey towards Viksit Bharat 2047.

# RBI Cancels Banking Licence of Paytm Payments Bank

**Context:** The Reserve Bank of India (RBI) has cancelled the banking licence of Paytm Payments Bank Limited due to continued regulatory non-compliance.

## About Payments Banks

- Payments Banks are specialised banks introduced by the RBI to promote financial inclusion and provide basic banking services to underserved sections of society.
- The concept was recommended by the Nachiket Mor Committee on Financial Inclusion.

## Key Features

- **Objective:** Provide safe savings, remittance, and digital payment services.
- **Limited Banking Functions:** Can accept deposits up to ₹2 lakh per customer, but cannot provide loans or issue credit cards.
- **Digital-First Model:** Operate mainly through mobile banking, internet banking, and agent networks, ensuring low operational costs.
- **Investment Requirement:** Must invest at least 75% of deposits in Government Securities (G-Secs) to ensure safety and liquidity.
- **Regulation:** Payments Banks are regulated by the Reserve Bank of India (RBI).

## Significance

- Play an important role in expanding banking access, promoting digital payments, and strengthening financial inclusion, especially in rural and underserved areas.

# India's First Green Methanol Plant

**Context:** India's first port-based green methanol plant is being established at Deendayal Port, Kandla (Gujarat) to produce eco-friendly marine fuel for ships.

## Key Features

- **Feedstock:** Uses Prosopis juliflora (an invasive weed) as raw material for biofuel production.
- **Production Capacity:** Pilot plant will produce about 5 tonnes of green methanol per day.
- **Technology:** Converts biomass into syngas through gasification, which is then transformed into methanol.
- **Environmental Benefits:** Helps reduce CO<sub>2</sub>, NO<sub>x</sub>, and SO<sub>x</sub> emissions while supporting ecosystem restoration.
- **Policy Significance:** Aligns with India's Green Ports Initiative and the International Maritime Organization's (IMO) green shipping goals.
- **Circular Economy Model:** Combines removal of invasive species with the production of low-emission marine fuel.

## About *Prosopis juliflora*

- A thorny shrub/tree native to Central and South America (Mexico).
- Introduced in India by the British in the late 19th century to combat desertification.
- Commonly known as Vilayati Babul (North India) and Gando Baval (Gujarat).
- Considered one of India's most invasive alien species.

## Ecological Concerns

- Depletes groundwater resources.
- Replaces native vegetation and biodiversity.
- Increases soil salinity and land degradation.
- Has severely damaged the Banni Grasslands of Kutch, threatening wildlife such as the Great Indian Bustard.

# Mission on Arunachal Kiwi

**Context:** The Union Minister for Development of North Eastern Region launched the “Arunachal Kiwi: The USP of Arunachal Pradesh” mission to promote the state as a leading organic kiwi production and export hub.

## About the Mission

- A cluster-based initiative aimed at strengthening kiwi production, processing, branding, and exports in Arunachal Pradesh.
- Financial Outlay: Around ₹167 crore through a convergence-based approach.
- Nodal Ministry: Ministry of Development of North Eastern Region (MDoNER).
- Supported by NABARD, APEDA, ICAR-CITH, and private investors.
- Establishes six post-harvest management hubs in Ziro Valley, Dirang, Kalaktang, Shi Yomi, and Dibang Valley.
- Part of the “Brand North East” vision, under which each Northeastern state promotes a unique product with a distinct USP.

## Brand North East Products

- Arunachal Pradesh - Organic Kiwi
- Assam - Muga Silk
- Meghalaya - Lakadong Turmeric
- Nagaland - Coffee
- Mizoram - Ginger
- Sikkim - Organic Farming
- Manipur - Polo Heritage

## Kiwi Cultivation

- Major producing states in India include Arunachal Pradesh, Himachal Pradesh, Jammu & Kashmir, Uttar Pradesh, Sikkim, Meghalaya, and Kerala.
- Arunachal Pradesh is India's largest kiwi-producing state, contributing over 50% of national production.
- Major global producers include New Zealand, China, Italy, Australia, and Chile.

## About Kiwi Fruit

- Kiwi (*Actinidia deliciosa*), also known as Chinese Gooseberry, is a deciduous climbing vine.
- Rich in Vitamin B, Vitamin C, antioxidants, dietary fibre, phosphorus, potassium, and calcium.

## Ideal Growing Conditions

- Altitude: 900-1600 m above sea level
- Rainfall: Around 150 cm annually
- Soil: Deep, fertile, well-drained sandy loam
- Temperature: Requires 700-800 chilling hours below 7°C during winter
- Kiwi plants are generally dioecious, with male and female flowers on separate plants.

# Mizoram Ginger Mission

**Context:** The Ministry of Development of North Eastern Region (MDoNER) has launched the Mizoram Ginger Mission to strengthen the ginger value chain in the state.

## About Mizoram Ginger Mission

- A convergence-led initiative aimed at developing the entire ginger value chain, from production to processing and marketing.
- Part of the “Brand North East” initiative, which promotes unique products from Northeastern states.

## Brand North East Products

- Mizoram - Ginger
- Meghalaya - Lakadong Turmeric
- Arunachal Pradesh - Kiwi
- Tripura - Queen Pineapple
- Nagaland - Coffee
- Sikkim - Organic Products

## About Mizo Ginger

- **GI-Tagged Variety:** Mizo Ginger has received a Geographical Indication (GI) tag.
- **Pharma-Grade Quality:** Known for its superior medicinal and pharmaceutical properties.
- **High Oleoresin Content:** Contains 6-8% oleoresin, much higher than the global average of about 3%.
  - Oleoresin is a concentrated natural extract containing essential oils, flavour, aroma, and active medicinal compounds.
- **Export Potential:** Highly valued in markets across Southeast Asia, the Middle East, and Europe due to its quality and aroma.
- **Special Recognition:** Mizoram has been declared the “Ginger Capital of India” by NITI Aayog.

# Padma Doree Initiative

**Context:** The North Eastern Handicrafts and Handlooms Development Corporation (NEHHDC), under the Ministry of Development of North Eastern Region (MDoNER), has launched the Padma Doree Initiative.

## Key Highlights

- Promotes collaboration between weavers and artisans from different regions.
- Supports livelihood generation and market access for traditional handloom communities.
- Encourages preservation of India’s rich textile heritage through innovation and cultural exchange.



### About Padma Doree Initiative

- A cross-regional textile initiative connecting Northeast India and Madhya Pradesh.
- Combines Eri (Ahimsa) Silk of Northeast India with the traditional Chanderi weaving of Madhya Pradesh.
- Objective: To promote a sustainable, artisan-centric textile ecosystem while preserving and reviving traditional crafts.
- Significance: Embodies the spirit of “Ek Bharat Shreshtha Bharat” by bringing together diverse cultural and weaving traditions.
- Sustainability Focus: Encourages eco-friendly Eri silk production and promotes heritage handloom practices.
- Cultural Promotion: Features exhibitions, fashion shows, and live demonstrations by artisans to showcase traditional craftsmanship.

## SEHAT Initiative

**Context:** The Union Ministers for Health & Family Welfare and Agriculture & Farmers’ Welfare jointly launched the SEHAT Mission.

### About SEHAT Initiative

- SEHAT stands for Science Excellence for Health through Agricultural Transformation.
- Nodal Agencies: ICMR (Indian Council of Medical Research) and ICAR (Indian Council of Agricultural Research).
- Objective: To strengthen the link between agriculture, nutrition, and public health for better health outcomes.

### Key Features

- Preventive Healthcare Focus: Promotes a shift from a treatment-based healthcare model to a preventive and promotive healthcare approach.
- Food as Medicine: Encourages healthy and nutritious diets as a means to prevent diseases and improve overall well-being.
- Inter-Sectoral Convergence: Integrates agricultural research, nutrition science, and public health strategies.
- Holistic Health Approach: Aims to improve nutritional security and reduce the burden of lifestyle and diet-related diseases.

### Significance

- Supports the goal of a healthier and nutritionally secure population.
- Strengthens coordination between the agriculture and health sectors.
- Promotes sustainable food systems and better public health outcomes.



# LEADS Report 2025

**Context:** The Union Minister of Commerce and Industry released the Logistics Ease Across Different States (LEADS) Report 2025.



## About LEADS Report

- Launched by the Department for Promotion of Industry and Internal Trade (DPIIT) in 2018.
- It is a national benchmarking framework that assesses logistics performance across States and Union Territories.
- Objective: To evaluate logistics efficiency, identify gaps, and support logistics reforms across the country.

## Key Assessment Areas

- Logistics infrastructure
- Service quality
- Regulatory environment
- Operational efficiency
- Data-driven logistics reforms

## LEADS 2025 Highlights

- Introduced a more robust and evidence-based methodology.
- Around 59% weightage is given to objective indicators for performance assessment.
- States and UTs are classified into four categories:
  - Exemplars
  - High Performers
  - Accelerators
  - Growth Seekers

## Top Performers (Exemplars)

- Coastal States: Tamil Nadu
- Landlocked States: Uttar Pradesh
- North-Eastern States: Mizoram
- Union Territories: Delhi

## Significance

- Helps improve India's logistics ecosystem and supply chain efficiency.
- Supports the goal of reducing logistics costs and enhancing ease of doing business.
- Encourages states and UTs to adopt best practices and undertake targeted reforms.

# India's First Mega Greenfield Shipyard

**Context:** A tripartite MoU has been signed to establish India's first Mega Greenfield Shipyard at Thoothukudi, Tamil Nadu.



## Key Stakeholders

- HD Korea Shipbuilding & Offshore Engineering (HD KSOE) - Global shipbuilding partner for the project.
- National Shipbuilding & Heavy Industries Park, Tamil Nadu (NSHIP-TN) - SPV jointly promoted by V.O. Chidambaranar Port Authority and SIPCOT.
- Sagarmala Finance Corporation Limited (SMFCL) - Financial partner for the project.

## India-Republic of Korea Maritime Cooperation

- The agreement was signed under the VOYAGES Initiative (Shared Vision for Operation of Yard Assisted Growth with Efficiency and Scale).
- Reflects growing maritime cooperation between India and the Republic of Korea in shipbuilding, shipping, and maritime logistics.

## About the Thoothukudi Shipyard Project

- Location: Thoothukudi
- Annual Capacity: Proposed shipbuilding capacity of 2.5 million Gross Tonnage (GT).
- Employment Generation: Expected to create around 15,000 direct jobs along with significant indirect employment.
- Shipbuilding Hub: Will serve as the anchor facility of the Thoothukudi Shipbuilding Cluster being developed by NSHIP-TN.

## Significance

- Strengthens India's shipbuilding and maritime manufacturing capabilities.
- Supports the vision of becoming a global maritime and logistics hub.
- Enhances India-South Korea strategic cooperation in the maritime sector.

# Withholding Tax

**Context:** The Government is considering reducing withholding tax on government bonds to attract foreign investment and strengthen India's external financial position.

## About Withholding Tax

- Withholding Tax is a tax deducted at source on payments such as interest, dividends, royalties, or bond income made to non-residents.
- The payer deducts the tax before making the payment and deposits it directly with the government, ensuring timely tax collection and compliance.

## Key Features

- **Applicable to Non-Residents:** Mainly levied on cross-border payments made to foreign individuals or entities.
- **Current Scenario:** Foreign Portfolio Investors (FPIs) currently pay around 20% withholding tax on interest earned from Indian government bonds after the concessional 5% rate ended in 2023.
- **Difference from TDS:** While Tax Deducted at Source (TDS) generally applies to domestic transactions, withholding tax primarily applies to payments made to non-residents.
- **Role of DTAA:** Double Taxation Avoidance Agreements (DTAAs) enable investors from partner countries to benefit from lower withholding tax rates and avoid double taxation.

## Significance

- Helps ensure efficient tax collection from foreign investors.
- A lower withholding tax can attract greater foreign investment into government securities and improve capital inflows.

# Electronic Gold Receipts (EGRs)

**Context:** The National Stock Exchange (NSE) has launched Electronic Gold Receipts (EGRs) to modernise and formalise India's gold market.



## What are EGRs?

- EGRs are SEBI-regulated digital instruments that represent ownership of physical gold and can be traded on stock exchanges like shares and bonds.
- Physical gold is stored in SEBI-accredited vaults, and equivalent EGRs are issued in investors' demat accounts.

## Key Features

- **Digital Trading:** Gold can be bought and sold electronically through exchanges.
- **Quality Assurance:** Backed by gold meeting LBMA Good Delivery or India Good Delivery Standard purity norms.
- **Physical Redemption:** Investors can convert EGRs into physical gold in smaller denominations.
- **Tax Benefit:** No GST on EGR trading; 3% GST is applicable only when physical gold is withdrawn.
- **Collateral Use:** EGRs can be pledged as collateral for loans, improving liquidity.

## EGRs vs Other Gold Investment Options

- **EGRs:** Tradable digital gold with the option of physical delivery.
- **Gold ETFs:** Provide digital exposure to gold but limited physical redemption for small investors.
- **Sovereign Gold Bonds (SGBs):** Offer returns linked to gold prices but are cash-settled and do not provide physical gold.

**Significance:** EGRs promote transparent, secure, and efficient gold trading, while integrating India's physical gold market with the formal financial system.

# Ecocide

**Context:** Ongoing conflicts in West Asia have renewed global discussions on recognising ecocide as an international crime due to large-scale environmental destruction.

## About Ecocide

- **Ecocide** refers to severe, widespread, or long-term damage to the environment caused by human activities.
- It includes destruction of ecosystems through war, industrial activities, or excessive resource exploitation.
- **Origin:** The term was coined by Arthur W. Galston during the Vietnam War to describe environmental devastation caused by Agent Orange.
- **Legal Status:** Ecocide is not yet recognised as an international crime under the Rome Statute of the International Criminal Court (ICC).
- Some countries, including Russia, Ukraine, and France, have incorporated similar provisions in their domestic laws.

## Key Concerns

- **No Separate International Crime:** Environmental destruction is currently addressed mainly under war crimes, limiting accountability.
- **Human-Centric Laws:** Existing legal frameworks focus on harm to people rather than harm to nature itself.
- **Limited Jurisdiction:** International bodies like the ICC face jurisdictional constraints, especially when countries are not members.
- **Weak Enforcement:** Environmental crimes often go unpunished due to lack of effective enforcement and political will.
- **Fragmented Legal Framework:** Multiple treaties address environmental harm, but overlapping provisions weaken accountability.

## Need for Recognising Ecocide

- **Fifth International Crime:** Inclusion under the Rome Statute alongside genocide, crimes against humanity, war crimes, and aggression.
- **Stronger Deterrence:** Would discourage large-scale environmental destruction during conflicts and industrial activities.
- **Better Enforcement:** Could enable stronger international cooperation and cross-border prosecution.
- **Environmental Justice:** Supports climate justice by recognising ecosystems as entities worthy of legal protection.
- **Improved Global Governance:** Strengthens international efforts toward environmental conservation and sustainability.

**Conclusion:** Recognising ecocide as an international crime can enhance accountability for large-scale environmental destruction and strengthen global environmental protection, provided effective enforcement mechanisms and political commitment are ensured.

## E100 Fuel

**Context:** The Ministry of Road Transport and Highways has issued a draft notification proposing E100 (100% ethanol) as an approved automotive fuel in India.

### About E100

- E100 is a fuel containing about 93% anhydrous (water-free) ethanol, along with small quantities of gasoline and additives for stability.
- It is used as a standalone alternative to petrol.
- **Engine Requirement:** E100 can be used only in flex-fuel or dedicated ethanol-powered engines designed for high ethanol content.
  - Flex-fuel engines can operate on petrol, ethanol blends, or pure ethanol (E100) by automatically adjusting fuel supply and ignition settings.

## Ethanol Blending Programme (EBP)

- Launched: 2003
- Objective: Reduce crude oil imports, enhance energy security, and promote cleaner fuels.
- Initial Progress: Ethanol blending remained around 2% in 2014 due to policy and supply constraints.
- Acceleration Phase: India achieved E10 (10% ethanol blending) in 2022 through policy support.
- Current Status: E20 (20% ethanol-blended petrol) became the default fuel across India from April 2026 after a phased rollout.
- India achieved its E20 target ahead of the 2030 deadline.

## Significance of E100

- Reduces dependence on imported crude oil.
- Supports cleaner and greener transportation.
- Promotes ethanol production from agricultural feedstocks.
- Contributes to India's energy security and emission reduction goals.

**Conclusion:** The introduction of E100 marks a major step in India's transition towards alternative fuels, strengthening energy security while supporting sustainable and low-carbon transportation.

# Palamu Tiger Reserve (PTR)

**Context:** The Jharkhand government has proposed establishing India's first Integrated Human-Elephant Conflict Research Centre in the Palamu Tiger Reserve (PTR).

## About the Proposed Research Centre

- Will conduct scientific analysis of human-elephant conflict data from across India.
- Aims to develop evidence-based strategies for reducing human-wildlife conflicts.

## About Palamu Tiger Reserve

- Location: Situated in the Chhotanagpur Plateau region of Jharkhand.
- Protected Status: Declared a Protected Forest in 1947.
- Project Tiger: Among the first nine tiger reserves created under Project Tiger (1973-74).
- Administrative Area: Spread mainly across Latehar district and partly in Garhwa district.
  - Core-Buffer Structure: Core Area (Critical Tiger Habitat): 414.08 sq. km
  - Includes Betla National Park (226.32 sq. km)
  - Buffer Area: 715.85 sq. km
- River System: Drained by the North Koel River and its tributaries.

**Significance:** Palamu Tiger Reserve is one of India's oldest tiger reserves and plays a vital role in tiger conservation, biodiversity protection, and human-wildlife conflict management in eastern India.

# Ganges Softshell Turtle

**Context:** India's first satellite-tagged Ganges Softshell Turtle was released in Kaziranga National Park and Tiger Reserve, Assam, on Endangered Species Day 2026.



## About the Initiative

- A healthy adult turtle was captured, fitted with a satellite transmitter under veterinary supervision, and released back into the wild.
- The initiative aims to track movement patterns and support conservation efforts.

## About Ganges Softshell Turtle

- Scientific Name: *Nilssonina gangetica*
- Type: Freshwater turtle species.

## Key Features

- Head Markings: Distinctive arrowhead-shaped markings on the head.
- Carapace: Smooth, flattened, leathery shell with a yellow border.
- Snout: Long tube-like snout that allows breathing while remaining submerged.
- Diet: Omnivorous; feeds on molluscs, insects, fish, amphibians, aquatic plants, waterfowl, and carrion.

## Distribution

- Found in the Ganga, Indus, Mahanadi, and Brahmaputra river systems across northern and eastern India.

## Ecological Importance

- Acts as a predator and scavenger, helping maintain river health by consuming dead organisms, decaying matter, and controlling algal growth.

## Conservation Status

- Wildlife (Protection) Act, 1972: Schedule I
- IUCN Red List: Endangered
- CITES: Appendix I

## About Endangered Species Day

- Observed annually on the third Friday of May.
- Aims to raise awareness about endangered species and promote conservation efforts.

# Brain Death Certification

**Context:** The Supreme Court is reviewing India's brain death certification process amid concerns over misuse in organ harvesting and the absence of uniform medical testing standards.

## What is Brain Death?

- Brain death (Brain Stem Death) is the irreversible cessation of all brain activity, including functions necessary for life such as breathing.
- A brain-dead person can survive only with ventilator support.

## Key Indicators

- Absence of brainstem reflexes (pupil, gag, pain response).
- No spontaneous breathing (apnea).
- Irreversible loss of brain function.

## Why is Brain Death Declaration Important?

- Essential for deceased organ donation (heart, lungs, liver, kidneys, etc.).
- Prevents risks associated with living donors.
- Provides legal clarity for withdrawal of life support.

## Current Protocol in India

- **Legal Basis:** Governed by the Transplantation of Human Organs and Tissues Act (THOTA), 1994.
- Recognises brain stem death as legal death.
- Certification can be made only by a 4-member medical board, including:
  - Doctor-in-charge
  - Neurologist/Neurosurgeon
  - Treating physician
  - Independent doctor
- Brain death must be confirmed twice (6-12 hours apart).
- Relies mainly on clinical tests such as the apnea test and brainstem reflex examination.
- EEG and angiogram are not mandatory under current rules.

## Challenges

- **Lack of Training:** Many doctors lack formal training in brain death certification.
- **Subjective Testing:** Clinical tests may be applied inconsistently.
- **Infrastructure Gaps:** Advanced tests like EEG and angiography are unavailable in many hospitals.
- **Ethical Concerns:** Allegations of premature declarations have created public mistrust and affected organ donation rates.

### About EEG (Electroencephalogram)

- A non-invasive test that records the brain's electrical activity.
- Used for:
  - Confirmation of brain death
  - Diagnosis of epilepsy and seizures
  - Assessment of coma and brain injuries
- Limitation: Results may be affected by external interference and require clinical correlation.

### About Angiogram

- An imaging test used to assess blood flow in blood vessels, especially the brain.
- Used for:
  - Confirming absence of cerebral blood flow in brain death
  - Detecting aneurysms, strokes, and vascular blockages
- Limitation: Invasive procedure requiring specialised equipment and expertise.

### Way Forward

- Introduce standardised protocols and confirmatory tests where feasible.
- Strengthen training of medical professionals.
- Improve transparency in certification procedures.
- Build public trust to support ethical organ donation.

**Conclusion:** A transparent, uniform, and scientifically robust brain death certification system is essential to protect patient rights while strengthening India's organ donation framework.

## Mission Drishti

**Context:** India's largest privately developed Earth observation satellite, Mission Drishti, was successfully launched aboard SpaceX Falcon 9 from Vandenberg, USA.

### Key Components

- Synthetic Aperture Radar (SAR): Active X-band microwave sensor with imaging resolution up to 0.9 m.
- Provides all-weather, day-and-night imaging capability.
- Multispectral Imaging Sensor (MSI): Captures data across seven spectral bands, including Coastal Blue, Red Edge, and Near-Infrared.
- Useful for agriculture, environmental monitoring, and resource management.
- OptoSAR Fusion Payload: Integrates SAR and optical data in a single pass.
- Produces 1.8 m fused, analysis-ready imagery, improving accuracy and reducing processing time.
- Communication Antenna: Enables efficient real-time transmission of data to ground stations.
- Star Tracker: Determines satellite orientation by tracking stars, ensuring precise imaging.
- Solar Panels: Provide continuous onboard power supply.

## About Mission Drishti

- Mission Drishti is the world's first OptoSAR satellite, combining Electro-Optical (EO) and Synthetic Aperture Radar (SAR) technologies for advanced Earth observation.
- Developed by GalaxEye, a Karnataka-based private space technology firm.
- Marks a significant milestone in India's growing private space sector.

## Key Features

- **OptoSAR Technology:** First satellite to combine EO and SAR sensors on a single platform.
- **All-Weather Imaging:** Functions effectively even through clouds and adverse weather.
- **Day-and-Night Monitoring:** Enables continuous surveillance and observation.
- **Sun-Synchronous LEO:** Operates in a Sun-synchronous Low Earth Orbit for consistent imaging conditions.
- **High-Frequency Data Collection:** Ensures regular and reliable Earth observation.

**Significance:** Mission Drishti strengthens India's private space capabilities by providing high-resolution, all-weather, round-the-clock Earth observation, with applications in agriculture, disaster management, environmental monitoring, infrastructure planning, and national security.

# First-Ever Malaria Treatment for Infants

**Context:** The World Health Organization (WHO) has prequalified the first malaria medicine specifically designed for infants weighing 2-5 kg.

## About the Malaria Drug

- **Drug:** Infant-specific formulation of Artemether-Lumefantrine (brand name: Coartem).
- **Significance:** First malaria treatment specially developed for very young infants.
  - **Why Needed?** Earlier, infants were given modified doses of medicines meant for older children.
  - This increased the risk of dosing errors.
  - The new formulation provides safer and more accurate treatment.

## New Diagnostic Tests for Malaria

- WHO has also prequalified three new rapid malaria diagnostic tests.

## Issue with Existing Tests

- Most current tests detect the HRP2 protein produced by *Plasmodium falciparum*.
- Some parasite strains lack the HRP2 gene, causing false-negative results and continued disease transmission.

### Improvement in New Tests

- The new tests detect pf-LDH (Plasmodium falciparum lactate dehydrogenase), an alternative parasite protein.
- This enables more reliable malaria detection, especially in regions with HRP2-negative strains.

### WHO Recommendation

- Countries should adopt these new tests when more than 5% of malaria infections are missed due to HRP2 gene deletions.

## Massive Stars Trigger Birth of New Stars

**Context:** Researchers at Aryabhata Research Institute of Observational Sciences have found that massive stars can trigger the formation of new stars in nearby molecular clouds.

### What are Molecular Clouds?

- Molecular clouds are cold, dense regions in space where stars are formed.
- They mainly consist of:
  - Molecular Hydrogen (H<sub>2</sub>)
  - Helium
  - Cosmic dust
  - Trace gases such as carbon monoxide
- Temperature: Usually between 10–30 Kelvin, making them among the coldest objects in space.
- Their high density allows gas and dust to collapse under gravity, leading to star formation.

### What are Massive Stars?

- Massive stars have a mass more than eight times that of the Sun.
- They are extremely hot, bright, and energetic.
- Short Life Cycle: They burn their fuel rapidly and survive only for a few million years.
- High Energy Output: Emit intense ultraviolet radiation and powerful stellar winds that affect nearby space.
- End Stage: They explode as Type II Supernovae, leaving behind neutron stars or black holes.
- Origin: Like other stars, they form within molecular clouds made of gas and dust.

### Significance of the Study

- The radiation and stellar winds from massive stars can compress nearby molecular clouds, triggering the formation of new stars.
- This finding improves our understanding of the star formation process and the evolution of galaxies.



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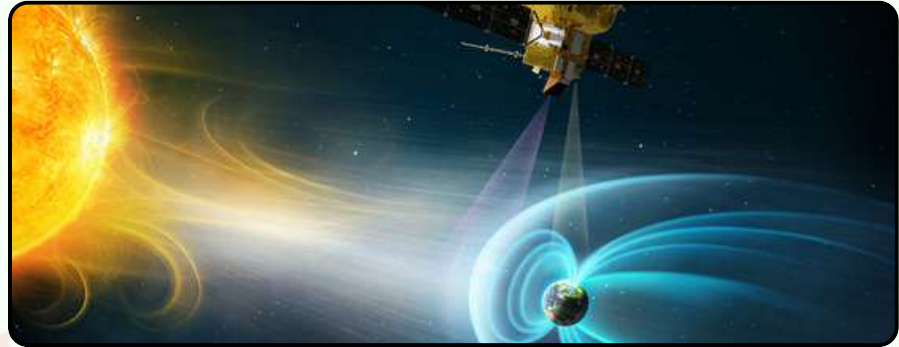
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# SMILE Mission

**Context:** The Chinese and European space agencies are jointly launching the SMILE (Solar wind Magnetosphere Ionosphere Link Explorer) Mission to study how Earth protects itself from harmful solar radiation.



## About SMILE Mission

- Full Form: Solar wind Magnetosphere Ionosphere Link Explorer (SMILE).
- Launch Vehicle: Vega-C rocket.
- Joint Mission: First joint space mission between the European Space Agency and Chinese space agencies.
- Objective: To study how Earth's magnetosphere protects the planet from solar winds and radiation.
- Scientific Goal: Capture the first real-time X-ray images of interactions between solar particles and Earth's magnetic shield.
- Orbital Position: Will operate about 1.21 lakh km above Earth's North Pole.
- Mission Life: Around 3 years.
  - Key Instruments: Soft X-ray Imager
  - Magnetometer
  - Light Ion Analyser
  - Ultraviolet Imager

## What is the Magnetosphere?

- The magnetosphere is the region around Earth dominated by its magnetic field, acting as a protective shield against harmful solar and cosmic radiation.
- Formation: Created by the movement of molten iron and nickel in Earth's outer core.
- Shape: A comet-like magnetic bubble, compressed on the Sun-facing side and stretched on the opposite side by solar winds.
- Its shape and strength continuously change with solar activity.

## Importance of the Magnetosphere

- Protection from Solar Winds: Deflects charged particles and harmful solar emissions.
- Atmospheric Protection: Prevents Earth's atmosphere from being stripped away by solar radiation.
- Supports Life on Earth: Shields living organisms from dangerous cosmic rays and high-energy particles.

# UMMID Programme

**Context:** The Government has launched the UMMID Dashboard and released the UMMID Compendium to strengthen monitoring and implementation of the UMMID Programme.



## About UMMID Programme

- Full Form: Unique Methods of Management and Treatment of Inherited Disorders (UMMID).
- Launched: 2019.
- Nodal Agency: Department of Biotechnology, Ministry of Science and Technology.
- Objective: To promote early diagnosis, genetic counselling, prenatal testing, and affordable treatment of inherited genetic disorders in newborns and children.

## Key Features

- Prevention-Based Approach: Focuses on early detection and intervention under the principle "Prevention is better than Cure."
- NIDAN Kendras: Established in government hospitals to provide advanced genetic testing and multidisciplinary care for inherited diseases.
- Screening Programme: Conducts screening of pregnant women and newborns, particularly in Aspirational Districts and underserved regions.

## Beneficiaries

- Nearly 3 lakh individuals have benefited through screening, diagnostic services, and outreach programmes across the country.

## Significance

- Helps reduce the burden of congenital and hereditary diseases through early identification and treatment.
- Strengthens India's genetic healthcare infrastructure and improves access to specialized healthcare services.

# Cyborg Botany

**Context:** Researchers are developing Cyborg Botany technology to monitor plant stress signals in real time, enabling smarter and more efficient agriculture.

## What is Cyborg Botany?

- Cyborg Botany is the integration of living plants with electronic components, creating hybrid systems that can detect and communicate biological signals.
- The concept is derived from a “cybernetic organism (cyborg)”, where biology and technology work together.
- It is an interdisciplinary field combining biology, nanotechnology, materials science, and engineering.

## How Does It Work?

- **Biochemical Signal Detection:** Plants naturally produce signals in response to stress such as drought, pests, or temperature changes.
- **Embedded Electronics:** Nanowires and conductive polymers (e.g., PEDOT) are integrated into plant tissues to act as sensors.
- **Real-Time Communication:** These sensors transmit signals to external devices, allowing continuous monitoring of plant health.

## Significance

- Enables early detection of plant stress at the cellular level.
- Supports timely intervention, improving crop yield and sustainability.
- Enhances resource efficiency in agriculture.

## Applications

- **Precision Agriculture:** Real-time monitoring of crop health and stress conditions.
- **Environmental Monitoring:** Detection of soil quality, pollutants, and changing environmental conditions.
- **Smart Farming:** Helps farmers make data-driven decisions for better productivity and resource management.

# Vela Supercluster

**Context:** Astronomers have discovered the Vela Supercluster (Vela Banzi), a massive cosmic structure hidden behind the dust and stars of the Milky Way.

## About Superclusters

- Superclusters are the largest known structures in the Universe, made up of groups and clusters of galaxies held together by gravity.
- **Example:** Laniakea Supercluster, which contains the Milky Way and nearly 100,000 nearby galaxies.

## Key Features of the Vela Supercluster

- Distance from Earth: About 800 million light-years away.
- Size: Spans nearly 300 million light-years.
- Location: Situated in the Zone of Avoidance, a region largely hidden by the Milky Way's dust and dense star fields.

## How Was It Discovered?

- Scientists used hybrid mapping techniques, combining:
  - Galaxy redshift data (used to measure galaxy distance and motion)
  - Observations from the MeerKAT radio telescope.
- Radio waves can penetrate dust clouds, helping astronomers observe regions invisible to optical telescopes.

## What is the Zone of Avoidance?

- A large area of the sky obscured by interstellar dust and dense stars within the Milky Way.
- Covers nearly 20% of the observable sky.
- Creates a major blind spot for traditional optical observations.

## Significance

- The discovery improves our understanding of the large-scale structure of the Universe.
- It helps explain the distribution and movement of galaxies hidden behind the Milky Way's dust veil.

# JANANI Portal

**Context:** The Ministry of Health and Family Welfare has launched JANANI (Journey of Antenatal, Natal and Neonatal Integrated Care) to strengthen maternal and child healthcare through digital monitoring.

## About JANANI

- Digital Maternal Health Platform: JANANI is a service-oriented digital platform that maintains and tracks the health records of women during their reproductive years.
- Upgraded RCH Portal: It is an enhanced version of the existing Reproductive and Child Health (RCH) Portal.
- Longitudinal Health Records: Creates a continuous digital health record covering the entire maternal and child healthcare cycle, from pregnancy to childbirth and neonatal care.

## Significance

- Enables better tracking of maternal and child health services.
- Improves continuity of care through integrated digital records.
- Supports timely healthcare interventions and better health outcomes for mothers and children.

# India's First Alzheimer's Disease-Modifying Therapy

**Context:** India has launched its first disease-modifying therapy for Alzheimer's disease, Donanemab, under the brand name Lormalzi.

## About the Therapy

- **Drug:** Donanemab, a monoclonal antibody used for treating early-stage Alzheimer's disease.
- **Mechanism of Action:** Targets and removes amyloid-beta plaques from the brain, helping slow cognitive decline.
  - Amyloid-beta plaques are abnormal protein deposits that accumulate between brain cells and contribute to memory loss and neurological damage.
- **Eligible Patients:** Individuals with mild cognitive impairment or early-stage Alzheimer's disease.
- **Administration:** Given as an intravenous (IV) infusion once every four weeks for approximately 18 months.

## Risks and Concerns

- May cause Amyloid-Related Imaging Abnormalities (ARIA), including:
  - Brain swelling
  - Brain bleeding

## Significance

- Marks a major milestone in India's neurological and dementia care.
- Provides a treatment option that can slow disease progression rather than only managing symptoms.
- Important as India's dementia burden is rising, with around 8.8 million people currently affected, projected to reach 16.9 million by 2036.

## Challenge

- **High Cost:** The therapy costs about ₹91,688 per vial, making long-term treatment expensive and limiting accessibility for many patients.

# Ebola Outbreak in DR Congo

**Context:** The World Health Organization has declared the Ebola outbreak in the Democratic Republic of the Congo a Public Health Emergency of International Concern (PHEIC).

- **Virus Strain:** The outbreak is caused by the Bundibugyo ebolavirus, for which no approved vaccine or specific treatment currently exists.

## What is Ebola Virus Disease (EVD)?

- Ebola is a severe zoonotic viral disease that spreads from animals to humans and can subsequently spread between humans.
- First Identified: In 1976 near the Ebola River in present-day DR Congo.
- Cause: Caused by viruses of the Orthoebolavirus genus under the Filoviridae family.
- Natural Reservoir: Believed to originate from infected fruit bats.

## Symptoms

- Fever
- Fatigue
- Headache
- Muscle pain
- Vomiting and diarrhoea
- Abdominal pain
- Internal and external bleeding in severe cases

## Transmission

- Direct contact with infected blood or body fluids.
- Contact with contaminated materials.
- Exposure to infected animals such as fruit bats and non-human primates.

## Incubation Period

- Symptoms usually appear 2-21 days after infection.

## Vaccine Status

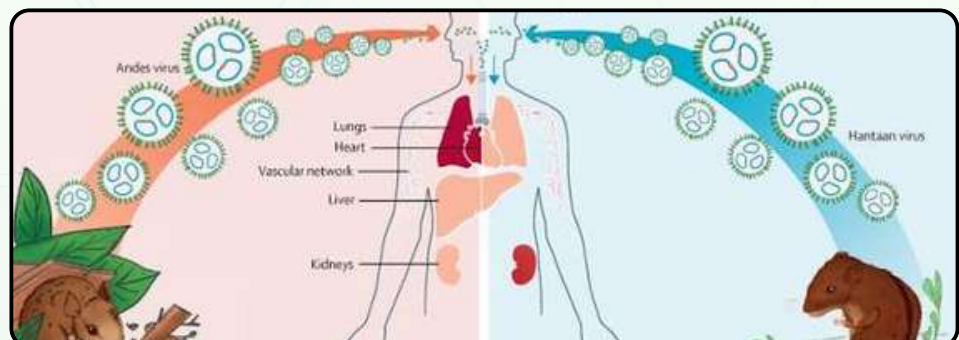
- Vaccines are available for certain Ebola strains, particularly the Zaire strain.
- However, no approved vaccine currently exists for the Bundibugyo strain, making outbreak management more challenging.

## Significance

- The outbreak highlights the continuing threat of emerging infectious diseases and the need for stronger surveillance, rapid response systems, and vaccine research.

# Hantavirus

**Context:** A suspected hantavirus outbreak on a cruise ship in the Atlantic Ocean has reportedly caused several infections and multiple deaths.



## About Hantavirus

- Hantaviruses are a group of rodent-borne viruses that infect humans through contact with infected rodents or their excreta.
- Transmission: Primarily occurs through exposure to the urine, droppings, or saliva of infected rats and mice.
- Human-to-Human Transmission: Extremely rare.

## Symptoms

- Fever
- Muscle pain
- Fatigue
- Cough
- Breathing difficulty

## Diseases Caused

- Hantavirus Pulmonary Syndrome (HPS): Affects the lungs and can cause severe respiratory illness.
- Hemorrhagic Fever with Renal Syndrome (HFRS): Affects the kidneys and may lead to kidney failure in severe cases.

## Treatment

- There is no specific antiviral cure for hantavirus infection.
- Treatment mainly involves supportive care, including intensive medical management in severe cases.

## Prevention

- Rodent control and proper sanitation measures.
- Safe food storage and effective waste management.
- Avoiding areas infested with rodents and their droppings.

## Significance

- Hantavirus is a serious zoonotic disease with high mortality in severe cases, highlighting the importance of public health surveillance, sanitation, and rodent control measures.

# Zwan-Wolf Effect

**Context:** Scientists using NASA's MAVEN Mission have observed the Zwan-Wolf Effect in Mars' atmosphere for the first time, despite Mars lacking a global magnetic field.



### About Zwan-Wolf Effect

- It is a plasma phenomenon where charged particles are compressed and guided along magnetic field lines (flux tubes).
- First discovered in 1976.
- Earlier, it had been observed only in planets with strong magnetic fields, such as Earth.
- The recent discovery on Mars provides new insights into how solar wind interacts with the Martian atmosphere.

### About MAVEN Mission

- MAVEN (Mars Atmosphere and Volatile Evolution) is a NASA mission launched in 2013 and placed in Mars' orbit in 2014.
- It studies Mars' atmosphere and its interaction with solar wind.
- The mission aims to understand how Mars lost most of its atmosphere and transformed from a potentially wetter planet into the cold, dry world seen today.
- MAVEN is currently one of the active missions orbiting Mars and contributes significantly to planetary atmosphere research.

## Pathfinder: India's First Orbital Data Centre Satellite

**Context:** Pixxel, in partnership with Sarvam AI, is developing Pathfinder, India's first orbital data centre satellite.

### About Pathfinder

- Pathfinder is a next-generation satellite designed to process and analyse data directly in space instead of transmitting raw data to Earth.
- It is being developed by Pixxel with AI support from Sarvam AI.
- The satellite, weighing about 200 kg, is expected to be launched by 2026.
- It marks a shift towards intelligent satellites, enabling faster and real-time decision-making.

### Key Features

- **Datacentre-Grade GPUs:** Equipped with high-performance GPUs for advanced AI computing in orbit.
- **Onboard AI Processing:** Enables real-time data analysis, training, and inference without dependence on ground-based data centres.
- **Hyperspectral Imaging + AI:** Combines hyperspectral sensors with AI to generate instant insights from captured data.

### Pathfinder vs Traditional Satellites

- **Data Processing:** Pathfinder processes data in orbit, while traditional satellites send raw data to Earth for analysis.
- **Functionality:** It can identify patterns and generate insights onboard, unlike conventional satellites that mainly collect and transmit data.
- **Efficiency:** Reduces latency and enables quicker decision-making through real-time analysis.

## Significance

- Strengthens India's private space ecosystem.
- Enhances Earth observation capabilities through AI-powered analytics.
- Represents a major step towards autonomous and intelligent space-based computing systems.

# Kuki-Zo Group Talks

**Context:** Talks between the Centre, the Ministry of Home Affairs, and Kuki-Zo groups resumed in 2026 amid continuing ethnic tensions in Manipur.



## Background of the Talks

- **Suspension of Operations (SoO) Agreement:** Signed in 2008 with the Kuki National Organisation (KNO) and United People's Front (UPF), providing a ceasefire framework with insurgent groups.
  - Renewed in 2025 with revised conditions under President's Rule.
- **Post-2023 Violence:** Ethnic clashes between Kuki-Zo and Meitei communities led to large-scale displacement and insecurity.
- **Resumption of Dialogue:** Talks resumed in May 2026, focusing on security arrangements and relocation of SoO camps.
- **Demand for Political Settlement:** Kuki-Zo groups continue to demand a Union Territory with a legislature for greater security and autonomy.

## About Kuki-Zo Groups

- Kuki-Zo groups are ethnic tribes mainly residing in Manipur, Mizoram, Assam, Myanmar, and Bangladesh.
- They belong to the Tibeto-Burman linguistic family and are predominantly Christian.
- They are concentrated in the hill districts of Manipur and follow a chieftainship-based social structure.
- Major organisations include KNO, UPF, and the Kuki-Zo Council.

## Key Issues

- **Ethnic Conflict:** Ongoing tensions with Meitei and Naga groups have caused violence, displacement, and property loss.
- **Land and Identity Concerns:** Disputes over tribal land rights and concerns over political and demographic marginalisation persist.
  - The demand for inclusion of Meiteis in the Scheduled Tribe (ST) list has further intensified tensions.
- **Humanitarian Crisis:** More than 60,000 people have been displaced, with rehabilitation and resettlement progressing slowly

## Way Forward

- Promote inclusive political dialogue involving all stakeholders.
- Strengthen security and governance through effective law-and-order measures.
- Explore greater autonomy and decentralised governance within the constitutional framework.

**Conclusion:** A balanced approach combining political dialogue, security measures, and humanitarian support is essential for achieving lasting peace and stability in Manipur.

# Smart Border Project

**Context:** The Ministry of Home Affairs (MHA) is set to launch the Smart Border Project to strengthen surveillance along the India-Bangladesh and India-Pakistan borders and curb illegal infiltration.

## About the Smart Border Project

- **Integrated Border Grid:** A technology-driven border security system aimed at creating an impenetrable surveillance network.
- **Advanced Technology:** Deployment of drones, radars, modern cameras, and other surveillance tools for real-time border monitoring.
- **Expanded BSF Jurisdiction:** BSF's operational jurisdiction has been extended from 15 km to 50 km along international borders to improve border management.
- **Coordinated Security Approach:** Promotes cooperation among State Police, CAPFs, intelligence agencies, district administrations, and the Narcotics Control Bureau.
- **Information-Based Operations:** Focuses on identifying infiltration routes, dismantling smuggling networks, and preventing illegal cross-border activities.
- **Community Participation:** Encourages coordination between BSF personnel, local communities, village representatives, and district authorities.

## Significance

- Enhances border security through technology-led surveillance and intelligence-based operations.
- Helps prevent illegal infiltration, smuggling, and cross-border crimes.
- Supports border-area development through convergence with the Vibrant Villages Programme.

## About Vibrant Villages Programme (VVP)

- A Centrally Sponsored Scheme launched in 2023.
- Aims to improve infrastructure, connectivity, and livelihood opportunities in strategically important villages along India's border regions.
- Seeks to strengthen both border security and socio-economic development.

# Chief of Defence Staff (CDS)



**Context:** The Government has appointed Lt Gen NS Raja Subramani (Retd) as the new Chief of Defence Staff (CDS) and Secretary, Department of Military Affairs.

## About Lt Gen NS Raja Subramani

- Currently serving as Military Adviser at the National Security Council Secretariat.
- Previously served as:
  - Vice Chief of the Army Staff
  - General Officer Commanding-in-Chief (GOC-in-C), Central Command
- Major command assignments:
  - Commanded 16 Garhwal Rifles during Operation Rhino in Assam.
  - Led 168 Infantry Brigade in Jammu & Kashmir.
  - Commanded 17 Mountain Division in the Central Sector.
  - Headed 2 Corps, the Indian Army's premier strike corps on the Western Front.

## About the Chief of Defence Staff (CDS)

- The CDS is India's highest-ranking military officer and the principal military adviser to the Government on tri-service matters.
- Established in 2019 to enhance jointness, integration, and coordination among the Army, Navy, and Air Force.
- Appointed by the Appointments Committee of the Cabinet (ACC).
- Can be selected from any of the three armed services.
- Holds the rank of a four-star officer, equivalent to the Service Chiefs.
- Ranked 12th in the Indian Order of Precedence.

## Key Functions

- Acts as the Principal Military Adviser to the Defence Minister.
- Serves as the Permanent Chairman of the Chiefs of Staff Committee (CoSC).
- Functions as the Secretary of the Department of Military Affairs (DMA) under the Ministry of Defence.

**Note:** Lt Gen NS Raja Subramani becomes the third CDS of India, after Bipin Rawat and Anil Chauhan.

# Kalam & Kavach 3.0

**Context:** The Ministry of Defence is organising the third edition of Kalam & Kavach to promote defence modernisation, indigenous capability development, innovation, and strategic partnerships.

## About Kalam & Kavach 3.0

- It is a high-level strategic defence conference being held at the Manekshaw Centre.
- The event brings together policymakers, military leaders, defence industries, start-ups, academia, diplomats, and strategic experts.
- It serves as a platform for discussions on strengthening India's defence and security ecosystem.

## Theme

“Taking JAI Forward With I<sup>2</sup>”

- JAI: Jointness, Aatmanirbharta, and Innovation
- I<sup>2</sup>: Indigenisation and International Collaboration

## Objectives

- Strengthen India's defence ecosystem through:
  - Integrated military capability development
  - Indigenous defence manufacturing
  - Innovation-driven solutions
  - International strategic partnerships
- Promote self-reliance in the defence sector under the Aatmanirbhar Bharat vision.
- Enhance defence production capacity and scalability to support the goal of Viksit Bharat@2047.

## Significance

- Encourages collaboration among government, industry, start-ups, and academia.
- Supports defence modernisation and technological advancement.
- Boosts indigenous defence production while expanding global defence cooperation.

# TARA Glide Weapon System

**Context:** The Defence Research and Development Organisation (DRDO) and the Indian Air Force successfully conducted the maiden trial of the Tactical Advanced Range Augmentation (TARA) weapon system.

## About TARA

- TARA (Tactical Advanced Range Augmentation) is India's first indigenous glide weapon system developed by Research Centre Imarat (RCI), Hyderabad, along with other DRDO laboratories.
- It converts conventional unguided bombs into precision-guided weapons capable of accurately striking ground targets.
- The system enhances the range, accuracy, and lethality of low-cost aerial weapons.
- It uses a modular range-extension kit, which can be attached to existing bombs to increase strike range and improve targeting precision.
- The system strengthens India's precision-strike capability while reducing dependence on imported weapon technologies.

## Significance

- Boosts Aatmanirbhar Bharat in the defence sector.
- Improves the effectiveness of existing aerial bombs at a lower cost.
- Enhances the Indian Armed Forces' capability to engage targets from safer stand-off distances.

## What is a Glide Weapon System?

- A glide weapon is a precision-guided aerial weapon that glides toward its target after being released from an aircraft.
- Unlike conventional bombs that fall directly under gravity, glide weapons can travel longer distances and strike targets with greater accuracy.
- They provide extended range, improved survivability, and precision engagement of enemy targets.

# INS Mahendragiri

**Context:** The Indian Navy has taken delivery of INS Mahendragiri (Yard 12654), an advanced stealth-guided missile frigate built under Project 17A.

## About INS Mahendragiri

- INS Mahendragiri is a stealth multi-role guided missile frigate of the Nilgiri-class, developed under Project 17A.
- It is the sixth Nilgiri-class frigate and the fourth vessel built by Mazagon Dock Shipbuilders Limited.
- Named after Mahendragiri, a prominent peak in the Eastern Ghats.
- Built using Integrated Modular Construction (IMC) technology, which reduces construction time and improves efficiency.
- Equipped with advanced weapons and sensors for:
  - Anti-Surface Warfare (ASuW)
  - Anti-Air Warfare (AAW)
  - Anti-Submarine Warfare (ASW)

## About Project 17A

- Project 17A is the Indian Navy's programme to build advanced stealth-guided missile frigates.
- It is the upgraded successor to Project 17 (Shivalik-class), featuring enhanced stealth, survivability, and combat capabilities.
- A total of 7 Nilgiri-class frigates are being constructed under the project.

## Nilgiri-Class Frigates under Project 17A

- INS Nilgiri (Lead Ship)
- INS Himgiri
- INS Udaygiri
- INS Dunagiri
- INS Taragiri
- INS Mahendragiri
- INS Vindhyagiri

## Significance

- Strengthens India's maritime defence capabilities.
- Enhances the Indian Navy's ability to address modern naval threats across surface, air, and underwater domains.
- Supports the goal of Aatmanirbhar Bharat through indigenous warship design and construction.

# Operation WHITE STRIKE

**Context:** The Narcotics Control Bureau (NCB) seized 349 kg of high-grade cocaine worth about ₹1,745 crore in the Mumbai region under Operation WHITE STRIKE.

## About Operation WHITE STRIKE

- It is a major anti-drug operation conducted by the NCB targeting transnational narcotics networks.
- The seizure of 349 kg of cocaine is among the largest cocaine seizures in India, exceeding the country's annual average seizure of 200-300 kg.
- The operation was based on six months of intelligence gathering and surveillance.

## Importance

- Strengthens India's fight against organised drug trafficking.
- Helps dismantle international narcotics syndicates operating in the country.
- Enhances coordination among enforcement agencies for combating cross-border drug crimes.



## Significance of the Operation

- **Disruption of International Drug Networks:** Exposed transnational drug trafficking routes and local distribution chains.
- **Intelligence-Led Policing:** Demonstrated the effectiveness of long-term surveillance and coordinated intelligence operations.
- **Bottom-to-Top Approach:** A smaller drug seizure helped investigators uncover a much larger cartel network.
- **Strategic Importance of Mumbai:** Highlights Mumbai's role as a key entry and distribution hub due to its ports and extensive logistics infrastructure.

# Project Deepak

**Context:** Project Deepak of the Border Roads Organisation (BRO) celebrated its 66th Raising Day on May 4.

## About Project Deepak

- Project Deepak is a strategic road construction project of the Border Roads Organisation (BRO), established in 1961.
- It is responsible for developing and maintaining critical road infrastructure in border and high-altitude regions.

## Area of Operation

- Operates in the strategic districts of Himachal Pradesh:
  - Shimla
  - Kinnaur
  - Kullu
  - Lahaul-Spiti
- Focuses on improving connectivity in border and remote areas.

## Key Contributions

- Constructs and maintains important strategic routes, including:
  - Hindustan-Tibet Road
  - Parts of the Manali-Leh Highway
- These roads are vital for:
  - Defence logistics and troop movement
  - Border security
  - Socio-economic development of remote regions

## Significance

- Strengthens India's border infrastructure and military preparedness.
- Enhances connectivity in difficult Himalayan terrain.
- Supports both national security and regional development in strategically important areas.



# Abhay

**Context:** The Central Bureau of Investigation (CBI) has launched “Abhay”, an AI-based helpbot to combat cyber fraud and fake CBI notices.

## About Abhay

- Abhay is an AI-powered helpbot developed by the CBI for:
  - Verification of CBI notices.
  - Protection of citizens from cyber fraud and digital arrest scams.
- It helps users identify whether a notice claiming to be from the CBI is genuine or fake.

## Why was it launched?

- The CBI highlighted the growing misuse of Artificial Intelligence (AI) and deepfake technologies, which make it difficult to distinguish authentic content from fabricated material.
- Fraudsters often use fake notices and threats of “digital arrest” to deceive victims.
  - Digital arrest has no legal recognition in Indian law and is commonly used as a scam tactic.

## Access

- Citizens can access Abhay through the official website of the Central Bureau of Investigation.

## Significance

- Strengthens public awareness against cybercrime.
- Helps verify official communications and prevent online fraud.
- Supports safer digital interactions in an era of AI-generated misinformation and deepfakes.

# Pragati 2026 Military Exercise

**Context:** A multinational military exercise, PRAGATI 2026, commenced at Umroi Military Station in Meghalaya with participation from India and 12 friendly countries of the Indian Ocean Region (IOR).



## About Exercise PRAGATI

(Partnership of Regional Armies for Growth and Transformation in the Indian Ocean Region)

- Type: Multinational military exercise involving India and partner countries of the Indian Ocean Region.
- Venue: Conducted at Umroi Military Station, Meghalaya.
- Participating Countries: India, Bhutan, Cambodia, Indonesia, Laos, Malaysia, Maldives, Myanmar, Nepal, Philippines, Seychelles, Sri Lanka, and Vietnam.
  - Primary Objective: Enhance professional military exchanges among participating armies.
  - Improve interoperability and coordination during joint operations.
  - Strengthen military-to-military cooperation and regional security partnerships.
  - Key Focus Areas: Joint training and tactical exercises.
  - Sharing best practices in military operations.
  - Capacity building and mutual learning among armed forces.
  - Promoting regional peace, stability, and security in the Indian Ocean Region.

## Significance

- Strengthens India's defence and strategic engagement with IOR countries.
- Enhances preparedness for multinational humanitarian assistance and disaster relief (HADR) operations.
- Promotes trust, cooperation, and collective security among participating nations.
- Supports India's vision of a secure and stable Indian Ocean Region through defence diplomacy.

# NEET Paper Leak Controversy: Ethics, Governance and Public Trust

## Context:

Recent allegations of a paper leak in the National Eligibility cum Entrance Test (NEET) triggered nationwide protests and raised concerns about the integrity of public examinations in India.



### More on the News:

Under the National Education Policy (NEP) 2020, the National Testing Agency (NTA) was entrusted with:

- Conducting common aptitude tests.
- Assessing higher-order conceptual understanding.
- Reducing dependence on coaching institutions.
- Conducting multiple examinations annually.
- Creating a single national testing gateway.

### **Ethical Governance in Public Examinations**

Ethical governance refers to conducting examinations in a manner that upholds:

- Fairness
- Transparency
- Accountability
- Integrity
- Public trust

It ensures that selection processes remain merit-based and free from corruption, malpractice, and institutional bias.

### **Ethical Dimensions of the NEET Controversy**

#### **1. Integrity and Fairness**

Public examinations are founded on equal opportunity and merit.

- Paper leaks provide unfair advantages to a few candidates.
- They destroy the level playing field and compromise merit-based selection.

Ethical Concerns:

- Violation of honesty and fairness
- Undermining meritocracy
- Erosion of procedural justice
- Loss of credibility of the examination system

#### **2. Accountability and Institutional Responsibility**

Examination authorities have a fiduciary responsibility to ensure confidentiality and fairness.

Repeated leaks indicate:

- Institutional failure
- Administrative negligence
- Weak monitoring systems

Ethical Issues:

- Failure of institutional vigilance
- Administrative inefficiency
- Possibility of collusion and corruption
- Weak accountability mechanisms
- Lack of transparency in investigations

Governance Concern:

Repeated failures weaken public confidence in the state's ability to ensure justice and equality.

### 3. Emotional and Psychological Impact on Students

The controversy has significant consequences for students and families.

Impacts:

- Anxiety and mental stress
- Loss of motivation and confidence
- Financial burden due to prolonged preparation
- Feelings of injustice and helplessness

### 4. Crisis of Probity in Governance

Public examinations derive legitimacy from ethical conduct, not merely legal procedures.

Probity in Governance Includes:

- Transparency
- Accountability
- Ethical administration
- Institutional integrity
- Protection of public trust

### 5. Administrative Evil and Institutional Failure

The controversy highlights the concept of Administrative Evil, where unethical outcomes emerge from systemic failures rather than deliberate corruption alone.

Forms of Administrative Evil:

- Negligence
- Lack of vigilance
- Institutional indifference
- Normalisation of unethical practices
- Administrative complacency

### 6. Threat to Social Mobility

Public examinations serve as pathways for upward mobility, especially for economically weaker sections.

- Ethical governance ensures opportunities are earned through merit.
- Paper leaks disproportionately harm sincere and disadvantaged aspirants.

### Consequences of Examination Leaks

#### Normalisation of Corruption

- Creates a perception that success depends on manipulation rather than hard work.

#### Weakening of Meritocracy

- Deserving candidates lose opportunities despite genuine effort.

#### Social Distrust

- Citizens lose faith in institutions and governance mechanisms.

#### Decline in Ethical Standards

- Repeated impunity can normalize unethical behavior in society.

#### Violation of Public Trust Doctrine

- Public examinations operate on a trust relationship between citizens and institutions.
- Breach of trust undermines institutional legitimacy.

## Philosophical Perspectives

### Immanuel Kant - Human Beings as Ends

Kant argued that individuals should always be treated as ends in themselves, never merely as means.

#### Relevance to NEET:

- Honest students become victims of corruption and administrative failures.
- Their aspirations and dignity are compromised for vested interests.

### Mahatma Gandhi - Means and Ends

Gandhi believed that ethical outcomes require ethical methods.

#### Relevance to NEET:

- A fair examination system cannot emerge from compromised procedures.
- Ethical governance is essential for institutional legitimacy.

## Government Measures:

### Public Examinations (Prevention of Unfair Means) Act, 2024

#### Key Provisions

##### Stringent Punishment

- Imprisonment from 3 to 10 years.
- Fine up to ₹1 crore.

##### Liability of Service Providers

- Exam centres and agencies can be penalised, blacklisted, or debarred.

##### Cognizable and Non-Bailable Offences

- Enables stricter enforcement and faster investigations.

## Way Forward

### Implement K. Radhakrishnan Committee Recommendations (2024)

#### Major recommendations include:

- Multi-stage examinations
- Hybrid paper delivery systems
- Digital transmission of question papers
- Printing papers within exam centres shortly before the test
- Use of AI, ML, and blockchain technologies
- Adaptive testing systems
- Adoption of global best practices

#### Grant Statutory Status to NTA

#### Transforming NTA into a statutory body would provide:

- Greater autonomy
- Stronger accountability
- Institutional stability

## Encourage Research-Driven Testing

NTA should evolve into a research-oriented institution similar to the Educational Testing Service by promoting:

- Psychometric research
- Adaptive testing
- AI-based evaluation
- Continuous assessment innovation

## Introduce Multi-Stage Examinations

A model similar to JEE can:

- Reduce logistical burden
- Improve security
- Minimise large-scale leaks

## Strengthen Institutional Accountability

- Time-bound investigations
- Fix responsibility for negligence
- Strict disciplinary action

## Enhance Transparency

- Independent audits
- Transparent procedures
- Effective grievance redressal systems

## Improve Inter-Agency Coordination

Better coordination among:

- Examination authorities
- Police agencies
- Cybersecurity agencies
- Intelligence units

## Ethical Contradiction

A major ethical contradiction emerges when:

- Students face strict surveillance through biometric verification, CCTV monitoring, frisking, and dress-code restrictions.
- Yet institutions responsible for conducting examinations are often not held to the same standards of accountability.

This creates a situation where suspicion is directed at aspirants while systemic vulnerabilities remain inadequately addressed.

**Conclusion:** The NEET paper leak controversy is not merely an examination-management issue but a test of ethical governance, institutional integrity, and public trust. A credible examination system requires fairness, transparency, accountability, and strong institutional safeguards. Restoring confidence in public examinations is essential for protecting meritocracy, ensuring social justice, and strengthening citizens' faith in governance.



# Syama Prasad Mookerjee

**Context:** Prime Minister Narendra Modi recalled Syama Prasad Mookerjee after the BJP's first-ever victory in West Bengal. Mookerjee founded the Bharatiya Jana Sangh (1951), the predecessor of the BJP.

## About Syama Prasad Mookerjee

- Born: 6 July 1901.
- Education: Studied at Presidency College, Calcutta, and Lincoln's Inn, London.
- Academic Achievement: Became the youngest Vice-Chancellor of the University of Calcutta at the age of 33.

## Political Career

- Elected to the Bengal Legislative Council in 1929 and 1930, first as a Congress member and later as an independent.
- Served as Finance Minister in the Bengal government led by A.K. Fazlul Huq (1941-42).
- Advocated cooperation between Hindus and Muslims for effective governance.
- Served as President of the Hindu Mahasabha from 1943 to 1946.
- Joined independent India's first Cabinet under Jawaharlal Nehru as Minister of Industry and Supply.

## Resignation Over Nehru-Liaquat Pact

- The Nehru-Liaquat Pact (1950) sought to protect minority rights in India and Pakistan.
- Mookerjee demanded stronger enforcement provisions against violations of the agreement.
- Resigned from the Union Cabinet when such safeguards were not included.

## Formation of Bharatiya Jana Sangh

- After resigning, he founded the Bharatiya Jana Sangh (BJS) in 1951 with support from the Rashtriya Swayamsevak Sangh (RSS).
- The Bharatiya Jana Sangh later evolved into the Bharatiya Janata Party (BJP).



# Veera Pasi

**Context:** Recently, Leader of Opposition Rahul Gandhi unveiled a statue of Veera Pasi in Raebareli, highlighting the contribution of Dalit heroes in the Revolt of 1857.

## About Veera Pasi

- Veera Pasi was a Dalit freedom fighter from the Pasi community who participated in the Revolt of 1857 against British rule.
- He was born on 11 November 1835 in Lodhwari village, Raebareli (Uttar Pradesh).
- He was a trusted commander and close associate of Rana Beni Madhav Baksh Singh.
- According to local folklore, he rescued Rana Beni Madhav after his capture by British forces during the revolt.
- The British reportedly announced a reward of ₹50,000 for information leading to his capture.
- Oral traditions suggest that he died while defending Rana Beni Madhav from British troops.

## Significance

- Veera Pasi is remembered as a symbol of Dalit courage, resistance, and contribution to India's freedom struggle.
- His legacy highlights the role of marginalized communities in the Revolt of 1857. Indian Rebellion of 1857

# Whitley Awards 2026

**Context:** Indian conservationists Barkha Subba and Parveen Shaikh won the Whitley Awards 2026 for their efforts in protecting the Himalayan Salamander and Indian Skimmer habitats.

## About Whitley Awards

- The Whitley Awards are global conservation awards presented annually by the Whitley Fund for Nature to recognize grassroots conservation leaders.
- Popularly known as the “Green Oscars” for excellence in wildlife conservation.
- Each awardee receives around £50,000 to support conservation projects.
- The awards promote community-led and science-based conservation in biodiversity-rich regions of Asia, Africa, and Latin America.

## Indian Awardees

### Barkha Subba

- Recognized for conserving the Himalayan Salamander in Darjeeling wetlands.
- Focuses on habitat restoration, removal of invasive species, disease monitoring, and protection of nearly 30 breeding sites through community participation.

### Parveen Shaikh

- Leads the “Guardians of the Skimmer” initiative for conserving the Indian Skimmer along the Chambal River.
- Conservation efforts increased nest survival rates from 14% to 27%, while the population grew from about 400 to nearly 1,000 birds (2017–2025).

## Significance

- Highlights the importance of community-based conservation in protecting endangered species and fragile ecosystems.
- Showcases India's contribution to global biodiversity conservation efforts.

# Subhas Chandra Bose Aapda Prabandhan Puraskar 2026

**Context:** The Sikkim State Disaster Management Authority has been awarded the Subhas Chandra Bose Aapda Prabandhan Puraskar 2026 in the Institutional Category.

## About the Award

- The Subhas Chandra Bose Aapda Prabandhan Puraskar is an annual national award instituted by the Government of India to recognize excellence in disaster management.
- It is announced every year on 23 January, the birth anniversary of Subhas Chandra Bose.
- Nodal Ministry: Ministry of Home Affairs (MHA).
- The award recognizes outstanding contributions in:
  - Disaster risk reduction
  - Preparedness and response
  - Relief and rehabilitation
  - Research, innovation, and capacity building

## Award Components

- Institutional Category: Cash prize of ₹51 lakh and a certificate.
- Individual Category: Cash prize of ₹5 lakh and a certificate.

## Objective

- To promote a culture of disaster resilience and encourage best practices in disaster management across India.
- To recognize and motivate individuals and institutions contributing significantly to disaster preparedness and risk reduction.

# International Booker Prize 2026

**Context:** Taiwan Travelogue by Yáng Shuāng-zǐ, translated by Lin King, won the International Booker Prize 2026.



## About Taiwan Travelogue

- Originally written in Mandarin Chinese.
- Set in 1938 Taiwan during Japanese colonial rule.
- The story follows Aoyama Chizuko, a Japanese novelist visiting Taiwan on a state-sponsored literary tour.
- She develops a close bond with Chizuru, a Taiwanese interpreter and skilled cook.
- Through food and travel, the novel explores:
  - Colonialism and imperial power
  - Gender and class relations
  - Identity and cultural exchange
  - Human relationships and emotional connections
- It is the first Mandarin Chinese translation to win the International Booker Prize and the first of Yáng Shuāng-zǐ's works translated into English.

## About the International Booker Prize

- An annual award recognizing the best translated fiction published in the UK or Ireland.
- Established in 2005 as the Man Booker International Prize.
- The £50,000 prize money is shared equally between the author and translator.
- Shortlisted authors and translators receive £2,500 each.
- The award promotes global appreciation of high-quality translated literature.

## Indian Winners

- 2022: Geetanjali Shree won for Tomb of Sand — the first Hindi work to receive the award.
- 2025: Banu Mushtaq won for Heart Lamp — the first Kannada work to win the prize.

# Agricola Medal 2026

Context: Prime Minister Narendra Modi was awarded the Agricola Medal 2026 by the Food and Agriculture Organization (FAO) at its headquarters in Rome, Italy.



## About the Agricola Medal

- The Agricola Medal is the highest honour conferred by the FAO.
- It was established in 1977.
- The award recognizes individuals for their outstanding contribution to food security and sustainable agriculture.
- Past Indian Recipient: Former Prime Minister Manmohan Singh received the award in 2008 for his role in modernizing Indian agriculture and reducing hunger and poverty.

## Key Highlights of India's Agriculture

- Agriculture in India is viewed as a strong cultural bond between people and nature.
- India is promoting climate-resilient agriculture through initiatives such as "Per Drop More Crop", micro-irrigation, and precision farming.
- Advanced technologies like Artificial Intelligence (AI), drones, remote sensing, and digital platforms are improving farm productivity and farmers' incomes.
- Over the last decade, India has developed around 3,000 climate-resilient crop varieties to enhance agricultural sustainability.

## Significance

- The award recognizes India's efforts in strengthening food security, promoting sustainable farming practices, and adopting technology-driven agricultural reforms.

# World Press Freedom Index 2026

Context: India slipped to 157th position in the World Press Freedom Index 2026, highlighting concerns related to media freedom, journalist safety, and institutional pressures.



## Key Highlights of World Press Freedom Index 2026

- **India's Rank:** India ranked 157th out of 180 countries, down from 151st in 2025.
- **Global Trend:** Press freedom has weakened worldwide, with more than half of countries falling into the “difficult” or “very serious” categories.
- **Top-Ranked Countries:** Norway, Netherlands, Estonia, Denmark, and Sweden.
- **Lowest-Ranked Countries:** Eritrea, North Korea, China, and Iran.
- **Neighbourhood Comparison:** India ranked below Nepal (87), Sri Lanka (134), Bangladesh (152), and Pakistan (153), but above China (178).

### About the World Press Freedom Index

- It is an annual ranking that measures the level of press freedom across the world.
- Published by Reporters Without Borders (RSF).
- Covers 180 countries and territories.
- Rankings are based on five indicators:
  - Political environment
  - Legal framework
  - Economic conditions
  - Social and cultural factors
  - Safety of journalists

### Significance

- The index serves as an important global benchmark for assessing media independence, freedom of expression, and the working environment for journalists.

## World Migration Report 2026

**Context:** The World Migration Report 2026 highlights India's growing importance in global migration trends and diaspora networks.

### About the World Migration Report

- Published periodically by the International Organization for Migration (IOM).
- Provides data and analysis on global migration patterns, trends, challenges, and policy issues.

### Significance for India

- Reflects India's position as one of the world's largest sources of migrants.
- Highlights the economic importance of the Indian diaspora through remittances, skilled workforce contributions, and global connectivity.
- Emphasizes the need for safe, orderly, and regular migration pathways.



## Key Highlights

- **Global Migrants:** Around 304 million people were living outside their country of birth in 2024, accounting for nearly 3.7% of the world's population.
  - **Major Migration Corridors:** Mexico → United States remains the world's largest migration corridor.
  - India-UAE and India-U.S. rank among the top global migration corridors.
- **Regional Trend:** Migration from Asia is largely driven by employment opportunities, particularly towards Gulf and Southeast Asian countries.
- **Gender Pattern:** Labour migration from Asia is predominantly male-dominated.
- **Indian Diaspora:** About 3.2 million Indians reside in the United States, making them one of the largest foreign-born communities there.
- **Gulf Migration:** United Arab Emirates has one of the highest migrant populations in the world, with migrants constituting nearly 74% of its population.
  - **Dual Nature of Indian Migration:** Labour migration to Gulf countries.
  - Skilled migration of students and professionals to countries like the United States.
- **Humanitarian Concerns:** Thousands of migrants die or go missing every year during migration journeys, highlighting the risks associated with irregular migration.

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