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India's New Global Strategy

Green Transition • Technology • Geopolitics

Message



A civil servant with the right aptitude is the kind of officer the nation expects. Right aptitude does not mean possessing vast knowledge, but having relevant knowledge, a balanced perspective and the ability to implement that knowledge effectively.

When it comes to UPSC or PCS examinations, mere accumulation of knowledge is not enough; its effective expression is equally important. These examinations assess an aspirant's analytical ability, expression skills and balanced understanding of contemporary issues. The process of preparation is not limited to the examination alone; it also inspires individuals to develop a meaningful perspective on important national and social issues. Undoubtedly, this journey is challenging, yet equally inspiring and purposeful.

Perfect 7 magazine has been an integral medium in developing selected civil servants' understanding of current affairs. In accordance with changing examination patterns, syllabus requirements and the nature of contemporary issues, the magazine has continuously refined itself.

I hope that Perfect 7 magazine will remain a perfect companion in your preparation journey and continue to guide you throughout your Civil Services Examination journey.

With Best wishes.

Vinay Singh
Founder
Dhyeya IAS

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Indian Society & Art and Culture

Somnath Swabhiman Parv: Faith, Identity and the Continuity of Indian Civilization

Context:

The Somnath Temple stands as a symbol of India's spiritual continuity and indomitable national spirit. Recently, 75 years were completed since the inauguration of the reconstructed Somnath Temple in independent India. In 2026, the Government of India and the Somnath Trust are organizing the "Somnath Swabhiman Parv." The "Somnath Swabhiman Parv" marks two significant milestones in India's historical journey: one thousand years since the first recorded attack on the Somnath Temple in 1026 CE and seventy-five years since the consecration of the reconstructed temple in 1951 after Independence. The celebration of "Somnath Swabhiman Parv" is not merely a religious event; it symbolizes the continuity of Indian civilization, cultural renaissance, and national self-confidence. At a time when India is attempting to establish itself as a "Civilizational State," the discourse surrounding Somnath becomes even more relevant.

Historical Background of the Somnath Temple:

- Located at Prabhas Patan in the Saurashtra region of Gujarat, the Somnath Temple is considered the first among the 12 Jyotirlingas of Lord Shiva. Since ancient times, the temple has been a major center of Indian maritime trade, religious faith, and cultural prosperity. References to the temple and the region are found in the Rigveda, Shiva Purana, Skanda Purana, and the Mahabharata.



- » **Rigveda:** Mentions the Somnath Temple and the construction of the Jyotirlinga situated there.
- » **Skanda Purana:** In its "Prabhas Khanda," Somnath is described as the Adilinga (the first Jyotirlinga). It elaborately narrates the story of Chandra Deva's penance to Lord Shiva and the construction of the

temple.

- » **Shiva Purana:** Chapter 13 mentions Someshwara Mahadeva (Somnath) as the first among the 12 Jyotirlingas.
- » **Mahabharata:** The epic and the Bhagavata Purana refer to this place as “Prabhas Kshetra” or “Prabhas Pattana,” an important pilgrimage site. According to belief, Lord Krishna relinquished his mortal form here.
- Throughout history, the temple faced several invasions, but the attack by Mahmud of Ghazni in 1026 CE remains the most widely discussed. During this invasion, the temple’s wealth was looted and the structure suffered severe damage.
- However, the Somnath Temple was rebuilt every time. This is why the temple is not merely a religious symbol but also represents the cultural resilience and regenerative capacity of Indian society.

Independent India and the Reconstruction of Somnath:

- After Independence, India’s first Deputy Prime Minister and Home Minister, Sardar Vallabhbhai Patel, initiated the reconstruction of the Somnath Temple. This decision was not merely religious in nature; it was linked to national pride and cultural renaissance.
- At that time, India was struggling with the trauma of Partition, communal tensions, and a colonial mindset. In such circumstances, the reconstruction of Somnath conveyed the message that India sought to reconnect with its cultural roots. K.M. Munshi described it as the “revival of the soul of the nation.”
- In 1951, India’s first President, Rajendra Prasad, inaugurated the temple. He stated, “The reconstruction of Somnath symbolizes the resurgence of a nation that has regained its identity after centuries of subjugation.”

Architectural Style of the Somnath Temple

- The present temple has been built in the ‘Chalukyan’ or ‘Solanki’ architectural style. It belongs to the ‘Mahamuru’ type of temple architecture, known

for its grandeur. The outer and inner walls of the temple are intricately carved with depictions of deities, apsaras, and animals. The present temple was designed by the renowned architect Prabhashankar Sompura.

- **Structure of the Temple:** The temple is mainly divided into three sections—the Garbhagriha (sanctum sanctorum), Sabhamandapa (assembly hall), and Nrityamandapa (dance hall/entrance section).
 - The main shikhara of the temple rises approximately 155 feet above the ground.
 - A 27-foot-long flagpole is installed above the shikhara.
 - The kalasha situated atop the shikhara weighs nearly 10 tons.
- **Baan Stambh (Arrow Pillar):** Located on the seashore, this is an ancient pillar. It bears an inscription stating that there is no landmass or mountain in a straight line between this point and the South Pole.
 - The rear side of the temple directly faces the Arabian Sea, giving it a magnificent visual appeal.

Somnath Swabhiman Parv and Cultural Heritage:

- The Indian Constitution views “secularism” as equal respect for all religions rather than opposition to religion. Therefore, governments in India have actively participated in the preservation of religious and cultural heritage.
- In recent years, the trend of “cultural renaissance” has gained momentum in India. Projects such as the Kashi Vishwanath Corridor, Mahakal Lok, Ram Mandir, and Somnath are being presented not merely as religious initiatives but as symbols of cultural-national identity.
- The Somnath Swabhiman Parv is also considered part of this broader cultural renaissance. Through this event, India is bringing its historical memories, religious sites, and cultural symbols back to the center of national discourse.
- India is now presenting itself not merely as a modern political nation but as a civilization

with thousands of years of cultural tradition.

The Concept of a Civilizational State and India:

- The significance of Somnath is not confined to religion alone. It reflects a defining characteristic of Indian civilization—the ability to rebuild even after destruction.
- Indian civilization has faced invasions, colonial rule, cultural suppression, and Partition, yet its fundamental cultural stream has continued uninterrupted. Somnath symbolizes this “civilizational continuity.”
- Today, the concept of a “Civilizational State” is gaining increasing attention in international politics. Countries such as China, Türkiye, and Russia are attempting to connect their historical-cultural identities with modern politics. India, too, is presenting itself not merely as a modern political entity but as a nation rooted in an ancient cultural tradition. Symbols such as Somnath, Kashi, Ayodhya, and Nalanda strengthen this discourse.

Heritage Conservation and Economic Development:

- The significance of Somnath is not only cultural but also economic. Religious tourism is growing rapidly in India. Under schemes such as PRASAD and Swadesh Darshan, pilgrimage sites are being connected with modern infrastructure.
- Every year, the Somnath Temple attracts millions of devotees and tourists, thereby boosting local employment, the hotel industry, handicrafts, and the transport sector.
- Thus, heritage conservation is increasingly becoming an important part of the “cultural economy.” This also demonstrates that modern development and cultural preservation are not contradictory but complementary to each other.

India’s Soft Power and Somnath:

- At the global level, India is attempting to strengthen its “soft power.” Along with yoga,

Ayurveda, Buddhist heritage, and Indian philosophy, the importance of religious-cultural sites is also increasing.

- Places such as Somnath present the antiquity and vibrancy of Indian culture before the world. This strengthens India’s image as a civilization based on diversity, tolerance, and cultural continuity.
- Additionally, for the Indian diaspora, such sites serve as a medium of cultural connection and identity.

Major Challenges:

- Although the resurgence of Somnath presents positive symbolism, certain challenges remain:
 - » **Politicization of History:** Selective interpretation of historical events may increase social polarization.
 - » **Question of Inclusivity:** Cultural renaissance must remain aligned with India’s pluralistic traditions.
 - » **Commercialization:** Excessive commercial development of pilgrimage sites may affect their spiritual identity.
 - » **Heritage Conservation vs Modernization:** A balance between modern facilities and original architecture is essential.
 - » **Historical Authenticity:** It is necessary to preserve the historical character during reconstruction and beautification.

Conclusion:

The thousand-year journey of Somnath and the seventy-five years of its reconstruction do not merely represent the history of a temple; they represent the history of the vitality and regenerative power of Indian civilization. At a time when India is strengthening its cultural identity and soft power on the global stage, symbols such as Somnath convey that the true strength of a nation lies not only in its economy or military capability, but also in its cultural memory and civilizational confidence.

Short Issues

NCRB Report on Crimes

Context:

Recently, The Crime in India, 2024 report released by the National Crime Records Bureau (NCRB) presents a mixed picture of crime trends in the country.

India recorded a total of 58.86 lakh cognisable crimes in 2024, marking a 6% decline compared to 2023. Of these, 35.44 lakh cases were registered under the Indian Penal Code (IPC) and Bharatiya Nyaya Sanhita (BNS), while 23.41 lakh were under special and local laws.

While the overall incidence of cognisable crimes has declined, certain categories such as cybercrime, drug overdose deaths, and offences against the State have shown a rising trend, highlighting emerging challenges in internal security and public safety.

Key Points of NCRB Report:

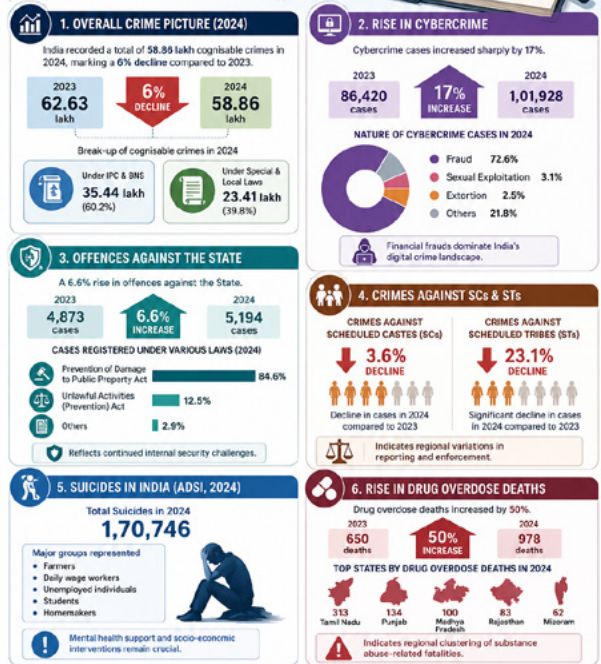
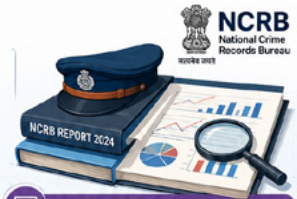
- **Rise in Cybercrime:** Despite an overall decline in crime rates, cybercrime cases increased by 17.9%. More than 1.01 lakh cases were registered in 2024, of which nearly 72.6% were related to financial fraud.
- **Crimes Against Women and Children:** Crimes against women witnessed a marginal decline of 1.5% (4.41 lakh cases). However, crimes against children increased by 5.9%, with kidnapping and sexual offences constituting the highest share.
- **Crimes Against Senior Citizens and Economic Offences:** Crimes against senior citizens recorded an alarming increase of 16.9%. Economic offences also rose by 4.6%.
- **Crimes Against SCs/STs:** Crimes against Scheduled Castes (SCs) declined by 3.6%, while crimes against Scheduled Tribes (STs) registered a significant decline of 23.1%.
- **Murder and Riots:** Murder cases declined by 2.4% (total 27,049 cases), with interpersonal disputes remaining the primary cause. Crimes classified as “Offences Against the

State” increased by 6.6%.

NCRB REPORT ON CRIMES 2024

Key Trends from National Crime Records Bureau

The Crime in India, 2024 report by the NCRB presents a mixed picture of crime trends. While overall cognisable crimes have declined, cybercrime, drug overdose deaths, and offences against the State are rising, highlighting emerging challenges to internal security and public safety.



Other Crime Trends:

- The report also highlighted a 6.6% rise in offences against the State, with 5,194 cases in 2024 compared to 4,873 in 2023. A majority of these cases were registered under the Prevention of Damage to Public Property Act (84.6%), followed by the Unlawful Activities (Prevention) Act (12.5%), reflecting continued internal security challenges.
- On the social justice front, crimes against Scheduled Castes (SCs) declined by 3.6%, while crimes against Scheduled Tribes (STs) fell significantly by 23.1%, suggesting regional variations in reporting and enforcement.

Suicide and Drug Overdose Trends:

- The Accidental Deaths & Suicides in India (ADSI), 2024 report recorded 1,70,746

suicides, with significant representation from farmers, daily wage workers, unemployed individuals, students, and homemakers.

- A concerning trend is the 50% rise in drug overdose deaths, which increased from 650 in 2023 to 978 in 2024. Tamil Nadu reported the highest number of such deaths (313), followed by Punjab, Madhya Pradesh, Rajasthan, and Mizoram, indicating regional clustering of substance abuse-related fatalities.

Significance of the report:

- The NCRB data reflects a structural shift in India's crime profile, where traditional crimes show a decline, but technology-driven crimes and substance abuse-related deaths are rising sharply.
- This underscores the need for strengthening cybersecurity infrastructure, digital literacy, and drug prevention mechanisms, alongside conventional policing reforms.

Way Forward:

- Strengthening cyber policing units and forensic capabilities
- Enhancing inter-agency coordination for cyber fraud tracking
- Expanding mental health and suicide prevention frameworks
- Tackling drug abuse through targeted rehabilitation and enforcement
- Improving data-driven policing using NCRB analytics

Conclusion:

The 2024 NCRB report highlights that while India is witnessing a marginal improvement in overall crime levels, the nature of crime is evolving, shifting towards cyber-enabled offences and public health-linked fatalities,

requiring a more technology-driven and preventive security approach.

NITI Aayog Report on the School Education System in India

Context:

Recently, NITI Aayog has released a report titled "School Education System in India: Temporal Analysis and Policy Roadmap for Quality Enhancement".

About the report:

- The report analyses the progress of India's school education system from 2014-15 to 2024-25 and provides recommendations to improve quality, equity, and learning outcomes in line with the vision of Viksit Bharat @2047. The study is based on data



NITI Aayog Releases Policy Report on 'School Education System in India: Temporal Analysis and Policy Roadmap for Quality Enhancement'

NITI Aayog has released a comprehensive policy report that presents a data-driven analysis of the school education system in India over the past decades and outlines a forward-looking roadmap to enhance quality, equity, access and learning outcomes.

KEY HIGHLIGHTS OF THE REPORT

- Temporal Analysis:** In-depth analysis of trends and patterns in enrolment, infrastructure, learning outcomes, equity and governance over time.
- Quality Enhancement:** Evidence-based insights to improve teaching quality, curriculum, assessment and student learning outcomes.
- Equity and Inclusion:** Focus on bridging gaps across gender, socio-economic groups, regions and school types.
- Data-Driven Policy Roadmap:** Actionable recommendations for States and Union Territories to strengthen planning, monitoring and outcomes.
- Strengthening Foundational Learning:** Prioritising foundational literacy and numeracy as the cornerstone of lifelong learning.
- Systemic Reforms:** Recommendations to build an efficient, accountable and future-ready school education system.

“Building a strong school education system is the foundation for India's inclusive and sustainable development.”

ACCESS EQUITY QUALITY OUTCOMES

A QUALITY EDUCATION TODAY BUILDS A STRONGER INDIA TOMORROW

Empowered Students Effective Teachers Enabling Schools Accountable Systems Viksit Bharat @2047 © IBG NEWS

from UDISE+, PARAKH, NAS, and ASER surveys covering all States and Union Territories.

Major Achievements in School Education:

- India currently manages the world's largest school education system with 14.71 lakh schools, over 24.69 crore students, and 1.01 crore teachers. The report highlights

that elementary education has achieved near-universal access, with Gross Enrolment Ratio (GER) standing at 90.9% at the primary level and 90.3% at the upper primary stage.

- School infrastructure has improved considerably during the last decade. Functional electricity coverage increased from 55.96% in 2014-15 to 91.9% in 2024-25. Digital access has also expanded rapidly, with internet facilities rising from 8.05% to 63.5% of schools.
- Learning outcomes, especially in foundational literacy and numeracy, are also showing gradual recovery after disruptions caused by the pandemic.

Key Challenges Identified in the report:

- Despite progress, the report identifies several structural and learning-related challenges. The school system remains fragmented, with a large number of primary schools but limited higher secondary institutions.
- While there are 7.3 lakh primary schools, only 1.64 lakh higher secondary schools exist, creating transition difficulties for students.
- Secondary-level dropout remains a serious concern, with the dropout rate at 11.5%, compared to only 0.3% at the primary level. The report also notes that more than one-third of schools have fewer than 50 students, making resource allocation and teacher deployment inefficient.
- Learning quality continues to be uneven. According to ASER findings, nearly half of Grade 5 students in rural India cannot read a Grade 2 level text, reflecting persistent issues of rote learning and weak foundational skills.

Recommendations of NITI Aayog:

- The report recommends structural reforms through the development of Composite Schools covering Grades 1-12 and evidence-based school rationalization. It also suggests establishing independent

State School Standards Authorities (SSSAs) for monitoring quality and safety standards.

- Further, the report emphasizes competency-based education, teacher training, digital inclusion, and support for children with disabilities and migrant students. Strengthening foundational literacy and numeracy remains a key priority.

Conclusion:

India has made significant progress in expanding access and infrastructure in school education. However, improving learning outcomes, reducing secondary dropouts, and ensuring equitable digital access remain major challenges. The roadmap proposed by NITI Aayog aims to transform India's school education system into a more inclusive, efficient, and quality-driven framework essential for achieving the goals of Viksit Bharat @2047.

The Bhojshala Complex Judgment and Its Historical Significance

Context:

Recently, The Indore Bench of the Madhya Pradesh High Court has delivered a landmark 242-page judgment declaring the disputed Bhojshala-Kamal Maula Mosque complex in Dhar as a Hindu temple dedicated to Goddess Vagdevi (Saraswati). The verdict marks a major development in one of India's long-standing religious and heritage disputes.

Key Observations of the Court:

- The High Court noted:
 - » Continuous historical evidence of Hindu worship
 - » Strong indications of a Sanskrit learning centre
 - » Archaeological findings supporting temple origin
- The court ruled in favour of the Hindu side while directing ASI to continue conservation of the monument.

About Bhojshala Complex:

- The Bhojshala complex is an 11th-century protected monument that originally functioned as a major centre of Sanskrit learning and a temple dedicated to Goddess Vagdevi (Saraswati).
- Over time, parts of the temple structure were incorporated into what became known as the Kamal Maula Mosque, making it a deeply contested religious site.
- **Location**
 - » **District:** Dhar (historically Dhara), Malwa region
 - » **State:** Madhya Pradesh
 - » **Historical importance:** Former capital of the Paramara dynasty

under Arjunavarma Deva in the early 13th century.

- **Islamic Period Transition:** In the 14th century, during the Malwa Sultanate period, the site underwent conversion into a mosque and became associated with the Sufi saint Shaikh Kamal Maula, leading to its dual religious identity.
- **Modern Legal Status:** The site was declared a protected monument under the Ancient Monuments Preservation Act in 1904. A 2003 ASI arrangement allowed:
 - » Hindu worship on Tuesdays and Basant Panchami
 - » Muslim prayers on Fridays

Architectural and Epigraphic Features:

- **Temple Architecture:** The structure includes a large courtyard, colonnades, and a prayer hall with carved pillars and ceilings reflecting clear Hindu temple architectural styles.
- **Sarpabandha Inscriptions:** Two unique inscriptions are found at the site:
 - » One containing Sanskrit alphabets and grammatical structures
 - » Another detailing Sanskrit verb forms across tenses and moods
- **Literary and Religious Inscriptions:**
 - » Prakrit inscriptions praising Kurma Avatara (Vishnu's tortoise incarnation)
 - » Slabs containing classical Sanskrit dramatic compositions linked to royal scholars

Conclusion:

The Bhojshala judgment by the Madhya Pradesh High Court represents a significant legal milestone in heritage dispute resolution. While it clarifies ownership of religious rights, it also underscores the need for sensitive handling of historically layered cultural sites to ensure harmony and preservation.

Netherlands Returns 11th Century Chola Copper Plates

Tracing the Bhojshala dispute

ORIGINS, AS PER MP GOVT'S SUBMISSION

1034 AD: King Bhoja establishes a temple dedicated to Goddess Vagdevi (Maa Saraswati), which served as a renowned center of learning.

1305 AD: Sultan Ala-ud-din Khalji launches the first major attack on Bhojshala.

1401 AD: Malwa governor Dabbar Khush attempts to convert the complex into a mosque but faces resistance.

1514 AD: Sultan Mahmud Shah Khalji launches a second assault on the site. Over time, parts of the complex are integrated into what became known as the Kamal Maula Mosque.

MUSLIMS ALLOWED TO OFFER PRAYERS

1935: The Dhar state allows Muslims, for the first time, to offer Friday namaz inside the complex.

1951: Bhojshala and Kamal Maula's Mosque are declared a monument of national importance under the Ancient and Historical Monuments and Archaeological Sites and Remains (Declaration of National Importance) Act, 1951.

ASI BANS HINDU ENTRY

February 6, 1998: The Archaeological Department bans Hindu entry into Bhojshala "until further orders", though Friday prayers for Muslims continue.

February, 2003: A fresh entry of the Bhojshala site on Basant Panchami between Hindu devotees and the administration over the declaration of liberation of the site, leaving 2 dead and several injured.

April 7, 2008: The Director-General of the ASI issues an arrangement – Muslims can offer Friday prayers between 1 and 3 pm; Hindus can offer prayers on Tuesdays and on Basant Panchami; and visitors can take flowers and other items as offering.

2006: Clash erupts in Dhar on Basant Panchami, which coincided with Friday namaz, leaving several injured.

RECOVERY OF IDOLS

1875: Major General William Kincaid conducts excavations at the complex, leading to the recovery of the idol of Goddess Vagdevi.

1903: Lord Curzon removes the Vagdevi idol and transports it to England, where it remains in the British Museum.

1904: Under the Ancient Monuments Preservation Act, Bhojshala is declared a protected monument and its management is handed over to the ASI. Under the Act, religious activities are restricted.

FIRST LAWSUIT

1962: Activist Amredda files a suit against the Union of India and the MP government, seeking possession of the Kamal Maula Mosque and restraining interference in namaz. The suit is dismissed, but later, Hindu Mahasabha leader Thakur Nihal Chandra was implicated.

1995–1997: To manage communal tensions, the government allows Hindus to pray on Tuesdays and during Basant Panchami, while Muslims are permitted to pray on Fridays.

LEGAL BATTLE

2022: The Hindu Front for Justice files a plea seeking year-round prayer rights and a scientific survey to determine the site's original religious character, citing the Gyanraj case as a precedent.

March 2024: The Indian Bench of the MP HC directs the ASI to conduct a comprehensive scientific survey.

July 2024 (ASI findings): After a 98-day survey, the ASI submits its report, suggesting that the mosque was constructed in the 14th century by modifying and reusing structural elements from an 11th-century temple.

FINAL HEARING

Jan-April 2026: Supreme Court orders stay on the ASI report, following which the high court begins final hearings.

May 12: The high court reserves its judgment.

May 15: The HC orders the original character of the Bhojshala complex to be a temple, basing the verdict on the ASI's scientific findings regarding the structure's origin.

Historical Background:

- **Foundation (1000–1055 AD):** The complex was established by Raja Bhoja, the most prominent ruler of the Paramara dynasty, as a centre of higher learning and Sanskrit education.
- **Expansion Phase:** Successors like Udayaditya and Naravarman expanded and maintained the institution, with further patronage

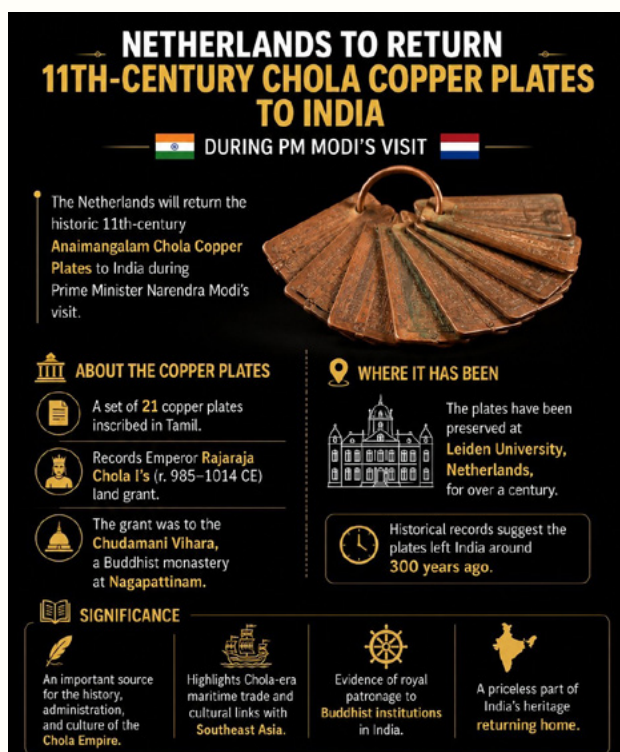
to India

Context:

Recently, the 11th century Chola copper plates were formally handed over to India by the Netherlands during Prime Minister Narendra Modi's visit.

Background:

- The Netherlands returned the Chola copper plates (Anaimangalam copper plates) to India, acknowledging their Indian origin.
- The plates had been in the possession of Leiden University since 1862.
- The decision was taken on the recommendation of the Dutch Colonial Collections Committee, following India's request in 2023.



NETHERLANDS TO RETURN 11TH-CENTURY CHOLA COPPER PLATES TO INDIA
 DURING PM MODI'S VISIT

The Netherlands will return the historic 11th-century Anaimangalam Chola Copper Plates to India during Prime Minister Narendra Modi's visit.

ABOUT THE COPPER PLATES

- A set of 21 copper plates inscribed in Tamil.
- Records Emperor Rajaraja Chola I's (r. 985–1014 CE) land grant.
- The grant was to the Chudamani Vihara, a Buddhist monastery at Nagapattinam.

WHERE IT HAS BEEN

The plates have been preserved at Leiden University, Netherlands, for over a century.

Historical records suggest the plates left India around 300 years ago.

SIGNIFICANCE

- An important source for the history, administration, and culture of the Chola Empire.
- Highlights Chola-era maritime trade and cultural links with Southeast Asia.
- Evidence of royal patronage to Buddhist institutions in India.
- A priceless part of India's heritage returning home.

About the Copper Plates:

- **Total:** 21 large copper plates and 3 smaller plates
- Two sets of artefacts:
 - » One linked to Rajaraja Chola I and Rajendra Chola I

- » Another linked to Kulottunga Chola I
- The plates bear royal seals and record administrative and religious grants.
- They were likely excavated during Dutch colonial activities in Nagapattinam between 1687 and 1700.
- These plates were brought to Netherlands in 1712 from Nagapattinam by Florentius Camper, a Dutch missionary, associated with Dutch East Indies Company.

About Chola dynasty:

- The Chola dynasty was one of the longest-ruling dynasties in South India.
- Originated in Tamil region.
- Its control extended to present-day Tamil Nadu, Kerala, and parts of Andhra Pradesh and Karnataka.
- Known for:
 - » strong naval power,
 - » overseas trade,
 - » temple architecture,
 - » efficient administration

Major Chola Rulers:

- **Rajaraja Chola I (947–1014 CE)**
 - » Built the Brihadeeswarar Temple at Thanjavur
 - » Expanded empire across South India and Sri Lanka
- **Rajendra Chola I**
 - » Extended Chola influence to Southeast Asia
 - » Built Gangaikonda Cholapuram
 - » Known for strong maritime campaigns
- **Kulottunga Chola I**
 - » Strengthened administrative reforms
 - » Maintained stability and trade networks

Administration, Society and Economy:

- **Administration:**
 - » Highly centralised monarchy
 - » Well-structured revenue system
 - » Strong village self-governance (ur and sabha systems)
 - » Efficient land revenue administration
- **Economy:**

- » Agriculture-based economy
- » Flourishing maritime trade with Southeast Asia
- » Active port towns like Nagapattinam
- » Strong guild system for trade and commerce
- **Society:**
 - » Stratified but highly organised social structure
 - » Prominent role of temples in social life
 - » Patronage of Buddhism and Hinduism

Cultural and Architectural Contributions:

- **Chola Architecture:**
 - » Dravidian style temple architecture
 - » Massive vimanas (temple towers)
 - » Intricate stone carvings and bronze sculptures
- **Major Temples:**
 - » Brihadeeswarar Temple (Thanjavur)
 - » Gangaikonda Cholapuram Temple
 - » Airavatesvara Temple (Darasuram)
 - » These are collectively known as the Great Living Chola Temples and are UNESCO World Heritage Sites.
- **Maritime Legacy:**
 - » Cholas developed a powerful navy under Rajendra Chola I
 - » Maintained trade links with Southeast Asia, Sri Lanka and China
 - » Played a key role in Indian Ocean trade networks

Significance of the Return:

- Strengthens India's cultural restitution diplomacy
- Reinforces global recognition of Indian heritage rights
- Highlights historical trade and cultural links with Southeast Asia
- Supports India's broader campaign against colonial-era artefact looting
- Enhances understanding of Chola civilisation globally

Conclusion:

The return of the Chola copper plates is a

significant step in restoring India's cultural heritage. It strengthens global cooperation in heritage repatriation and highlights the importance of preserving and returning historically significant artefacts to their rightful origins.

Demographic Transition in India and the SRS 2024 Report

Context:

Recently, the Office of the Registrar General and Census Commissioner of India released the Sample Registration System (SRS) Statistical Report 2024. The report indicates that India is undergoing a rapid demographic transition.

Key Findings of the SRS 2024 Report:

- **Total Fertility Rate (TFR)**
 - » India's Total Fertility Rate has declined to 1.9, indicating that the country is gradually moving towards a low-fertility society. This is below the replacement level of 2.1.
- **Crude Birth Rate (CBR)**
 - » The country's birth rate has shown a continuous decline.
 - » A decade ago, it was 21, which has now decreased to 18.3 per 1,000 population.
 - » The birth rate in urban areas (14.7) is significantly lower than in rural areas (20.2).
- **Infant Mortality Rate (IMR)**
 - » Due to improvements in healthcare services, the IMR has declined to 24 per 1,000 live births.
 - » A decline of 6 points has been recorded over the last five years.
- **Under-Five Mortality Rate (U5MR)**
 - » The mortality rate of children below five years of age in the country has declined to 28.
- **Crude Death Rate (CDR)**
 - » The death rate remains stable at 6.4 per 1,000 persons.
 - » However, it is still slightly higher than

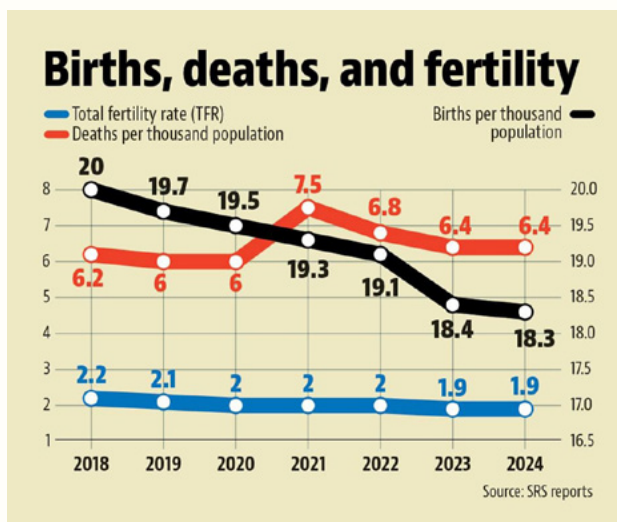
the pre-COVID level.

- **Sex Ratio at Birth (SRB)**
 - » A marginal improvement has been recorded during the period 2022–24.
 - » It has now reached 918 girls per 1,000 boys.

Regional Disparities and State-Level Variations:

Demographic changes are not uniform across different states of India.

- **Leading States**
 - » Southern states such as Kerala and Tamil Nadu are leading the demographic transition.
 - » Kerala has the lowest IMR in the country at just 8.
 - » Tamil Nadu recorded an IMR of 11.
- **Challenging States**
 - » Despite healthcare improvements, Madhya Pradesh continues to have a high IMR of 35 and U5MR of 41.
 - » Bihar and some northern states still have a TFR above the national average.
 - » These regional disparities reflect inequalities in healthcare, education, and social development.



Meaning of Demographic Transition:

- Demographic transition refers to the process in which:
 - » Both birth rates and death rates gradually decline
 - » Population growth rate slows down
 - » The proportion of elderly population begins to rise

- India is currently entering the advanced stage of this transition.

Administrative and Policy Implications:

- **Crisis of Demographic Dividend**
 - » The decline of TFR to 1.9 may reduce the proportion of working-age population in the future.
 - » Dependency on the elderly population will increase
 - » Pressure on social security systems will rise
 - » Government will need to focus on skill development and employment generation
- **Rural-Urban Health Inequality**
 - » IMR in rural areas (27) remains significantly higher than in urban areas (17).
 - » This highlights the need to strengthen the National Health Mission (NHM) and primary healthcare services.

Challenge of Ageing Population

- Low fertility rates will lead to a rapid rise in the elderly population in the future. This will require:
 - » Expansion of pension systems
 - » Development of geriatric healthcare services
 - » Strengthening of social security frameworks

Major Government Initiatives:

- » National Health Mission (NHM)
- » Ayushman Bharat Scheme
- » Poshan Abhiyaan
- » Mission Indradhanush
- » Janani Suraksha Yojana
- » National Population Policy
- These initiatives have played an important role in improving maternal and child health

indicators.

Key Definitions and Concepts:

- **Infant Mortality Rate (IMR):** Infant Mortality Rate refers to the number of deaths of children below one year of age per 1,000 live births. It is an important indicator of the health system and socio-economic development.
- **Crude Birth Rate (CBR):** Crude Birth Rate refers to the number of live births occurring per 1,000 population in a year.
- **Total Fertility Rate (TFR):** Total Fertility Rate refers to the average number of children a woman is expected to give birth to during her lifetime.
- **Neonatal Mortality Rate (NMR):** Neonatal Mortality Rate refers to the number of deaths of infants within 28 days of birth per 1,000 live births.

Conclusion:

The SRS 2024 Report indicates that India is entering the phase of population stabilization. Policymakers must focus on healthcare quality, reducing regional disparities, addressing ageing population challenges, and effectively utilizing the demographic dividend for inclusive and sustainable development.

Kerala's Elderly Department

Context:

Recently, the newly elected government in Kerala announced the creation of a separate department for elderly welfare, becoming the first state in India to institutionalise governance exclusively for senior citizens. This reflects the rising policy urgency around ageing, both in Kerala and across India.

Kerala: India's Most Ageing State:

- Kerala is undergoing advanced demographic ageing similar to East Asian and European

countries. As per the Elderly in India Report 2021, around 16.5% of Kerala's population is above 60 years, projected to reach 20.9% by 2031.

- Old-age dependency ratio:
 - » 19.6% (2011)
 - » 26.1% (2021)
 - » 34.3% (projected 2031)

WHY THIS STEP?

- ✓ Kerala has one of the highest proportions of elderly in India.
- ✓ To address growing socio-economic and healthcare challenges.
- ✓ To ensure dignity, security and a better quality of life.

KEY FUNCTIONS OF THE DEPARTMENT

- ✓ Policy making exclusively for senior citizens
- ✓ Better healthcare and geriatric care services
- ✓ Financial security and social protection
- ✓ Old age homes, day care centres and support
- ✓ Helpline, counselling and grievance redressal

BENEFITS FOR ELDERLY CITIZENS

- ✓ Dignified and secure life
- ✓ Accessible healthcare
- ✓ Social Inclusion
- ✓ Protection of rights
- ✓ Better support in old age

“Caring for our elders is a duty, a respect and a measure of a progressive society.”

Geriatric Healthcare | Social Security | Active Ageing | Care & Support | Respect & Dignity

- The rise in old-age homes indicates weakening traditional family support systems.

Reasons behind Rapid Ageing:

- **Declining Fertility Rate:** Kerala's Total Fertility Rate (TFR) is around 1.35, well below replacement level (2.1), reflecting a broader demographic shift in India's southern states.
- **Increased Life Expectancy:** Improved healthcare has raised longevity:
 - » Women: ~78.4 years
 - » Men: ~71.9 years
 - » Migration Trends
- Large-scale outward migration of the working-age population has created “empty nest” households, increasing elderly vulnerability. Return migration of retirees also adds to the ageing burden.

Key Challenges Faced by the Elderly:

- **Health Challenges:** According to the Longitudinal Ageing Study in India (LASI), over 70% of Kerala's elderly suffer from

chronic diseases such as hypertension, diabetes, arthritis, and cardiovascular conditions. Dementia and mental health issues are also rising.

- **Feminisation of Ageing:** Women outnumber men at older ages, with many elderly women living alone as widows, facing economic and social insecurity.
- **Economic Vulnerability:** Many elderly continue working under MGNREGS due to inadequate pensions and financial insecurity.

Government Initiatives:

- Kerala has developed several innovative elderly-care programmes:
 - » Vayomithram – mobile medical care
 - » Samayaprabha – daycare centres
 - » Smruthipadham – dementia care initiative
 - » Kerala Care Palliative Grid – integrated palliative system
- In 2025, the state also formed the first State Elderly Commission to safeguard senior citizens' rights.

Challenges Ahead:

- Kerala faces a shortage of geriatric professionals, including doctors, nurses, physiotherapists, and occupational therapists. Addressing this gap is essential for building a robust care economy and age-friendly infrastructure by 2030.

Elderly Population in India:

- India's elderly population (60+) accounts for over 12% of the total population and is projected to reach about 319 million by 2050. Women constitute nearly 58%, with a high proportion of widows.
- Traditional joint family systems are weakening due to urbanisation, migration, and nuclear families, increasing loneliness and dependency.
- Common health issues include diabetes, hypertension, arthritis, and cognitive decline. Regional disparities are significant, with states like Kerala ageing faster than

states like Bihar and Uttar Pradesh.

- Government measures include:
 - » Maintenance and Welfare of Parents and Senior Citizens Act, 2007
 - » Indira Gandhi National Old Age Pension Scheme
 - » Atal Pension Yojana

Conclusion:

Kerala's decision to create a dedicated department for elderly welfare marks a pioneering governance reform in India. As demographic ageing accelerates nationwide, the Kerala model offers a potential blueprint for integrating healthcare, social security, and dignity-based ageing policies into India's broader development framework.

Dowry Deaths in India: Laws, Causes, Judicial Trends & Challenges

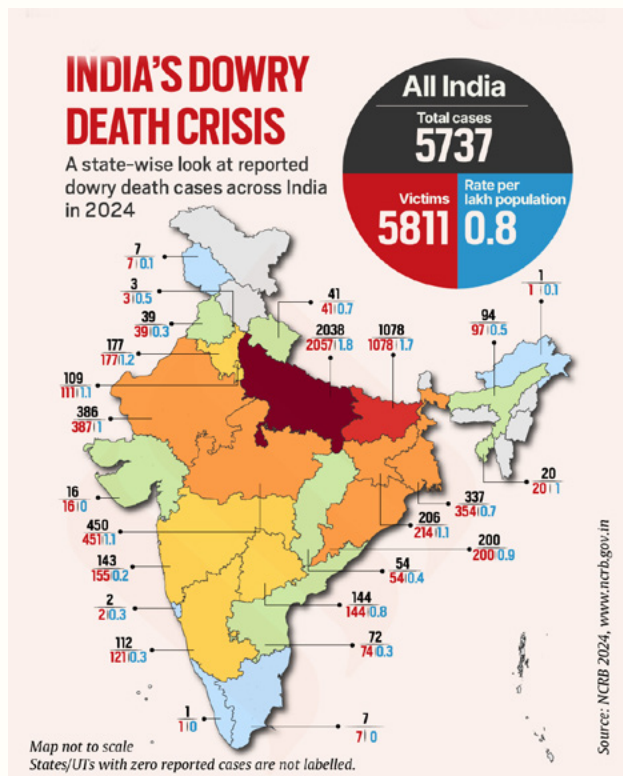
Context:

The recent death of Twisha Sharma in Bhopal has once again brought dowry-related violence into sharp national focus. Allegations of harassment, suspicious circumstances surrounding her death and subsequent judicial scrutiny including intervention by the Supreme Court and investigation by the Central Bureau of Investigation (CBI) have reignited debate on the persistence of dowry deaths in modern India.

What is Dowry Death:

- A dowry death refers to the unnatural death of a married woman caused by burns, bodily injury, or other suspicious circumstances within seven years of marriage, where evidence indicates she was subjected to cruelty or harassment related to dowry demands. It is treated as a distinct offence due to:
 - » Its occurrence in the private domain of marriage
 - » Difficulty in gathering direct evidence

- » High incidence of concealment and intimidation



Legal Framework against Dowry Deaths:

- **Bharatiya Nyaya Sanhita (BNS), 2023**
 - » **Section 80 – Dowry Death**
 - Applies when a woman dies unnaturally within 7 years of marriage
 - Requires proof of dowry-related cruelty before death
 - Punishment: minimum 7 years, up to life imprisonment
 - » **Section 85 – Cruelty by Husband or Relatives**
 - Covers physical and mental cruelty
 - Includes harassment for unlawful demands
- **Dowry Prohibition Act, 1961**
 - » Criminalises giving, taking, and demanding dowry
 - » Applies even if dowry is given “voluntarily”
 - » Limitations:

- Social acceptance of “gifts”
- Low conviction rates
- Underreporting

- **Indian Evidence Act, 1872**

- » **Section 113B – Presumption of Dowry Death**
 - Death within 7 years of marriage + dowry harassment
 - Court presumes husband/relatives responsible
 - Burden shifts to accused

Judicial decisions:

- **Satbir Singh v. State of Haryana (2021):** The Supreme Court emphasized strict interpretation of dowry death provisions to ensure effective prosecution of offenders.
- **Rajbir v. State of Haryana (2010):** Directed courts to consider adding murder charges in cases with suspicious circumstances, strengthening accountability.
- **Kans Raj v. State of Punjab (2000):** Court held that dowry death laws must be interpreted in light of social realities and domestic secrecy.

Judicial Trend:

- Courts increasingly emphasize:
 - » victim-centric interpretation
 - » burden shifting to accused
 - » need for effective investigation

Why Dowry Deaths Persist:

- **Patriarchal mindset:** Marriage seen as ownership transfer, not equality
- **Social prestige:** Dowry linked to status and consumerism
 - » Weak enforcement of dowry death cases
 - » Poor investigation
 - » Low conviction rates
 - » Trial delays
 - » Witness intimidation
- **Social pressure:** Victims discouraged from leaving abusive marriages
- **Institutional issues:** Police bias, weak forensics, influence of powerful accused families

Government Initiatives:

- Dowry Prohibition Act enforcement mechanisms
- One Stop Centres for women in distress
- Fast-track courts for crimes against women
- Emergency helplines (181, 112)
- Awareness campaigns like Beti Bachao Beti Padhao

Conclusion:

The Twisha Sharma case reflects a continuing pattern of structural violence within marriage, not an isolated incident. Despite strong constitutional and legal safeguards, dowry deaths persist due to patriarchy, weak enforcement, and social acceptance. Eliminating dowry deaths requires social attitude change, stronger institutions, and enforcement of constitutional morality. True gender justice will be achieved only when marriage is based on equality, not control.

National Family Health Survey-6 (NFHS-6)

Context:

Recently, the Ministry of Health and Family Welfare (MoHFW) released the National Family Health Survey-6 (NFHS-6) for the year 2023–24. The survey covered 715 districts and approximately 679,000 households across India.

About NFHS-6:

- NFHS-6 is a comprehensive, multi-stage survey aimed at assessing key health and social development indicators in India. It examines trends related to maternal and child health, fertility rates, nutrition, immunization, health insurance coverage, and digital inclusion.
- The survey is conducted by the International Institute for Population Sciences (IIPS) and is regarded as India's most extensive health and demographic survey. It provides district-level data on population, health, nutrition,

and family welfare, playing a crucial role in evidence-based policymaking and monitoring progress toward the Sustainable Development Goals (SDGs).

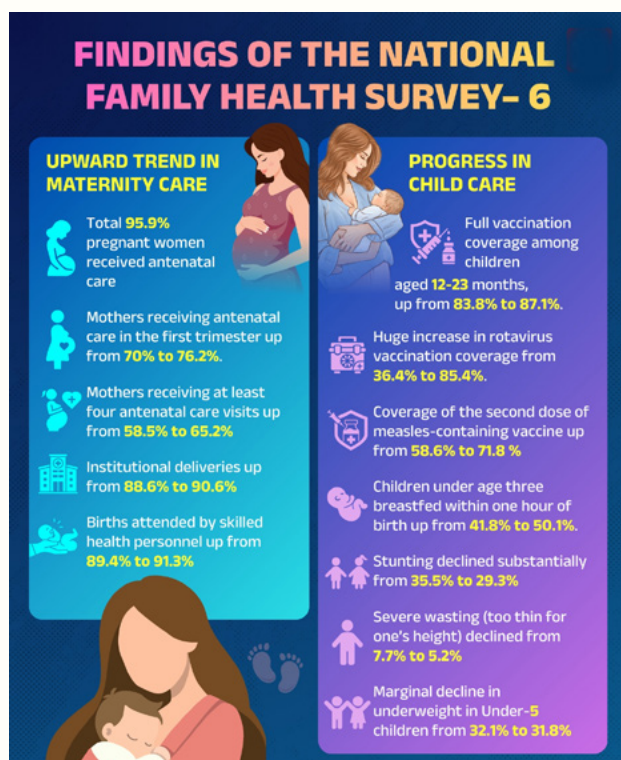
- The survey also serves as a benchmark for evaluating the performance of major government health programs and identifying regional disparities in healthcare access and outcomes.

Key Findings of the Survey:

- **Significant Improvement in Maternal Health:** According to the survey, maternal health indicators have shown remarkable progress:
 - » Institutional deliveries increased to 90.6%.
 - » Antenatal Care (ANC) coverage reached 95.9%.
 - » Early registration of pregnancies and regular health check-ups also recorded substantial improvement.
 - » These achievements reflect better access to healthcare services and the effective implementation of maternal health programs.
- **Improvement in Child Health and Nutrition:** NFHS-6 reports positive progress in child health and nutrition indicators:
 - » Stunting among children declined from 35.5% to 29.3%.
 - » Severe wasting decreased from 7.7% to 5.2%.
 - » Full immunization coverage increased to 87.1%.
 - » Rotavirus vaccine coverage rose significantly to 85.4%.
 - » These improvements indicate better implementation of child health and nutrition initiatives.
- **Enhanced Healthcare Access and Social Security:** Access to healthcare services and financial protection has improved considerably:
 - » Health insurance coverage increased from 41% to 60.2%.
 - » Government schemes such as Ayushman Bharat – Pradhan Mantri

Jan Arogya Yojana (PM-JAY) played a significant role in this expansion.

- » 95.6% of children's vaccinations were administered through government health facilities.
- » Internet usage among women increased substantially from 33.3% to 64.3%.
- » This reflects reduced digital inequality and improved access to services.



Key Challenges:

- Despite the progress, several challenges remain:
 - » Around 40.5% of infants aged 6–8 months do not receive adequate complementary feeding.
 - » Approximately 12.9% of children remain partially immunized or completely unvaccinated.
 - » The prevalence of Non-Communicable Diseases (NCDs) is increasing.
 - » A double burden of malnutrition is emerging, with undernutrition coexisting alongside rising obesity.
 - » Only 37.8% of pregnant women receive

the recommended dosage of iron and folic acid supplements.

Way Forward:

- To address these challenges, targeted interventions are necessary:
 - » Adoption of AI-based micro-planning through U-WIN can improve immunization monitoring and coverage.
 - » Strengthening POSHAN 2.0 and Saksham Anganwadi can further enhance child nutrition outcomes.
 - » Expanding Health and Wellness Centres will support early detection and management of non-communicable diseases.
- Behavioral change campaigns can encourage better nutritional compliance among pregnant women.

Conclusion:

NFHS-6 highlights India's significant progress in the health sector. Improvements in maternal and child health, nutrition, immunization, and health insurance coverage are encouraging. However, challenges such as malnutrition, incomplete immunization, and the rising burden of lifestyle-related diseases indicate that healthcare policy must increasingly shift from a treatment-centered approach toward preventive healthcare, improved nutritional quality, and the promotion of healthy lifestyles.

Polity & Governance

Paper Leak Case: Supreme Court's Concerns and Legal Framework for Ensuring Exam Integrity in India

Context:

India's competitive examination system forms the foundation of the aspirations of millions of young people. Examinations conducted for admission to medical, engineering, civil services, and other higher educational institutions are not only a means of career advancement but also serve as the cornerstone of social mobility and equal opportunity. In this context, the recent NEET-UG paper leak incident has challenged not only the credibility of a single examination but also the integrity of India's merit-based selection system, educational administration, and public institutions. The cancellation of the examination and the subsequent re-test have raised serious questions regarding the fairness and reliability of the National Testing Agency (NTA) and the country's public examination system.

Observations of the Supreme Court:

- During the hearing of the NEET-UG controversy, the Supreme Court strongly criticized the repeated failures in conducting secure and fair examinations. The Court observed that such incidents have caused immense psychological and emotional distress to millions of students and their families.
- The key concerns raised by the Court included:
 - » Severe mental and emotional harm

suffered by students and their families.

- » Growing crisis of trust in national-level entrance examinations.
- » Absence of a clear accountability mechanism within the examination system.
- » "Ad-hocism" in examination administration and weak institutional memory.
- » Failure to establish individual accountability of responsible officials.
- The Supreme Court emphasized that merely constituting new committees or introducing procedural changes would not solve the problem; rather, accountability and institutional reforms must be ensured.

Constitutional Dimension of Exam Integrity

Paper leaks are not merely administrative or legal issues; they directly relate to the constitutional principles of equality and justice.

- **Article 14:** This Article guarantees equality before the law and equal protection of the laws to all individuals. When the examination process becomes unfair and some candidates gain unauthorized access to question papers, equal treatment is denied to all aspirants, resulting in a violation of Article 14.
- **Article 16:** This Article guarantees equality of opportunity in matters of public employment. Many competitive examinations serve as the gateway to government services and

public institutions. If examinations are compromised through malpractice or paper leaks, deserving candidates are deprived of fair opportunities, thereby weakening the principle of equal opportunity.

- **Article 21:** Through its expansive interpretation, the Supreme Court has recognized dignified life, fair procedures, and equitable opportunities as part of Article 21. Paper leaks subject students to stress, uncertainty, and insecurity regarding their future, adversely affecting their right to a dignified life and fair opportunities.

Government and NTA's Response:

- The National Testing Agency (NTA), in its affidavit before the Supreme Court, outlined several reforms undertaken following the paper leak incident. These measures include strengthening security protocols, improving logistics arrangements, and enhancing monitoring mechanisms. Major steps include:
 - » Secure printing arrangements under the supervision of senior officials.
 - » Use of the Department of Posts and Central Armed Police Forces (CAPF) for transportation of question papers.
 - » CCTV surveillance and preservation of digital records.
 - » Preparation of multiple sets of question papers, including backup arrangements.
 - » Isolation of question paper setters and implementation of controlled access systems.
 - » Adoption of stricter Standard Operating Procedures (SOPs).

Present Structure of the National Testing Agency (NTA)

- Following the NEET controversy, concerns have emerged not only regarding security measures but also about the institutional capacity of the NTA itself.
- **Major Institutional Challenges:**
 - » The NTA, established in 2017, still has a limited permanent administrative structure.

- » Excessive dependence on outsourcing for examination operations.
- » Frequent transfers of key officials.
- » Lack of institutional memory and experience.
- » Highly centralized examination management.
- The Supreme Court's reference to "ad-hocism" is closely linked to these structural weaknesses.

Legal Framework to Prevent Examination Leaks:

- A major legal safeguard against paper leaks and examination fraud in India is the Public Examinations (Prevention of Unfair Means) Act, 2024, which came into force on 21 June 2024. The law was enacted to curb organized examination fraud, question paper leaks, and the misuse of technology.

Key Features of the Act

- **Scope and Applicability**
 - » Applicable to major public examinations notified by the Central Government.
 - » Includes NEET, JEE, UPSC, SSC, CUET, and other significant examinations.
- **Definition of Unfair Means:** The Act defines various offences, including:
 - » Leakage or unauthorized disclosure of question papers.
 - » Tampering with OMR sheets or computer systems.
 - » Providing illegal assistance to candidates during examinations.
 - » Impersonation and fraudulent conduct of examinations.
 - » Cyber manipulation and hacking of examination systems.
- **Stringent Punitive Provisions:**
 - » **For individuals involved in cheating or paper leaks:** imprisonment of 3 to 5 years and a fine up to Rs.10 lakh.
 - » **For organized criminal networks or "education mafias":** imprisonment of 5 to 10 years and fines exceeding Rs.1 crore.
 - » **For service providers involved in malpractice:** fines up to Rs.1 crore and

imprisonment for senior officials.

- » All offences are cognizable, non-bailable, and non-compoundable.

■ **Strong Enforcement Provisions**

- » Attachment and confiscation of properties of offenders.
- » Provision for speedy investigation.
- » Special emphasis on action against organized examination fraud syndicates.
- » The Act represents one of India's most stringent legal frameworks against examination malpractice, although its effectiveness will depend on robust enforcement and timely prosecution.

State-Level Anti-Paper Leak Laws

- **Uttar Pradesh:** Under the Uttar Pradesh Public Examinations (Prevention of Unfair Means) Act:
 - » Confiscation of property of offenders.
 - » Life imprisonment for organized criminal networks.
 - » Fine up to Rs.1 crore.
- **Other States:**
 - » States such as Uttarakhand and Bihar have also introduced ordinances/laws providing for fines up to Rs.1 crore and life imprisonment for masterminds involved in paper leaks and OMR sheet manipulation.

Bharatiya Nyaya Sanhita (BNS) and the Information Technology Act

- **Bharatiya Nyaya Sanhita (BNS)**
 - » Although the Public Examinations (Prevention of Unfair Means) Act, 2024 serves as a specialized law against examination malpractice, general criminal laws are also invoked against offenders. Provisions relating to fraud, forgery, criminal conspiracy, and organized crime are commonly applied in examination-related offences.
- **Information Technology (IT) Act, 2000**
 - » **Data Tampering and Hacking:** Section 66 of the IT Act is invoked in cases involving unauthorized access to examination servers, hacking, theft of question

papers, or manipulation of answer sheets and evaluation data.

- » The Act strengthens the legal framework against cyber-enabled examination fraud and supports the secure conduct of digital examinations.

Administrative Reforms

- Alongside legal measures, examination authorities are modernizing their infrastructure.
 - » **Biometric Authentication:** Mandatory Aadhaar/biometric verification of candidates at examination centres.
 - » **Jammers and CCTV:** Installation of jammers and high-quality CCTV cameras in all examination halls.
 - » **Digital Distribution:** Transition towards computer-based examinations and digital encryption systems (such as dynamic question paper systems) to reduce risks associated with physical transportation.

International Examples:

- Several countries have developed advanced technological and administrative mechanisms to ensure the security of large-scale examinations, offering valuable lessons for India.
- China's Gaokao examination employs military-grade security arrangements, AI-based surveillance, facial recognition technology, and strict controls on electronic devices.
- South Korea's CSAT (College Scholastic Ability Test) relies on special administrative arrangements on examination day, centralized security mechanisms, and nationally coordinated examination management to maintain credibility.
- In the United States, examinations such as SAT and GRE use digital question banks, multi-layer encryption, and multiple dynamic versions of question papers, significantly reducing the risk of leaks.
- These international experiences demonstrate that a combination of technological innovation, strong institutional capacity,

and effective administrative coordination is the most effective means of ensuring examination security and fairness.

Structural Challenges in Examination Administration:

- Despite legal safeguards, systemic weaknesses continue to undermine examination security. The Supreme Court highlighted “ad-hocism” in the functioning of the NTA and expressed concern regarding the lack of institutional continuity and frequent transfers of key officials. Major challenges include:
 - » Weak institutional memory due to administrative changes.
 - » Fragmented accountability across multiple agencies.
 - » Security vulnerabilities in the transportation and distribution chain of question papers.
 - » Increasing use of digital devices by organized cheating syndicates.
 - » Inadequate implementation of recommendations made by expert committees.

Way Forward:

India must adopt a multidimensional approach to examination security.

- **Technological Reforms**
 - » Expansion of computer-based examinations.
 - » AI-based systems for detecting suspicious activities.
 - » Strengthening cybersecurity infrastructure.
 - » Blockchain-based question paper tracking systems.
- **Institutional Reforms**
 - » Establishment of a National Examination Security Authority.
 - » Development of a permanent professional cadre within the NTA.
 - » Preservation of institutional memory and expertise.
 - » Regular independent audits of examination security.

- **Legal and Administrative Reforms**

- » Strict implementation of the Public Examinations Act, 2024.
- » Speedy investigation and prompt prosecution.
- » Better coordination between central and state agencies.
- » Personal accountability of officials found responsible.

- **Student-Centric Reforms**

- » Psychological counselling for affected candidates.
- » Clear and transparent policies regarding re-examinations.
- » Strengthening grievance redressal mechanisms.

Conclusion:

The NEET-UG paper leak case is not merely an administrative failure but a serious systemic challenge to India’s merit-based education system and the principle of equal opportunity. The incident demonstrates that enacting stringent laws alone is insufficient; effective implementation, institutional strengthening, and accountability are equally important. India’s examination system is not merely a mechanism for selection but the most significant instrument for the social and economic advancement of millions of young people. If incidents such as paper leaks continue to recur, public trust in institutions will erode, and the legitimacy of the merit-based system itself will be undermined.

Short Issues

PIL Misuse in India

Context:

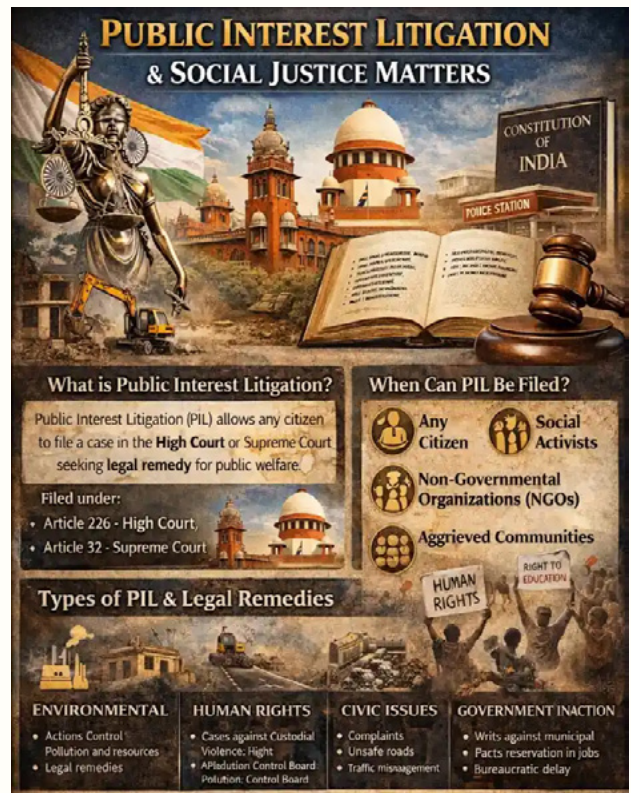
Recently, a nine-judge Bench of the Supreme Court, while hearing the Sabarimala review petitions, raised serious concerns regarding the misuse of Public Interest Litigation (PIL). Justice B.V. Nagarathna remarked that PILs have metamorphosed from a tool for social justice into 'private', 'publicity', 'political', and even 'paisa' (money) interest litigation.

Historical Evolution of PIL:

- PIL was conceived as a revolutionary tool in the late 1970s and early 1980s by Justices P.N. Bhagwati and V.R. Krishna Iyer. Its primary purpose was to provide "access to justice" for the marginalized who could not approach the court themselves.
- By relaxing the traditional rule of locus standi, which requires the petitioner to be the aggrieved party, the court allowed any public-spirited citizen to file a case on behalf of the underprivileged. Landmark cases like Hussainara Khatoon (1979) and S.P. Gupta (1981) solidified this "judicial activism."

The Current Contention:

- The debate resurfaced during the Sabarimala review, where the Centre and the Bench questioned the locus standi of the Indian Young Lawyers Association. The NGO had originally challenged the ban on women aged 10–50 entering the temple.
 - » **The Bench's Concern:** Chief Justice Surya Kant questioned what "business" the NGO had in the temple's traditions, labeling the petition as potentially "meddling" rather than a bona fide PIL.
 - » **The 'Paisa/Publicity' Factor:** The court noted that many PILs are now triggered by newspaper articles or personal agendas rather than genuine public suffering, leading to a waste of judicial time.



Critical Issues with Modern PILs:

- **Fivolous Litigation:** "Publicity Interest Litigations" are often filed for media attention or to settle political scores.
- **Judicial Overreach:** Excessive use of PILs can lead to the judiciary performing executive functions, blurring the lines of the Separation of Powers.
- **Backlog of Cases:** Many petitions waste the Court's time and divert attention from critical matters such as criminal justice (e.g., *suo motu* proceedings).

Conclusion:

While PIL remains a "unique mechanism" for social change, the Supreme Court's recent observations signal a shift toward stricter scrutiny. There is an urgent need to recalibrate the PIL framework, as suggested by the Centre, to ensure it remains a shield for the weak rather than a sword for the meddler.

Acid Attack Victims Included Under the RPwD Act

Context:

Recently, The Supreme Court of India, in a recent judgment, expanded the definition of “acid attack victims” under the Rights of Persons with Disabilities (RPwD) Act, 2016. Earlier, the Act only recognised victims of acid throwing. It did not explicitly include victims who were forcibly made to ingest acid.

Key Judgment:

- A Bench led by the Chief Justice of India held that survivors of forcible ingestion of acid must also be included within the definition of “acid attack victims”.
- This interpretation will apply retrospectively from the inception of the Act (2016).
- The expansion was made using the Supreme Court’s powers under Article 142 of the Constitution (to ensure complete justice).

Legal and Constitutional Basis:

- **Article 142:** Empowers the Supreme Court to pass orders necessary for doing complete justice.
- The Court stepped in as the statutory schedule had not yet been formally amended by the government.

ingestion are now formally recognised as persons with disabilities.

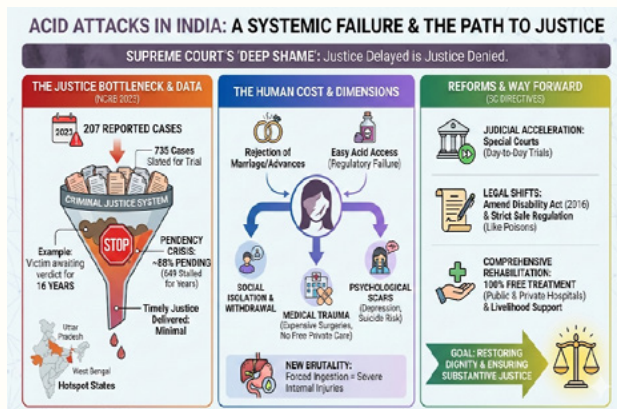
- This recognition ensures that they are included within the legal framework of disability rights, allowing them to be treated with dignity and provided necessary support rather than being left outside the system of protection.
- As a result, such survivors become eligible for disability certificates, which open access to financial assistance, healthcare, and rehabilitation services. The Court also highlighted the gender justice dimension, noting that most victims are women, thereby linking the issue to gender-based violence. Overall, this approach reflects a broader human rights perspective focused on rehabilitation, social security, and restoring dignity for survivors.

About RPwD Act, 2016:

- The Rights of Persons with Disabilities Act, 2016 replaced the 1995 Act to align with the UN Convention on the Rights of Persons with Disabilities (UNCRPD).
- **Key Features:**
 - » Expanded disability categories from 7 to 21, including acid attack survivors.
 - » 4% reservation in government jobs and 5% in higher education.
 - » Emphasis on non-discrimination, dignity, and equality.
 - » Mandates accessibility in public infrastructure and ICT.
 - » Establishes grievance redressal authorities at central and state levels.

Conclusion:

The Supreme Court’s ruling is a significant step in strengthening disability rights and victim protection in India. It reflects a progressive interpretation of law, ensuring that legal protection keeps pace with the evolving nature of crimes and their impact on survivors.



Significance of the Judgment:

- Under the Rights of Persons with Disabilities (RPwD) Act, 2016, survivors of forcible acid

Panchayat Advancement Index (PAI) 2.0

Context:

The Panchayat Advancement Index (PAI) 2.0 was recently released by the Ministry of Panchayati Raj. It evaluates the performance of 2,59,867 Gram Panchayats (excluding West Bengal) based on their progress in implementing Sustainable Development Goals (SDGs) at the grassroots level.

About PAI 2.0:

- The PAI 2.0 is a multi-dimensional framework designed to assess the Localization of Sustainable Development Goals (LSDGs) at the Gram Panchayat level.
 - » **Developed by:** Ministry of Panchayati Raj
 - » **Coverage:** 2.59 lakh+ Gram Panchayats (all states except West Bengal)
 - » **Assessment year:** FY 2023–24
 - » **Indicators:** 150 indicators
 - » **Themes:** 9 SDG-aligned local themes
- The index measures how effectively Panchayats contribute to inclusive and sustainable rural development.

Key Features and Classification:

- PAI 2.0 ranks Gram Panchayats on a 0–100 scale and categorises them into five groups:
 - » **Achiever (90–100):** 0 Panchayats
 - » **Front Runner (75–90):** 3,635 Panchayats
 - » **Performer (60–75):** 1,18,824 Panchayats
 - » **Aspirant (40–60):** 1,23,719 Panchayats
 - » **Beginner (below 40):** 13,689 Panchayats
- The distribution shows that most Panchayats fall in the middle categories, indicating moderate and uneven rural development progress.

Key Outcomes:

- The Panchayat Advancement Index (PAI) 2.0 recorded a 97.30% participation rate of Gram Panchayats, making it one of the highest levels of data coverage in rural governance assessments in India.

- Among states, Tripura performed the best with around 80% of its Panchayats in the Front Runner category, followed by Kerala and Odisha, which also showed strong governance outcomes and steady improvement.
- In contrast, larger states such as Uttar Pradesh, Bihar, and Rajasthan lagged behind in terms of performance rankings, reflecting regional disparities in grassroots development.
- PAI 2.0 evaluates Panchayats across nine SDG-linked themes such as poverty alleviation, health, education, sanitation, and gender equality.
- Under thematic performance, Theme 1 (Poverty-free and Livelihoods) saw 3,313 Gram Panchayats achieving A+ grades, while Theme 2 (Healthy Panchayat) recorded 1,015 A+ graded Panchayats, indicating strong outcomes in key social sectors.



Objectives of the Index:

- PAI 2.0 aligns with the UN Sustainable Development Goals (SDGs) and complements India's SDG India Index (NITI Aayog).
- **Key objectives:**
 - » Strengthen grassroots governance
 - » Promote data-driven planning

- » Support “Viksit Gram Panchayat” vision
- » Ensure inclusive rural development
- It consolidates 17 SDGs into 9 local themes such as poverty reduction, health, education, water, sanitation, and women empowerment.

Significance for Panchayati Raj System:

- PAI 2.0 strengthens India’s three-tier Panchayati Raj system under the 73rd Constitutional Amendment Act, 1992.
- **Significance:**
 - » Encourages competitive governance among Panchayats
 - » Identifies regional disparities in development
 - » Promotes transparency & accountability
 - » Supports better resource allocation
 - » Strengthens participatory democracy at the grassroots
- India has over 2.63 lakh Panchayats and 32 lakh elected representatives, making such indices crucial for governance monitoring.

Conclusion:

The Panchayat Advancement Index (PAI) 2.0 is a significant reform tool for assessing and improving grassroots governance in India. By linking local development with global SDGs, it strengthens the vision of Viksit Gram Panchayats and promotes inclusive, transparent, and data-driven rural transformation.

SC Urges Abortion Limit Waiver for Minor Rape Survivors

Context:

Recently, the Supreme Court of India has urged the Union government to amend abortion laws to remove gestational limits for minor rape survivors. The observation came while hearing a curative petition regarding termination of a 30-week pregnancy of a 15-year-old survivor.

Key observations by Court:

- The Court made it clear that reproductive

choice in such sensitive cases rests solely with the survivor and her guardians, not with the State or medical professionals.

- The Bench led by Justice Surya Kant and Justice Joymalya Bagchi emphasized that doctors are merely facilitators who must respect the decision taken by the minor survivor and her parents.
- It further called for a significant reform in the Medical Termination of Pregnancy Act, 1971, suggesting the removal of gestational limits in cases involving minor rape survivors. The reasoning was grounded in practical realities—delays in reporting and legal procedures often push pregnancies beyond permissible limits, and forcing continuation in such situations can intensify psychological trauma.
- Adopting a trauma-centric approach, the Court acknowledged that rape-induced pregnancy leaves a lasting scar and that compelling a survivor to give birth undermines her dignity and autonomy, principles closely tied to Article 21 of the Constitution.

SC URGES ABORTION LIMIT WAIVER FOR MINOR RAPE SURVIVORS

The Supreme Court of India has urged the Union government to amend abortion laws to remove gestational limits for minor rape survivors, emphasizing dignity, autonomy and a trauma-centric approach.

“Reproductive choice in such sensitive cases rests solely with the survivor and her guardians, not with the State or medical professionals.”
—Supreme Court

KEY OBSERVATIONS BY COURT

- SURVIVOR-CENTRIC DECISION-MAKING**
Reproductive choice rests solely with the survivor and her guardians. Doctors are merely facilitators and must respect their decision.
- WAIVER OF GESTATIONAL LIMITS**
The Court urged removal of gestational limits in cases of minor rape survivors, due to delays in reporting and legal processes.
- TRAUMA-CENTRIC APPROACH**
Rape-induced pregnancy leaves a lasting scar. Forcing continuation intensifies psychological trauma and violates dignity and autonomy.
- CONSTITUTIONAL GROUNDING**
The right to reproductive choice is part of Article 21 – protecting life, liberty, dignity, mental health and future life prospects.

EXISTING LEGAL FRAMEWORK ON ABORTION IN INDIA

- GOVERNED BY MEDICAL TERMINATION OF PREGNANCY ACT, 1971 (AMENDED IN 2021)**
Permits abortion under specific conditions to protect the health and rights of women.
- GESTATIONAL LIMITS (AS PER LAW)**
 - UP TO 20 WEEKS**
With opinion of one Registered Medical Practitioner.
 - 20 – 24 WEEKS**
With opinion of two Registered Medical Practitioners.
For grounds including: risk to woman’s physical or mental health, fetal abnormalities, or contraceptive failure (married & unmarried women).
- CONSENT & CONFIDENTIALITY**
• Guardian consent: mandatory for minors.
• Identity of the patient must be protected at all times.
- BEYOND 24 WEEKS**
Allowed only in exceptional cases with approval of a Medical Board.

Recent Supreme Court rulings have strengthened reproductive choice as a fundamental right, urging a more compassionate, rights-based approach.

Existing Legal Framework on Abortion:

- Abortion in India is governed by the

Doctrine of Essential Religious Practices

Medical Termination of Pregnancy Act, 1971 (amended in 2021), which permits termination up to 24 weeks for specific categories such as rape survivors and minors, under defined conditions.

- It allows abortion up to 20 weeks with one doctor's opinion and 20–24 weeks with two doctors' approval, based on risks to the woman's physical or mental health, fetal abnormalities, or contraceptive failure (for both married and unmarried women).
- The framework also ensures consent and confidentiality, requiring guardian approval for minors and protecting patient identity.
- Abortions beyond 24 weeks are allowed only in exceptional cases with Medical Board approval. Recent rulings by the Supreme Court have further strengthened reproductive choice as a fundamental right, pushing for a more compassionate and rights-based approach.

Important Supreme Court Judgments:

- The judgment marks a clear shift from a doctor-centric framework to a woman- and child-centric approach, prioritizing the survivor's choice over institutional decision-making.
- It strongly reinforces bodily autonomy by affirming that reproductive decisions are deeply personal and protected as constitutional rights.
- The scope of Article 21 is broadened to include dignity, mental health, and future life prospects, recognizing the long-term impact of forced pregnancy on survivors.

Challenges in Implementation

- Legislative amendment required
- Ethical concerns around late-term abortions
- Medical infrastructure readiness
- Balancing foetal rights vs survivor rights

Conclusion:

The Supreme Court's observations mark a progressive shift toward survivor-centric justice, prioritizing dignity, autonomy, and mental well-being over rigid legal timelines.

Context:

Recently, the doctrine of "Essential Religious Practices" (ERP) has come into discussion in the context of the hearing of the Sabarimala review case. The active role of the judiciary in cases related to various religious practices such as the hijab dispute, Sabarimala temple entry, rights of Muslim women, and administration of religious institutions has raised the question of whether courts should determine which practices of a religion are "essential" and which are not.

What is the Doctrine of Essential Religious Practices (ERP)?

- The doctrine of Essential Religious Practices is a constitutional principle developed by the Indian judiciary, through which it is determined which practices of a religion will receive protection under Articles 25 and 26 of the Constitution.
- Article 25 grants citizens the freedom of religion, while Article 26 provides religious institutions the right to manage their own religious affairs.
- The origin of this doctrine can be traced to the famous Shirur Mutt Case of 1954. The Supreme Court held that only those practices would receive constitutional protection which constitute an "integral and essential" part of a religion.

Growing Role of Judicial Intervention:

- Over time, the ERP doctrine has become a major basis for the Indian judiciary in resolving religious disputes. In several important cases, courts have attempted to examine whether a particular practice is truly an essential part of a religion or not. Major examples include:
 - » **Sabarimala Case (2018):** The Supreme Court held that the restriction on the entry of women was against gender

equality.

- » **Triple Talaq Case:** The Court held that triple talaq was not an essential religious practice in Islam and declared it unconstitutional.
- » **Hijab Dispute:** In the Karnataka hijab controversy, the question was also raised whether wearing a hijab constitutes an essential religious practice in Islam.
- » **Cases related to the Dawoodi Bohra community and animal sacrifice:** Courts attempted to strike a balance between religious freedom and public order.
- These cases made it clear that the judiciary is no longer merely a constitutional interpreter, but in many instances has also become an institution determining the validity of religious practices.

practices are essential, they indirectly begin intervening in religious matters.

- **Subjective Interpretation:** There is no clear standard for determining an “essential practice.” Different benches have adopted different approaches in different cases, resulting in judicial inconsistency.
- **Religious Freedom vs Social Reform:** The ERP doctrine has often been used to advance social reforms. However, this has intensified the debate over whether the State and judiciary have the authority to alter religious traditions.

Constitutional and Social Significance:

- The Indian Constitution views secularism not merely as the “separation of State and religion,” but as “equal respect” for all religions. Therefore, it is the responsibility of the judiciary to protect religious freedom while also ensuring fundamental rights, particularly equality, dignity, and gender justice.
- Now, the ERP doctrine has become a means of establishing a balance among three important values in Indian democracy:
 - » Religious freedom,
 - » Social justice,
 - » Constitutional morality.

Conclusion:

The doctrine of Essential Religious Practices is a tool for maintaining a balance between religion and the State. Although it faces criticism, it remains necessary in a diverse society like India for promoting social reform and eliminating orthodoxy. The doctrine of Essential Religious Practices has become a complex yet important part of India’s constitutional framework. At a time when conflicts between religious identity and constitutional values are increasing, the role of the judiciary becomes even more sensitive. There is a need for courts to adopt a balanced, restrained, and constitutional approach in religious matters so that both religious freedom and social justice can be protected.

Constitutional Provisions Related to Freedom of Religion

- Article 25** Freedom of conscience and free profession, practice and propagation of religion.
- Article 26** Freedom to manage religious affairs.
- Article 27** Freedom as to payment of taxes for promotion of any particular religion.
- Article 28** Freedom as to attendance at religious instruction or religious worship in certain educational institutions.

Major Criticisms:

- **“Theological” Intervention by the Judiciary:** Critics argue that courts do not possess the expertise to interpret religious scriptures and traditions. When courts decide which

Prison Statistics India (PSI) 2024 Report

Context:

Recently, the National Crime Records Bureau released the Prison Statistics India (PSI) 2024 Report, which provides a comprehensive assessment of India’s prison system. The report examines prison population, overcrowding, infrastructure, staffing, rehabilitation programmes, and the socio-economic profile of prisoners.

About Prison Statistics India (PSI) Report:

- The Prison Statistics India (PSI) Report is an annual publication prepared by the NCRB. It compiles prison-related data from all States and Union Territories and highlights key issues concerning prison administration, inmate welfare, and correctional reforms.
- The report helps policymakers and judicial authorities assess challenges in India’s prison system and design appropriate reforms.

Key Findings of PSI 2024 Report:

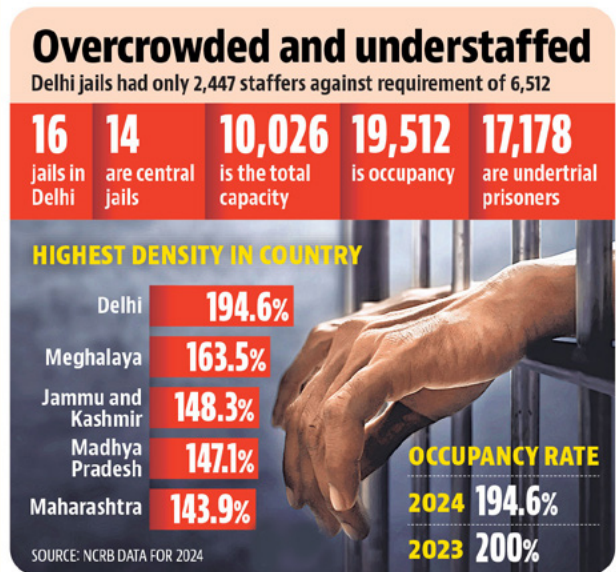
- One of the most serious concerns highlighted in the PSI 2024 Report is severe prison overcrowding. Delhi recorded the highest occupancy rate at 194.6%, with 19,512 inmates against a sanctioned capacity of 10,026.
- Similar overcrowding was observed in Meghalaya, Jammu & Kashmir and Madhya Pradesh. Overcrowding negatively affects sanitation, healthcare, living conditions, prison discipline, and rehabilitation efforts.
- The report also revealed India’s heavy dependence on undertrial detention. Delhi prisons housed 17,178 undertrial prisoners compared to only 2,232 convicted prisoners. This reflects judicial delays, lengthy trial procedures, and limited access to bail and legal aid.
- Another major issue identified was the shortage of prison staff. Against a sanctioned

strength of 6,516 personnel, only 2,447 staff members were available, leaving 4,069 vacancies. Such shortages weaken prison security, inmate supervision, counselling, and rehabilitation services.

- The report further highlighted the socio-economic vulnerability of prisoners. A majority of inmates had education below Class 10 and belonged to economically weaker sections, showing the strong link between poverty, low education and criminal justice vulnerability.

Structural Causes behind Prison Crisis:

- Several structural factors contribute to the prison crisis in India:
 - » Judicial delays leading to prolonged undertrial detention
 - » Excessive use of custodial detention and restrictive bail practices
 - » Poor prison infrastructure and inadequate expansion of facilities
 - » Weak legal aid mechanisms for economically weaker prisoners
 - » Large-scale vacancies in prison administration and staff



Government Initiatives and Reforms:

- The government has introduced several reforms to improve prison administration:

- » Model Prisons and Correctional Services Act, 2023 to modernise prisons and promote rehabilitation
- » Model Prison Manual, 2016 for uniform prison management, legal aid, and vocational training
- » E-Prisons Project for digitisation of prison records
- » Integrated Criminal Justice System (ICJS) linking courts, police, prisons, and prosecution
- » FASTER System for rapid electronic transmission of bail orders
- » Under-Trial Review Committees (UTRCs) to review prolonged detention cases
- » NALSA legal aid programmes for legal literacy and free legal services inside prisons

Way Forward:

- India must reduce undertrial detention through faster trials and liberal bail policies. Increasing judicial strength and establishing fast-track courts can help reduce case pendency.
- Prison infrastructure, sanitation, and healthcare facilities should be modernised, while staff vacancies must be filled urgently.
- Greater emphasis should be placed on rehabilitation, education, vocational training, counselling, and legal aid.
- Promotion of open and semi-open prisons and the use of digital technology can improve transparency and efficiency in prison governance.

Conclusion:

The PSI 2024 Report exposes deep structural weaknesses in India's prison system, particularly overcrowding, excessive undertrial detention, and inadequate infrastructure. Although recent reforms aim to transform prisons into correctional and rehabilitative institutions, effective implementation, judicial efficiency, and a human rights-based approach remain essential for meaningful prison reforms in India.

SC's Ruling on Religious Educational Institutions

Context:

Recently, the Supreme Court of India left the decision regarding the classification of institutions imparting religious education to the Central Government. While hearing a petition, the Court clarified that the matter falls within the jurisdiction of the Union Ministry of Education as a policy issue. The petition sought that institutions providing religious education should not be treated as "secular or vocational" institutions; instead, they should be classified as "religious and charitable institutions" under Article 26(a) of the Indian Constitution.

Key Constitutional Provisions:

This issue is linked to the interpretation and balance between various provisions under Part III (Fundamental Rights) of the Indian Constitution:

- **Article 26(a) vs Article 30(1):** The petitioner argued that institutions primarily imparting religious education to promote a particular religion should not receive the special protection granted to "minority educational institutions" under Article 30(1). Instead, they should be treated as "religious and charitable institutions" under Article 26(a).
- **Scope of Article 19(1)(g):** According to the petition, Article 30(1) does not confer any additional or exclusive right; rather, it is an extension of Article 19(1)(g), which guarantees the freedom to practice any profession or carry on any occupation, trade, or business. Therefore, religious education cannot be equated with purely secular or modern professional education.
- **Applicability of Public Restrictions:** If these institutions are classified under Article 26(a), they would become directly subject to state-imposed restrictions related to public order, morality, and health.

Implications of Classification:

If the Ministry of Education classifies such institutions as “religious/charitable,” it could have far-reaching administrative and social consequences:

- **State Regulatory Control:** At present, minority institutions under Article 30(1) enjoy considerable administrative autonomy. However, if brought under Article 26(a), the state would gain broader legal authority to regulate aspects such as child safety, curriculum oversight, and teacher qualifications.
- **Right to Education (RTE) and Article 21A:** The state is constitutionally obligated under Article 21A to ensure compulsory modern education for children below 14 years of age. The unchecked functioning of purely religious institutions may undermine children’s right to scientific and secular education.
- **National Security and Social Cohesion:** The petition also raised concerns regarding unregistered institutions operating in border regions and the potential risk of radicalization. Stronger regulation, it argued, could strengthen national integrity and the constitutional value of fraternity.

Judicial Perspective: Principle of Separation of Powers:

- By refraining from direct intervention, the Supreme Court upheld the principle of Separation of Powers. The Court observed that:
 - » Determining the nature of educational institutions and framing regulations for them falls within the domain of the Executive.
 - » The Judiciary should avoid judicial activism in policy matters unless there is a clear violation of fundamental rights.

Conclusion:

In a multi-religious and secular country like India, maintaining a delicate balance between religious freedom (Articles 25–28) and cultural and educational rights (Articles 29–30) is

essential. The Union Ministry of Education must now formulate a clear policy framework that respects the right to religious education while also ensuring that every child below the age of 14 receives access to mainstream modern and vocational education.

Ordinance Approved to Increase the Number of Judges in the Supreme Court to 38

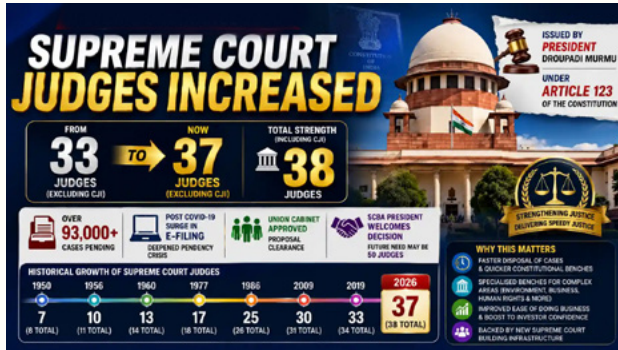
Context:

Recently, President Droupadi Murmu approved the “Supreme Court (Number of Judges) Amendment Ordinance, 2026”. Under this, the sanctioned strength of judges in the country’s apex court has been increased from 34 to 38 (37 judges + 1 Chief Justice). This decision was taken on the recommendation of the Cabinet and upon the request of the Chief Justice of India, Justice Surya Kant.

Legal Framework to increase the number of Judge of Supreme Court:

- The number of judges in the Supreme Court is determined under the Supreme Court (Number of Judges) Act, 1956, which can be amended by Parliament. The Supreme Court of India began functioning in 1950 with eight judges (one Chief Justice and seven judges).
- Over time, due to increasing judicial workload, the sanctioned strength has been progressively expanded.
- The recent ordinance amends Section 2 of the 1956 Act. A bill to replace this ordinance is expected to be introduced in the upcoming Monsoon Session of Parliament.
- Under Article 124(1) of the Constitution of India, Parliament has the authority to decide the number of judges in the Supreme Court. Using this flexibility, the strength has been revised multiple times over the years—11 judges in 1956, 14 in 1960, 18 in 1978, 26 in 1986, 31 in 2008, and 34

in 2019 (excluding the Chief Justice). The latest amendment increases the strength to 37 judges plus the Chief Justice, making a total of 38.



Why Was the Increase in Number Necessary?

- **Heavy Backlog of Cases:** By April 2026, the number of pending cases in the Supreme Court of India had reached a record level of 92,823. Due to the shortage of judges, the case clearance rate was relatively slow, leading to growing judicial delays.
- **Formation of Constitutional Benches:** Under Article 145(3) of the Constitution, a bench of at least five judges is required to decide cases involving interpretation of the Constitution. Increasing the number of judges will make it easier to constitute larger and more frequent constitutional benches.
- **Judicial Efficiency and Workload Pressure:** At present, judges in the apex court face the burden of hearing dozens of cases daily. Increasing the number of judges will allow them more time for in-depth analysis of cases and delivery of well-reasoned judgments.

Way Forward:

- **Quick Filling of Vacancies:** After increasing the sanctioned strength to 38, the current working strength stands at 32, leaving six vacancies. The Collegium system must fill these posts promptly to ensure that the intended benefits of this reform are realized.
- **Increasing Numbers Alone is not Enough:** Experts believe that merely increasing the

number of judges is not a complete solution to judicial delays. It must be complemented with broader reforms, including:

- » **Modernisation of courts:** Greater use of AI and digital case management systems.
- » **Limiting appellate jurisdiction:** The Supreme Court should primarily function as a constitutional court, with proposals such as a National Court of Appeal being considered.
- » **Strengthening lower courts:** A large share of pending cases lies in district and subordinate courts, requiring foundational reforms at that level.

Conclusion:

Increasing the number of judges to 38 is a progressive step towards ensuring the right to speedy justice. However, for the Indian judiciary to become fully efficient, continuous reforms in procedures, infrastructure development, and greater transparency in the Collegium system remain essential.

SC Verdict on Stray Dogs and Expansion of Article 21

Context:

Recently, the Supreme Court delivered a landmark judgment expanding the scope of Article 21 (Right to Life and Personal Liberty). The Court ruled that citizens have the right to move freely in public spaces without fear of stray dog attacks, especially amid rising cases of dog bites and rabies deaths.

Key observation by Court:

- **Constitutional Interpretation of Article 21:**
 - » The Court observed that Article 21 is not limited to mere survival but includes the right to live with dignity and safety. It held that children, elderly citizens, and the general public must be able to access roads, parks, schools, hospitals, and transport hubs without constant

fear of physical harm.

- » The judgment adds a new dimension to Article 21 by recognising “freedom from fear in public spaces” as part of the Right to Life.



- **Balancing Human Rights and Animal Welfare:**
 - » The Supreme Court clarified that stray dogs do not have an unrestricted right to occupy public areas if they pose a threat to human life. While Article 51A(g) promotes compassion towards living creatures, the Court stated that animal welfare cannot override citizens’ rights to safety, mobility, and dignity under Articles 19 and 21.
 - » Thus, the judgment attempts to balance humane treatment of animals with protection of public safety.
- **Declaration of “No-Release Zones”:** The Court directed that stray dogs should not be present in high-footfall public spaces such as:
 - » Schools and colleges
 - » Hospitals and clinics
 - » Railway stations, airports, and bus depots
 - » Sports complexes and public parks
 - » Dogs captured from these areas cannot be released back even after sterilisation and vaccination. Instead, they must be relocated to authorised shelters.
- **Euthanasia and Feeding Regulations:**
 - » The judgment permits euthanasia only in legally permissible cases involving rabid, terminally ill, or demonstrably

aggressive dogs, under expert veterinary supervision.

- » The Court also prohibited indiscriminate feeding of stray dogs in public places and directed municipal authorities to create designated feeding zones.
- **Accountability and Administrative Directions:**
 - » The Court ordered every district to establish at least one fully functional Animal Birth Control (ABC) Centre. High Courts will monitor implementation through continuing mandamus proceedings.
 - » States and Union Territories must submit compliance reports by August 2026. Officials acting in good faith in stray dog management were also granted legal protection.

Way Forward:

India needs a One Health Approach integrating public health, animal welfare, and environmental management. Expansion of sterilisation drives, scientific waste disposal, public awareness, and partnerships with animal welfare organisations are essential.

Conclusion:

The judgment marks an important expansion of Article 21 by linking public safety with the Right to Life. It seeks to create a balanced framework that protects both human dignity and animal welfare through humane and scientific stray dog management.

Supreme Court's verdict on Section 124A

Context:

Recently, The Supreme Court of India has clarified that ongoing sedition trials and appeals under Section 124A of the Indian Penal Code (IPC) can proceed if the accused explicitly has no objection. This clarification modifies the 2022 interim order that had kept all sedition cases in abeyance while the government reviewed the

colonial-era law. The issue came up in a case involving an accused who had been in jail for 17 years and sought disposal of his appeal on merits on sedition trial.

Background:

- In May 2022, the Supreme Court had paused all sedition proceedings nationwide, directing that no fresh FIRs be registered under Section 124A until reconsideration of the provision.
- The aim was to balance national security concerns with protection of civil liberties under the Constitution. The recent ruling introduces a case-specific exception based on the consent of the accused.

Key Observations of the Supreme Court:

- **Consent of Accused**
 - » If an accused person wants their case to be heard and cleared on merits, proceedings can continue.
 - » There is no legal bar if the accused voluntarily agrees.
- **Direction to High Court**
 - » The Supreme Court directed the Madhya Pradesh High Court to hear the pending appeal immediately.
 - » The case must be decided on merits without delay.

About Section 124A (Sedition Law):

- Section 124A defines sedition as acts—speech, writing, or conduct—that bring hatred or disaffection against the government.
 - » Cognizable offence
 - » Non-bailable offence
 - » Punishment: Up to life imprisonment or minimum 3 years with fine

Key Judgments on sedition:

- **Kedar Nath Singh vs State of Bihar (1962)**
 - » Sedition is valid but narrowly interpreted.
 - » Only applies if there is incitement to violence or public disorder.
 - » Mere criticism of the government is not sedition.

- **Balwant Singh vs State of Punjab (1995)**
 - » Slogans without violence do not amount to sedition.
- **Constitutional provisions:**
 - » **Article 19(1)(a):** Freedom of speech and expression
 - » **Article 19(2):** Reasonable restrictions for public order and security
 - » The core debate is balancing individual liberty with national security.

SUPREME COURT CLARIFIES: CONSENTED ACCUSED CAN FACE SEDITION TRIALS UNDER SECTION 124A
Constitutional validity of the law remains under challenge.

BACKGROUND	EARLIER SUPREME COURT POSITION (2022)	RECENT CLARIFICATION (MAY 21, 2026)	CONSTITUTIONAL CHALLENGE STILL PENDING
SECTION 124A (SEDITION) Part of the Indian Penal Code (IPC), 1860 Introduced during British colonial rule in 1898 Punishes: Acts or speech considered to incite disaffection against the government	In May 2022, the Supreme Court: • Suspended fresh sedition cases and ongoing proceedings. Observed that Section 124A: • Reflected colonial mindset • Had chilling effect on free speech • Was widely misused The Court noted the Union government's statement that outdated colonial laws should be reconsidered.	In: Kamran vs State of Madhya Pradesh the Court clarified: If accused persons voluntarily agree, courts may proceed with sedition trials on merits. PURPOSE To protect: • Right to speedy trial • Timely closure of pending cases	The constitutional validity of Section 124A remains under challenge in: S.G. Vombatkere vs Union of India MAIN GROUNDS OF CHALLENGE Petitioners argue Section 124A violates: • Freedom of speech and expression • Personal liberty • Equality before law under: Article 19, Article 21, Article 14 of the Constitution.

Arguments against Sedition Law:

- Often used to suppress dissent
- Vague terms like “disaffection” allow misuse
- Colonial-era provision
- Democracies like the UK have abolished it
- Existing laws (UAPA, NSA) already address security threats

Arguments in Favour:

- Protects sovereignty and integrity of the nation
- Deters violent separatist movements
- Maintains public order
- Useful in cases of incitement to rebellion

Way Forward:

- Strict application of the Kedar Nath Singh guidelines

- Narrow definition to include only violent intent
- Strong safeguards before filing FIRs
- Need to reassess whether Section 124A should be retained, amended, or repealed

Conclusion:

The Supreme Court’s clarification reflects a nuanced attempt to balance judicial efficiency with constitutional scrutiny of the sedition law. While it allows flexibility for accused persons seeking speedy adjudication, the broader debate over Section 124A continues to test India’s democratic balance between free speech and national security.

Bail under the UAPA Act

Context:

Recently, a bench of the Supreme Court referred an important legal question related to bail under the Unlawful Activities (Prevention) Act (UAPA) to a Larger Bench. The issue arose during hearings in the 2020 Delhi riots conspiracy case, where different judicial approaches emerged regarding the bail pleas of various accused persons.

What is the main dispute?

- Section 43D(5) of the UAPA imposes very strict restrictions on bail.
- According to this provision, if the court finds that the allegations appear to be prima facie true, the accused cannot be granted bail.

Two Conflicting Judicial Approaches on bail:

- **Liberal View:** In the 2021 case of *Union of India v. K.A. Najeeb*, the Supreme Court held that:
 - » Excessive delay in trial may violate Article 21 of the Constitution.
 - » Constitutional courts can grant bail to an accused who has remained in jail for a long period.
 - » The stringent provisions of the UAPA cannot completely override fundamental

rights.

- » This judgment was considered to prioritize personal liberty.
- **Strict View:** In January 2026, another bench of the Supreme Court rejected the bail pleas of Umar Khalid and Sharjeel Imam and observed that:
 - » Bail in matters concerning national security must be granted with extreme caution.
 - » Article 21 cannot be used as a “trump card.”
 - » Delay in trial alone cannot automatically become a ground for bail.
 - » This approach gives greater importance to national security.

BAIL UNDER THE UAPA ACT
— THE LEGAL DEBATE: LIBERTY vs. SECURITY —

CONTEXT
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WHAT IS THE MAIN DISPUTE?
Section 43D(5) of the UAPA imposes very strict restrictions on bail. According to this provision, if the court finds that the allegations appear to be prima facie true, the accused cannot be granted bail.

TWO CONFLICTING JUDICIAL APPROACHES ON BAIL

<p>1 LIBERAL VIEW <i>Union of India v. K.A. Najeeb (2021)</i></p> <ul style="list-style-type: none"> ✓ Excessive delay in trial may violate Article 21 of the Constitution. ✓ Constitutional courts can grant bail to an accused who has remained in jail for a long period. ✓ The stringent provisions of the UAPA cannot completely override fundamental rights. <p>This judgment was considered to prioritize personal liberty.</p>	<p>VS</p>	<p>2 STRICT VIEW <i>Umar Khalid & Sharjeel Imam Case (January 2026)</i></p> <ul style="list-style-type: none"> ✗ Bail in matters concerning national security must be granted with extreme caution. ✗ Article 21 cannot be used as a “trump card.” ✗ Delay in trial alone cannot automatically become a ground for bail. <p>This approach gives greater importance to national security.</p>
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ABOUT THE UNLAWFUL ACTIVITIES (PREVENTION) ACT (UAPA)
The Unlawful Activities (Prevention) Act, enacted in 1967, is India’s primary anti-terrorism law.

MAIN OBJECTIVES

- Protect the sovereignty and integrity of India
- Prevent terrorism and unlawful activities
- Ban terrorist organizations
- Punish terror financing
- Punish conspiracies and related activities

THE BALANCING QUESTION FOR THE COURTS:
How to uphold national security while protecting the fundamental right to personal liberty under Article 21 of the Constitution.

Supreme Court’s Observation:

- The Court clarified that two Coordinate Benches of equal strength cannot criticize

each other's judgments. If there is disagreement with an earlier decision, the matter must be referred to a Larger Bench through the proper judicial process.

- The Court also stated that the K.A. Najeeb judgment is not a “mathematical formula” under which every accused detained for a long time must automatically receive bail. In every case, a practical balance between national security and personal liberty is necessary.

Importance of the Reference:

- This reference by the Supreme Court is highly significant because the Larger Bench will provide clarity on the following questions:
 - » What should be the correct legal interpretation of bail under the UAPA?
 - » Does prolonged imprisonment violate Article 21?
 - » How should the balance between national security and individual liberty be maintained?

About the Unlawful Activities (Prevention) Act (UAPA):

- The Unlawful Activities (Prevention) Act, enacted in 1967, is India's primary anti-terrorism law.
- **Main Objectives:**
 - » Protect the sovereignty and integrity of India
 - » Prevent terrorism and unlawful activities
 - » Ban terrorist organizations
 - » Punish terror financing and conspiracies

Key Features of the UAPA:

- **Power to Declare Individuals as Terrorists:** After the 2019 amendment, the government can designate an individual as a terrorist. Earlier, this provision applied only to organizations.
- **Bail is Extremely Difficult:** According to Section 43D(5), if the allegations appear *prima facie* true, bail cannot be granted. For this reason, the UAPA is considered one

of India's most stringent criminal laws.

- **Extended Time for Filing Chargesheet:** Under ordinary criminal law, a chargesheet must generally be filed within 60–90 days. However, under the UAPA, the investigation period may be extended up to 180 days. This allows prolonged pre-trial detention.

Conclusion:

This case highlights the constitutional balance between national security and personal liberty within India's criminal justice system. The Larger Bench's decision will play an important role in bringing clarity, consistency, and future judicial direction regarding bail laws under the UAPA.

Assam Uniform Civil Code (UCC) Bill

Context:

Recently, the Legislative Assembly of Assam passed a Uniform Civil Code (UCC) Bill aimed at bringing uniformity in personal laws related to marriage, divorce, succession, and live-in relationships. The Bill seeks to create a common legal framework for all residents of Assam, although it exempts Scheduled Tribes, who form a significant portion of the state's population.

Objective of the Bill:

- The primary objective of the Assam UCC Bill is to establish a uniform system governing personal laws. It aims to standardise rules for marriage and divorce, regulate live-in relationships, and create a uniform inheritance framework.
- It also seeks to ensure legal consistency for all residents of Assam, including those living outside the state.

Key Provisions:

- **Marriage Regulations:** The Bill sets minimum marriage age at 21 for men and 18 for women and mandates free consent without

coercion or fraud. It prohibits marriage within 37 degrees of prohibited relationships (including first cousins). All marriages must be registered within 60 days, including those performed outside Assam, and records will be open for inspection.

- **Divorce Provisions:** A uniform divorce system is introduced with mandatory registration within 60 days of court decree. Recognised grounds include cruelty, desertion, and mutual consent, ensuring standardisation across communities.
- **Live-in Relationship Regulation:** The Bill mandates compulsory registration of live-in relationships, even for Assam residents living outside the state. Termination must also be registered. Registration is denied in cases of minority, existing marriage, prohibited relationships, or invalid consent.
- **Penalties:**
 - » Up to 3 months' imprisonment or Rs.10,000 fine for non-registration
 - » Up to 6 months' imprisonment or Rs.25,000 fine for continued non-compliance
 - » It also grants maintenance rights to deserted women and recognises children from such relationships as legitimate.
- **Succession and Inheritance:** The Bill introduces a uniform, gender-neutral inheritance system for intestate succession. Class I heirs include spouse, children, and parents, aiming to simplify disputes and ensure equality across communities.

About Uniform Civil Code (UCC):

- The UCC, under Article 44 of the Directive Principles of State Policy, proposes a common set of personal laws for all citizens covering marriage, divorce, inheritance, adoption, and succession.
- India currently follows religion-based personal laws, though states like Uttarakhand and Gujarat have initiated UCC-related frameworks.
- While the UCC aims to promote equality, gender justice, and national integration, it

also faces criticism over concerns related to religious freedom and cultural diversity.

Ban On Polygamy, Mandatory Registration Of Live-In Relationships:

Key Takeaways From Assam UCC Bill



Ban On Polygamy

Polygamy to be banned across all communities in Assam.



Mandatory Registration Of Live-In Relationships

Live-in relationships must be registered.



Legal Protection

Live-in partners and children born from such unions to get legal recognition and protection.



Exemption For STs

The law will not apply to Scheduled Tribes (STs) residing in Assam.



Uniform Legal Framework

A common legal framework for Marriage, Divorce, Succession/Inheritance and Live-in relationships.



Respect For Religious & Customary Rites

Marriages can continue under existing religious and customary rites.



Minimum Age For Marriage

21 years for men and 18 years for women.



Compulsory Registration

Registration of marriages and divorces made compulsory.



Legal Protections Ensured

Ensures maintenance rights, inheritance claims and legal protection for spouses.



Important Decisions of the Supreme Court:

- **Sarla Mudgal (1995):** Highlighted the need for a UCC to prevent misuse of religious conversion for bigamy.
- **Shayara Bano (2017):** Struck down triple talaq, prioritising gender justice and equality over discriminatory practices in personal law.

Conclusion:

The Assam UCC Bill represents a major step toward legal uniformity in personal laws. While it aims to promote equality, clarity, and modernisation of family laws, it also raises significant debates on privacy, diversity, and constitutional balance. Its evolution will play an important role in shaping India's broader discourse on the Uniform Civil Code.



International Relations

Green Transition, Technology and Geopolitics: India's New Global Strategy

Context:

Prime Minister Modi's recent five-nation visit in May 2026 to the United Arab Emirates, the Netherlands, Sweden, Norway, and Italy has presented India's foreign policy in a new strategic dimension. The central focus of this tour was to strengthen India's long-term energy security, green transition, technological self-reliance, and India's role in global supply chains.

India is among the world's fastest-growing major economies. According to the International Energy Agency (IEA), the largest share of global energy demand growth in the coming decade is expected to come from India. At present, India imports nearly 85 percent of its crude oil requirement and around 50 percent of its gas requirement. In such a situation, energy security is no longer merely an economic necessity but has become a question of national security and strategic autonomy. Prime Minister Modi's visit is being viewed as highly significant within this broader geopolitical and economic context. The agreements reached with these countries are expected to strengthen India's presence in the sectors of clean energy, critical minerals, and sustainable development.

Energy Security: India's Biggest Strategic Challenge

- The Russia-Ukraine war, tensions in West Asia, the Red Sea crisis, and fluctuations in global oil prices have clearly demonstrated

that disruptions in energy supply can seriously impact any nation's economy. For a developing and energy-dependent country like India, this challenge is even more serious because:

- » India is the world's third-largest energy consumer.
- » Energy demand in the country is rising rapidly.
- » Manufacturing, the digital economy, and urbanisation are further increasing energy requirements.
- » India is committed to achieving its Net Zero target by 2070.
- In such a scenario, India must simultaneously balance three objectives:
 - » Ensuring affordable energy availability
 - » Securing energy supply
 - » Transitioning toward green and clean energy
- Prime Minister Modi's five-nation visit is therefore being seen as a strategic initiative aimed at resolving this "Energy Trilemma."

UAE: The Central Pillar of India's Energy Diplomacy:

- The United Arab Emirates (UAE) has emerged as an extremely important partner in India's energy strategy. India-UAE relations are no longer limited to oil trade but have expanded into strategic investment, petroleum storage, renewable energy, and food security.
- During this visit, both countries emphasized

expanding cooperation in the following areas:

- » Long-term oil and gas supply
- » Strategic petroleum storage
- » Green hydrogen
- » Energy infrastructure investment
- » Petrochemical cooperation

- India is moving beyond a policy focused solely on purchasing oil and is working toward a broader “energy partnership.” The objective now is to encourage foreign energy-producing countries to invest in India’s energy sector as well.
- In particular, the participation of Abu Dhabi National Oil Company (ADNOC) in India’s strategic petroleum reserves strengthens India’s energy security. This provides India with the option to ensure supply security during global crises.

Europe and Nordic Countries: Green Energy and Technological Cooperation

The second major dimension of Prime Minister Modi’s visit was technological and green energy cooperation with European and Nordic countries.

- **Netherlands: Semiconductor and Green Technology:**
 - » The Netherlands is a major global hub for semiconductor equipment manufacturing and water management technology. India aims to establish itself as an alternative to China-centric global supply chains. Cooperation between India and the Netherlands is significant in the following sectors:
 - Semiconductor manufacturing
 - Chip design

- Clean energy technology
- Ports and logistics
- Water management
- » India’s Semiconductor Mission can succeed only if it receives advanced technology and global investment.



- **Sweden and Norway: Models of Green Transition:**

- » Sweden and Norway represent some of the world’s most advanced green economy models. These countries are leaders in clean energy, electric mobility, carbon-neutral technologies, and sustainable industrial development. For India, cooperation with these countries is important in several respects:
 - Green hydrogen
 - Battery storage technology
 - Electric mobility
 - Carbon capture technology
 - Waste management
 - Arctic research
- » India is now transitioning from a “brown economy” to a “green economy.” For this, not only capital but also advanced technology and research cooperation are essential.

Special Strategic Partnership with Italy:

- The elevation of India-Italy relations to a “Special Strategic Partnership” is considered one of the most significant diplomatic achievements of this visit. Italy is a major industrial and manufacturing center in Europe. Cooperation between the two countries is being expanded in the following areas:
 - » Defence manufacturing
 - » Energy transition
 - » Green industries
 - » Advanced machinery
 - » Maritime security
 - » Critical minerals
- Critical minerals are increasingly becoming the new center of global geopolitics. Lithium, cobalt, nickel, and rare earth elements are essential for electric vehicles, batteries, and semiconductor industries.
- China’s dominance over these minerals has emerged as a major strategic challenge for the world. India is now working toward developing alternative supply chains.

India’s Broader Strategy Related to Energy Security

- Prime Minister Modi’s visit clearly reflects India’s multi-dimensional energy strategy. India no longer wishes to remain dependent solely on an import-based energy model.
- **India’s Major Strategies:**
 - » **Diversification of Energy Sources:** India is increasing energy imports from multiple regions including Russia, West Asia, the United States, and Africa so that excessive dependence on any one region can be avoided.
 - » **Expansion of Green Energy:** India has set a target of achieving 500 GW of non-fossil fuel energy capacity by 2030.
 - » **Green Hydrogen Mission:** The National Green Hydrogen Mission is an important step toward transforming India into a clean fuel exporter.
 - » **Strategic Petroleum Reserves:** India is expanding its petroleum storage capacity to maintain energy supply during global crises.

- » **Technological Self-Reliance:** Emphasis is being placed on increasing domestic manufacturing in semiconductors, batteries, and clean energy equipment.

Challenges:

- Although India’s strategy is ambitious, several challenges remain:
 - » Excessive import dependence
 - » High cost of clean energy technology
 - » Dependence on China for critical minerals
 - » Global geopolitical instability
 - » Limitations in domestic energy infrastructure
- Additionally, during the green energy transition, employment and social impacts associated with the coal-based economy will remain significant challenges.

Conclusion:

Prime Minister Modi’s five-nation visit has made it clear that India’s foreign policy is now based on a “multi-alignment” model. India is advancing its national interests while maintaining balanced relations with the United States, Europe, Russia, and West Asia. India is moving toward becoming an important hub in global energy and trade networks by leveraging its strategic position in the Indian Ocean region. India’s foreign policy is no longer confined merely to diplomatic relations but has become part of a broader strategy encompassing energy security, technological self-reliance, green transition, and the ambition of becoming a global economic power. If India succeeds in establishing a balance between energy security, green development, and technological self-reliance, then in the coming decade it may emerge not only as the world’s most populous country but also as a major center of global economic and strategic power.

Short Issues

India–Nepal Boundary Dispute

Context:

Recently, Nepal objected to the use of the Lipulekh Pass for the Kailash Mansarovar Yatra, reiterating its claim over the Lipulekh–Kalapani–Limpiyadhura region. India rejected the claim, stating that it lacks historical and cartographic basis and reaffirming that the route has been used for decades.

Historical Basis of the Dispute:

- The dispute originates from the Treaty of Sugauli (1816) signed between the British East India Company and Nepal after the Anglo-Nepalese War. The treaty defined the boundary along the Mahakali (Kali) River, with Nepal retaining territory east of it and British India retaining land to the west.
- However, the treaty did not clearly identify the river's exact source, creating ambiguity. Nepal claims the river originates at Limpiyadhura, placing Kalapani and Lipulekh within its territory, while India identifies the source closer to the Kalapani–Lipulekh area, making it part of Uttarakhand.

Nepal's Stand:

- Nepal asserts that Limpiyadhura, Lipulekh and Kalapani lie east of the Mahakali River and are part of Nepal based on the Treaty of Sugauli, historical maps, and administrative records. It argues that the river's true source is Limpiyadhura, shifting the boundary eastwards.
- Nepal has also opposed infrastructure projects and agreements made without its consent, including India–China understandings on the Lipulekh route. In 2020, Nepal issued a revised political map including these territories and later incorporated it into its constitution, making it a sovereignty issue.

India's Stand:

- India maintains that the region is an integral part of Uttarakhand and has been under its administrative control. It highlights the use of the Lipulekh route for the Kailash Mansarovar Yatra since 1954, reinforcing historical usage.
- India views Nepal's claim as unilateral and unsupported by strong evidence, while stating that the boundary is largely settled in practice. It supports resolution through bilateral dialogue and peaceful negotiations.



Strategic and Geopolitical Importance:

- The region lies near the India–Nepal–China tri-junction, making it strategically significant for border security and Himalayan military logistics.
- It also holds religious importance due to the Kailash Mansarovar Yatra, with Lipulekh offering a shorter route to Tibet. India–China coordination on this route has increased Nepal's concerns about exclusion from trilateral decisions.

Why the Problem Persists:

- The dispute persists due to ambiguous geography, as the Mahakali river system has multiple tributaries and no clearly defined source.
- Colonial-era maps provide conflicting interpretations, while political nationalism in Nepal and strategic interests linked to infrastructure and China connectivity further complicate resolution.

Proposed Solution:

- A solution lies in strengthening the India–Nepal Joint Boundary Working Group and using GIS mapping, satellite imagery, and hydrological studies for scientific demarcation.
- A joint survey commission with experts can help resolve differences. Diplomatic engagement must continue while avoiding unilateral actions.
- Confidence-building measures and people-to-people ties should be strengthened, and geopolitical factors, especially China-related issues, should be kept separate.

Conclusion:

The dispute reflects how historical treaties, river ambiguity, and strategic geography combine to create enduring boundary tensions, requiring careful diplomacy and scientific resolution.

2026 RSF World Press Freedom Index

Context:

Recently, Reporters Without Borders (RSF) released the 2026 World Press Freedom Index, highlighting a sharp global decline in press freedom. The report noted that press freedom scores fell in 100 out of 180 countries and territories, while the global average score reached its lowest level in 25 years.

About the Index:

- The World Press Freedom Index is published annually by RSF since 2002. It assesses the

level of press freedom in 180 countries and territories based on five indicators:

- » Political context
 - » Legal framework
 - » Economic conditions
 - » Sociocultural environment
 - » Safety of journalists
- The Index measures the ability of journalists to work freely and independently without political pressure, censorship or violence.



Key findings of the Index:

- For the first time, over 52% of countries were classified as having a “difficult” or “very serious” situation for journalism.
- The legal indicator recorded the steepest global decline due to increasing misuse of:
 - » National security laws,
 - » Anti-terror laws,
 - » Strategic lawsuits against journalists (SLAPPs).
- The Middle East and North Africa remained the most dangerous region for journalists.
- Rising political pressure, violence, censorship and media monopolisation were

major concerns globally.

Ranking of Countries:

- **Top Ranked Countries:**
 - » Norway
 - » Netherlands
 - » Estonia
 - » Denmark
 - » Sweden
- **Bottom Ranked Countries:**
 - » Eritrea (180th)
 - » North Korea
 - » China
 - » Iran
 - » Saudi Arabia

India's Ranking:

- India ranked 157th out of 180 countries, falling six places from 151st in 2025. RSF cited the key reasons for India's poor ranking:
 - » Violence against journalists,
 - » Concentrated media ownership,
 - » Political pressure,
 - » Misuse of national security laws.

Implications:

- Declining press freedom weakens democracy, transparency and accountability.
- Suppression of independent journalism reduces citizens' access to reliable information.
- Excessive state control and legal intimidation can undermine civil liberties and democratic institutions.
- Economic concentration of media ownership may reduce plurality of opinions.

About Reporters Without Borders:

- Reporters Without Borders (RSF, Reporters sans frontières) is a Paris-based international non-governmental organization that defends the fundamental human right to access free and reliable information.
- Founded in 1985, it is best known for compiling the annual World Press Freedom Index and advocating for the protection of journalists globally.

Conclusion:

The 2026 RSF Index reflects growing global challenges to free and independent journalism. Protecting press freedom is essential for democratic governance, informed public discourse and protection of fundamental rights. Countries must strengthen legal safeguards, ensure journalist safety and promote independent media institutions to uphold democratic values.

India–Trinidad and Tobago Relations

Context:

Recently, India's External Affairs Minister S. Jaishankar was on a two-day official visit (8–9 May 2026) to Trinidad and Tobago. The visit forms an important part of India's SAGAR (Security and Growth for All in the Region) initiative and its policy of active engagement with countries of the Global South. The primary objective of the visit was to elevate bilateral relations from a primarily cultural partnership to a broader framework encompassing technological and economic cooperation.

Key Highlights of the Visit:

- India handed over the first batch of 2,000 laptops to local school children as part of its technological assistance in the education sector.
- A "National Prosthetics Centre" was inaugurated in Penal. The centre will utilize India's renowned "Jaipur Foot" technology to assist physically challenged individuals.
- A state-of-the-art agro-processing facility was inaugurated in Couva, for which India provided machinery and technical assistance.
- Dr. Jaishankar visited the site associated with the arrival of Indian indentured labourers, reaffirming the civilizational and historical ties between the two countries.
- The visit also reaffirmed India's growing

strategic engagement with the Caribbean Community (CARICOM).

- Bilateral trade has grown significantly, almost doubling in the last five years to now reach \$350 million. Trade is continuously growing in sectors like health and pharmaceuticals, automobiles and machinery, iron and steel, textiles and apparel.
- Trinidad and Tobago is the first country in the Caribbean region to agree to adopt India's United Payments Interface platform for smooth payments.



Eight Major Memoranda of Understanding (MoUs) Signed:

During the visit, both countries signed eight important MoUs to expand the scope of bilateral cooperation:

- **Renewable Energy (Solarization):** An agreement was signed to equip the building of Trinidad and Tobago's Ministry of Foreign and CARICOM Affairs with solar energy infrastructure. This reflects India's commitment toward the Sustainable Development Goals (SDGs).
- **Preservation of Cultural Heritage (Nelson Island):** An agreement was signed for upgrading infrastructure on the historic

Nelson Island, a site deeply connected with the history of Indian migrants.

- **Global Outreach of Ayurveda:** A decision was taken to establish an "Indian Chair" on Ayurveda at the University of the West Indies, enhancing India's soft power in the field of traditional medicine.
- **Public Health (Vector Control):** A health cooperation agreement was signed for technical collaboration in controlling mosquito-borne and other infectious diseases.
- **Tourism Cooperation:** Both countries agreed to develop a framework for enhancing tourism infrastructure and increasing people-to-people exchanges.
- **Digitalization of Education:** An agreement was reached to improve the quality of education through digital platforms and technological cooperation.
- **Health Infrastructure:** Both sides agreed to cooperate in strengthening general healthcare services and ensuring accessibility to medicines.
- **Capacity Building and Skill Development:** Cooperation under India's ITEC (Indian Technical and Economic Cooperation) programme will be expanded to train professionals from Trinidad and Tobago in various sectors.

Conclusion:

The large population of Indian-origin people in Trinidad and Tobago (around 35%) serves as an important cultural asset for India, providing emotional and historical strength to bilateral relations. The visit of India's External Affairs Minister marks a significant milestone in India-Caribbean relations. Trinidad and Tobago possesses vast natural gas reserves, which could become highly important for India's future energy security. India is increasingly positioning itself as the voice of the developing world, and providing technological assistance to countries such as Trinidad and Tobago further strengthens this image.

Strategic Partnership between India and the Netherlands

Why in News?

Prime Minister Narendra Modi visited the Netherlands on 16–17 May 2026 on an official visit. During the visit, both countries upgraded their bilateral relations to the level of a “Strategic Partnership.” The two countries signed 17 important agreements for the development of secure future supply chains and infrastructure.

Key Strategic Agreements:

- **High Technology and Semiconductor Sovereignty**
 - » **ASML–Tata Electronics Agreement:** India’s Tata Electronics signed an important Memorandum of Understanding (MoU) with the Dutch global semiconductor giant ASML. ASML holds a global monopoly in the manufacturing of advanced lithography machines. This partnership will strengthen India’s first commercial semiconductor fab plant in Dholera, Gujarat.
 - » **Strategic Roadmap (2026–2030):** Both countries issued a five-year framework for joint research in the fields of Artificial Intelligence (AI), quantum computing, space exploration, and critical minerals.
- **Water Management and Climate Adaptation:**
 - » **Kalpasar Project:** India’s Ministry of Jal Shakti and the Dutch Ministry of Infrastructure signed a Letter of Intent for technical cooperation on Gujarat’s Kalpasar Project. Under this, Dutch flood control and land reclamation technologies will be used to construct a freshwater reservoir in the Gulf of Khambhat.
 - » **Centre of Excellence at IIT Delhi:** A “Centre of Excellence on Water” has been established at IIT Delhi to address challenges in sustainable water science and wastewater management.

- **Cultural Diplomacy and Defence Cooperation:**

- » **Return of Chola-era Artefacts:** The Government of the Netherlands formally handed over 11th-century Chola copper plates to India. These artefacts were taken to Europe from Nagapattinam in 1712. This is considered a major success of India’s cultural diplomacy and soft power.
- » **Defence Co-production:** Both countries agreed on a defence roadmap for joint manufacturing of defence equipment, technology transfer (ToT), and the establishment of joint ventures.



Economic and Bilateral Trade Relations:

- The Netherlands is currently one of the most important economic pillars for India within the European Union (EU):
 - » **FDI Investment:** The Netherlands is the fourth-largest foreign direct investor in India, with cumulative investments exceeding USD 55.6 billion.
 - » **Bilateral Trade:** In the financial year 2024–25, bilateral trade between the two countries reached USD 27.8 billion.
 - » **Trade Gateway:** The Netherlands’ Port of Rotterdam serves as the main gateway for Indian goods entering the European continent.

Key Benefits for India:

- **Technological Self-Reliance:** Dutch cooperation in semiconductors and AI will form a crucial foundation for India’s ‘Atmanirbhar Bharat’ and ‘Digital India’

initiatives.

- **Climate Resilience:** Dutch expertise in drainage and coastal management will help protect coastal cities like Mumbai and Chennai from climate change risks.
- **Indo-Pacific Security:** Both countries support a free, open, and rules-based Indo-Pacific region, which is crucial for global maritime trade and security.

Conclusion:

This new phase of India–Netherlands relations is not limited to trade transactions, but represents the building of a future-ready technological and environmental partnership. With shared goals in semiconductor sovereignty, food security, and climate resilience, this strategic partnership is emerging as a strong pillar in global geopolitics.

BRICS Foreign Ministers' Meeting

Context:

Recently, The BRICS Foreign Ministers' Meeting held in New Delhi, reaffirmed support for an independent Palestinian State based on pre-1967 borders with East Jerusalem as its capital. India also reiterated its traditional support for the "Two-State Solution" to resolve the Israel–Palestine conflict. However, sharp disagreements between Iran and the United Arab Emirates prevented the adoption of a joint declaration, resulting instead in a "Chair's Statement and Outcome Document."

Key Highlights of the BRICS Meeting:

- **Support for Palestinian Statehood:** BRICS members reaffirmed support for:
 - » A sovereign, independent, and viable Palestinian State
 - » Borders based on pre-1967 lines
 - » East Jerusalem as Palestine's capital
 - » The grouping reiterated commitment to the Two-State Solution in accordance with international law, UN resolutions, and the Arab Peace Initiative.

- **Position on Gaza Strip:** The statement described Gaza as an inseparable part of the Occupied Palestinian Territory and supported unification of Gaza and the West Bank under the Palestinian Authority.
- **Maritime Security in West Asia:** The meeting highlighted the importance of secure maritime trade routes, including:
 - » Strait of Hormuz
 - » Red Sea
 - » Bab-el-Mandeb Strait

Members acknowledged differing views regarding the West Asian conflict and maritime tensions.

About BRICS:

- **Evolution of BRICS**
 - » **2001:** Term "BRIC" coined by economist Jim O'Neill
 - » **2006:** Formation of BRIC grouping
 - » **2010:** South Africa joined, becoming BRICS
 - » BRICS+ now includes Egypt, UAE, Ethiopia, Indonesia, and Iran
- **The bloc represents:**
 - » Around 49.5% of global population
 - » 40% of global GDP
 - » 26% of global trade
- **Objectives:** BRICS aims to:
 - » Reform global governance institutions
 - » Reduce Western dominance in IMF and World Bank
 - » Strengthen South-South cooperation

New Development Bank (NDB):

- The New Development Bank, headquartered in Shanghai, finances infrastructure and sustainable development projects.

What is the Two-State Solution?

- **The Two-State Solution proposes:**
 - » Israel as a homeland for Jewish people
 - » Palestine as an independent state for Palestinians
- **Historical Background:**
 - » 1947 UN Partition Plan proposed separate Arab and Jewish states

- » 1993 Oslo Accords established mutual recognition between Israel and the Palestine Liberation Organization (PLO)

India's Position on Israel–Palestine:

- **Historical Support for Palestine:** India recognized the Palestine Liberation Organization in 1974 and the State of Palestine in 1988.
- **Relations with Israel:** India established full diplomatic ties with Israel in 1992 while maintaining support for Palestine.
- **Current Policy:** India follows a “de-hyphenation” approach, maintaining independent relations with both Israel and Palestine. While condemning terrorism and supporting Israel’s security concerns, India continues to advocate humanitarian support and a negotiated Two-State Solution.

Conclusion:

The BRICS meeting highlighted continued support for Palestinian statehood while exposing internal geopolitical divisions within the grouping. India’s balanced diplomacy reflects its commitment to strategic autonomy, regional stability, and peaceful resolution of the Israel–Palestine conflict through the Two-State framework.

India–Sweden Strategic Partnership

Context:

Recently, India and Sweden elevated their bilateral relationship to a Strategic Partnership during Prime Minister Narendra Modi’s official visit to Sweden in May 2026. The move reflects growing cooperation between the two countries in innovation, sustainability, defence, trade and emerging technologies.

Key Highlights of the Visit:

- Prime Minister Narendra Modi received Sweden’s Royal Order of the Polar Star and Commander Grand Cross, the highest

honour awarded to a foreign head of government. This marked PM Modi’s 31st international honour.

- India and Sweden agreed to institutionalise relations through a Strategic Partnership based on shared democratic values, innovation, sustainability and research cooperation. The partnership will be guided by four pillars:
 - » Strategic Dialogue for Stability and Security,
 - » Next-Generation Economic Partnership,
 - » Emerging Technologies and Trusted Connectivity,
 - » Shaping Tomorrow Together – People, Planet, Health and Resilience.
- To operationalise the upgraded partnership, both countries adopted the India–Sweden Joint Action Plan 2026–2030, which provides a roadmap for cooperation in political, economic, technological, security, climate and people-to-people domains.
- Both nations also endorsed the development of the India–Sweden Technology and Artificial Intelligence Corridor (SITAC) to accelerate collaboration in AI, digital infrastructure and advanced technologies. An India–Sweden SME and Start-up Platform will also be established to support innovation-driven entrepreneurship.

About India–Sweden Relations:

- **Diplomatic Relations:** India and Sweden established diplomatic relations in 1948. Sweden hosted the first India–Nordic Summit in 2018, strengthening India’s engagement with the Nordic region. Bilateral ties have steadily expanded in trade, innovation, clean technology and education.
- **Economic Relations:** Bilateral trade between the two countries reached nearly USD 7.75 billion in 2025. Sweden’s cumulative FDI inflow into India stood at approximately USD 2.59 billion between 2000 and 2024. Around 280 Swedish companies operate in India in sectors such as:
 - » Telecommunications,

- » Automobiles,
- » Engineering,
- » Clean energy.
- » Nearly 75 Indian companies also maintain a business presence in Sweden.
- **Sustainability Cooperation:** India and Sweden jointly launched the Leadership Group for Industry Transition (LeadIT) at the UN Climate Action Summit in 2019. The initiative promotes low-carbon industrial transition and sustainable manufacturing practices.

Significance for India:

- The partnership strengthens India's strategic engagement with Northern Europe and the European Union. Sweden is an innovation-driven economy and an important partner for India in:
 - » Green industrialisation,
 - » Advanced manufacturing,
 - » Digital economy expansion,
 - » Sustainable urban mobility.
- The partnership also supports resilient global supply chains amid geopolitical uncertainties. Both countries further emphasized reforms in the United Nations and other multilateral institutions to make them more representative and effective.

Way forward:

The elevation of India–Sweden relations to a Strategic Partnership marks a major advancement in bilateral ties based on democratic values, innovation and sustainable development. As both countries deepen cooperation in emerging technologies, climate transition, trade, defence and multilateral engagement, the partnership has the potential to become a key pillar of India's engagement with the Nordic region and Europe.

Indian PM's Visit to UAE

Context:

Recently, Prime Minister Narendra Modi visited the United Arab Emirates, strengthening India's "Look West" policy amid West Asia tensions. The visit reinforced the Comprehensive Strategic Partnership focusing on energy, investment, technology, and regional stability.

Major Outcomes and Bilateral Agreements:

- **Investment and Economic Cooperation:** The UAE announced USD 5 billion investments in India. Key commitments include USD 3 billion by Emirates NBD in RBL Bank and USD 1 billion each by ADIA–NIIF (infrastructure) and IHC (Sammaan Capital). These will boost infrastructure, banking, and capital markets.
- **Energy Security and Strategic Cooperation:** Energy ties remain central, with the UAE being India's 4th largest crude oil supplier, 3rd largest LNG supplier, and largest LPG supplier (FY 2024–25). Agreements on long-term LPG supply and Strategic Petroleum Reserves (SPR) were signed. The Strait of Hormuz remains critical for global energy security.
- **Defence and Security Framework:** A new defence framework was agreed, focusing on joint exercises, defence industry cooperation, and maritime security. It strengthens coordination in the Indian Ocean Region and enhances strategic trust.
- **Technology and Maritime Infrastructure:** Cooperation expanded in AI, supercomputing, and fintech, including an 8 Exaflop CDAC–G42 supercomputing cluster. Maritime agreements between Cochin Shipyard Limited and Drydocks World at Vadarinar will boost ship repair capacity, logistics, and skill development under Make in India.

Significance of the Visit:

- **Reliable Energy Partner:** The UAE ensures stable energy supplies for India. Long-term LPG and SPR cooperation enhances energy security and resilience.
- **Geopolitical Balancing:** The visit reflects

India's balanced diplomacy in West Asia, maintaining ties across competing regional actors while promoting stability.

- **Strengthening CEPA Framework:** The outcomes build on the India-UAE Comprehensive Economic Partnership Agreement, which pushed bilateral trade beyond USD 100 billion (FY 2025-26), with a target of USD 200 billion by 2032.

About India-UAE Relations:

- India and the UAE share centuries-old maritime trade links in spices, pearls, textiles, and dates. Diplomatic relations were established in 1972. The partnership accelerated after PM Modi's 2015 visit, expanding across trade, energy, defence, infrastructure, technology, and renewable energy.
 - » **Trade and Investment Relations:** The UAE is among India's largest trading partners, with bilateral trade crossing USD 101.25 billion (FY 2025-26). Investment flows include USD 25.19 billion FDI (2000-2025), supported by sovereign wealth funds and a Local Currency Settlement system reducing dollar dependence.
 - » **Energy Partnership:** The UAE is India's key energy supplier and the only partner in India's Strategic Petroleum Reserve programme, strengthening long-term energy security.

Conclusion:

The visit marks a shift toward a future-oriented partnership. With USD 5 billion investments, strong energy cooperation, defence collaboration, and advanced technology partnerships, India-UAE relations are emerging as a key pillar of India's economic growth and West Asian diplomacy.

America-China Summit 2026

Context:

Recently, a bilateral summit was held in Beijing between the President of the United States and the President of China. This marks the first visit by a U.S. President to China in a decade. The purpose of the visit was to establish "strategic stability" in the global order amid deep geopolitical and economic rivalry between the two countries.

Key Policy Decisions of the Summit:

- **Economic easing:** Both sides agreed on limited trade concessions:
 - » China pledged to purchase 200 Boeing aircraft.
 - » It was agreed to increase imports of U.S. beef after easing sanitary restrictions.
 - » Agreement was reached to increase purchases of soybeans from the U.S. market.
- **Technology and investment:**
 - » The U.S. allowed 10 Chinese companies renewed access to advanced Nvidia chips, which are crucial for the AI and semiconductor industries.
 - » Discussions began on establishing a "Trade Board" and an "Investment Board" to manage tariffs and simplify non-sensitive investments.
- **Strategic stability framework:**
 - » China proposed a "strategic stability-based constructive relationship" to manage tensions related to Taiwan and the South China Sea.
 - » Both countries acknowledged the need to avoid uncontrolled escalation of tensions.
- **Concept of the Thucydides Trap:**
 - » China referred to the risk of the "Thucydides Trap" and urged avoiding structural conflict between a rising power and an established power.
- **West Asia and energy security:**
 - » Both countries agreed on ensuring freedom of navigation in sea routes, especially in the Strait of Hormuz.
 - » A shared approach was seen in preventing escalation of nuclear

tensions in Iran.

Strategic Implications for India:

- In global geopolitics, this bipolar discourse will have a multi-dimensional impact on India's national interests:
- **Strategic autonomy vs. multilateral alliances**
 - » **Relevance of QUAD:** If economic proximity between the U.S. and China increases under a “de-risking” policy, the U.S. commitment to balancing China in the Indo-Pacific region may be affected.
 - » **Strategic balance:** India will need to maintain its “strategic autonomy” while strengthening security cooperation with the United States so that the regional balance of power is not disrupted.
- **Economic and supply chain dynamics**
 - » **‘China + 1’ strategy:** Improved U.S.–China trade relations could slow down multinational companies that were viewing India as an alternative manufacturing hub.
 - » **Critical mineral security:** If China relaxes restrictions on the export of rare earth elements (REEs), it would provide immediate relief to India's electronics, semiconductor, and clean energy sectors within global supply chains.
- **Technological sovereignty**
 - » **iCET and tech diplomacy:** The India–U.S. initiative on Critical and Emerging Technology (iCET) is ongoing. In light of U.S.–China AI engagement, India must take a leading role in shaping global standards for data sovereignty and AI governance.
- **Regional security and border challenges**
 - » **Impact on the Line of Actual Control (LAC):** If Washington and Beijing coordinate on global issues such as the Middle East and energy security, India will need to continuously monitor the level of U.S. diplomatic support regarding

the India–China border dispute.

Way Forward:

- **Strengthening supply chains:** India should enhance self-reliance (Atmanirbhar Bharat) in critical minerals and defense components and make maximum use of platforms such as the Mineral Security Partnership (MSP).
- **Multi-alignment policy:** To balance global powers, India should strengthen the QUAD on one hand, while also maintaining its influence in Eurasian geopolitics through BRICS and SCO on the other.
- **Leadership of the Global South:** India should position itself as an indispensable global actor by raising the priorities of developing countries—such as debt sustainability and climate finance—on international platforms.

Conclusion:

In contemporary international relations, there are no permanent friends or enemies, only permanent national interests. This dialogue between the U.S. and China presents India with an important opportunity to enhance its manufacturing competitiveness and redefine its strategic autonomy.

3rd India–Nordic Summit 2026

Context:

Recently, the 3rd India-Nordic Summit was held on 19 May 2026 in Oslo, where India and five Nordic countries, Denmark, Finland, Iceland, Norway and Sweden elevated their partnership to a Green Technology and Innovation Strategic Partnership.

About Nordic Region:

The Nordic region comprises five sovereign states: Denmark, Finland, Iceland, Norway, and Sweden. It is distinct from “Scandinavia,” which generally includes Norway, Sweden, and Denmark only. The Nordic model is known for high human development, strong welfare

systems, and leadership in clean energy and digital governance.

Key Outcomes of the 3rd Summit:

The 2026 summit marked a shift from sectoral cooperation to a structured long-term strategic partnership.

- **Green Technology and Innovation Partnership:** India and Nordic countries agreed to deepen cooperation in:
 - » Renewable energy and green hydrogen
 - » Circular economy & waste management
 - » Digital infrastructure & clean technologies
 - » Climate-smart industrial solutions
- **Trade and Investment Expansion:** The summit emphasized implementation of the India-EFTA Trade and Economic Partnership Agreement (TEPA) and progress on the India-EU Free Trade Agreement. Nordic investments are expected to strengthen India's manufacturing and innovation ecosystem.
- **Science, Technology and Innovation:** Cooperation was expanded in:
 - » 6G telecommunications
 - » Artificial intelligence and quantum technologies
 - » Start-up ecosystems and incubators
 - » This supports India's aim of reducing dependency on concentrated technology supply chains.
- **Arctic and Blue Economy Cooperation:** The countries agreed to strengthen collaboration in Arctic research, climate monitoring, and sustainable ocean governance. This also supports India's Arctic policy and Indo-Pacific maritime vision.

Strategic Significance for India:

- **Climate and Green Transition:** Nordic countries are global leaders in sustainability. Cooperation helps India achieve its "Panchamrit" climate goals and net-zero target through access to advanced green technologies.
- **Geopolitical and Arctic Engagement:** The

Arctic region is becoming strategically significant due to climate change and new shipping routes. India's engagement with Nordic countries enhances its influence in Arctic governance and climate science cooperation.



3RD INDIA-NORDIC SUMMIT
 19 MAY 2026 | OSLO, NORWAY

India and five Nordic countries – Denmark, Finland, Iceland, Norway and Sweden – elevated their partnership to a

GREEN TECHNOLOGY AND INNOVATION STRATEGIC PARTNERSHIP

THE FIVE NORDIC COUNTRIES
 DENMARK FINLAND ICELAND NORWAY SWEDEN

STRATEGIC SIGNIFICANCE FOR INDIA

- 1. CLIMATE AND GREEN TRANSITION**
 Nordic countries are global leaders in sustainability. Cooperation helps India achieve its "Panchamrit" climate goals and net-zero target through access to advanced green technologies.
- 2. GEOPOLITICAL AND ARCTIC ENGAGEMENT**
 The Arctic region is becoming strategically significant due to climate change and new shipping routes. India's engagement with Nordic countries enhances its influence in Arctic governance and climate science cooperation.
- 3. TECHNOLOGY AND STRATEGIC AUTONOMY**
 Partnerships in 6G, AI, and quantum computing support India's goal of technological self-reliance and diversification of critical supply chains.

ABOUT INDIA-NORDIC SUMMITS
 The India-Nordic Summit is a high-level diplomatic meeting between India and five Nordic countries: Denmark, Finland, Iceland, Norway, and Sweden. It aims to strengthen cooperation in areas like trade, climate change, clean energy, innovation, and global governance.

THREE SUMMITS – A JOURNEY OF GROWING PARTNERSHIP

- 2018 STOCKHOLM**
 Focus on innovation, global security, and economic cooperation.
- 2022 COPENHAGEN**
 Emphasis on post-pandemic recovery, climate action, and blue economy.
- 2026 OSLO**
 Upgraded to Green Technology and Innovation Strategic Partnership.

The 3rd India-Nordic Summit marks a new chapter of sustainable, innovative, and future-ready partnership for a resilient planet and prosperous future.

- **Technology and Strategic Autonomy:** Partnerships in 6G, AI, and quantum computing support India's goal of technological self-reliance and diversification of critical supply chains.

About India-Nordic Summits:

- The India-Nordic Summit is a high-level diplomatic meeting between India and five Nordic countries: Denmark, Finland, Iceland, Norway, and Sweden.
- It aims to strengthen cooperation in areas like trade, climate change, clean energy, innovation, and global governance.

- **Three summits:**
 - » **2018 (Stockholm):** Focus on innovation, global security, and economic cooperation.
 - » **2022 (Copenhagen):** Emphasis on post-pandemic recovery, climate action, and blue economy.
 - » **2026 (Oslo):** Upgraded to Green Technology and Innovation Strategic Partnership.

Conclusion:

The 3rd India–Nordic Summit represents a significant evolution in India’s engagement with Northern Europe. It strengthens cooperation in climate action, advanced technology, trade, and Arctic governance. For India, this partnership is strategically important for achieving sustainable growth, technological advancement, and a stronger global role in emerging geopolitical spaces.

India–Vietnam Deepen Defence Cooperation

Context:

Recently, India and Vietnam have upgraded their bilateral relations to an “Enhanced Comprehensive Strategic Partnership (ECSP).” During the visit of India’s Defence Minister Rajnath Singh to Vietnam, both countries reiterated their commitment to maintaining peace, stability, and security in the Indo-Pacific region.

Key Outcomes of Bilateral Meeting:

- **Strengthening Defence Cooperation:** Both sides agreed to expand joint exercises, institutionalised dialogues, training, capacity building, and defence industry/logistics cooperation. India reaffirmed support for Vietnam’s defence modernisation.
- **Maritime Security in Indo-Pacific:** Focus on freedom of navigation, maritime stability, enhanced maritime domain awareness, and cooperation against piracy and non-

traditional threats, reflecting strategic convergence.

- **Defence Technology & Emerging Areas:** Cooperation expanded in cyber security, AI, quantum technologies, and defence industrial collaboration to boost modern defence capability.
- **Technology & Capacity Building Initiatives:**
 - » Language lab inaugurated at Vietnam Air Force Officers’ College (Indian assistance)
 - » AI lab announced at Telecommunications University, Nha Trang
 - » MoU signed between India’s Military College of Telecommunications Engineering and Vietnam’s Telecommunications University on AI & quantum tech



Strategic Significance for India:

- **Indo-Pacific Security Architecture:** Strengthens India’s role in a stable, rules-based Indo-Pacific amid geopolitical competition.
- **Act East Policy Consolidation:** Vietnam remains a key partner in India’s Act East outreach in Southeast Asia.
- **Defence Modernisation & Technology Cooperation:** Supports India’s defence innovation ecosystem, especially in AI, cyber, and quantum domains.
- **Maritime & Geopolitical Balance:** Enhances coordination on sea lane security and regional balance in the Indo-Pacific.

India–Vietnam Relations:

- **Historical & Diplomatic Foundations:** Civilizational ties over 2,000 years (Buddhist links, Cham heritage); solidarity during anti-colonial struggles; diplomatic relations established in 1972; India supported Vietnam during war and post-1979 isolation.
- **Defence & Security Cooperation:** Upgraded under Joint Vision 2030 and logistics MoU; India gifted INS Kirpan (2023); MRO support for Su-30s and Kilo-class submarines; annual VINBAX exercise; cooperation under Indo-Pacific Oceans Initiative; shared stand on freedom of navigation.

Conclusion:

India–Vietnam defence ties are evolving into a key Indo-Pacific security pillar, driven by maritime cooperation, defence technology, and capacity building, aligning with India’s goal of a stable, rules-based regional order.

India–Italy Special Strategic Partnership 2026: IMEC, Defence & Trade

Context:

During Prime Minister Narendra Modi’s official visit to Rome, Italy, in May 2026, India and Italy elevated their bilateral relationship to a historic level by upgrading it from a “Strategic Partnership” to a “Special Strategic Partnership.” During the meeting between the two countries, the “India–Italy Joint Strategic Action Plan 2025–29” was reviewed and new dimensions of cooperation were outlined. This step reflects the expansion of India’s Europe policy beyond France and Germany, especially amid ongoing global geopolitical turbulence.

Major Agreements:

- **Defence and Security Industrial Roadmap (Defence & Security)**
 - » Both countries approved a comprehensive Defence Industrial Roadmap. Under this framework, cooperation will move

beyond the mere purchase and sale of defence equipment toward the co-development and co-production of helicopters, naval platforms, maritime weapon systems, and electronic warfare systems.

- » Italian investment in the Tamil Nadu Defence Industrial Corridor will be encouraged. Additionally, both sides agreed to initiate a new “Maritime Security Dialogue.”



PM MODI ITALY VISIT 2026: TRADE, DEFENCE AND IMEC TALKS WITH MELONI

Strengthening India–Italy Strategic Partnership for a Prosperous and Secure Future

KEY AGENDA

- TRADE & INVESTMENT**
Expanding bilateral trade, boosting investments and enhancing economic ties
- DEFENCE COOPERATION**
Deepening defence collaboration, joint exercises and technology partnerships
- IMEC TALKS**
Advancing India–Middle East–Europe Economic Corridor for connectivity and shared growth
- PEOPLE TO PEOPLE TIES**
Strengthening cultural, academic and diaspora connections

“ India and Italy share a strong historical bond and a vision for the future. Together, we will build partnerships that promote peace, prosperity and progress for our people and the world. ”
 – Narendra Modi

- **Economic Cooperation and Trade Targets (Economic & Trade Linkages)**
 - » Target of 20 Billion Euros: Leveraging the negotiations surrounding the India–EU Free Trade Agreement (FTA), both countries have set an ambitious target of increasing bilateral trade to 20 billion euros by 2029.
 - » More than 400 major Italian companies are currently operating in India. Their presence will be further expanded through synergy between India’s “Make in India” initiative and Italy’s “Made in Italy” programme.
- **Connectivity and Geo-Strategy (Connectivity: IMEC Corridor)**

- » Both leaders reaffirmed their full commitment to the India–Middle East–Europe Economic Corridor (IMEC) and agreed to hold its first ministerial meeting within 2026 itself.
- » A Memorandum of Understanding (MoU) was signed to enhance maritime transport and port connectivity, linking India’s western coastline with Italian ports such as Trieste.
- **Emerging Technologies and Critical Minerals**
 - » **INNOVIT India Hub:** A dedicated innovation hub will be established in India to accelerate startups in Artificial Intelligence (AI), quantum computing, semiconductors, and fintech sectors.
 - » **Critical Minerals Agreement:** A strategic agreement was reached for the co-production of critical minerals and their recycling from e-waste in order to ensure sustainable and secure global supply chains.
- **Migration, Mobility and Trilateral Cooperation**
 - » Agreements were signed to facilitate the legal mobility of Indian nurses and skilled professionals.
 - » **Trilateral Cooperation in Africa:** India’s “Digital Public Infrastructure” (DPI) and Italy’s “Mattei Plan” will be integrated to launch joint development projects in Africa, particularly in the agriculture and healthcare sectors.
- **Strategic Significance:**
 - » **Indo-Mediterranean Vision:** Italy is located at the centre of the Mediterranean region and views the Indo-Pacific as part of an “Extended Mediterranean.” This vision aligns with India’s objective of ensuring a free, open, and secure Indo-Pacific in partnership with like-minded democratic countries.
 - » **Counter-Terrorism Cooperation:** An institutional framework has been established between India’s

Enforcement Directorate (ED) and Italy’s Guardia di Finanza for sharing financial intelligence and dismantling terror financing networks.

- » **A New Strategic Partner in Europe:** Beyond the United Kingdom and France, Italy is now emerging as one of India’s most trusted and significant economic and defence partners in continental Europe.

Way Forward:

India should fully leverage Italian technological expertise in advanced defence manufacturing and the semiconductor sector. Simultaneously, addressing the financial and logistical challenges associated with the IMEC project and operationalising it at the earliest would strengthen the strategic autonomy of both countries at the global level.

India–South Korea Defence Partnership 2026

Context:

Recently, Defence Minister Rajnath Singh visited Seoul (South Korea), where India and South Korea agreed to further strengthen their Special Strategic Partnership through deeper cooperation in defence, technology, maritime security, and industrial collaboration.

High-Level Defence Engagements:

- During the visit, Singh also met Lee Yong-chul, Minister of Defence Acquisition Program Administration (DAPA). Both sides agreed to harness complementarities between their defence industries to expand joint development, co-production, and export opportunities.
- Discussions also covered strengthening logistics cooperation, military exchanges, and emerging technology partnerships.

Key outcomes of the visit:

- **Institutional Framework and Agreements:**

Both countries acknowledged growing convergence between India's Act East Policy and South Korea's regional strategic vision. They reaffirmed commitment to a free, open, inclusive, and rules-based Indo-Pacific. Several Memoranda of Understanding (MoUs) were exchanged to expand cooperation in:

- » Defence cyber security
- » Training between India's National Defence College and Korea National Defence University
- » UN peacekeeping cooperation
- » These agreements aim to make the partnership more structured and multidimensional.

▪ **Defence Industry Cooperation & Innovation:**

A key focus of the visit was strengthening defence industrial collaboration. Both sides discussed the India-Korea Defence Innovation Accelerator Ecosystem (KIND-X) to integrate innovation ecosystems. The aim is to promote co-development in advanced technologies, including AI, sensors, semiconductors, autonomous systems, and cyber capabilities.

- **Key Defence Manufacturing Initiatives:** Two major agreements were signed between Larsen & Toubro (L&T) and Hanwha Aerospace, reinforcing cooperation in defence production. These are expected to enhance technology transfer, local manufacturing, and export-oriented production, strengthening India's defence industrial base under the Make in India framework.

- **Maritime Security and Indo-Pacific Vision:** Both sides reiterated shared interests in maintaining stability in the Indo-Pacific region. Cooperation will focus on maritime security, naval capabilities, and regional security architecture, reflecting their shared strategic outlook in response to evolving geopolitical challenges.

- **Veterans' Cooperation and Historical Linkages:** India and South Korea also agreed

to deepen cooperation in veterans' affairs. A Memorandum of Understanding on International Veterans Affairs Cooperation will promote joint efforts to honour Korean War veterans, enhance academic and cultural exchanges, and preserve shared historical memory. India's contribution during the Korean War, including the deployment of the 60th Parachute Field Ambulance, was specially acknowledged, highlighting long-standing humanitarian ties.

About India–South Korea Defence Partnership:

- India–South Korea relations have evolved into a Special Strategic Partnership (2015), supported by increasing defence industrial collaboration such as the K9 Vajra-T artillery program.
- The relationship is guided by convergence between India's Act East Policy and South Korea's regional strategies, with growing focus on supply chain resilience, critical technologies, and Indo-Pacific stability.

Conclusion:

The visit of Defence Minister Rajnath Singh marks a significant step in strengthening India–South Korea defence ties. With expanded cooperation in defence production, cyber security, innovation ecosystems, and Indo-Pacific strategy, both countries are moving toward a more integrated and future-oriented strategic partnership.

Russia–China Relations and Putin's 2026 Beijing Visit

Context:

Recently, Russian President Vladimir Putin visited Beijing on 19–20 May 2026, which took place immediately after the visit of US President Donald Trump to China. Putin–Xi summit was also held between the two countries. This visit highlighted China's growing central role in

global diplomacy.

Background of Russia–China Ties:

- Russia and China share a long history marked by cooperation and rivalry. During the Cold War, both signed the 1950 Treaty of Friendship after the Communist Revolution in China. However, ideological disputes led to the Sino-Soviet split in the 1960s and border clashes in 1969.
- Relations improved after the collapse of the Soviet Union, and under Vladimir Putin and Xi Jinping, ties deepened significantly. In 2022, both countries declared a “no-limits partnership”.

About the Meeting:

- The Putin–Xi summit focused on strengthening strategic, economic and technological cooperation. Both leaders discussed energy security, trade expansion, digital technology, artificial intelligence, transport connectivity and global governance reforms. More than 40 agreements were signed during the visit.
- **Key Outcomes:**
 - » Expansion of bilateral trade and investment.
 - » Greater cooperation in energy, technology and space sectors.
 - » Continued work on the Power of Siberia gas pipeline projects.
 - » Increased use of local currencies (Yuan and Ruble) in trade, promoting de-dollarisation.
 - » Joint support for a “multipolar world order” and criticism of Western dominance.

Benefits of the Russia–China Partnership:

- Russia gains a major economic lifeline from China after Western sanctions due to the Ukraine war.
- China buys large volumes of Russian oil, gas, and raw materials, supporting Russia’s export revenues.
- China supplies Russia with machinery,

electronics, vehicles, and technology that were earlier imported from the West.

- In 2025, about 32% of Russia’s total trade was with China, showing rising dependence on Beijing.
- Russia provides China with diplomatic and strategic backing in global forums, especially against US pressure.
- The partnership helps both countries counterbalance Western influence in global affairs.



Global Impacts of partnership:

- The partnership challenges the US-led global order.
- It supports the idea of a multipolar world with multiple power centres.
- It promotes trade in local currencies, reducing reliance on the US dollar.
- It contributes to gradual de-dollarisation in global trade.
- It increases geopolitical competition among major powers.
- It forces countries like India, Japan, and European states to adjust their foreign policies.

Implications for India:

The growing closeness between Russia and China poses a serious challenge for India’s foreign policy:

- **Strategic dilemma:** India has traditionally been a strong defence and strategic partner of Russia. If Russia moves completely into China’s camp, it could affect India’s position

along the Line of Actual Control (LAC).

- **Impact on defence supplies:** India still depends on Russia for military equipment. Closer Russia–China ties could affect these supplies during times of crisis.
- **Multipolarity vs unipolarity:** India also supports a multipolar world, but it does not favour an Asia dominated by China.

Conclusion:

Putin's latest visit to Beijing underlines Russia's growing dependence on China following Western sanctions. With Trump also trying to improve ties with Xi Jinping, India must adopt alternative diplomatic and strategic approaches to protect its long-term interests.

India–Cyprus Strategic Partnership

Context:

Recently, India and Cyprus officially upgraded their bilateral relations to the level of a “Strategic Partnership” during the visit of Cyprus President Nikos Christodoulides to New Delhi on 22 May 2026. During this visit, both countries signed six major agreements.

Key Agreements and Initiatives:

- **Bilateral Defence Cooperation Roadmap (2026–2031)**
 - » A structured 5-year defence cooperation framework
 - » Cooperation in capacity building, joint training, and Search and Rescue (SAR) operations
 - » Promotion of defence co-production
 - » Opportunity for Indian defence companies to collaborate with Cypriot firms under the EU's €150 billion SAFE programme
- **Security and Counter-Terrorism Cooperation**
 - » Formation of a Joint Working Group (JWG) to share information on terror financing networks
 - » Launch of a Bilateral Cybersecurity

Dialogue

- **Financial and Digital Integration**
 - » Plan to link India's UPI with Europe's TIPS payment system by 2027
 - » Promotion of cross-border digital payments and fintech cooperation
- **IMEC and Connectivity**
 - » Launch of a bilateral connectivity dialogue under the India–Middle East–Europe Economic Corridor (IMEC)
 - » Plan to develop Cyprus as a key European entry point for Indian goods
- **Education and Talent Mobility**
 - » Mutual recognition agreement between ICAI and Cyprus's ICPAC
 - » MoU on diplomatic training
 - » Promotion of academic and professional mobility
- **Trade and Institutional Initiatives**
 - » Cyprus announced the opening of a trade office in Mumbai
 - » Cyprus joined India's Indo-Pacific Oceans Initiative (IPOI)
 - » Activation of the India–Greece–Cyprus (IGC) Business and Investment Council

About India–Cyprus Relations:

- India and Cyprus have been founding members of the Non-Aligned Movement (NAM).
- India's active participation in the United Nations Peacekeeping Force in Cyprus (UNFICYP) has strengthened the foundation of defence cooperation between the two countries.
- **Economic and Trade Relations:**
 - » Cyprus has invested approximately USD 12 billion in Foreign Direct Investment (FDI) in India so far.
 - » Bilateral trade is around USD 214 million.
 - » **Target:** To double trade by 2030.
 - » **Major Indian exports:** Pharmaceuticals, chemicals, and steel products.

Geopolitical Importance:

- **Strategic Balance**

- » In the context of the Turkey–Pakistan alignment, India’s partnership with Cyprus provides a strategic counterbalance.
- » On the Cyprus issue, India has supported Cyprus’s sovereignty, territorial integrity, and a UN-based resolution.
- **Support in the UN Security Council (UNSC)**
 - » Cyprus has reiterated its support for India’s permanent membership in the UNSC.
 - » It has also assured active support in advancing the India–EU Free Trade Agreement (FTA).
- **Indo-Pacific and Europe Linkage:**
 - » This partnership acts as a strategic bridge between the Indo-Pacific and Europe.
 - » Through the IMEC, India’s role in global supply chains is further strengthened.

Challenges:

- **Financial Transparency**
 - » Cyprus’s past reputation as a tax haven.
 - » Challenges related to round-tripping of funds and financial monitoring.
- **IMEC Implementation**
 - » Geopolitical instability in West Asia.
 - » Logistical and security challenges.
- **Major Opportunities**
 - » Direct access to European markets for India.
 - » Expansion of digital payments and fintech cooperation.
 - » Joint ventures in defence production.
 - » Development of alternative global trade routes.

Conclusion:

The India-Cyprus Strategic Partnership is emerging as a significant geo-strategic bridge between the Indo-Pacific and the Mediterranean region. Agreements in defence, digital economy, trade, and connectivity make it a multi-dimensional and future-oriented partnership. If the India–Cyprus Joint Action Plan (2025–

2029) is effectively implemented, it can further strengthen India’s position in global geopolitics.

India–US Relations 2026

Context:

Recently, on 24 May 2026, a high-level delegation meeting was held between India and the US in New Delhi between Indian External Affairs Minister Dr. S. Jaishankar and US Secretary of State Marco Rubio. The primary objective of the meeting was to reduce trade differences, resolve immigration-related issues, and advance cooperation in energy, security, and technology sectors.

Key Areas of Discussion:

- **Bilateral Trade Agreement:** Both countries emphasized the need to conclude a comprehensive bilateral trade agreement at the earliest. This agreement is expected to reduce trade barriers, enhance investments, and strengthen supply chains between the two nations.
- **Energy Security and Global Geopolitics:** Energy security emerged as a key topic during the discussions. In view of rising tensions in West Asia and the situation in the Strait of Hormuz, both sides stressed the importance of secure maritime routes and stable energy prices. India reiterated its “Dialogue, Diplomacy, and De-escalation” approach and opposed the politicization of energy resources.
- **Immigration and Visa Issues:** India raised concerns over difficulties faced by Indian students and professionals due to stricter U.S. visa regulations. The United States clarified that these changes are part of a global visa modernization process and are not targeted at any specific country. India also agreed to accept only verified undocumented Indian migrants through proper legal procedures.
- **Critical Minerals, AI, and Technological Cooperation:** Both countries agreed to

strengthen cooperation in critical minerals, semiconductors, artificial intelligence (AI), and nuclear energy. The main objective is to secure global supply chains and reduce excessive dependence on China. Initiatives such as Pax Silica and FORGE were also discussed in this context.

- **Defence and Security Cooperation:** India and the United States emphasized enhanced cooperation in the defence sector under the “Make in India” initiative. This includes joint military exercises, maritime security cooperation, counter-terrorism efforts, and defence technology sharing. Both sides also highlighted the need to maintain stability in the Indo-Pacific region.
- **Quad and Indo-Pacific Cooperation:** The meeting took place ahead of the Quad Foreign Ministers’ Meeting, which includes India, the United States, Japan, and Australia. The objective of this grouping is to ensure a free, secure, and rules-based Indo-Pacific region. This cooperation is also seen as a means to balance China’s growing influence in the region.

Current Status of India–US Relations:

- Today, India–US relations have evolved into a “Comprehensive Global Strategic Partnership.” The relationship is no longer limited to defence cooperation but has expanded into trade, technology, energy, cybersecurity, and global governance. However, issues such as tariffs, visa policies, and strategic autonomy continue to pose challenges between the two countries.

Geopolitical and Economic Implications:

- India continues to deepen its engagement with the United States while maintaining its strategic autonomy. Balancing energy and defence partnerships remains a key feature of India’s foreign policy. The proposed trade agreement is expected to enhance India’s role in global supply chains, while technological cooperation will strengthen India’s competitiveness in emerging

technologies.

Conclusion:

The May 2026 dialogue marks a new phase in India–US relations, where strategic partnership and economic realism are equally important. In the coming years, this relationship is expected to play a crucial role in shaping stability in the Indo-Pacific region, global trade dynamics and technological cooperation.

QUAD Summit 2026

Context:

Recently, the foreign ministers of the QUAD (Quadrilateral Security Dialogue), India, United States, Japan, and Australia, held a meeting focusing on security in the Indo-Pacific region, critical minerals, maritime cooperation, and energy security. The meeting comes at a time when China’s aggressive activities in the South China Sea, global supply chain disruptions, energy insecurity, and technological competition are intensifying rapidly.

Key Outcomes of the Recent Meeting:

- **Cooperation on Critical Minerals:**
 - » The meeting emphasized advancing the Critical Minerals Initiative. Minerals such as lithium, cobalt, nickel, and rare earth elements are essential for electric vehicles, batteries, semiconductors, and defense industries.
 - » At present, China dominates the global supply of these minerals. Therefore, QUAD countries aim to develop alternative and reliable supply chains. For India, these minerals are particularly important as the country is actively promoting green energy and semiconductor manufacturing.
- **Indo-Pacific Energy Security Initiative:**
 - » QUAD countries announced new initiatives to strengthen clean energy, green hydrogen, energy infrastructure, and energy supply security.

- » Global energy markets have been affected by the Russia–Ukraine war and instability in West Asia. In this context, diversification of energy sources has become a major priority for the QUAD.
- **Focus on Maritime Security:**
 - » The meeting stressed enhancing Maritime Domain Awareness and increasing cooperation in the Indian Ocean and the South China Sea.
 - » The QUAD also expressed concern over growing attacks on commercial ships and threats to maritime trade routes. This is especially important for India because nearly 95% of its trade is conducted through sea routes.

Fiji Port Project:

- The QUAD announced the development of a joint port infrastructure project in Fiji. This is being viewed as a strategic response to China’s growing influence in the Pacific region.
- The initiative also reflects QUAD’s “development partnership model,” which focuses not only on security cooperation but also on infrastructure development.



Significance for India:

- QUAD strengthens India’s “Act East Policy,” “SAGAR Vision,” and Indo-Pacific strategy.
- Through QUAD, India can benefit from technological cooperation, defense partnerships, maritime security, and supply chain diversification.
- Additionally, QUAD provides India with a

collective diplomatic platform to counter China’s aggressive policies.

- QUAD is no longer just a strategic dialogue platform; it is gradually evolving into a broader framework for economic, technological, and geopolitical cooperation.

Challenges:

- QUAD is still not a formal military alliance like NATO, and differences remain among member countries regarding their approach toward China.
- ASEAN countries also fear that growing strategic competition in the Indo-Pacific may increase regional tensions.

What is QUAD?

- QUAD is an informal strategic grouping of four democratic countries—India, the United States, Japan, and Australia. It was first initiated in 2007, but became more active after 2017 due to China’s increasing influence in the Indo-Pacific region.
- Its primary objective is to ensure a “free, open, inclusive, and rules-based Indo-Pacific.”

Conclusion:

In the current global scenario, QUAD is rapidly emerging as a multidimensional strategic platform. Its scope is no longer limited to security cooperation; it now extends to technology, energy, trade, supply chains, and maritime governance. For India, QUAD is not only a means of maintaining strategic balance but also an important opportunity to strengthen its role in the evolving global power structure.



Environment & Ecology



Global Forest Goals Report 2026: The Future of Forests Amid Climate Change, Energy Poverty and Sustainable Development

Context:

The recently released Global Forest Goals Report 2026 by the United Nations has warned the world about the deteriorating condition of forests. According to the report, the global forest area declined by approximately 40 million hectares between 2015 and 2025. One of the report's most significant findings is that, in addition to agricultural expansion, the growing demand for fuelwood and charcoal has emerged as a major driver of forest degradation, particularly in developing regions of Africa and Asia.

This finding comes at a time when forests are widely recognized as one of the most critical natural resources for addressing climate change, biodiversity conservation, and the achievement of Sustainable Development Goals (SDGs). For India and most countries across the world, this report is not merely an environmental concern but a comprehensive policy document linked to development, energy security, food security, and social justice.

Global Forest Goals Report 2026:

- The report is prepared by the United Nations Department of Economic and Social Affairs (UNDESA) and the United Nations Forum on Forests (UNFF). Its objective is to assess progress toward the six Global Forest Goals and 26 associated targets established under the United Nations Strategic Plan for Forests

(2017–2030).

- These goals aim to promote forest conservation, restoration, and sustainable management worldwide while utilizing forests to address global challenges such as climate change and poverty.

Key Findings of the Report

- **Continued Decline in Global Forest Area:** According to the report, the world's total forest area declined from 4.18 billion hectares in 2015 to 4.14 billion hectares in 2025. This means that nearly 40 million hectares of forest cover were lost within a decade, highlighting the limitations of global forest conservation efforts.
- **Rapid Degradation of Primary Forests:** The world lost approximately 16 million hectares of primary forests between 2015 and 2025. Primary forests are natural forests that have experienced minimal human disturbance. They are extremely important for biodiversity conservation, water regulation, and carbon storage. South America witnessed the highest loss of these forests.
- **Agricultural Expansion Remains the Largest Driver:** The conversion of forests into agricultural land continues to be the leading cause of deforestation globally. Rising food demand and commercial agricultural activities have significantly affected forest landscapes across the world.

- **Growing Demand for Fuelwood and Charcoal:** One of the report's most notable findings is that energy poverty has forced millions of households in developing countries to continue relying on fuelwood and charcoal. As a result, immense pressure is being placed on forest resources. This challenge is particularly severe in Sub-Saharan Africa and parts of Asia.
- **Increasing Impacts of Climate Change:** Droughts, heatwaves, wildfires, pest infestations, and forest diseases are increasingly weakening forest ecosystems. Consequently, forests are gradually losing their capacity to function as effective carbon sinks.
- **Slow Progress in Forest Restoration:** A total of 91 countries pledged to restore nearly 190 million hectares of forest land, but by 2025, only 44 million hectares had been restored. This indicates that the pace of global forest restoration remains far below expectations.

Energy Poverty and the Forest Crisis: A New Perspective

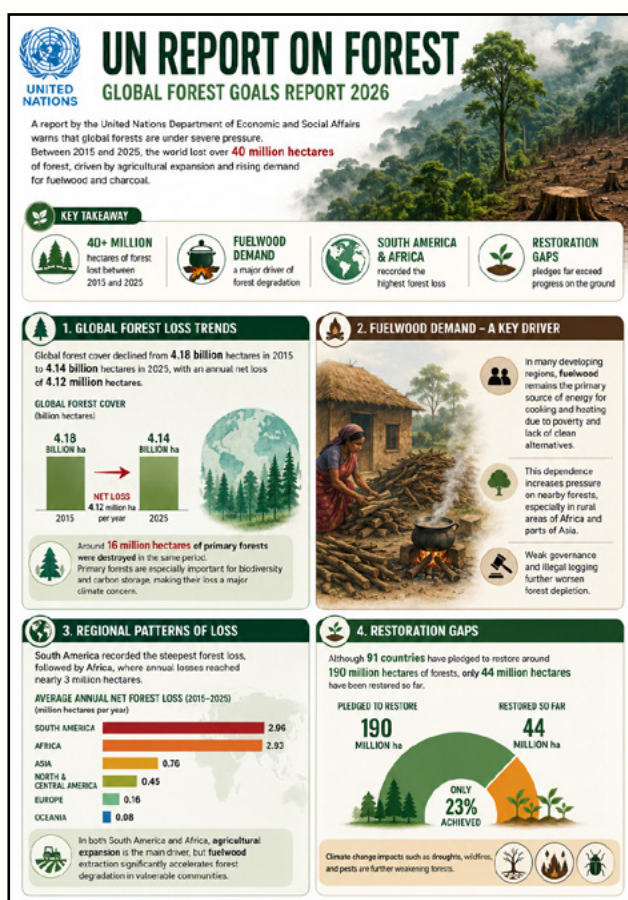
- One of the most significant contributions of the Global Forest Goals Report 2026 is its recognition that forest degradation is not merely an environmental issue but is deeply connected to energy access and poverty.
- Many poor communities across the world continue to depend on wood for cooking and household energy needs. Under such circumstances, forest conservation laws alone cannot be fully effective unless alternative sources of clean energy are made available.
- Therefore, expanding access to LPG, biogas, solar energy, and clean cooking technologies is not only an energy policy measure but also a crucial strategy for forest conservation. This perspective reflects the integrated nature of the Sustainable Development Goals.

The Relationship Between Forest Conservation and Climate Change:

- Forests play a vital role in regulating the

Earth's temperature by absorbing carbon dioxide from the atmosphere. It is estimated that global forests absorb nearly one-third of the carbon emissions generated by human activities.

- However, when forests are destroyed, a double loss occurs. Not only is the carbon-absorbing capacity reduced, but the carbon stored in trees and soils is also released into the atmosphere. Consequently, forest conservation is regarded as one of the most effective natural strategies for climate change mitigation.



Implications for India:

- India is among the countries that have sought to balance forest conservation with environmental commitments and developmental aspirations. The country has announced its goal of achieving net-zero emissions by 2070 and has emphasized

increasing forest and tree cover to create additional carbon sinks.

Major Initiatives of India

- **Green India Mission (GIM):** Launched in 2014 under the National Action Plan on Climate Change (NAPCC), the mission aims to enhance forest and tree cover while strengthening ecosystem resilience against climate change.
- **National Afforestation Programme (NAP):** Initiated in 2000, the programme seeks to rehabilitate degraded forest areas and promote community participation through Joint Forest Management Committees.
- **CAMPA Fund (Compensatory Afforestation Fund Management and Planning Authority):** The concept evolved following Supreme Court directives in 2002 and received a statutory basis through the Compensatory Afforestation Fund Act (CAF Act), 2016. Funds collected from the diversion of forest land for non-forest purposes are utilized for afforestation and forest conservation activities.
- **Forest Conservation Act:** Enacted in 1980, the Act aims to regulate the diversion of forest land for non-forest purposes and ensure forest protection. Significant amendments were introduced in 2023.
- **Land Degradation Neutrality (LDN) Target:** Under the United Nations Convention to Combat Desertification (UNCCD), India announced its commitment in 2019 to achieve Land Degradation Neutrality by 2030. The objective is to prevent land degradation while restoring degraded landscapes.
- **Mission LiFE (Lifestyle for Environment):** The concept was introduced by Prime Minister Modi at COP-26 in Glasgow in 2021 and formally launched in 2022. It seeks to promote environmentally sustainable lifestyles and responsible consumption patterns.
 - » According to India's latest forest surveys, the country's forest and tree cover is gradually increasing. However,

challenges related to forest quality, biodiversity conservation, and the protection of natural forests continue to persist.

- » Furthermore, fuelwood dependence remains prevalent in many rural and tribal regions. Therefore, integrating clean energy programmes with forest conservation strategies has become increasingly important.

Way Forward:

- Achieving the global forest goals will require much more than tree plantation drives. A multidimensional strategy is essential:
 - » Stronger policies to prevent deforestation.
 - » Balanced land-use planning between agriculture and forestry.
 - » Universal access to clean energy.
 - » Greater participation of indigenous and local communities.
 - » Adequate financial resources for forest restoration programmes.
 - » Integration of biodiversity conservation and climate policies.
 - » Promotion of deforestation-free supply chains.

Conclusion:

The Global Forest Goals Report 2026 makes it clear that forest conservation is not merely an environmental responsibility but a question linked to the future of human civilization. Forests are fundamental to climate stability, biodiversity conservation, water security, food security, and livelihoods. The report's most important message is that the forest crisis cannot be viewed in isolation from poverty, energy access, development, and climate change. The challenge before India and the world is to move beyond the artificial dichotomy between development and environmental protection and adopt a model in which economic progress and ecological conservation advance together. The success of the 2030 Global Forest Goals will ultimately depend on this balanced and integrated approach.

Short Issues

India's First Green Methanol Plant at Kandla

Context:

India is developing its first green methanol production facility at the Deendayal Port Authority in Kandla, Gujarat. The plant is being developed by Thermax Limited using gasification technology from Ankur Scientific Energy Technologies.

Key Features of the Project:

- The project primarily uses invasive biomass as feedstock, especially *Prosopis juliflora*, locally known as Gando Baval in Gujarat and Vilayati Keekar in North India. This plant has heavily spread across the Kutch's Banni grasslands, covering large areas, displacing native grasses, and reducing biodiversity, making it an ecological challenge that is now being repurposed for clean energy production.
- The project is located at Kandla Port in Gujarat and has a production capacity of around 5 tonnes of methanol per day. Its main objective is to support India's transition toward green ports and promote the use of clean shipping fuels, aligning with broader sustainability and decarbonisation goals.
- The technology used involves two main stages: gasification and methanol synthesis. In gasification, the biomass is heated without oxygen to produce syngas, a mixture of hydrogen, carbon monoxide, and carbon dioxide. This syngas is then processed in the second stage to produce green methanol, a cleaner alternative fuel.

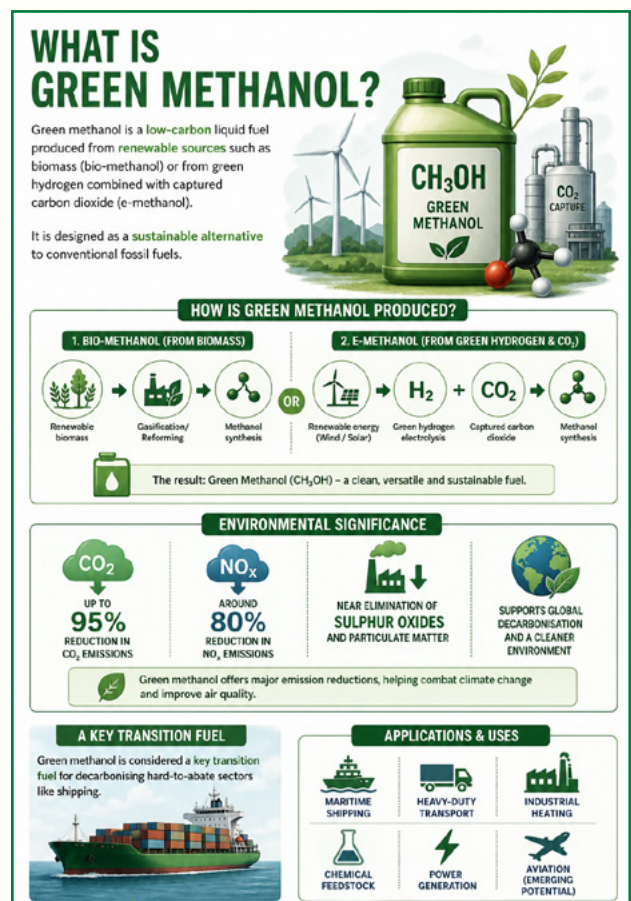
What is Green Methanol?

- Green methanol is a low-carbon liquid fuel produced from renewable sources such as biomass (bio-methanol) or from green hydrogen combined with captured carbon dioxide (e-methanol). It is designed as a sustainable alternative to conventional

fossil fuels.

Environmental Significance:

- Green methanol offers major emission reductions:
- Up to 95% reduction in CO₂ emissions
- Around 80% reduction in NO_x emissions
- Near elimination of sulphur oxides and particulate matter
- It is considered a key transition fuel for decarbonising hard-to-abate sectors like shipping.



Policy and Global Context:

- **Maritime Decarbonisation**
 - » Aligns with regulations of the International Maritime Organization
 - » Supports IMO target of net-zero emissions by 2050
- **Green Port Strategy**

- » India is upgrading major ports into low-emission “green ports”
- » Kandla project is a model for circular economy-based port development

Economic and Strategic Importance:

- **Waste-to-Wealth Model**
 - » Converts invasive biomass into valuable energy fuel
 - » Supports circular economy principles
- **Energy Security**
 - » Reduces dependence on imported fossil fuels
 - » Biomass-based fuels can partially replace crude oil imports
- **Industrial Opportunity**
 - » Potential expansion using:
 - Agricultural residues (bagasse, cotton stalk)
 - Municipal solid waste

Challenges:

- High production cost compared to fossil methanol
- Limited large-scale infrastructure
- Supply chain logistics for biomass collection
- Technology scaling from pilot (5 TPD) to industrial scale

Significance for India:

- First step toward green maritime fuel ecosystem
- Aligns with:
 - » Net Zero commitments
 - » National Bioenergy strategy
 - » Clean port modernization
- Demonstrates innovative use of invasive species for climate action

Conclusion:

The Kandla green methanol project represents a unique convergence of environmental restoration, clean energy innovation, and maritime decarbonisation. By transforming the invasive *Prosopis juliflora* into sustainable fuel, India is advancing toward a circular and low-carbon economy while addressing ecological degradation in regions like Kutch. If

successfully scaled, this model could redefine how waste biomass and invasive species are integrated into national energy systems.

Weakening of Atlantic Meridional Overturning Circulation (AMOC)

Context:

A recent scientific study warns that the Atlantic Meridional Overturning Circulation (AMOC), one of the most important climate-regulating ocean systems on Earth, could weaken by up to 59% by 2100.

About AMOC:

- The Atlantic Meridional Overturning Circulation (AMOC) can be understood as a massive “ocean conveyor belt” that circulates heat and nutrients across the Atlantic Ocean. It is part of the larger global system known as thermohaline circulation.
- Warm surface waters from the tropics are carried northwards by AMOC. When they reach the Arctic region, the water cools, becomes denser, and sinks deep into the ocean.
- This cold, dense water then flows back south at depth before eventually rising again to complete the cycle. This continuous movement helps regulate Earth’s climate by redistributing heat across hemispheres.

Reasons for AMOC is Weakening:

- The AMOC depends on a delicate balance of temperature and salinity (salt levels). However, climate change is disrupting this balance.
- Rapid melting of Arctic ice is releasing large amounts of fresh water into the North Atlantic. Fresh water is less dense and does not sink easily, weakening the deep-water formation process that drives AMOC.
- Earlier studies suggested a slowdown of around 15% over the past decades, but newer research based on improved ocean

observations indicates that the system may weaken by as much as 59% by 2100.

- Scientists warn that AMOC is a potential “climate tipping point,” meaning that once it crosses a threshold, it could shift into a permanently weaker state.

WEAKENING OF ATLANTIC MERIDIONAL OVERTURNING CIRCULATION (AMOC)

A recent scientific study warns that the Atlantic Meridional Overturning Circulation (AMOC), one of the most important climate-regulating ocean systems on Earth, could weaken by up to **59%** by 2100.

1. WHAT IS AMOC?

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- 3 This cold, dense water then flows back south at depth.
- 4 ...and so eventually rising again to complete the cycle.

KEY FINDING

AMOC could weaken by up to **59%** by 2100

THE OCEAN CONVEYOR BELT

Warm surface water flows north. Cools, becomes denser, sinks. This continuous movement helps regulate Earth's climate by redistributing heat across hemispheres. Cold, dense water flows south at depth. Rises again to the surface.

2. WHY IS AMOC WEAKENING?

The AMOC depends on a delicate balance of temperature and salinity (salt levels). However, climate change is disrupting this balance.

MELTING ARCTIC ICE

MORE FRESH WATER INTO THE NORTH ATLANTIC

FRESH WATER IS LESS DENSE AND DOES NOT SINK EASILY

WEAKENS DEEP-WATER FORMATION THAT DRIVES AMOC

Earlier studies suggested a slowdown of around 10% over the past decades, but newer research based on improved ocean observations indicates that the system may weaken by as much as 59% by 2100.

Scientists warn that AMOC is a potential “climate tipping point” meaning that once it crosses a threshold, it could shift into a permanently weaker state.

3. GLOBAL CLIMATE IMPACTS

A weakened AMOC could cause severe global climate disruptions.

SEA-LEVEL RISE ALONG THE EASTERN COAST OF NORTH AMERICA

SHIFTS IN RAINFALL PATTERNS ACROSS MANY REGIONS

AFFECTS HEAT DISTRIBUTION BETWEEN HEMISPHERES

CHANGES IN STORM TRACKS AND INCREASED EXTREME WEATHER EVENTS

Potentially trapping more heat in the Southern Hemisphere while cooling parts of the Northern Hemisphere.

AT A GLANCE

AMOC is a vital ocean current that regulates Earth's climate.

Melting Arctic ice adds fresh water, weakening deep-water formation and AMOC.

AMOC could weaken by up to **59%** by 2100.

A weakened AMOC poses serious risks to climate, coasts and ecosystems.

Reducing greenhouse gas emissions and protecting the oceans can help prevent this vital system.

WHAT CAN WE DO?

REDUCE EMISSIONS

PROTECT OCEANS & ICE

SUPPORT CLEAN ENERGY

PROMOTE RESEARCH & AWARENESS

AMOC IS ONE OF EARTH'S HIDDEN ENGINES. PROTECTING IT MEANS PROTECTING OUR FUTURE.

- AMOC is closely connected to other global climate systems, including the El Niño–Southern Oscillation. ENSO is a periodic climate pattern in the Pacific Ocean with warm (El Niño), cool (La Niña), and neutral phases occurring every 2–7 years.
- A weaker AMOC can alter global ocean heat distribution, making ENSO events more unpredictable and extreme. This increases the chances of irregular rainfall patterns across continents, including Asia.

Implications for India:

- Although AMOC is located in the Atlantic, its effects can influence the Indian monsoon indirectly through global atmospheric circulation changes.
- A disrupted AMOC can alter heat distribution across oceans, potentially affecting monsoon timing, intensity, and reliability.
- Since India’s agriculture, drinking water supply, and hydropower systems depend heavily on monsoon rainfall, even small shifts can have large socio-economic consequences.

Conclusion:

The AMOC is a key part of Earth’s climate system, distributing heat globally. Its weakening due to climate change poses serious risks. For India, the main concern is its impact on monsoon patterns, which affect food security, water supply, and rural livelihoods. Strengthening climate resilience and improving forecasting systems is essential for preparing for these long-term changes.

Heat-Related Stress on food security

Context:

A recent joint report by the Food and Agriculture Organization and the World Meteorological Organization warns that extreme heat is becoming a major threat to global agriculture and food security.

Global Climate Impacts:

- A weakened AMOC could cause severe global climate disruptions. It may lead to sea-level rise along the eastern coast of North America, shifts in rainfall patterns, and changes in storm tracks.
- It also affects heat distribution between hemispheres, potentially trapping more heat in the Southern Hemisphere while cooling parts of the Northern Hemisphere.

Link with El Niño and Global Weather Systems:

About Extreme heat:

- Extreme heat refers to prolonged periods of excessively high temperatures, officially categorized as heatwaves, which are rising in intensity and frequency due to climate change.
- It is a significant non-traditional disaster impacting health, agriculture, and labor, causing "thermal injustice" where the poor and informal workforce are disproportionately affected.

Key findings of the report:

- **Extreme Heat as a "Threat Multiplier":**
 - » The report describes extreme heat as a "threat multiplier" because it worsens existing vulnerabilities in developing countries.
 - » Extreme heat increases soil moisture evaporation, disrupts rainfall patterns, dries agricultural land, and causes floods and droughts.
 - » It also damages forests, reduces biodiversity, and affects food supply chains. Since nearly 80 per cent of agricultural land globally depends on rainfall, rising temperatures create severe stress for food production systems.
- **Impact on India's Food System:**
 - » India's food security depends heavily on climate-sensitive crops like wheat and rice. The Indo-Gangetic Plains, known as the food bowl of India, are highly vulnerable to terminal heat stress.
 - » Even a rise of 1–2°C above normal temperatures can reduce wheat productivity by causing shrivelled grains and forced crop maturity. The 2022 heatwave significantly reduced wheat yields in several Indian states.
 - » Rice cultivation is also at risk because it is highly dependent on rainfall and stable weather conditions.
 - » Since rice contributes nearly 70 per cent of calorie intake in India, rising

heat poses a direct threat to national food security. India's dependence on monoculture farming of wheat and rice further increases vulnerability to climate change.

- **Effects on Livestock, Fisheries, and Forests:**

- » Extreme heat adversely affects livestock, especially the dairy and poultry sectors. Heat stress reduces milk and egg production while increasing animal mortality.
- » Fisheries are also under threat because rising ocean temperatures reduce dissolved oxygen levels and push fish populations into deeper waters beyond the reach of traditional fishermen.
- » Forests are equally vulnerable as rising temperatures increase the risk of wildfires, damaging biodiversity and reducing the availability of forest products such as fruits, honey, and medicinal plants.

Challenges in India's Agricultural Policy Framework:

- India's agricultural policies have mainly focused on increasing food production rather than climate resilience. Subsidies and the Minimum Support Price (MSP) system encourage the cultivation of water-intensive crops like wheat and paddy.
- Climate-resilient crops such as millets and pulses remain less profitable for farmers despite government promotion of "Shree Anna."

Conclusion:

Extreme heat has emerged as a major challenge for India's food security and agricultural economy. Climate-sensitive crops, dependence on monsoon rainfall, and a large agricultural workforce make India highly vulnerable to rising temperatures. To address this crisis, India must promote crop diversification, climate-resilient farming, labour protection, and sustainable agricultural policies to build a more secure and

resilient food system.

Rusty-Spotted Cat Sighting in Aravallis

Context:

Recently, a “Rusty-spotted Cat” was sighted in the wildlife corridor of the Aravalli region near Faridabad district of Haryana (Delhi-NCR). In particular, photographic evidence of a female cat and her kitten was recorded near Kot village. This is the first time that concrete evidence of breeding of this rare cat has been found in this area, which is a positive sign for the ecological health of the Aravalli ecosystem.

About the Rusty-Spotted Cat:

- The rusty-spotted cat is one of the smallest wild cats globally, measuring about 35–48 cm in body length, with nearly half contributed by its tail. It has short greyish-red fur with rusty spots that provide camouflage in dry forests and scrublands. It is a highly secretive and nocturnal species, making sightings extremely rare.
- It is native to India, Sri Lanka, and Nepal, but has a scattered and low-density population. Around 75% of its habitat is under pressure due to agriculture, urban expansion, and land-use change.
- The species is listed as Near Threatened on the IUCN Red List and is protected under Schedule I of the Wildlife (Protection) Act, 1972, ensuring the highest legal protection in India.

Why the Sighting in Aravallis is Important:

- The Aravalli sighting is ecologically significant as it confirms that fragmented scrubland ecosystems near major cities can still support rare wildlife. The Aravalli Range acts as a vital ecological corridor and a natural barrier against the expansion of the Thar Desert in northwestern India.
- Importantly, the observation suggests the possibility of a breeding population, not just

a stray individual. This indicates habitat stability, prey availability, and relatively low disturbance in certain pockets. It highlights the ecological value of scrublands, which are often overlooked compared to forests but are crucial for biodiversity conservation.



Other Small Wild Cats of India:

- India hosts several lesser-known small wild cats that play key roles in maintaining ecological balance by controlling rodent populations and supporting food chains.
 - » **Fishing Cat:** The fishing cat (*Prionailurus viverrinus*) is a strong swimmer adapted to wetlands. It is found in the Sundarbans, Ganga-Brahmaputra basins, and parts of the Western Ghats. It is classified as Endangered due to wetland loss, pollution, and urbanisation, and is protected under Schedule I.
 - » **Caracal:** The caracal is a medium-sized nocturnal cat identified by its black ear tufts. It is now rare in India, mainly surviving in Rajasthan and Gujarat. It is listed as Least Concern globally but critically threatened in India and protected under Schedule I.
 - » **Asiatic Wildcat:** The Asiatic wildcat (*Felis lybica ornata*) inhabits arid regions, especially the Thar Desert. Its sandy coat provides camouflage in dry habitats. Though globally Least Concern, local populations face habitat pressure and are protected under Schedule I.

Ecological Importance of the Aravalli Range:

- The Aravalli Range is one of the oldest mountain systems in the world, stretching across Gujarat, Rajasthan, Haryana, and Delhi. Despite degradation from mining, deforestation, and urbanisation, it remains ecologically crucial.
- It prevents desertification, regulates climate, and supports biodiversity corridors for wildlife movement. The presence of the rusty-spotted cat highlights its ecological resilience and the need for urgent conservation of scrub and dry forest ecosystems.

International Conservation Context:

- India's conservation efforts are aligned with global initiatives such as the International Big Cat Alliance (IBCA), launched in 2023. While focused on large cats like tigers and leopards, it reflects India's broader commitment to wildlife protection. India is home to five of the seven big cat species, making it a global biodiversity hotspot.

Conclusion:

The rediscovery of the rusty-spotted cat in the Aravallis demonstrates that even fragile and urban-adjacent ecosystems can support rare wildlife. Along with species like the fishing cat, caracal, and Asiatic wildcat, it underscores India's rich but vulnerable biodiversity. Strengthening habitat conservation in regions like the Aravallis is essential for protecting these elusive species and maintaining ecological balance.

Wildlife Sanctuaries in Nicobar Islands

Context:

Recently, the Nicobarese Tribal Council has demanded the immediate revocation of three

newly notified wildlife sanctuaries on Little Nicobar, Menchal and Meroe islands in the Union Territory of Andaman and Nicobar Islands. The Council alleges that the Union Government bypassed mandatory consultation processes under the Forest Rights Act (FRA), 2006 and ignored the community's ancestral ownership, cultural practices and spiritual connection with these islands.

About Conflict over Wildlife Sanctuaries:

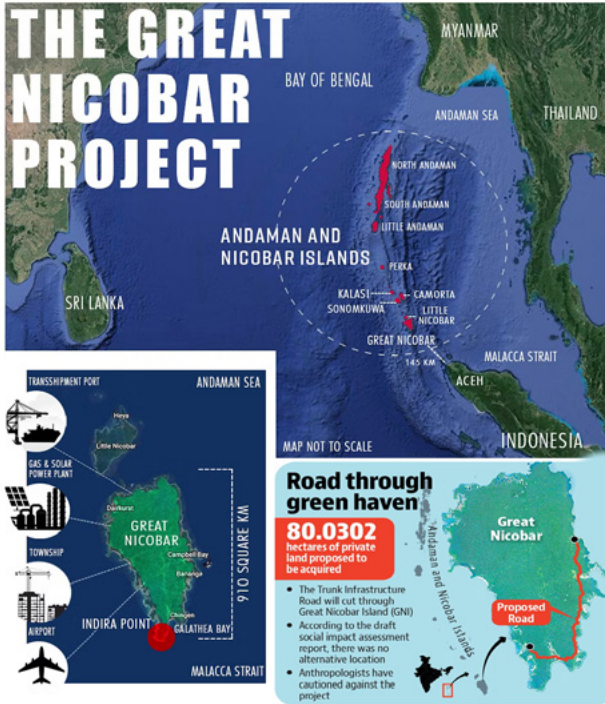
- The sanctuaries were notified as part of an environmental mitigation strategy linked to the Rs.92,000-crore Great Nicobar Island Development Project in Great Nicobar Island, which includes a container port, airport, and township.
- The objective is to offset ecological damage from large-scale infrastructure expansion.

Islands at the Centre of the Dispute:

- **Little Nicobar Island (Ong)**
 - » **Area & Status:** About 140 km², part of the inhabited Southern Nicobar group.
 - » **Significance:** Biodiversity-rich island supporting endangered species and Nicobarese settlements.
 - » **Sanctuary Proposal:** Leatherback Turtle Sanctuary overlaps with traditional villages.
 - » **Concern:** Restricts access to ancestral and residential lands.
- **Menchal Island (Pingaeyak)**
 - » **Status:** Uninhabited, occasionally used for seasonal farming and fishing.
 - » **Cultural Significance:** Sacred island believed to host ancestral spirits.
 - » **Sanctuary Proposal:** Megapode Sanctuary for endemic bird conservation.
 - » **Concern:** Seen as complete exclusion from culturally important land.
- **Meroe Island (Piruii)**
 - » **Status:** Small island (~0.52 km²), uninhabited.
 - » **Usage:** Resource area for coconuts and fishing.
 - » **Sanctuary Proposal:** Coral Sanctuary for

reef protection.

- » **Concern:** Ignores customary ownership and traditional use rights.



Why the Nicobarese Are Opposing the Move:

- The opposition is based on legal, cultural, and livelihood concerns:
 - » **Violation of FRA:** No proper Gram Sabha consultations or consent processes were conducted before notification.
 - » **Sacred Landscape:** Menchal and Meroe are believed to be abodes of ancestral spirits, making access restrictions culturally significant.
 - » **Livelihood Dependence:** Islands support coconut and areca nut plantations, along with forest resources used for housing, tools, and traditional crafts.
 - » **Limited Rights Concern:** Authorities allow ritual hunting, but the community argues their rights include habitation, agriculture, and resource use.
 - » **Tourism Opposition:** Proposed eco-tourism is rejected; instead, locals

demand jetties, water supply, and telecom connectivity.

Conclusion:

The dispute over wildlife sanctuaries in the Nicobar Islands highlights a major conflict between conservation-led mitigation and indigenous rights. While the sanctuaries aim to protect fragile ecosystems affected by development in Great Nicobar Island, the Nicobarese community sees them as an infringement on ancestral land, cultural identity, and livelihood security. The resolution will depend on balancing ecological protection with legal safeguards under the Forest Rights Act and indigenous rights in India.

India's First Satellite-Tagged Ganges Soft-Shell Turtle

Context:

Recently, India's first satellite-tagged Ganges soft-shell turtle was released in the 1,302 sq. km Kaziranga National Park and Tiger Reserve in Assam.

Significance of the Initiative:

- The satellite-tagging project aims to study the turtle's seasonal movement patterns, habitat use, nesting areas, and breeding behaviour in the Brahmaputra river basin. The initiative was carried out by the Wildlife Institute of India in collaboration with the Assam Forest Department and Kaziranga National Park authorities, with funding support from the National Geographic Society.
- The project will help conservation authorities design better habitat management strategies and strengthen freshwater biodiversity conservation in Assam.

About the Ganges Soft-Shell Turtle:

- The Ganges soft-shell turtle (*Nilssonina gangetica*) is a large freshwater turtle species native to South Asia. It is known for

its flat leathery shell, long neck, and tubular snout that helps it breathe while remaining submerged underwater.

Key Characteristics:

- The turtle has an olive-green or dull green shell with yellow borders.
- It possesses a flattened and flexible shell that allows swift movement in water.
- It is one of the largest freshwater turtles in the world, with shell lengths reaching up to 94 cm.
- The species is omnivorous and scavenging in nature, feeding on fish, frogs, mollusks, aquatic plants, insects, and carrion.
- An important identifying feature is the arrowhead-shaped marking on the top of its head.



Habitat and Distribution:

- The species is found across major river systems of South Asia, including:
 - » Ganga
 - » Brahmaputra
 - » Indus
 - » Yamuna
 - » Mahanadi
- It inhabits deep, slow-moving rivers, lakes, reservoirs, canals, and streams with sandy or muddy bottoms. In India, Assam is considered one of the world's priority regions for freshwater turtle conservation. Out of the eight soft-shell turtle species found in India, five are reported from the Kaziranga landscape.

Ecological Importance:

- The Ganges soft-shell turtle plays a crucial ecological role as a river scavenger and predator. By feeding on dead and decaying organic matter, it helps maintain water quality and ecological balance in freshwater ecosystems.

Conservation Status:

- Listed as Vulnerable on the International Union for Conservation of Nature (IUCN) Red List.
- Protected under Schedule I of the Wildlife Protection Act, 1972.
- Included in Appendix I of Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

Major Threats:

- The species faces several threats:
 - » Habitat destruction due to sand mining, dams, and river pollution.
 - » Accidental drowning in fishing nets.
 - » Illegal poaching for meat and traditional beliefs associated with turtle claws.
 - » Declining freshwater ecosystems due to human activities.

Conclusion:

The satellite-tagging of the Ganges soft-shell turtle represents an important step in India's freshwater conservation efforts. The initiative highlights the growing use of technology in wildlife management and underlines the importance of protecting river ecosystems and endangered aquatic species for long-term ecological sustainability.

India Abstains from UNGA Resolution on ICJ Climate Opinion

Context:

Recently, India abstained from voting on a United Nations General Assembly (UNGA) resolution based on the advisory opinion of the

International Court of Justice regarding climate change obligations. The resolution, introduced by Vanuatu, was adopted with 141 votes in favour, 8 against and 28 abstentions, including India.

About the Resolution:

- The resolution urged countries to comply with climate obligations in line with the ICJ advisory opinion on climate change.
- **ICJ Advisory Opinion on Climate Change**
 - » Countries have a legal obligation to combat human-induced climate change.
 - » States must protect the environment for present and future generations.
 - » Nationally Determined Contributions (NDCs) should reflect the “highest possible ambition”.
 - » Climate commitments fall under the principle of “due diligence”, requiring strict implementation and enforcement.
- Although ICJ advisory opinions are non-binding, they carry significant moral and legal authority and may influence future international environmental law and climate litigation.

Key Reasons behind India’s Abstention:

- **Protection of UNFCCC Framework:** India argued that climate obligations should arise only from negotiations under the:
 - » United Nations Framework Convention on Climate Change (UNFCCC)
 - » Paris Agreement
 - » India opposed giving quasi-binding status to a non-binding ICJ opinion.
- **Concerns Regarding NDCs:** India stated that the resolution could:
 - » Undermine the nationally determined

structure of the Paris Agreement.

- » Subject domestic climate targets (NDCs) to international judicial scrutiny.
- » Impose external mitigation standards on developing countries.
- **Omission of Climate Finance:** India strongly criticized the absence of “climate finance” in the resolution. India emphasized that:
 - » Developed countries have historical responsibility for emissions.
 - » They must provide:
 - Financial assistance
 - Technology transfer
 - Capacity building support
 - India termed the omission a “serious concern”.
- **Dilution of CBDR-RC Principle:** India reiterated the principle of:
 - » Common But Differentiated Responsibilities and Respective Capabilities (CBDR-RC)



- India argued that:
 - » Historical emitters and developing countries cannot bear equal burdens.
- Energy transition must be:
 - » Just
 - » Equitable
 - » Development-oriented

About the International Court of Justice (ICJ):

- **Establishment**
 - » Principal judicial organ of the United Nations.
 - » Established in 1945.
 - » Headquarters: The Hague, Netherlands.
- **Functions of ICJ:**
 - » **Contentious Cases:** Settles legal disputes between sovereign states.
 - » **Advisory Opinions:** Provides legal opinions to UN organs and agencies.

Key Features

- Composed of 15 judges elected for 9-year terms.
- All UN member states are parties to the ICJ Statute.
- Decisions are based on:
 - » International treaties
 - » Customs
 - » General principles of law

Jurisdiction and Enforcement

- Jurisdiction depends on state consent.
- ICJ judgments are legally binding.
- Enforcement may involve the UN Security Council if states fail to comply.

Conclusion:

India's abstention on the UNGA resolution reflects its cautious approach toward expanding judicial oversight in climate governance. While supporting climate action and vulnerable nations, India continues to emphasise climate equity, developmental justice, and the UNFCCC framework.

ZSI Study on Indian Cockroach Species

Context:

Recently, scientists from the Zoological Survey of India (ZSI) published an important research study on Indian cockroaches (Blattodea) in the international taxonomy journal *Zootaxa*.

Key Highlights:

- **High Endemism:** According to the

report, India has 191 recorded species of cockroaches. More than 60% of these (around 119 species) are endemic, meaning they are found only in India.

- **First DNA Barcode Library:** Scientists have prepared India's first and largest DNA Barcode Reference Library. For this, more than 100 high-quality barcodes were developed using the mitochondrial cytochrome c oxidase I gene. DNA Barcoding is an advanced biological technique used to identify the specific species of an unknown organism.
- **Cryptic Diversity:** Genetic analysis revealed 86 to 99 distinct genetic lineages from just 150 samples. Among these, 44 lineages are still unnamed, indicating the possibility of discovering new species in the future. The recently discovered new species from agricultural fields in Pune, *Neoloboptera peninsularis*, is a direct example of this.
- **Connection with the Gondwana Period:** Time-calibrated phylogenetic analysis suggests that the diversification of Indian cockroaches dates back nearly 162 million years. This timeline corresponds with the geological history of the fragmentation of the Gondwana supercontinent and the separation of the Indo-Madagascar plate from Africa.

Ecological Importance:

Cockroaches are generally viewed only as dirty insects that spread diseases. However, they possess significant ecological importance:

- **Nutrient Cycling:** Out of the 5,000 species found worldwide, less than 1% live as pests in human habitats. Most species inhabit forests and leaf litter. They decompose dead organic matter and help make the soil fertile.
- **Foundation of the Food Web:** These insects serve as a major food source for birds, reptiles, and small mammals, thereby maintaining the balance of the food chain.
- **Bioindicators:** Wild cockroaches are highly sensitive to environmental and habitat

changes. Therefore, they act as natural indicators for monitoring ecosystem health.

prepared by the Zoological Survey of India is not merely a documentation of cockroach species, but also a historic step toward strengthening India's broader Biological Sovereignty. The integration of traditional taxonomy with modern technologies such as DNA Barcoding (an integrated taxonomic approach) will prove to be a major achievement in fulfilling India's National Biodiversity Targets.

THE COCKROACH THE ULTIMATE SURVIVOR

280 MILLION YEARS OF SURVIVAL. COUNTLESS REASONS TO MARVEL (OR SHUDDER).

- The establishment of the Cockroach Jania Party (CJP) has brought the insect to the limelight.
- This insect whose origin dates back 280 million years is found in almost every household.

“A nuclear war, if it comes, will not be won by the Americans ... the Russians ... the Chinese. The winner of World War III will be the cockroach.”
- National Committee for a Sane Nuclear Policy, 1965

A SURVIVOR THROUGH TIME

280 MILLION YEARS AGO: Cockroaches appear on Earth

CRETACEOUS-PALEOGENE EXTINCTION: Survived the extinction that killed 80% of animal life

HIROSHIMA & NAGASAKI 1945: Seen emerging from rubble - a myth was born

TODAY: Found in almost every household

From nuclear radiation to decapitation, **nothing can wipe it out from the earth.**

CAN COCKROACHES SURVIVE NUCLEAR WAR?

MYTH: Cockroaches were reportedly seen emerging from the rubble after the nuclear bombings in Hiroshima and Nagasaki. So, a myth was created that they can survive nuclear attacks.

FACT: They **CANNOT** survive the heat of a nuclear fireball or the crushing pressure of shockwaves. But they are highly resistant to nuclear radiation. They survived after being exposed to 10,000 rad, which is 30 times the lethal dose for humans.

So, it is most likely to outlive humans after a radioactive fallout.

CAN COCKROACH LIVE WITHOUT HEAD?

Yes! A cockroach can survive for days or even weeks without its head.

Open circulatory system: Blood clots in the head stump, sealing it and isolating it from the rest of the body.

Breathes through small pores called spiracles located along its body.

So, it can move, sense its surroundings and do simple work without a head.

MORE AMAZING COCKROACH FACTS

- NATURE'S RECYCLER**: Cockroaches play an important role in the nitrogen cycle. They feed on dead and decaying matter and recycle it all back into the soil.
- FOOD FOR MANY**: They are a food source for many animals, including birds and rats.
- CAN HOLD ITS BREATH**: Cockroaches can live submerged under water for up to 30 minutes. They hold their breath to regulate water loss.
- GOOD RUNNERS**: Cockroaches can run up to 3 inches an hour. Baby cockroaches can run as fast as their parents.
- FAST GROWERS**: The German cockroach can become an adult in just 30 days after its birth.
- SIZE MATTERS**: The largest cockroaches are found in South America with a one-foot wingspan. Average cockroaches range from 1" to 2" long.
- DIVERSE SPECIES**: The most common cockroach in the German cockroach, but there are more than 4,000 species of roaches.

⚠️ The German cockroaches are harmful to human beings as they have been held responsible for the outbreaks of illness and allergic reactions in many people.

- **Seed Dispersal:** Some forest-dwelling cockroach species help in dispersing the seeds of certain plants. They transport seeds either by consuming them or by carrying them attached to their bodies to safer locations, thereby supporting the natural regeneration of plants.
- **Soil Aeration:** By creating tunnels and burrows beneath the soil or within decaying leaf litter, these insects naturally dig the soil. This improves the flow of oxygen and water within the soil, a process known as soil aeration. This process is extremely important for the growth of plant roots.

Conclusion:

This first DNA Barcode Reference Library

Science & Technology

India's Semiconductor Mission: A Step Towards Chip Technology, Innovation and Technological Sovereignty

Context:

Recently, the Central Government approved two new semiconductor projects under the India Semiconductor Mission (ISM). These include the country's first Gallium Nitride (GaN)-based semiconductor and Micro-LED manufacturing facility at Dholera, Gujarat, and a new semiconductor packaging and testing facility in Surat. With these approvals, the number of projects sanctioned under the Semiconductor Mission has reached 12. Additionally, Tata Electronics and the Dutch company ASML have signed a technology collaboration agreement for India's first chip fabrication facility.

These developments indicate that India no longer wants to remain merely a consumer market for electronics; rather, it is moving towards becoming a significant manufacturing and innovation hub in the global semiconductor value chain.

NITI Aayog's 2035 Roadmap:

- The recently released 10-year roadmap presents a long-term vision for India's semiconductor sector. It aims to develop a \$120–150 billion semiconductor value-chain ecosystem by 2035. The roadmap is based on five key pillars:
 - » Advanced research and development (R&D) and design intellectual property (IP)
 - » Long-term investment and financial

support

- » Advanced packaging and compound semiconductor manufacturing
- » Skilled workforce and talent development
- » Reliable global partnerships and supply-chain collaboration
- The document particularly emphasizes developing India as a global hub for advanced packaging, Outsourced Semiconductor Assembly and Testing (OSAT), wide-bandgap semiconductors, and design innovation. This approach is also realistic because India's greatest strength in the current global market is its vast semiconductor design talent base.

Importance of Semiconductors:

- Semiconductors are primarily made from silicon. Under normal conditions, they do not conduct electricity efficiently, but when impurities are added, they become conductive. This property allows them to regulate the flow of electric current in electronic devices through switching and amplification.
- Smartphones, laptops, artificial intelligence, cloud computing, 5G networks, electric vehicles, drones, satellites, defense systems, and supercomputers all rely on semiconductor chips. They are often referred to as the "new oil" of the modern economy."
- The disruptions in global supply chains

during the COVID-19 pandemic and the subsequent chip shortage highlighted that semiconductors are not merely industrial products but strategic assets. The technological competition between the United States and China, along with geopolitical tensions in the Taiwan Strait, has further transformed chip manufacturing into a matter of national security. Consequently, almost all major economies are now striving to develop domestic semiconductor capabilities.

India Semiconductor Mission: A Comprehensive Vision:

- The Government of India launched the India Semiconductor Mission in 2021 with an outlay of Rs.76,000 crore. The objective is not merely to establish chip manufacturing plants but to create a complete semiconductor ecosystem encompassing design, manufacturing, testing, packaging, display fabrication, and research.
- Under the mission, the government provides financial assistance to semiconductor fabs, display fabs, compound semiconductor facilities, packaging and testing units, and design companies.
- At present, several projects have been approved across states including Gujarat, Assam, Uttar Pradesh, Odisha, Punjab, and Andhra Pradesh. Tata Electronics, Micron, CG Power, Foxconn, HCL, and several domestic and global companies are participating in the mission.

India Semiconductor Mission (ISM) 2.0:

- The Government of India recently announced India Semiconductor Mission 2.0 in the Union Budget 2026.
- Its scope extends beyond manufacturing facilities to include semiconductor equipment, specialty chemicals, raw materials, research, intellectual property, design innovation, and skill development.
- If India succeeds in combining its existing strength in chip design with manufacturing

capabilities, it can emerge as a major force in the global semiconductor value chain.

Dholera: India's Emerging "Silicon Valley of Chips":

- The Dholera Special Investment Region (DSIR) in Gujarat is emerging as the most important hub of India's semiconductor mission.
- India's first commercial semiconductor fabrication facility is being established here through a collaboration between Tata Electronics and Powerchip Semiconductor Manufacturing Corporation (PSMC) of Taiwan.
- With an investment of approximately Rs.91,000 crore, the project will manufacture chips ranging from 28 nanometers to 110 nanometers, which will be used in automobiles, telecommunications, consumer electronics, artificial intelligence, and defense applications.
- In addition, the recently approved Gallium Nitride (GaN)-based manufacturing facility will also be set up in Dholera, making the region a major center for semiconductor manufacturing in India.

EUV Lithography: The Most Advanced Technology in the Chip Industry

- Lithography is the most complex and critical process in semiconductor manufacturing. It is through this process that microscopic patterns containing billions of transistors are etched onto silicon wafers.
- Today, the production of advanced chips relies on Extreme Ultraviolet (EUV) Lithography technology. Using light with a wavelength of 13.5 nanometers, this technology enables the fabrication of extremely small and advanced chips.
- EUV plays a central role in manufacturing 5-nanometer, 3-nanometer and future 2-nanometer chips.
- The Dutch company ASML enjoys an almost complete monopoly in this field, as it is the only company in the world producing

advanced EUV lithography machines. Therefore, the collaboration agreement between ASML and Tata Electronics for India's first chip fabrication facility is highly significant. It is considered a major step toward enabling India to access the highest levels of global semiconductor technology.

Compound Semiconductors: Gallium Nitride (GaN):

- Traditional chip manufacturing has primarily been based on silicon. However, the importance of compound semiconductors is rapidly increasing for next-generation technologies.
- Gallium Nitride (GaN) is one such advanced material that performs better than silicon under conditions of high temperature, high voltage, and high frequency.
- GaN-based devices are used in 5G and future 6G communication systems, radar systems, defense equipment, satellite communications, electric vehicles, and high-efficiency fast chargers.
- This is why India's first GaN fabrication facility is not merely an industrial project but also a strategically significant initiative.

Opportunities in Micro-LED and Display Technology

- A significant aspect of the recently approved projects is the manufacturing of Micro-LED displays, which are considered the next generation of display technology.
- This technology offers higher brightness, lower energy consumption, longer lifespan, and superior visual quality.
- In the future, Micro-LEDs are expected to find widespread applications in augmented reality (AR), virtual reality (VR), smartwatches, smart glasses, and advanced electronic devices.

Major Challenges Before India:

- The biggest challenge is the requirement for enormous capital investment. Establishing a modern semiconductor fabrication facility

requires investments worth billions of dollars.

- In addition, the semiconductor industry requires vast quantities of purified water, uninterrupted power supply, and a highly skilled workforce.
- From a technological perspective, India is still at an early stage. Taiwan, South Korea, and the United States achieved their current positions only after decades of investment and research.
- India must simultaneously build capabilities in design, materials science, equipment manufacturing, research and development, and supply-chain ecosystems.

Conclusion:

India's Semiconductor Mission is not merely an industrial development programme; it is a comprehensive national mission linked to technological self-reliance, national security, economic competitiveness and global strategic influence. The progress of the India Semiconductor Mission, NITI Aayog's 2035 roadmap, the first semiconductor fab being established in Dholera, investments in advanced technologies such as GaN and SiC and growing partnerships with global companies all indicate that India is preparing for long-term leadership in the semiconductor sector. If the country succeeds in maintaining a balance between research, skill development, investment, and global collaboration, India can emerge in the coming decade not merely as a consumer of chips, but as a major global semiconductor power.

Short Issues

Hantavirus Outbreak on Cruise Ship

Context:

Recently, three passengers have died and three others have fallen ill following a suspected hantavirus outbreak aboard a Netherlands-based cruise ship in the Atlantic Ocean.

About Hantavirus:

- Hantavirus is a zoonotic virus that primarily spreads from rodents (such as rats) to humans and is considered a serious public health threat. It belongs to the Hantaviridae family and causes two major diseases in humans—Hantavirus Pulmonary Syndrome (HPS), which affects the lungs and Hemorrhagic Fever with Renal Syndrome (HFRS), which damages the kidneys.
- The primary scientific name for the genus of viruses that cause hantavirus disease in humans is Orthohantavirus. These viruses belong to the family Hantaviridae and encompass multiple distinct species, such as Orthohantavirus hantaanense (Hantaan virus) and Orthohantavirus sinnombreense (Sin Nombre virus).
- The virus was first identified in the 1970s in the Hantan River region of South Korea. Today, it is found in different parts of the world, with various strains present in different regions. The infection mainly spreads through inhalation of microscopic particles contaminated with the urine, feces, or saliva of infected rodents.

Symptoms:

- Symptoms usually appear 1–8 weeks after infection and include fever, fatigue, headache, and muscle pain. In severe cases, HPS can lead to respiratory failure, while HFRS may cause kidney failure. There is no specific treatment or vaccine available, making early detection and supportive medical care extremely important.

What is hantavirus

- A rare virus usually carried by **rodents**
- Can cause severe respiratory illness, including **HPS** and **HFRS**
- Most infections come from **rodent urine, droppings or saliva**

How it spreads

- Breathing in **airborne particles** from dried rodent urine/droppings
- Touching **contaminated surfaces** or nesting materials
- Direct contact or **rodent bites**
- Eating food/water **contaminated** by rodent excretions
- Person-to-person spread is **rare**, but has occurred in some strains

Symptoms

Early symptoms (flu-like)
Fever, chills, muscle aches
Severe headaches
Nausea, stomach pain
Dry cough, fatigue

Later symptoms
Sudden breathing difficulty
Chest tightness as lungs fill with fluid
In HFRS: blurred vision, rash, low blood pressure, kidney issues

Treatment & recovery

There are no specific treatments, but some strains can be treated with **antivirals** like ribavirin. Recovery can be slow, with ongoing fatigue and weakness

Way Forward:

- Standardized bio-security protocols for cruise ships.
- Pre-designated ports of refuge for medical emergencies.
- Strengthening WHO coordination under IHR (2005).
- Improved rodent surveillance in maritime environments.
- Integration of health security into maritime law frameworks.

Conclusion:

The hantavirus outbreak highlights the intersection of zoonotic disease risks, maritime mobility, and gaps in global governance. It underscores the need for stronger international coordination to balance public health security, human rights, and freedom of navigation in a highly interconnected world.

Mission Drishti Satellite

Context:

Recently, Bengaluru-based space-tech startup GalaxEye successfully launched Mission Drishti satellite, marking a significant milestone in India's private space sector. The satellite was launched aboard a SpaceX Falcon 9 rocket and successfully placed into orbit. It is being India's

largest privately built spacecraft and the first-of-its-kind OptoSAR satellite.

About Mission Drishti:

- Mission Drishti is a remote-sensing satellite developed by the Indian startup GalaxEye, designed to enhance Earth observation by integrating multiple sensing technologies into a single platform.
- **Key features:**
 - » Developed by a private Indian space-tech company (GalaxEye)
 - » Launched using SpaceX Falcon 9 rocket
 - » Successfully placed into orbit through a commercial launch mission
 - » Represents a major milestone in India's private space ecosystem
 - » Demonstrates growing capability of Indian startups in satellite technology

About OptoSAR Technology:

- The satellite uses OptoSAR (Optical + SAR) technology, combining two advanced imaging systems:
 - » **Optical imaging:** Provides high-resolution images in visible light conditions
 - » **Synthetic Aperture Radar (SAR):** Enables imaging through clouds, darkness, and all weather conditions

Significance:

- Enables all-weather, day-and-night Earth observation
- Improves accuracy and continuity of geospatial data
- Useful for defence, agriculture, disaster management, and climate monitoring

Significance for India's Space Sector:

- Strengthens India's private space ecosystem under IN-SPACE reforms.
- Shows capability of startups in building advanced satellite systems.
- Promotes innovation in dual-sensor (optical + radar) technology.
- Reduces dependence on foreign satellite data services.

- Supports India's vision of becoming a global space economy leader.

Private Space Sector in India:

- Private participation in India's space sector is undergoing a major shift from vendor-based manufacturing to end-to-end mission capability, driven by reforms introduced since 2020.
- The sector is now supported by a structured policy and institutional framework that promotes startups and private innovation.

Key Institutional Pillars:

- **IN-SPACE (Indian National Space Promotion and Authorisation Centre):** Single-window autonomous body under the Department of Space for regulating and promoting private players
- **NSIL (NewSpace India Limited):** Commercial arm of ISRO responsible for technology transfer and launch services
- **Indian Space Policy 2023:** Formalises role of private entities in building rockets, satellites, and providing space services

FDI Reforms (2024):

- Up to 74% FDI in satellite manufacturing
- 49% in launch vehicles
- 100% in satellite components

Key Achievements:

- India's private space ecosystem is rapidly expanding with over 200 startups working in satellites, launch vehicles, and data services.
 - » **Skyroot Aerospace:** Launched Vikram-S (India's first private rocket, 2022)
 - » **Agnikul Cosmos:** Developed 3D-printed rocket engine and private Launchpad
 - » **OneWeb India:** Approved for satellite broadband services via IN-SPACE
- These developments show India's transition into a competitive space economy driven by innovation and entrepreneurship.

Way Forward:

Mission Drishti highlights India's transition

from a government-led space programme to a collaborative space economy model. With rising private participation, India is steadily moving toward becoming a global hub for advanced satellite technology, Earth observation systems, and geospatial intelligence services.

PCOS Renamed as PMOS

Context:

Recently, Global experts have renamed Polycystic Ovary Syndrome (PCOS) as Polyendocrine Metabolic Ovarian Syndrome (PMOS) after 14 years of collaboration led by Monash University. Published in *The Lancet*, the change reflects updated understanding that the condition is a multisystem disorder affecting endocrine, metabolic, and reproductive health, not just the ovaries.

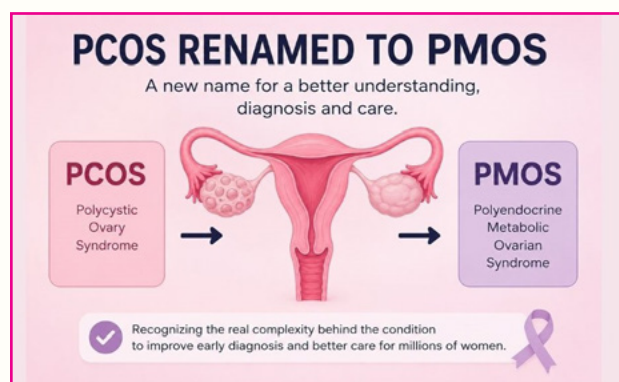
About PMOS (Previously PCOS):

- PMOS is one of the most common hormonal disorders in women, affecting nearly one in eight globally- over 170 million women. It is associated with a wide range of symptoms, including irregular or absent menstrual cycles, infertility, pregnancy complications, acne, excessive hair growth, weight gain, insulin resistance, anxiety, depression, diabetes, and cardiovascular risks.
- The earlier term PCOS was based on ultrasound findings of multiple small ovarian follicles, mistakenly referred to as “cysts.” However, research shows these are not true cysts but arrested follicles that fail to mature and release eggs.
- In a normal cycle, one follicle becomes dominant and ovulates, while others regress. In PMOS, this process is disrupted, leading to multiple immature follicles that appear cyst-like but reflect hormonal imbalance rather than ovarian disease.

Key Features of PMOS:

- PMOS reflects a multisystem disorder affecting:

- » Endocrine system dysfunction involving hypothalamus, pituitary, and ovaries
- » Metabolic issues such as insulin resistance and diabetes risk
- » Reproductive challenges including irregular ovulation and infertility
- » Dermatological symptoms like acne and excess hair growth
- » Mental health impacts including anxiety and depression
- » Long-term cardiovascular risks due to systemic inflammation



Why the Renaming Was Needed:

- Experts say the name PCOS oversimplified a complex endocrine disorder by focusing only on the ovaries. This misunderstanding contributed to delayed diagnosis and inadequate treatment for decades. The new name corrects this by recognising the condition as a disorder involving multiple systems rather than a single organ.
- PMOS highlights dysfunction across endocrine regulation, metabolic pathways, and reproductive hormones. It also acknowledges neuroendocrine and metabolic factors, making the condition more accurately defined in clinical practice and research.

India's Role and Relevance:

- India played an active role in the global consensus process, contributing to large-scale consultations involving over 22,000 responses from patients, clinicians, and

professional bodies across 56 organisations worldwide. Indian experts emphasised the importance of the change given the country's high prevalence of 16–18%.

- The inclusion of “metabolic” is particularly relevant in India due to rising insulin resistance, obesity, and Type 2 diabetes, even among adolescents.

Conclusion:

The transition from PCOS to PMOS represents a major advancement in women's health research. By aligning terminology with scientific evidence, it improves clinical clarity and patient awareness. For India and the world, it offers a more accurate framework for managing a condition that affects millions and requires integrated, long-term care.

WHO Declares Ebola as World Health Emergency

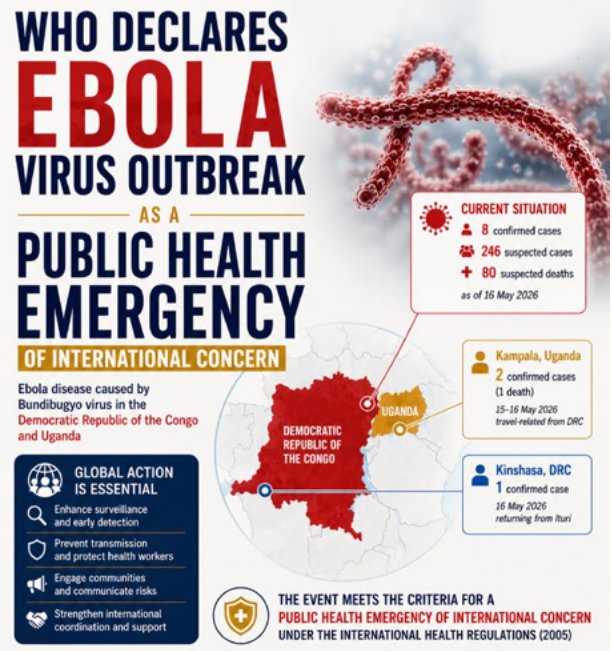
Context:

Recently, the World Health Organization declared the Ebola outbreak in the Democratic Republic of the Congo and Uganda a Public Health Emergency of International Concern (PHEIC).

About Current Situation of the Outbreak:

- According to WHO reports, eight laboratory-confirmed Ebola cases and 246 suspected cases have been identified in Ituri Province of the Democratic Republic of the Congo.
- Around 80 suspected deaths have also been reported. Uganda confirmed two Ebola cases in Kampala. The infected individuals had travelled from the Democratic Republic of the Congo, raising concerns about cross-border transmission.
- World Health Organization (WHO) clarified that although the outbreak is severe and requires coordinated international action, it does not currently qualify as a pandemic emergency like COVID-19.
- The organization also advised countries

against imposing international travel or border restrictions, as such actions may disrupt humanitarian assistance and trade.



What is Ebola Virus Disease?

- Ebola Virus Disease (EVD) is a severe and often fatal infectious disease caused by viruses belonging to the genus Orthoebolavirus. It is a zoonotic disease, meaning it spreads from animals to humans. The disease causes haemorrhagic fever and has an average fatality rate of nearly 50%.
- The present outbreak is caused by the Bundibugyo strain, a rare type of Ebola virus for which no approved vaccines or therapeutics currently exist.
- Although Congo and Uganda have faced Ebola outbreaks earlier, this is only the third outbreak linked to the Bundibugyo strain.

Transmission of Ebola Virus:

- The Ebola virus mainly originates in wild animals such as fruit bats and spreads to humans through direct contact with infected animals or bodily fluids.
- **Diagnostic Tests and Treatment:**

- » Laboratory testing is essential for confirming Ebola infection. Major diagnostic methods include RT-PCR tests, Antibody-Capture ELISA tests, antigen detection tests, and virus isolation by cell culture.
- » WHO recommends treatments such as mAb114 (Ansuvimab) and REGN-EB3 (Inmazeb). Key containment measures include isolation of patients, contact tracing, safe burial practices, improved sanitation, use of protective equipment, and public awareness campaigns.

About the World Health Organization:

- The World Health Organization (WHO) is the United Nations' specialized agency for international public health.
- Established in 1948 and headquartered in Geneva, Switzerland, it coordinates global efforts to combat diseases, strengthen healthcare systems, and respond to health emergencies.
- WHO currently works with 194 member states and operates through regional and country offices worldwide, including India.

Conclusion:

The Ebola outbreak in Congo and Uganda demonstrates the continuing threat posed by infectious diseases. WHO's declaration emphasizes the importance of global cooperation, disease surveillance and rapid public health response mechanisms to prevent international spread and protect global health security.

Chandrayaan-3 'Hop' Experiment Reveals Moon's Subsurface Layers

Context:

Recently, data obtained from the "Hop Experiment" conducted by the Vikram Lander of the Chandrayaan-3 mission near the Moon's south pole has provided new insights into the

structure of the Moon's regolith (dust and rocky surface). The mission revealed that the Moon's upper surface is not uniform; rather, it consists of different layers within just a few centimeters of depth. This study was published in The Astrophysical Journal based on data collected by the ChaSTE instrument.

About Chandrayaan-3 Mission:

- Chandrayaan-3 is India's third lunar mission launched in 2023 from Satish Dhawan Space Centre. It achieved the first successful soft landing near the lunar south pole. The mission included:
 - » Vikram lander and Pragyan rover
 - » One lunar day operational life (~14 Earth days)
 - » Focus on surface composition, seismic activity, and thermal studies
 - » The south pole is scientifically important due to possible water ice deposits.

What is the 'Hop' Experiment?

- The Hop Experiment, or "Hop Test," was a historic and successful test conducted by the Indian Space Research Organisation through the Chandrayaan-3 mission's Vikram Lander on the surface of the Moon.
- Under this experiment, after the primary soft landing of Chandrayaan-3, scientists reignited the lander's engines on the lunar surface. As a result, the Vikram Lander briefly "hopped" about 40 centimeters into the air and then performed another safe soft landing at a new location approximately 30 to 50 centimeters away from its original landing spot.

Key Scientific Findings:

- **Two Distinct Subsurface Layers:** Data from the ChaSTE instrument showed:
 - » A loose, porous upper layer
 - » A denser compact layer below 2–6 cm depth
 - » This indicates sharp changes in physical and thermal properties within a very shallow depth.
- **Regolith Disturbance by Rocket Plume:**

- » The lander's exhaust displaced around 3 cm of surface material. This exposure allowed instruments to study previously buried layers, providing direct evidence of plume–soil interaction on the Moon.
- **Extreme Thermal Gradient:** Measurements revealed:
 - » Temperature drops of nearly 60°C within 10 cm depth
 - » Very low thermal conductivity of lunar soil
 - » This is critical for future habitat and thermal protection design.

About ChaSTE:

- The ChaSTE (Chandra's Surface Thermophysical Experiment) instrument was mounted on the Vikram lander. It consisted of a rod-shaped probe with temperature sensors placed at multiple depths and a heater at its tip.
- ChaSTE penetrated the lunar surface and recorded temperature changes, heat flow, and soil resistance. After the hop maneuver disturbed the surface, ChaSTE measured the altered regolith conditions, helping scientists compare the fluffy upper layer with the compacted layer underneath.

Significance of Findings:

- **Scientific Importance:** The results improve understanding of lunar soil formation, impact history, and subsurface structure. They provide the first fine-scale thermal and density profile of the Moon's near-surface region.
- **Technological Importance:** The hop experiment validates:
 - » Controlled surface lift-off capability
 - » Precision thruster use on extraterrestrial surfaces
 - » Behaviour of regolith under engine exhaust
- **Strategic Importance:** The findings support future lunar missions, including:
 - » Human landing missions
 - » Lunar base construction

- » Sample return missions
- » They strengthen India's position in global space exploration and deep-space research.

Conclusion:

The Chandrayaan-3 hop experiment has transformed into a major scientific breakthrough, revealing the Moon's layered subsurface structure within centimetres. It enhances understanding of lunar geology and provides critical inputs for future exploration, strengthening India's capabilities in advanced space science and planetary missions.

Carbon-Free Ferrocene Analogue

Context:

Recently, Researchers at the Indian Institute of Technology Madras and the Indian Institute of Science Bengaluru have synthesizing a carbon-free molecule that replicates the iconic "sandwich" structure of ferrocene. The discovery solves a scientific challenge that had remained unresolved for over 70 years and has been published in the journal Science.

About Ferrocene and Its Significance:

- Ferrocene is a well-known organometallic compound discovered in the early 1950s, consisting of:
 - » An iron atom at the centre
 - » Two carbon-based ring structures (cyclopentadienyl rings)
- This unique "sandwich structure" has made ferrocene important in:
 - » Medicine
 - » Batteries
 - » Electronics
 - » Advanced materials
- Its stability and structure also made it a model compound in organometallic chemistry.

The Scientific Challenge:

- For decades, scientists attempted to create ferrocene-like structures without carbon, to understand whether:
 - » The “sandwich” geometry depends uniquely on carbon chemistry
 - » Or whether other elements can form similar stable frameworks
- Despite multiple attempts globally, no stable carbon-free analogue had been successfully synthesized.
- Expands understanding of chemical bonding
- Opens new pathways in molecular design
- Material Science Potential:
 - Though still in early stages, the discovery may lead to:
 - » Novel catalysts
 - » Advanced electronic materials
 - » High-stability compounds for industrial applications

About the Discovery:

- The research team successfully designed a novel molecule with:
 - » Osmium at the centre (instead of iron)
 - » Boron-based ring structures (instead of carbon rings)
 - » A stable sandwich-like molecular architecture
- This represents the first successful carbon-free ferrocene analogue.

Structural and Chemical Significance:

- Initial findings show:
 - » Strong bonding between osmium and boron rings
 - » High structural stability
 - » Similar geometry to ferrocene despite absence of carbon
- This challenges long-standing assumptions about the exclusive role of carbon in forming stable ring-based molecular systems.

Importance of Carbon in Chemistry:

- Carbon is central to organic chemistry, a branch dedicated to carbon compounds because it:
 - » Forms strong covalent bonds
 - » Creates long chains and complex structures
 - » Enables vast molecular diversity
- The breakthrough shows that carbon-like structural roles can also be mimicked by other elements, expanding the boundaries of inorganic and organometallic chemistry.

Significance of the Discovery:

- Solves a 70-year-old chemistry problem

Limitations:

- The molecule is currently a fundamental research breakthrough
- Practical applications are still under investigation
- Long-term industrial or technological use is yet to be established

Conclusion:

The synthesis of a carbon-free ferrocene analogue by researchers from Indian Institute of Technology Madras and Indian Institute of Science Bengaluru marks a landmark achievement in modern chemistry. By replicating one of chemistry’s most iconic structures without carbon, the discovery expands the frontiers of molecular science and opens new possibilities for designing advanced materials in the future.

Indian Scientists Develop ‘CLEAR’ Technology

Context:

Recently, in a significant breakthrough for the Indian medical sector, scientists in Bengaluru developed a new and revolutionary protein imaging technology called ‘CLEAR’ (Cleavable Light-Erased Antibody Reporter). This technology could prove to be a major discovery in precision medicine, early cancer detection, and the treatment of neurological disorders. The scientists’ research has also been published in the prestigious journal Royal Society of Chemistry’s Chemical Science.

About the CLEAR Technology:

- In conventional methods, multiple fluorescent markers (glowing dyes) are required to identify different proteins within cells. This process is highly complex and often damages biological tissues.
- CLEAR technology simplifies this entire process like a “biological blackboard.” By using only a single fluorescent marker, it becomes possible to create a map of countless proteins:
 - » **Tagging:** First, selected proteins in the cell are illuminated using a fluorescent tag.
 - » **Imaging:** A high-resolution image is captured through a microscope.
 - » **Erasing:** After this, the fluorescence signal is completely erased by exposing it to a mild beam of 365 nm LED light.
 - » **Repeating:** Once the “blackboard” is cleared, other proteins in the same sample are tagged and scanned again. This cycle continues repeatedly.
- Professor Sarit S. Agasti and his team at Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR) designed and synthesized this technology, while Indian Institute of Science (IISc) helped successfully test the technology on complex biological systems such as immune cells.

Applications of this Technology in the Medical Field:

- **Early Detection of Cancer:** This technology will help doctors observe subtle cellular-level changes that are not visible in conventional scans. This will enable the detection of cancer at a very early stage.
- **Understanding Brain Disorders:** Until now, understanding the behavior of proteins in complex neurological diseases such as Alzheimer’s and Parkinson’s has been extremely difficult, but CLEAR technology will make precise study possible.
- **Precision Medicine (Personalized Treatment):** Every patient’s body and disease profile

are different. This technology will provide accurate proteomic profile data of patients, enabling doctors to design patient-specific treatments instead of following a “one-size-fits-all” approach.

- **Low Cost and Higher Efficiency:** Since the technology uses only a single marker and ordinary LED light, it is significantly cheaper and safer than existing global technologies.

Conclusion:

The development of CLEAR technology is a proud moment for India and global medical science. This technology, developed by Indian scientists, will not only accelerate laboratory research but also pave the way for providing affordable, precise and life-saving treatments to millions of patients worldwide in the future.

Hydrogen-Powered Trains in India

Context:

Recently, the Railway Board officially approved the operation of the country's first indigenous hydrogen fuel cell-based train (DPRS 1200 kW DEMU). This train will run on the Jind-Sonipat rail section in Haryana and is set to prove to be a game-changer in achieving India's 'Net-Zero Carbon Emission' target.

About Hydrogen Trains:

- Hydrogen trains, or ‘hydrail’/H-trains, are electric trains that generate power onboard using hydrogen fuel cells instead of external electricity or diesel.
- They use Hydrogen Fuel Cell (HFC) technology, where hydrogen reacts with oxygen to produce electricity, with water vapour as the only byproduct, making them zero-emission at the point of use.

Key Features of India’s First Hydrogen Train:

- **Developed by:** Integral Coach Factory (ICF), Chennai

- **Route:** Jind–Sonipat, Haryana
- **Configuration:** 10-coach trainset
- **Maximum speed:** 75 kmph
- **Type:** Non-electrified route operation
- **Global alignment:** Matches hydrogen rail systems in Germany, Japan, Sweden, and China

About Hydrogen Fuel Cell Technology:

- Hydrogen trains operate through electrochemical reactions:
 - » Hydrogen enters the anode and splits into protons and electrons
 - » Protons pass through the Proton Exchange Membrane (PEM)
 - » Electrons flow through an external circuit, generating electricity
 - » Oxygen combines with protons and electrons at the cathode
 - » **Output:** Electricity + Water vapour + Heat
- The system has no combustion and minimal moving parts, making it quiet and efficient.

Significance for India:

- **Decarbonisation of Railways:** Supports Indian Railways' goal of net-zero emissions by 2070 by reducing diesel dependency.
- **Clean Energy Transition:** Hydrogen trains offer zero tailpipe emissions, helping India transition to cleaner transport systems.
- **Modernisation of Rail Network:** Enables green mobility on non-electrified and heritage routes.
- **Hydrogen for Heritage Initiative:** Indian Railways plans to deploy 35 hydrogen trains on heritage and hill routes under this initiative.

About National Green Hydrogen Mission:

- Approved in 2023, the mission aims to make India a global hub for green hydrogen.
- **Key targets:**
 - » 5 MMT annual green hydrogen production by 2030
 - » Potential expansion to 10 MMT with export growth

- » Replacement of fossil fuels in sectors like steel, refining, and fertilisers

Types of Hydrogen:

- **Grey Hydrogen:** Produced from fossil fuels (natural gas/coal) via steam methane reforming; emits CO₂.
- **Blue Hydrogen:** Produced from fossil fuels but with carbon capture and storage (CCS).
- **Green Hydrogen:** Produced via electrolysis using renewable energy; near-zero emissions.

Conclusion:

India's first hydrogen-powered train marks a major milestone in sustainable railway transformation. It aligns with the National Green Hydrogen Mission and India's net-zero commitment by 2070. With proper scaling and infrastructure support, hydrogen trains can become a key pillar of India's clean, efficient, and future-ready transport system.

Death of Asiatic Lion Cubs in Gir

Context:

Recently, eight Asiatic lion cubs have died in Gujarat's Gir region due to suspected Babesia infection. These cases have been reported mainly from revenue areas of Gir Somnath and Amreli districts. The incident has once again raised concerns over the conservation strategy of India's single-population endangered species.

What is Babesiosis?

- Babesiosis is a rare but serious tick-borne disease caused by a microscopic protozoan parasite called Babesia. It is transmitted through the bite of infected ticks.
- The parasite infects and destroys red blood cells (RBCs), leading to conditions such as anemia (low blood count) and other severe health complications.
- In 2018, several lions in the Gir region died due to a co-infection of Canine Distemper

Virus (CDV) and babesiosis, highlighting the severity of the disease and its impact on wildlife health.

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ASIATIC LION
Panthera leo leo
IUCN Status: **ENDANGERED**
Found only in the wild in India's Gir landscape.

WHAT IS BABESIOSIS?

Babesiosis is a rare but serious tick-borne disease caused by a microscopic protozoan parasite called *Babesia*. It is transmitted through the bite of infected ticks. The parasite infects and destroys red blood cells (RBCs).

LEADING TO:

- Anemia (low blood count)
- Weakness, lethargy & loss of appetite
- Severe health complications and even death

A DEADLY CO-INFECTION: 2018

In 2018, several lions in the Gir region died due to a co-infection of Canine Distemper Virus (CDV) and babesiosis, highlighting the severity of the disease and its impact on wildlife health.

WHY IT MATTERS

- Asiatic lions exist only in the Gir landscape. Any disease outbreak can have a serious impact on the entire population.
- Cubs are the future of the species. High cub mortality threatens long-term survival.
- Maintaining healthy prey, habitat and disease surveillance is crucial for lion conservation.
- Strengthening veterinary care, quick response and long-term disease management is essential.

PREVENTION & MANAGEMENT

- Regular tick surveillance and control
- Early detection and laboratory diagnostics
- Timely treatment and supportive care
- Habitat management and prey base conservation
- Rapid response teams and field monitoring
- Continuous research, data collection and capacity building

Major Concern:

- **Epidemic vulnerability:** A single disease outbreak can threaten the entire population of Asiatic lions due to their restricted distribution.
- **Expansion into revenue areas:** Lions are increasingly moving beyond protected forests into human-dominated landscapes, raising the risk of disease transmission and conflict.
- **Low genetic diversity:** Restricted breeding within a small population leads to inbreeding depression, reducing immunity and adaptability.

Way Forward:

- The establishment of a second population in Kuno National Park, as directed by the Supreme Court, is crucial for ensuring the species' long-term survival and resilience by reducing the risks associated with a single concentrated population. Alongside this, adopting a One Health approach that integrates the health of humans, livestock, and wildlife is essential for preventing zoonotic and vector-borne diseases.
- Further, regular anti-tick drives and vaccination of livestock in surrounding areas are important to reduce disease transmission. Strengthening genomic surveillance through institutions like the Gujarat Biotechnology Research Centre will also help in tracking mutations and monitoring disease patterns for effective wildlife health management.

Conclusion:

The death of lion cubs in Gir is not just a localized wildlife health issue but a warning signal about the risks of concentrating an entire species in a single habitat. Without urgent diversification of habitat, stronger disease surveillance, and scientific management, the long-term survival of the Asiatic lion population could face significant uncertainty.

Conservation Status of Asiatic Lions:

- The Asiatic lion (*Panthera leo persica*) is found only in the Indian state of Gujarat. Its primary natural habitat is the Gir National Park and Wildlife Sanctuary. These lions are slightly smaller than African lions and have a distinctive longitudinal fold of skin along their belly.
- **IUCN Red List:** Vulnerable
- **Wildlife Protection Act, 1972:** Schedule I (highest protection)
- **CITES:** Appendix I
- **Habitat:** Exclusively found in the Saurashtra region of Gujarat, primarily in Gir National Park and surrounding landscapes.
- **Population:** Approximately 891 individuals as per recent estimates.

Coal Gasification: India's New Strategy Between Energy Security, Self-Reliance and Green Transition

Context:

Recently, the Central Government approved an incentive scheme worth Rs. 37,500 crore for coal/lignite gasification projects located near the Earth's surface. Along with this, India has set an ambitious target of gasifying 100 million tonnes of coal by the year 2030. This initiative has emerged at a time when the global energy crisis, geopolitical tensions in West Asia, volatile crude oil prices, and increasing import dependence have become serious economic challenges for India.

India is the world's second-largest coal producer. The country possesses one of the largest coal reserves in the world (around 401 billion tonnes) along with nearly 47 billion tonnes of lignite reserves (a lower grade of coal). Coal accounts for more than 55 percent of India's energy mix. Through the gasification process, coal/lignite is converted into synthetic gas (syngas), which serves as a versatile raw material for the domestic production of fuels and chemicals. In this context, "coal gasification" is being viewed as a new foundation for energy security, industrial self-reliance, and an alternative fuel economy.

About Coal Gasification:

- Coal gasification is a process in which coal or lignite is converted into synthesis gas (syngas). Syngas mainly consists of carbon monoxide, hydrogen, and other gases. It can be used for producing fertilizers, methanol, ammonia, synthetic natural gas, fuels,

and industrial chemicals. This technology enables diversified and cleaner use of coal resources.

- India currently imports large quantities of LNG, methanol, ammonia, urea, and coking coal. The import bill for these products reached nearly Rs.2.77 lakh crore in FY2025, making the country vulnerable to international price fluctuations and geopolitical uncertainties. Coal gasification can help reduce this dependence by utilizing domestic coal resources more efficiently.

Key Features of the Scheme:

- The scheme includes several important provisions to encourage investment in coal gasification projects:
 - » Total financial support of Rs.37,500 crore for new surface coal and lignite gasification projects.
 - » Incentives of up to 20% of the cost of plant and machinery.
 - » Target to facilitate gasification of nearly 75 million tonnes of coal and lignite.
 - » Financial assistance through a transparent competitive bidding process.
 - » Incentives to be released in four instalments linked to project milestones.
 - » A maximum incentive limit of ₹5,000 crore per project.
 - » Technology-neutral approach with encouragement for indigenous technologies.

- » Extension of coal linkage tenure up to 30 years under the Non-Regulated Sector framework.

Importance of Coal Gasification:

- **Need for Energy Security:**
 - » India imports nearly 85% of its total crude oil requirement and a significant portion of its natural gas needs. In addition, the country remains dependent on foreign sources for methanol, ammonia, and fertilizers.
 - » Any geopolitical crisis at the global level directly impacts India's energy costs. The Russia-Ukraine war and the West Asia crisis have clearly demonstrated that an import-dependent energy system may not remain sustainable in the long run.
 - » In such a situation, India wants to utilize its vast domestic coal reserves in a more alternative and productive manner. Coal gasification can become an important medium in this direction.
- **Reduction in Import Expenditure:** In the financial year 2025, India's import expenditure on LNG, urea, ammonium

nitrate, ammonia, coking coal, methanol, DME, and other major substitutable products stood at nearly Rs.2.77 lakh crore. If gas, methanol, and fertilizers are produced domestically from coal:

- » LNG imports will decline,
- » Methanol imports will reduce,
- » The fertilizer industry will get domestic raw materials.
- » It is estimated that this could save India billions of dollars in foreign exchange annually.
- **Self-Reliant India and Industrial Development:** The government now wants to develop coal not merely as a “fuel” but also as a “feedstock.” This means coal will be used beyond electricity generation in sectors such as the chemical industry, transportation fuels, and green hydrogen. This policy also strengthens initiatives like Make in India, Atmanirbhar Bharat, and the National Manufacturing Policy.
- **Employment Generation:** Under this scheme, around 50,000 (direct and indirect) jobs are expected to be generated through 25 projects located in coal-producing regions.
- **Revenue for Governments:** Under the proposed 75 million tonnes of gasification-based coal/lignite utilization, annual benefits worth ₹6,300 crore are expected. In addition, revenue will also be generated through Goods and Services Tax (GST) and other taxes.
- **Technological Ecosystem:** By promoting indigenous technologies and reducing dependence on foreign EPC (Engineering, Procurement and Construction) contractors, India's domestic near-surface coal gasification capacity will be strengthened.

Potential Benefits:

- **Cleaner and More Efficient Use of Coal:** Compared to conventional coal combustion, gasification is considered a relatively more controlled and efficient process. This can improve energy efficiency.
- **Boost to the Methanol Economy:** India seeks to move towards a “Methanol Economy.” Methanol can be used as:

- » Transportation fuel,
- » Marine fuel,
- » Feedstock for the chemical industry.
- » If methanol begins to be produced domestically, import dependence will decline.
- **A Step Towards Green Hydrogen:** Hydrogen can also be derived from syngas. In the future, this could accelerate India's Hydrogen Economy.
- **Employment and Regional Development:** In coal-rich states such as Jharkhand, Odisha, Chhattisgarh, and West Bengal:
 - » New industries will develop,
 - » Employment opportunities will increase,
 - » Local economies will gain momentum.

Challenges:

Although coal gasification is being considered a relatively better technology, it is still associated with several challenges:

- **Carbon Emissions:** Coal ultimately remains a fossil fuel. The gasification process also generates carbon dioxide emissions. Unless technologies such as Carbon Capture Utilisation and Storage (CCUS) are adopted, it may go against climate goals. CCUS is an advanced clean technology that prevents carbon dioxide emitted from industrial plants from entering the atmosphere.
- **Water Usage Problem:** Gasification projects require large quantities of water. Many of India's coal-bearing regions are already facing water scarcity.
- **High Cost and Technological Challenges:** This is a highly capital-intensive technology. Both project establishment and operation require heavy investment. Moreover, India is not yet fully self-reliant in this technology.
- **Balancing with Renewable Energy:** On one hand, India is promoting solar and wind energy, while on the other hand it is increasing investment in coal gasification. Therefore, policymakers face the challenge of balancing development and green transition.

Global Perspective:

- China is the world's largest user of coal

gasification technology. It has developed large industrial models for producing chemicals and gas from coal. South Africa has also been using this technology for a long time.

- India is now attempting to reshape its energy strategy by learning from the experiences of these countries.

Way Forward:

- For India, coal gasification is neither merely an energy policy nor just an industrial project. It is part of a broader vision for the strategic utilization of resources. However, its success will depend upon several important factors:
 - » Development of indigenous technology,
 - » Environmental safeguards,
 - » Adoption of clean technologies such as CCUS,
 - » Effective water management,
 - » Private investment and policy stability.
- If these challenges are addressed, coal gasification can help India move from being an energy-importing nation towards becoming an energy self-reliant country.

Conclusion:

Today, the world is passing through an era of energy transition. India faces a dual challenge-rising energy demand on one side and climate commitments on the other. In such a scenario, coal gasification is emerging as a transitional solution amid the debate of "development versus environment." This technology offers India new possibilities in the direction of energy security, industrial self-reliance, and an alternative fuel economy. However, its real success will depend on how balanced, clean, and long-term India's implementation strategy proves to be.

Short Issues

Mission for Cotton Productivity 2026

Context:

Recently, the Union Government approved Rs. 5,659.22 crore for the Mission for Cotton Productivity for a five-year period (2026–27 to 2030–31). Announced in the Union Budget 2025–26, the mission aims to enhance cotton productivity through science and technology while ensuring a stable supply of quality cotton for India's textile industry.

About the Mission:

- The Mission for Cotton Productivity is a transformative initiative designed to improve cotton productivity, quality, and sustainability in India. It aligns with the government's 5F vision—Farm to Fibre to Factory to Fashion to Foreign, integrating the entire textile value chain. The mission also focuses on raising farmer incomes and strengthening India's global competitiveness in textiles.

Key Objectives and Components:

- The mission focuses on multiple science-driven and market-oriented interventions:
 - » **High-yielding & climate-resilient seeds:** Development of pest-resistant and climate-adaptive cotton varieties through advanced breeding techniques.
 - » **Technology-driven farming:** Promotion of High Density Planting System (HDPS), closer spacing, and Integrated Cotton Management to increase yields.
 - » **Processing modernisation:** Upgradation of ginning and processing units to improve efficiency and global competitiveness.
 - » **Quality testing infrastructure:** Establishment of accredited laboratories for standardized cotton grading and certification.
 - » **Branding and traceability:** Strengthening “Kasturi Cotton Bharat” to promote Indian cotton globally.

- » **Digital integration:** Linking mandis with e-platforms for transparent pricing and better market access.
- » **Circular economy:** Recycling cotton waste into value-added products to reduce environmental impact.
- » **Fibre diversification:** Encouraging natural fibres like bamboo, flax, ramie, and banana fibre.

Targets of the Mission:

- **Cotton production target:** 498 lakh bales by 2031
- **Productivity improvement:** from 440 kg/ha to 755 kg/ha



About India's Cotton Sector:

- India is the world's largest cotton-producing country in terms of acreage, accounting for approximately 40% of the global cotton area. However, in terms of total production, India is typically the second-largest producer after China, contributing about 20–23% of global output.
- Major producing states include Maharashtra, Gujarat, Telangana, Karnataka, and

Rajasthan. However, productivity remains lower than global leaders.

Challenges in Cotton Production:

- Key issues include low yields, pest attacks like pink bollworm, climate vulnerability due to rainfed cultivation, and price volatility affecting farmer incomes.

Government Support Measures:

- Minimum Support Price (MSP) mechanism through Cotton Corporation of India (CCI)
- Promotion of Bt cotton
- Kapas Kisan App for procurement facilitation
- Advisory support by Commission for Agricultural Costs and Prices (CACP)

Significance of the Mission:

- The Mission for Cotton Productivity is expected to:
 - » Boost farm incomes
 - » Ensure raw material security for the textile industry
 - » Strengthen India's global textile competitiveness
 - » Promote sustainable and technology-driven agriculture

Conclusion:

The Mission for Cotton Productivity is a strategic reform aimed at modernising India's cotton sector through innovation, digitalisation, and sustainability, strengthening the textile value chain under the 5F vision.

GST Collections Hit Record Rs. 2.43 Lakh Crore in April 2026

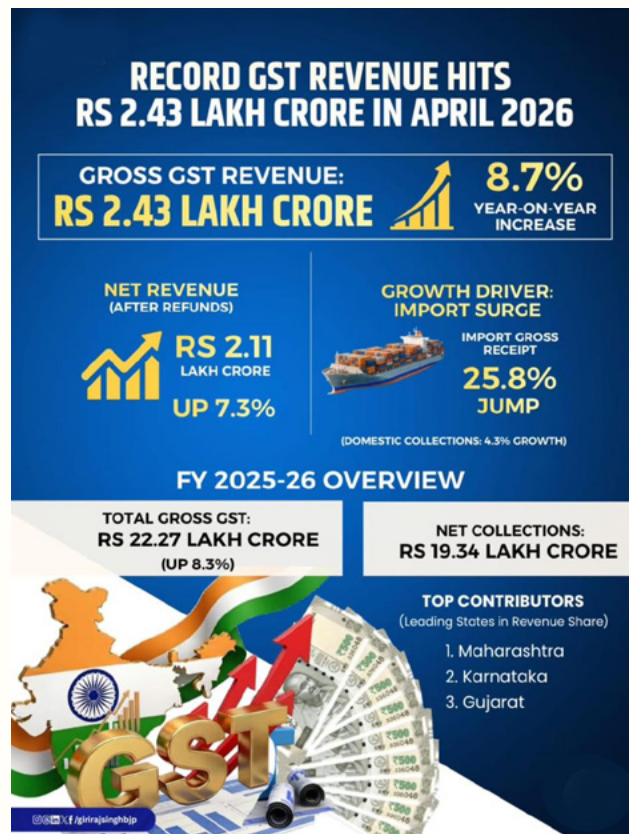
Context:

Recently, India's Goods and Services Tax (GST) collections reached an all-time high of Rs.2.43 lakh crore in April 2026, registering an 8.7% year-on-year growth. This milestone highlights the continued resilience and stability of India's indirect tax system, even amid global economic uncertainties and geopolitical tensions. The strong performance also reflects improved

compliance, economic recovery trends, and steady business activity across sectors.

Key Highlights:

- India's GST collections remained robust in April 2026, with gross revenue at Rs.2.43 lakh crore. After adjusting for refunds, net GST revenue stood at Rs.2.11 lakh crore, reflecting a 7.3% year-on-year growth.
- A major contributor was import-related GST, which surged to Rs.57,580 crore, growing by nearly 26% compared to the previous year.
- Domestic GST collections also expanded steadily to Rs.1.85 lakh crore, recording a 4.3% increase, indicating moderate but stable consumption and business activity within the economy.



Drivers of Growth:

- A key driver of GST growth has been import-led revenue, which increased significantly faster than domestic collections. This

reflects improving global trade linkages, supply chain normalization, and strong import demand. However, it also raises concerns about rising import dependence and relatively weaker domestic production capacity in some sectors.

- Domestic GST growth at 4.3% suggests moderate consumption trends, with possible softening in discretionary spending due to global uncertainties and geopolitical tensions. Despite this, GST collections continue to show a stable long-term growth trend of around 7–8% monthly, indicating overall economic resilience.

GST 2.0 Reforms and Their Role:

- The GST 2.0 reforms (2025–26) have played an important role in stabilizing the tax system. Key features include rate rationalisation with a simplified structure mainly in the 5% and 18% slabs, introduction of a higher 40% slab for luxury and sin goods, and exemptions on life and health insurance services.
- Institutional improvements such as the rollout of the GST Appellate Tribunal have also strengthened dispute resolution. These reforms have improved compliance, reduced classification disputes, and supported consumption while maintaining the tax base.

Institutional Framework of GST:

- The GST system in India is built on a strong constitutional framework. Article 246A grants concurrent taxing powers to both the Centre and States. Article 269A governs the levy and distribution of Integrated GST (IGST) on inter-state supplies.
- Article 279A establishes the GST Council, the apex decision-making body for tax rates, exemptions, and policy coordination. India follows a dual GST model comprising Central GST (CGST), State GST (SGST)/UTGST for intra-state transactions, and IGST for inter-state and import transactions, ensuring seamless credit flow across the economy.

Significance of Record Collections:

- Record GST collections strengthen fiscal capacity, enabling higher capital expenditure and welfare spending. They also act as a key indicator of economic health by reflecting consumption, business activity, and trade flows. Additionally, they reinforce cooperative federalism through better Centre-State coordination under the GST Council.

Concerns and Way Forward:

- Despite strong collections, challenges remain such as rising import dependence, moderate domestic demand, and external risks like geopolitical tensions. Going forward, policy focus should be on boosting domestic consumption, strengthening manufacturing under “Make in India,” further simplifying GST compliance, and expanding the tax base through greater formalisation of the economy.

Conclusion:

The record GST collections in April 2026 demonstrate the strength and maturity of India’s tax system. However, ensuring balanced growth will require addressing import dependence and supporting stronger domestic demand for sustainable long-term economic expansion.

Government of India-IFAD Launch COSOP 2026–2033 for Rural Prosperity

Context:

Recently, The Government of India, in partnership with the International Fund for Agricultural Development (IFAD), has launched a new eight-year Country Strategic Opportunities Programme (COSOP) for the period 2026–2033.

Objectives of the programme:

- The initiative is aimed at strengthening rural incomes, enhancing resilience, and scaling

sustainable livelihood opportunities across India. The programme is designed to align closely with India's long-term development roadmap under the Viksit Bharat@2047 vision, reflecting a shift toward inclusive, climate-resilient, and market-oriented rural transformation.

About COSOP 2026–2033:

- The Country Strategic Opportunities Programme (COSOP) 2026–2033 represents a comprehensive framework guiding India–IFAD cooperation for the next decade. It focuses on two core strategic priorities: first, enhancing the social, economic, and climate resilience of rural communities; and second, strengthening knowledge systems to scale proven development models within India and across countries of the Global South.
- The programme is designed not only as a project financing mechanism but also as a long-term institutional partnership model aimed at sustainable rural transformation.
- COSOP builds on IFAD's long-standing approach of integrating financial support with capacity building and innovation in rural systems.
- It prioritises strengthening grassroots institutions such as Self-Help Groups (SHGs), Farmer Producer Organisations (FPOs), and cooperatives, which act as critical linkages between farmers and markets, credit systems, technology platforms, and infrastructure networks.

About IFAD:

- The International Fund for Agricultural Development is a specialised agency of the United Nations established in 1977 after the World Food Conference. Headquartered in Rome, Italy, IFAD has 180 member states and maintains an AA+ credit rating, enabling it to mobilise resources from global capital markets.
- It focuses exclusively on rural poverty eradication and food security, supporting

smallholder farmers, rural women, pastoralists, and Indigenous communities through concessional loans and grants.

- Since its inception, IFAD has mobilised over US\$25 billion in development assistance, significantly improving food security and rural incomes worldwide. It operates as a co-investment platform, combining public and private resources to promote climate-resilient agriculture, rural infrastructure, and value chain development.

Significance of COSOP:

- The new COSOP places strong emphasis on scaling successful rural development models, including inclusive rural finance, digital agriculture services, cooperative governance, and climate-resilient value chains. It also aims to position India as a global knowledge hub in rural development by sharing best practices with countries in Africa, Southeast Asia, and Latin America.
- On the sidelines of the event, IFAD and NABARD signed a strategic partnership agreement to strengthen rural finance systems and promote innovation in agriculture and allied sectors.

Conclusion:

The COSOP 2026–2033 marks a significant step in deepening India–IFAD cooperation, moving from project-based interventions to systemic transformation of rural livelihoods. By combining financial inclusion, institutional strengthening, and global knowledge exchange, the initiative reinforces India's commitment to sustainable rural development and its emerging leadership role in global development cooperation.

Government Raised Import Duty on Gold and Silver

Context:

Recently, the Government of India increased import duties on gold and silver to 15% from

6%. The move comes amid pressure on foreign exchange reserves and heightened global uncertainty linked to the West Asia crisis. The Finance Ministry notified the change through revisions in the social welfare surcharge (SWS) and the agriculture infrastructure and development cess (AIDC).

Why Import Duties on Gold Were Increased:

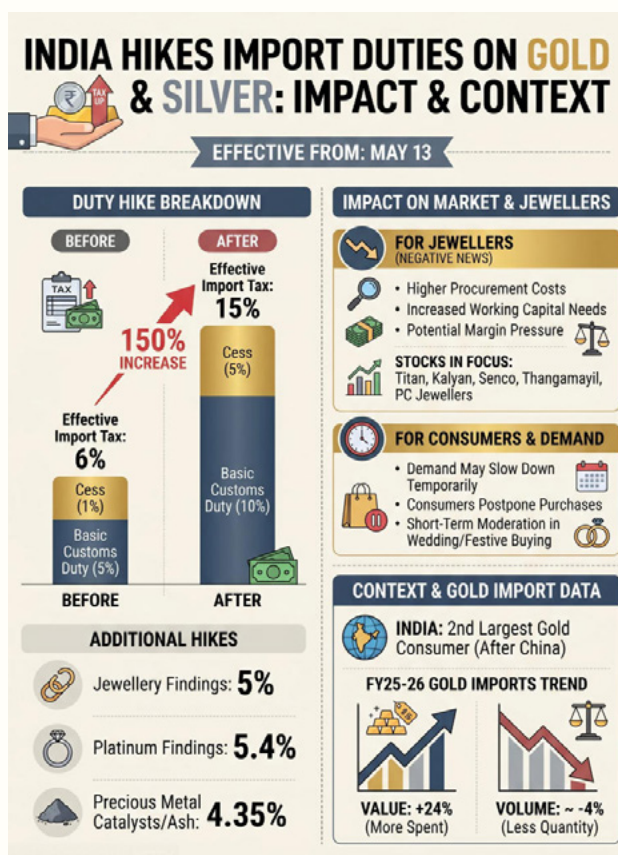
- The decision reflects multiple external pressures. India is facing foreign exchange stress due to a rising import bill, particularly from energy and commodities.
- Geopolitical tensions in West Asia have disrupted global oil supply chains, while crude oil prices have surged due to risks around the Strait of Hormuz.
- At the same time, the Indian rupee has weakened to record lows against the US dollar. In this context, the government aims to curb non-essential imports such as gold and conserve foreign exchange for critical needs like crude oil, fertilisers, defence equipment, and industrial inputs.

About Import Duty:

- Import duty is a tax imposed by the government on goods brought into a country from abroad. It serves multiple objectives such as:
 - » Protecting domestic industries
 - » Regulating imports and trade balance
 - » Generating government revenue
 - » Conserving foreign exchange reserves

Legal Framework in India:

- Import duties in India are governed primarily by the Customs Act, 1962 and the Customs Tariff Act, 1975. The law provides the framework for levy, assessment, collection, and exemption of customs duties on imported and exported goods.
- The Central Board of Indirect Taxes and Customs (CBIC), under the Ministry of Finance, is responsible for administering customs laws, preventing smuggling, and ensuring proper collection of duties.



Types of Import Duties in India:

- India imposes different categories of customs duties depending on the nature of goods and policy objectives:
 - » **Basic Customs Duty (BCD):** Levied on imported goods under the Customs Act.
 - » **Social Welfare Surcharge (SWS):** Additional surcharge on customs duties.
 - » **Agriculture Infrastructure and Development Cess (AIDC):** Imposed on selected imports to support agricultural infrastructure.
 - » **Anti-Dumping Duty:** Applied to protect domestic industries from unfairly cheap imports.
 - » **Safeguard Duty:** Imposed to protect domestic industries from sudden import surges.

Impact on Prices and Consumers:

- Higher import duty is expected to raise domestic gold and silver prices due to

increased landed costs. This will likely be passed on to consumers in jewellery and bullion markets.

- Following the announcement, domestic prices surged, reflecting immediate market sensitivity. The move reverses the earlier 2024–25 Budget decision that had reduced duties from 15% to 6%.

Conclusion:

The hike in gold import duty reflects a broader strategy of external sector management amid global uncertainty. While it will make gold more expensive for consumers in the short term, the policy aims to strengthen India's foreign exchange position, stabilise the rupee, and ensure adequate resources for essential imports during a period of geopolitical and energy market volatility.

India Sugar Export Ban 2026

Context:

Recently, The Government of India has banned sugar exports until September 30, 2026, citing precautionary concerns related to geopolitical uncertainty in West Asia and the potential impact of El Niño on agricultural output.

Reasons for government decision:

The export ban is driven by multiple precautionary factors:

- El Niño Risk:** Potential weak monsoon conditions could reduce future sugarcane output.
- Fertiliser Supply Uncertainty:** Geopolitical tensions in West Asia may disrupt fertiliser imports, affecting yields.
- Inflation Control:** Preventing future shortages helps contain food inflation pressures.
- Decline in domestic stocks:** In 2025–26, sugar production is estimated to be around 24 million tonnes, while domestic consumption is about 28 million tonnes. This could reduce the country's buffer stock

to about 4.5 million tonnes, which is the lowest level in several years.

- Ethanol blending target:** To achieve the national target of 20% ethanol blending in petrol, it is necessary to preserve sugarcane juice and sugar stocks for ethanol production.



Impact of ban of sugar export:

- The biggest positive impact of India's sugar export restriction will be on the domestic market, where adequate availability of sugar will be maintained.
- This will help stabilize prices and control inflation. In contrast, the global market has seen a rise due to this decision, with New York raw sugar futures increasing by about 2% and London white sugar rising by more than 3%.
- Neighboring countries such as Nepal,

Bangladesh, and Sri Lanka will also be directly affected, as they depend on sugar imports from India to meet demand during the festive season, which could lead to a potential supply crisis.

Exempted categories:

The government has allowed exports under certain conditions:

- **Bilateral quota:** Exports to the United States and the European Union will continue under the fixed Classification (CXL) and tariff rate quota arrangements.
- **Food security requests:** Supplies may be made in emergency situations on special government-to-government (G2G) requests from friendly countries.
- **Cargo already in process:** Ships whose loading has already begun or whose shipping bills were filed before May 13 will be allowed.
- **Special schemes:** Duty-free exports of raw materials under the Advance Authorization Scheme are exempted.

About Sugar Industry in India:

- Sugar industry in India is one of the largest agro-based sectors in the world. India is the second-largest producer of sugar after Brazil and the largest consumer globally.
- The sector supports millions of farmers, mill workers, and allied industries, making it a crucial part of the rural economy.
- India has seen fluctuating export performance. Exports peaked in 2022 at over Rs.45,000 crore but have steadily declined since then.

Conclusion:

The sugar export ban reflects a precautionary policy shift prioritising domestic food security, inflation control, and climate-risk preparedness. While India remains a major global sugar producer, the decision highlights how agricultural exports are increasingly shaped by climate variability, geopolitical uncertainty, and domestic price stability concerns.

Transformation in India's Payment System

Context:

According to the recent payment system report of the Reserve Bank of India, a major structural transformation has emerged in India's digital payment landscape. Over the last four years (2021–2025), consumer preference has rapidly shifted away from traditional debit cards toward Unified Payments Interface (UPI), credit cards, and digital wallets.

Key Findings of the Report:

- **Decline in Debit Card Usage:** Between 2021 and 2025, the number of debit card transactions declined sharply by 67%. The figure fell from 4.087 billion to 1.336 billion transactions. Their total transaction value also decreased from Rs.7.4 lakh crore to Rs.4.5 lakh crore. Debit cards are now increasingly limited mainly to cash withdrawals through ATMs.
- **Surge in Credit Card Usage:** The number of credit card transactions increased from 2.16 billion to 5.7 billion, reflecting nearly a 2.6-fold rise. The total transaction value reached Rs.23.2 lakh crore, with private banks accounting for a 71.1% share.
- **Dominance of UPI:** By the second half of 2025, UPI accounted for 85.5% of the total payment volume. However, due to its extensive use for small-value payments (below Rs.500), its share in the total transaction value stood at 9.5%.

Major Reasons Behind the Shift:

- **Convenience and Zero Charges:** The instant payment facility provided by UPI, along with the “Zero Merchant Discount Rate (Zero MDR)” policy, has made it universally accepted—from street vendors to large shopping malls.
- **Credit-Linked UPI and Rewards:** After the Reserve Bank of India permitted linking of RuPay credit cards with UPI, consumers

gained access to credit facilities without swiping physical cards. Additionally, cashback offers and reward points on credit cards are attracting more users.

- **Changing Financial Behaviour:** Consumers are increasingly preferring short-term credit options such as “Buy Now, Pay Later” services and credit cards instead of spending directly from their deposited savings through debit transactions.

the country indicates that digital financial inclusion has now reached the last mile.

- **Challenges of Cyber security and Financial Risks:** The rapid growth in credit cards and digital lending has increased the risk of consumers falling into debt traps. At the same time, there is a growing need for a robust technological framework to prevent cyber frauds.

Way Forward:

India’s transition toward a cashless economy is commendable. However, to ensure that this growth remains sustainable in the long term, the Reserve Bank of India must focus on enhancing financial literacy, strengthening cyber security standards, and further improving digital infrastructure in rural areas.

BHAVYA Scheme: India’s Next-Generation Industrial Park Development Initiative

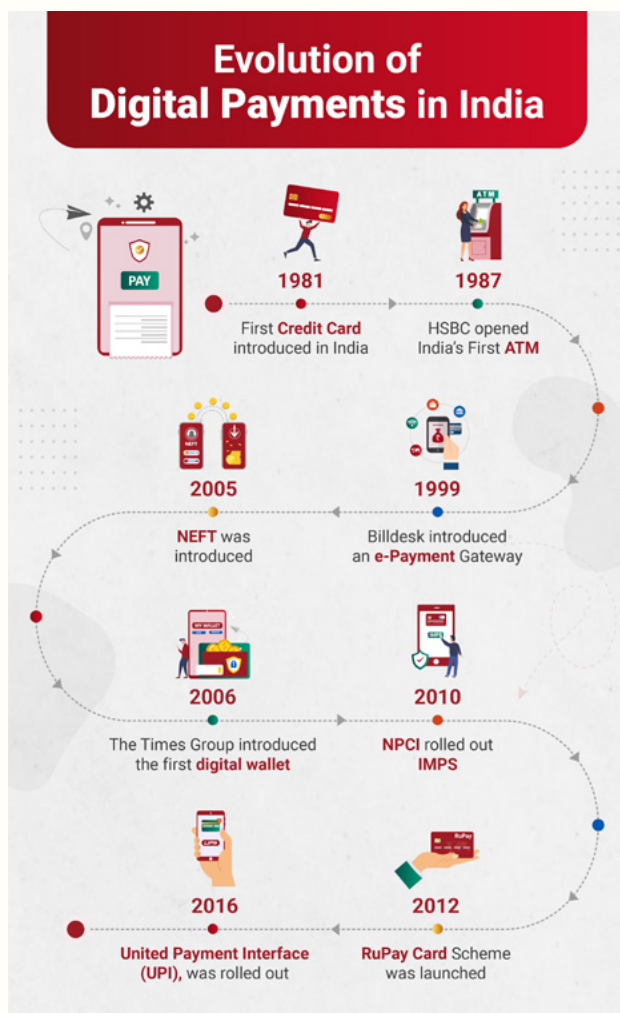
Context:

Recently, the Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce & Industry, Government of India, released detailed operational guidelines for the BHAVYA Scheme (Bharat Audyogik Vikas Yojana). The scheme is a strategic initiative to develop world-class, investment-ready industrial parks across India, aimed at strengthening the manufacturing ecosystem and attracting global investment.

About BHAVYA Scheme:

- The BHAVYA Scheme is a Central Sector Scheme designed to develop 100 modern industrial parks across India between 2026–27 and 2031–32, with a total financial outlay of approximately Rs.33,660 crore.
- In the first phase, up to 50 industrial parks will be selected through a challenge-based competitive process to ensure transparency, efficiency, and high-quality infrastructure development. The scheme is aligned with

Evolution of Digital Payments in India



Impact:

- **Expansion of the Formal Economy:** The rise in digital transactions has reduced dependence on cash, helping curb the parallel economy (black money) and broaden the tax base.
- **Financial Inclusion 2.0:** The presence of more than 730 million UPI QR codes across

national initiatives such as Make in India, PM Gati Shakti, and broader manufacturing and logistics development goals.

Key Objectives of the Scheme:

- The primary objective is to create investment-ready industrial ecosystems that attract domestic and global manufacturers. These parks aim to reduce logistics inefficiencies, improve ease of doing business, and enhance India's competitiveness in global value chains. The scheme also focuses on employment generation, strengthening supply chains, and promoting balanced regional industrial development across states.

Plug-and-Play Industrial Infrastructure:

- A key feature of the scheme is the development of plug-and-play industrial parks offering pre-developed land parcels, ready utilities, and pre-approved regulatory clearances. These parks are designed for immediate operational readiness.
- Core infrastructure includes road connectivity, underground utility systems, water and drainage management, and integrated power including renewable energy solutions.

Coverage and Land Requirements:

- The scheme supports both greenfield and eligible brownfield industrial parks. Minimum land requirements include 100 acres for non-hilly states, 25 acres for hilly states, North-Eastern states, Union Territories, and smaller states, and up to 1000 acres for large-scale developments. This flexible structure ensures inclusive and regionally balanced industrial growth.

Financial Structure and Assistance:

- The Central Government provides financial assistance through equity contributions linked to land value transferred to Special Purpose Vehicles (SPVs), along with milestone-based funding.
- Assistance may go up to Rs.1 crore per acre

for eligible projects. This performance-based model promotes accountability and efficient use of public funds while encouraging private and state participation.

Implementation Framework:

- The scheme is implemented through SPVs registered under the Companies Act, 2013. These SPVs are responsible for planning, infrastructure development, investor facilitation, and long-term operations and maintenance of industrial parks.
- The National Industrial Corridor Development Corporation (NICDC) serves as the Project Management Agency (PMA) for coordination, monitoring, and execution support.

Challenge-Based Selection Process:

- Industrial parks are selected through a competitive challenge-based framework. Evaluation parameters include multimodal connectivity, land suitability, infrastructure quality, industrial ecosystem strength, digital governance readiness, sustainability, and long-term economic viability. This ensures only high-potential projects are approved.



Infrastructure and Ecosystem Development:

- The scheme emphasizes holistic industrial ecosystem creation, including effluent treatment plants, testing laboratories, logistics hubs, worker housing, skill development centres, and digital single-

window clearance systems. These facilities ensure smooth industrial operations and improved productivity.

Private Sector Participation:

- Private developers are actively encouraged to participate through structured SPV-based models. Strong governance frameworks, transparency mechanisms, and accountability standards are built in to ensure efficient execution and investor confidence.

Monitoring and Governance:

- Implementation is monitored through GIS-based systems, regular progress reporting, independent audits, and oversight by a National Level Steering Committee chaired by the Secretary, DPIIT. These mechanisms ensure transparency, accountability, and timely execution.

Convergence with Other Schemes:

- The scheme integrates with initiatives in logistics, renewable energy, skill development, industrial corridors, and environmental sustainability. This convergence ensures a coordinated and holistic approach to industrial development.

Significance of the Scheme:

- BHAVYA is expected to significantly boost India's manufacturing capacity, attract global investment, generate large-scale employment, improve exports, and strengthen integration into global value chains, supporting India's growth as a major industrial hub.

Conclusion:

The BHAVYA Scheme is a forward-looking initiative aimed at building globally competitive, sustainable, and technology-driven industrial parks. With plug-and-play infrastructure, strong governance, and private sector participation, it is positioned to accelerate India's journey toward becoming a \$5 trillion economy and a global manufacturing powerhouse.

India's Coldwater Fisheries System

Context:

In recent times, India's cold-water fisheries sector is rapidly emerging as a significant component of the Blue Economy, with strong growth concentrated in the Himalayan and North Eastern regions.

About Cold-water fisheries:

- Cold-water fisheries are practised in high-altitude rivers, streams, lakes, and reservoirs where water temperature ranges between 5°C to 25°C, dissolved oxygen remains above 6 mg/L, and pH levels range from 6.5 to 8.0.
- These ecosystems are spread across Jammu & Kashmir, Ladakh, Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Sikkim, Meghalaya, and Nagaland, along with hill regions of West Bengal, Kerala, Karnataka, and Tamil Nadu. Collectively, they cover over 533,000 sq. km of mountainous terrain.
- India has identified more than 278 cold-water fish species, highlighting their ecological and conservation importance.

Production Status and Contribution:

- Although cold-water fisheries account for only about 3% of India's total fish production, their importance is growing steadily. India's total fish production reached 197.75 lakh tonnes in 2024–25, doubling since 2013–14.
- Cold-water fish production stands at around 7,000 metric tonnes, with trout contributing nearly 6,000 metric tonnes. Key species include rainbow trout, snow trout, and golden mahseer, which are cultivated using modern systems such as hatcheries, raceways, recirculating aquaculture systems (RAS), and biofloc technology.
- Jammu & Kashmir leads trout production with about 3,010 metric tonnes, followed by Himachal Pradesh and Uttarakhand.

Government Support and PMMSY:

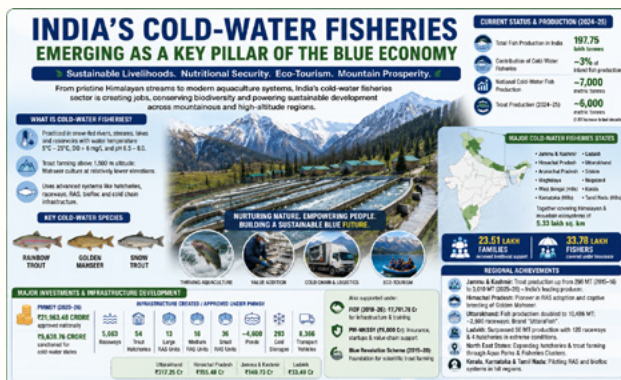
- The government has provided strong policy support through the Pradhan Mantri Matsya Sampada Yojana (PMMSY), under which more than 25% of total scheme funds have been allocated for cold-water fisheries.
- Investments include construction of hatcheries, raceways, RAS units, cold storage facilities, ponds, and transport infrastructure.
- These interventions have significantly boosted infrastructure development in Himalayan and North Eastern regions.

of total production, marking a structural shift in the sector.

- India also ranks first globally in shrimp production and achieved seafood exports worth Rs.62,408 crore in 2024–25.

Conclusion:

India’s cold-water fisheries sector, though small in volume, holds immense strategic importance. It strengthens the Blue Economy, promotes sustainable development in fragile Himalayan ecosystems, and enhances rural livelihoods. With strong policy support and technological integration, it is poised to become a key driver of inclusive and sustainable economic growth in the coming years.



India’s New Labour Codes and Their Implementation

Context:

Recently, The Ministry of Labour and Employment has notified the final rules for all four Labour Codes. The implementation marks a major overhaul of India’s labour regulatory framework aimed at simplifying laws, improving compliance, and expanding worker protections.

About New Labour Codes:

- The Government of India has notified four new Labour Codes (Wages, Social Security, Industrial Relations and Occupational Safety) by merging 29 central labour laws. These codes have been in effect since 21 November 2025.
- Their main objective is to promote ease of doing business, ensure minimum wages for all workers, establish a 48-hour work week, and provide better protection even for contract workers.

Technological and Infrastructure Development:

- Modern aquaculture practices are transforming the sector. Technologies such as RAS, biofloc systems, and cold-chain logistics are improving productivity and sustainability. Trout farming is typically practised above 1,500 metres altitude, while mahseer farming is suitable at lower elevations.
- Infrastructure development includes hatcheries, transport vehicles, and cold storage systems to ensure efficient production and marketing.

About India’s Fisheries Sector:

- India is the second-largest fish producer in the world, contributing about 8% of global output. The sector supports nearly 3 crore livelihoods and contributes 7.43% of agricultural GVA and about 1.1% of GDP. Inland fisheries now account for over 75%

▪ **Constitutional Basis of Labour Laws:**

- » Labour is a subject under the Concurrent List (List III) of the Seventh Schedule of the Constitution of India. This means both the Centre and States can legislate on labour matters, leading to the need

for harmonised national-level codes.

Key Highlights of the Four Labour Codes:

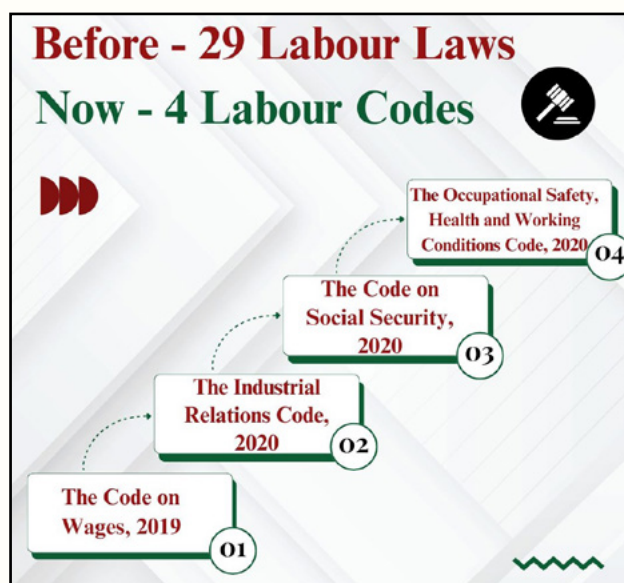
- The four codes are:
 - » Code on Wages (2019)
 - » Industrial Relations Code (2020)
 - » Social Security Code (2020)
 - » Occupational Safety, Health and Working Conditions Code (2020)

Key provisions include:

- National floor wage fixed by the Centre
- Mandatory 8-hour workday and 48-hour weekly cap
- Universal wage slips and compliance transparency
- Social security coverage for gig and unorganised workers
- Single registration and licensing system for employers

Key Policies:

- A national floor wage will be determined considering minimum living standards such as food, clothing, and housing. It will act as a baseline below which states cannot fix wages.
- However, the removal of a fixed formula for minimum wage calculation in the final rules has raised concerns.



Impact on Workers:

- **Formal workers:** Better regulation, wage protection, and safety standards
- **Informal workers:** Inclusion in social security schemes, though implementation remains key
- **Gig workers:** A dedicated National Social Security Board ensures representation and welfare coverage
- **Women workers:** Permission for night shifts with consent, safe transport, and workplace safety measures

Impact on Ease of Doing Business:

- The codes simplify compliance through:
 - » Single licence system for multi-state contractors
 - » Digital registration processes
 - » Consolidation of multiple laws into unified frameworks
 - » This reduces regulatory burden and improves labour market flexibility.

Concerns and Criticisms:

- Lack of clear formula for minimum wage fixation
- Possible wage disparities across states
- Implementation challenges due to federal coordination
- Fear of diluted bargaining power for workers
- Labour unions argue that flexibility may come at the cost of worker protection.

Conclusion:

The implementation of the four Labour Codes marks a structural transformation in India's labour governance system. While they aim to improve formalisation, ease of doing business and worker protection, their success will depend on balanced implementation.

VB-G RAM G Act, 2025

Context:

Recently, the Government of India notified commencement of the Viksit Bharat – Guarantee

for Rozgar and Aajeevika Mission (Gramin) Act, 2025 (VB-G RAM G Act) across rural India with effect from 1 July 2026.

About the Act:

- The VB-G RAM G Act, 2025 is a rural employment law designed to modernise India’s wage employment system. It aims to strengthen livelihood security, create durable rural infrastructure, enhance transparency through digital governance, and promote climate-resilient development.
- The Act replaces the Mahatma Gandhi National Rural Employment Guarantee Act and represents a major restructuring of rural employment policy, shifting emphasis from welfare-based job provision to productivity, asset creation, and sustainable rural development aligned with long-term national goals.
- The Act aligns rural employment with the vision of Viksit Bharat @2047, integrating job provision with productive asset creation. Guided by “Rozgar Bhi, Samman Bhi”, it emphasises dignity in work, decentralised planning, and long-term socio-economic transformation of rural areas.

Key Features of the VB-G RAM G Act, 2025:

- **Enhanced Employment Guarantee:** Increased from 100 to 125 days per rural household annually.
- **Thematic Works:** Focus on water security, rural infrastructure, livelihood assets, and climate resilience.
- **Digital Governance:** Biometric authentication, geo-tagging, NMMS attendance, GIS planning, real-time dashboards, and DBT-based wage payments.
- **Decentralised Planning:** Gram Panchayats prepare Viksit Gram Panchayat Plans (VGPPs) through Gram Sabhas.
- **Timely Wages:** Payment within 15 days with 0.05% daily compensation for delays.
- **Worker Welfare:** Provision of drinking water, shade, first aid, and childcare facilities at worksites.

- **Transparency Measures:** Mandatory social audits and mobile-based monitoring systems.
- **Seasonal Flexibility:** States may allow up to 60 days pause during peak agricultural seasons.

MGNREGA	VB-G RAM G
◆ 100 wage employment days	◆ 125 wage employment days
◆ Work scattered across categories; no robust national strategy	◆ Localised planning; mandates Viksit Gram Panchayat Plans
◆ Centre bears unskilled wage costs; states bear unemployment allowance	◆ State cost-sharing for wages ; 60:40 for most states; 90:10 for certain special-category regions
◆ No explicit statutory “pause window”	◆ States can notify up to 60 days in a FY when work will not be executed
◆ Wage payment within a stipulated time window	◆ Weekly wage payments mandated ; fortnight at most
◆ Gram Panchayat planning is central	◆ Integrates institutionalised convergence and infrastructure planning

Benefits of the Act:

- The Act improves livelihood security through extended employment days and strengthens rural infrastructure such as irrigation and connectivity.
- It boosts climate resilience through conservation and disaster mitigation works. Digital governance reduces corruption and delays, ensuring transparency and efficiency.
- Women’s participation is encouraged through childcare support and improved workplace facilities. Decentralised planning empowers local governance and ensures community-driven development.

Conclusion:

The VB-G RAM G Act, 2025 marks a shift toward

a productivity-oriented rural development model integrating employment, infrastructure, and sustainability. Its success will depend on efficient implementation, digital inclusion, and timely fund flow to ensure inclusive and equitable rural transformation under Viksit Bharat @2047.

Rising Counterfeit Currency Threat in India

Context:

Recently, The Reserve Bank of India's Financial Year 2025-26 Annual Report has revealed a 5.7% increase in counterfeit currency detection across the banking system. A total of 2,29,746 fake notes were identified, with counterfeit Rs.500 notes accounting for nearly 62% of all detected cases. The sharp rise in fake Rs.500 notes highlights persistent vulnerabilities in India's currency management and financial security framework.

Economic Implications:

- The circulation of counterfeit currency poses several economic challenges. It undermines public confidence in cash transactions, increases verification costs for banks and businesses, and can distort the integrity of the monetary system.
- Although the overall volume of fake notes remains small compared to total currency circulation, their presence adversely affects trust in financial institutions and cash-based transactions.

Link with Financial Terrorism:

- Counterfeit currency is not merely an economic offence but also a national security concern. Fake Indian Currency Notes (FICN) have often been linked to financial terrorism, where forged notes are used to finance extremist activities, organized crime, narcotics trafficking, and money laundering. Such activities threaten both economic stability and internal security.

Cross-Border Smuggling Concerns:

- The dominance of counterfeit Rs.500 notes suggests the involvement of organized criminal networks operating across borders. Smuggling routes used for illegal trade, drug trafficking, and hawala transactions are often exploited for the distribution of fake currency. This highlights the transnational nature of the challenge.

Technological Measures Required:

- To combat counterfeit currency, India must strengthen security features in banknotes through advanced printing technologies, machine-readable markers, and AI-based authentication systems. The use of data analytics and centralized counterfeit tracking systems can help identify emerging trends and trafficking routes. Expanding digital payment infrastructure can further reduce dependence on physical cash.

Administrative Measures:

- Administrative efforts should focus on stronger border surveillance, enhanced intelligence-sharing, and better coordination among agencies such as the RBI, National Investigation Agency, Directorate of Revenue Intelligence, and state police forces. International cooperation is also essential to dismantle cross-border counterfeit networks.

Conclusion:

The rise in counterfeit currency detection during FY26 serves as a reminder that financial security remains an ongoing challenge. A combination of advanced technology, robust law enforcement, effective border management, and increased digitalization is necessary to protect the Indian economy from financial terrorism and currency-related crimes.

Defence and Internal Security

Smart Border Project: India's Technology-Driven Border Security Strategy

Context:

India's national security challenges have changed rapidly over the past few years. Border security is no longer limited to fencing, border outposts and troop patrolling. Emerging threats such as drones, cyber technology, artificial intelligence, satellite surveillance, and hybrid warfare have made traditional border management models increasingly inadequate. In this changing security landscape, the recent announcement of the "Smart Border Project" by Union Home Minister Amit Shah signals a major strategic transformation in India's border security policy.

The project aims to transform the India-Pakistan and India-Bangladesh borders into a technology-driven security framework with the objective of making the borders "impenetrable." Considering present global circumstances, drone-based smuggling, terrorism, and illegal infiltration challenges, this initiative is emerging not merely as a security project but as a crucial component of India's long-term national security strategy.

Changing Border Security Scenario:

- India's nearly 15,200-kilometre-long land border passes through diverse geographical terrains. The western border consists of deserts and sensitive military zones, while the eastern border includes rivers, marshlands, and dense forests. Under such conditions, surveillance based solely on fencing and human patrolling cannot be

considered sufficient.

- In particular, incidents involving the smuggling of weapons, fake currency, and narcotics through drones along the Pakistan border have increased significantly. Drone activities in Punjab and Jammu have repeatedly posed challenges for security agencies. On the other hand, illegal infiltration, human trafficking, and organized crime along the India-Bangladesh border have remained persistent concerns.
- Additionally, the nature of modern warfare has also changed. Today, apart from military aggression, cyberattacks, drone surveillance, electronic disruptions, and hybrid warfare techniques are increasingly being used.

Key Features of the Smart Border Project:

The primary objective of this project is to transform border management from "Reactive Security" to "Predictive and Preventive Security." It marks a major policy shift from a manpower-intensive security arrangement to a technology-driven security model. Several advanced technologies will be used under this initiative:

- AI-Based Thermal Cameras and Radar Systems:** Thermal imaging cameras and radar networks will be deployed to prevent infiltration during nighttime. This will enable surveillance even in adverse weather conditions and darkness. AI-based systems will help identify suspicious activities in border areas. These technologies will

automatically analyse unusual activities and send alerts to security agencies.

- **Drones and Anti-Drone Systems:** Drones have emerged as one of the biggest challenges to border security. Therefore, the Smart Border Project will incorporate both drone surveillance and anti-drone technologies to prevent illegal drone activities.
- **Smart Fencing and Sensor Networks:** Sensors will be installed in border regions to instantly record any activity and transmit information to control centres. This system will be particularly effective in riverine and forested areas where conventional fencing is difficult.
- **Smart Underground Sensor Systems:** Underground vibration sensors (UGS) and underground fibre-optic sensors will be used to detect underground movement, tunnel-digging attempts, and to secure aquatic borders.
- **Integrated Command and Control System:** An integrated command system will be developed for real-time data sharing among the Border Security Force, local police, intelligence agencies, and other security institutions. This will enhance rapid response capability.

Integration with Previous Systems:

The Smart Border Project is not a standalone effort; rather, it represents a mature and expanded version of India's earlier security initiatives:

- **BOLD-QIT (Border Electronically Dominated QRT Interception Technique):** Drawing lessons from the successful deployment of this system along Assam's riverine borders, the new project further strengthens the security of aquatic boundaries. This initiative was particularly implemented in river areas along the India-Bangladesh border and utilized laser sensors, thermal imaging, and digital surveillance systems.
- **CIBMS (Comprehensive Integrated Border Management System):** Its pilot project was

launched during 2017–18 in the Samba sector of Jammu. The present project seeks to scale up the same CIBMS technology across nearly 6,000 kilometres of border areas.

- **Vibrant Village Programme (VVP 2.0):** Expanded in February 2026, this programme integrates the development of border villages with the digital surveillance grid, enabling local populations to act as the “eyes and ears” of the security network.

Connection with Atmanirbhar Bharat and Defence Modernisation:

- The Smart Border Project is not limited to border security alone. It is also linked to the broader policy vision of “Atmanirbhar Bharat” (Self-Reliant India) and defence modernisation. If India develops indigenous drones, sensors, AI platforms, and cybersecurity systems, it will further boost the defence manufacturing sector.
- India is already moving towards major investments in defence technology, semiconductor manufacturing, and drone policy reforms. The Smart Border Project can provide a practical platform for the

implementation of these efforts.

Challenges Associated with the Project:

Although the project is highly ambitious, it also faces several practical challenges:

- **High Financial Cost:** The installation and maintenance of AI systems, drone networks, sensors, and radar-based infrastructure along Indian borders will be extremely expensive. Implementing such systems across India's vast border areas may pose a significant economic challenge.
- **Cybersecurity Risks:** Greater use of digital technology also increases the risk of cyberattacks. If surveillance systems are hacked, it could become a serious threat to national security.
- **Technological Dependence:** India must ensure minimal foreign dependence in these technologies. Otherwise, sensitive security infrastructure may remain vulnerable to external influence.
- **Difficult Geographical Conditions:** Maintaining equipment in deserts, flood-prone regions, extremely cold areas, and dense forests will not be easy.
- **Inter-Agency Coordination:** Apart from the BSF under the Ministry of Home Affairs, real-time data sharing among local state police, the Intelligence Bureau (IB), and the Army under the Ministry of Defence may face administrative obstacles.

Way Forward:

- **Indigenisation:** To promote self-reliance in the defence sector, anti-drone systems and AI cameras developed by domestic defence startups under the "Make in India" initiative should be prioritized in order to reduce the risk of cyber espionage.
- **Regular Upgradation of Software and Infrastructure:** Along with becoming technologically advanced, these systems must also be made "future-proof" so that cross-border criminals cannot exploit emerging technologies such as deepfakes or encrypted drones to breach security.

- **Human-Tech Hybrid Model:** Complete dependence on technology may prove disastrous. Technology should be treated only as a "force multiplier," while final control must remain in the hands of skilled and mentally alert soldiers.
- **Bilateral Diplomacy:** Border management should not be viewed solely from a military perspective. Diplomatic relations with neighbouring countries, especially Bangladesh, must be strengthened. Through the Land Ports Authority of India (LPAI), legal trade and movement should also be facilitated. Additionally, Parliament and policymakers must ensure that a balance is maintained between technological surveillance and citizens' rights.

Conclusion:

The Smart Border Project represents a historic transformation in India's border security policy. This initiative makes it clear that India no longer wishes to rely solely on traditional security models but is instead developing a technology-driven security framework suited to future challenges. If implemented effectively, the project will not only help control infiltration and smuggling but will also strengthen India's ability to tackle future hybrid warfare and technological security threats. In the 21st century, strong borders will not be determined merely by the number of soldiers, but by technological capability, data intelligence, and rapid response mechanisms. The Smart Border Project is India's decisive step towards this new era of security.

Short Issues

INS Mahendragiri

Context:

Recently, The Indian Navy recently took delivery of INS Mahendragiri (Yard 12654), the sixth ship of the Nilgiri-class (Project 17A) frigates, marking a significant step in strengthening India's maritime defence capabilities. Built by Mazagon Dock Shipbuilders Limited (MDL), Mumbai, this milestone reflects India's growing emphasis on indigenous warship design and construction under the Aatmanirbhar Bharat initiative.

About Project 17A:

- The Nilgiri-class frigates (Project 17A) are the next-generation follow-on to the Shivalik-class (Project 17) frigates, featuring enhanced stealth, automation, and combat capabilities.
- A total of seven frigates are being constructed, divided between two major public sector shipyards—Mazagon Dock Shipbuilders Limited (MDL), Mumbai, which is building four ships, and Garden Reach Shipbuilders & Engineers (GRSE), Kolkata, which is constructing three.
- The project has an indigenous content of around 75%, involving over 200 MSMEs, thereby strengthening India's domestic defence industrial ecosystem and supporting self-reliance in critical technologies.

List of Seven Frigates:

- The fleet includes INS Nilgiri, INS Himgiri, INS Udaygiri, INS Taragiri, INS Dunagiri, INS Vindhyaagiri, and INS Mahendragiri.
- These vessels have been commissioned or delivered between 2025 and 2026, with INS Nilgiri being commissioned in January 2025 and INS Mahendragiri delivered in April 2026.
- The staggered induction of these ships ensures a steady enhancement of naval operational capability and fleet modernisation.

Key Technical Specifications:

- The Project 17A frigates incorporate advanced stealth features, including a reduced radar cross-section achieved through radar-absorbent materials and improved hull design.
- They are constructed using Integrated Modular Construction techniques, allowing pre-outfitted blocks to be assembled for faster production timelines. The ships displace around 6,670 tonnes, measure approximately 149 metres in length, and are capable of achieving speeds between 28–32 knots using CODOG or CODAG propulsion systems.

INDIA'S NEW WARSHIP
The Nilgiri-class frigate will be Indian Navy's most-advanced stealth frigate project till date

Project 17A
Known as the Nilgiri-class frigate will have seven vessels:

- INS Nilgiri
- INS Himgiri
- INS Udaygiri
- INS Dunagiri
- INS Taragiri
- INS Vindhyaagiri
- INS Mahendragiri

Estimated cost per vessel
₹ 4,000 cr+

Constructed by two companies:
• Mazagon Dock Shipbuilders
• Garden Reach Shipbuilders & Engineers

75% of equipment and systems orders are from indigenous firms

What is a Frigate?
A multi-role naval warship that serves as a fleet protector and submarine hunter

Weapon and Sensor Suite:

- These frigates are heavily armed for multi-dimensional warfare. Their air defence is provided by the 32-cell Barak-8 (LR-SAM) system, while surface strike capability is ensured through 8 BrahMos supersonic cruise missiles.
- They also feature a 76mm Super Rapid Gun Mount, AK-630 Close-In Weapon Systems (CIWS), and anti-submarine warfare equipment including torpedo tubes, rocket launchers, and HUMSA-NG sonar.
- Advanced sensors like the MF-STAR AESA radar enable multi-target tracking, while

the Shakti electronic warfare suite provides capabilities for electronic surveillance, interception, and jamming.

Significance:

- Designed entirely by the Indian Navy's Warship Design Bureau, Project 17A represents a major achievement in indigenous defence engineering
- These frigates are designed for blue-water operations and play a crucial role in carrier battle groups such as those centred around INS Vikrant, enhancing India's maritime power projection. The naming convention, based on Indian mountain ranges, continues the legacy of earlier Nilgiri-class vessels, symbolising continuity in naval tradition alongside technological advancement.

Conclusion:

The induction of INS Mahendragiri as part of the Nilgiri-class frigate programme underscores India's accelerating progress in indigenous defence manufacturing and naval modernisation. With advanced stealth, firepower, and automation, Project 17A significantly enhances the Indian Navy's operational readiness and strengthens its role as a key maritime force in the Indo-Pacific region.

Naval Anti-Ship Missile Short Range (NASM-SR)

Context:


Recently, the Indian Navy and the Defence Research and Development Organisation (DRDO) successfully carried out the first-ever salvo launch of the Naval Anti-Ship Missile – Short Range (NASM-SR) from a naval helicopter off the coast of Odisha.

About NASM-SR:

- The Naval Anti-Ship Missile Short Range (NASM-SR) is an advanced air-launched anti-ship missile system developed to enhance India's naval offensive capability.






- Designed to replace ageing foreign-origin missiles like the British Sea Eagle
- India's first indigenously developed helicopter-launched anti-ship missile
- Developed by Defence Research and Development Organisation (DRDO) through Research Centre Imarat (RCI), Hyderabad, along with other DRDO labs
- Strengthens self-reliance in naval strike systems

NAVAL ANTI-SHIP MISSILE—SHORT RANGE



NASM-SR is an indigenously developed short-range anti-ship missile

Designed for launch from Indian Navy Sea King helicopters

 <p style="font-size: x-small;">Effective strike range is around 55 km against surface vessels</p>	 <p style="font-size: x-small;">Features a solid rocket motor for propulsion</p>	 <p style="font-size: x-small;">Equipped with advanced guidance and navigation systems for precision targeting</p>
 <p style="font-size: x-small;">Carries a 100 kg high-explosive warhead to neutralize enemy ships</p>	 <p style="font-size: x-small;">Strengthens India's self-reliance in naval strike capabilities</p>	

Key Features of NASM-SR:

- **Propulsion System**
 - » Solid-propellant engine
 - » Ejectable booster for launch
 - » Long-burn sustainer for extended flight
- **Range and Flight Profile**
 - » Range: ~55 km

- » Subsonic sea-skimming trajectory to evade radar detection
- **Precision Strike Capability**
 - » Designed for waterline hits, targeting a ship's hull at the most vulnerable point
 - » Causes maximum flooding and structural damage
- **Guidance and Navigation**
 - » Fiber-optic gyroscope-based inertial navigation system
 - » Radio altimeter for altitude control
 - » Advanced Imaging Infra-Red (IIR) seeker for terminal precision targeting
- **Data and Control Systems**
 - » High-bandwidth two-way data link
 - » Enables lock-on-after-launch and in-flight target reprogramming
 - » Electro-mechanical actuator and jet vane control for high manoeuvrability
- **Platform Integration**
 - » Initially launched from Sea King helicopters
 - » Future integration planned with:
 - MH-60R Seahawk
 - HAL Dhruv (Advanced Light Helicopter)

Significance of NASM-SR:

- Validates India's indigenous maritime strike capability
- Demonstrates successful salvo firing from a single platform
- Enhances operational readiness in real combat scenarios
- Reduces dependence on imported systems like Sea Eagle missiles
- Strengthens ecosystem involving DRDO, MSMEs, and startups
- Boosts India's vision of a self-reliant defence manufacturing sector

Strategic Importance for India:

- NASM-SR significantly improves India's coastal defence and naval deterrence capability. Its sea-skimming, precision strike design makes it highly effective against enemy ships in littoral zones,

supporting India's maritime security in the Indian Ocean Region (IOR).

Conclusion:

The successful testing of NASM-SR marks a major leap in India's indigenous defence capability. It reflects the country's growing technological maturity in advanced missile systems and strengthens its maritime security architecture while advancing the goal of Atmanirbhar Bharat in defence production.

Successful Testing of 'TARA' Glide Weapon

Context:

Recently, the Defence Research and Development Organisation (DRDO) and the Indian Air Force (IAF) successfully conducted the maiden flight trial of the indigenous 'Tactical Advanced Range Augmentation (TARA)' glide weapon system off the coast of Odisha.

About the TARA Glide Weapon:

- TARA is an indigenously developed Range Extension Kit. It is a hybrid technology that converts conventional unguided bombs into highly precise smart weapons.
- In simple terms, it equips existing bombs with wings and an advanced guidance system, enabling them to glide accurately toward their targets.
- The system has been developed by DRDO's premier laboratory, the Research Centre Imarat (RCI), Hyderabad.

Key Technical Features:

- **Modular design:** TARA can be integrated with bombs of different weights, including 250 kg, 450 kg, and 500 kg variants.
- **Range:** The weapon is capable of striking targets at a distance of approximately 80–100 km. This stand-off range allows aircraft to carry out strikes while remaining outside the reach of enemy air defence systems.
- **Precision:** It uses a GPS-aided inertial

navigation system along with an electro-optical/infrared (IIR) seeker for the terminal phase. It has a circular error probable (CEP) of less than 3 metres, providing pinpoint accuracy.

- **Platform compatibility:** Although the initial trial was conducted using the Jaguar aircraft, it is designed for deployment on other frontline fighter aircraft such as the Sukhoi Su-30 MKI, Mirage-2000, and LCA Tejas.



India Successfully Test-Fires TARA Glide Weapon
DRDO & Indian Air Force | Indigenous Precision-Strike Milestone

What Happened?

- Successful test-fire of TARA (Tactical Advanced Range Augmentation)
- Launched off the coast of Odisha on May 7
- Conducted by DRDO in collaboration with Indian Air Force (IAF)

What is TARA?
Tactical Advanced Range Augmentation

- Glide weapon system
- Converts unguided warheads into precision-guided munitions
- Extends range & improves accuracy without new missile systems
- Enables low-cost precision warfare at scale

Key Capabilities

- Precision Strike:** High accuracy on ground targets
- Range Augmentation:** Significantly increased reach
- Modular Integration:** Works with existing warheads
- Cost-Effective:** Upgrades legacy arsenals affordably
- Air Force Force Multiplier:** Enhances deep strike capability

Strategic Significance

- Strengthens India's precision warfare capability
- Boosts Atmanirbhar Bharat in defence technology
- Enables rapid, scalable upgradation of existing munition stockpiles
- Enhances deterrence with long-range, accurate strikes

DRDO Defence Research & Development Organisation

INDIAN AIR FORCE Guardians of the Nation

Advancing India's Indigenous Defence & Self-Reliance

Strategic and Tactical Significance:

- **Atmanirbhar Bharat and cost-effectiveness:** The biggest advantage of TARA is its low cost. Instead of procuring new missiles, the Air Force can upgrade its existing stock of older and larger bombs with modern technology. This strengthens the goal of self-reliance in the defence sector.
- **Changing nature of air warfare:** In modern warfare, stand-off capability is crucial. With TARA, pilots are not required to enter deep into enemy territory, thereby ensuring the safety of both the aircraft and the pilot.
- **Surgical precision strikes:** This technology enables the destruction of terrorist

hideouts or military installations located in densely populated areas or near critical infrastructure without causing significant collateral damage.

Other Glide Bombs:

- **Smart Anti-Airfield Weapon (SAAW):** It is a 125 kg bomb with a range of 100 km, specifically designed to destroy enemy runways and bunkers.
- **GAURAV and GAUTAM:** These are also long-range glide bombs, belonging to the 1,000 kg and 500 kg categories respectively.

Conclusion:

The successful testing of TARA is not merely a technological achievement, but also a testament to India's advanced aeronautical engineering and weapon integration capabilities. Participation of private industry through Development-cum-Production Partners (DcPP) will ensure large-scale production and faster induction of such systems into the Indian Air Force.

Hypersonic Missile Technology

Context:

Recently, The Defence Research and Development Organisation's Defence Research & Development Laboratory (DRDL) successfully conducted a long-duration test of an actively cooled full-scale scramjet combustor at Hyderabad. The combustor operated for over 1,200 seconds, surpassing the earlier 700-second test conducted in January 2026.

About Hypersonic Missiles:

- Hypersonic missiles are advanced weapons capable of traveling at speeds greater than Mach 5, nearly five times the speed of sound. These missiles are difficult to intercept because they combine extreme speed with maneuverability.
- Unlike conventional ballistic missiles that follow predictable paths, hypersonic

missiles can change direction and fly at lower altitudes, making them harder to detect through radar and missile defence systems. Their development is rapidly transforming modern warfare and global strategic deterrence.

Types of Hypersonic missiles:

- Hypersonic missiles are mainly classified into two categories: Hypersonic Glide Vehicles (HGVs) and Scramjet-powered Hypersonic Cruise Missiles.
- HGVs are launched using rockets and then glide toward targets at high speed while maneuvering unpredictably.
- In contrast, hypersonic cruise missiles are powered continuously by scramjet engines using atmospheric oxygen for combustion, enabling sustained hypersonic flight and greater fuel efficiency for long-range operations.

About Scramjet Engine:

- A Scramjet, or Supersonic Combustion Ramjet, is an advanced air-breathing engine in which combustion occurs while airflow remains supersonic. Unlike conventional rockets, scramjets use atmospheric oxygen instead of carrying oxidizers, making them lighter and more efficient at very high speeds.
- However, maintaining stable combustion under such conditions is technologically challenging. The successful DRDL test demonstrates India's progress in mastering this sophisticated propulsion technology.

Significance and Strategic Importance:

- The successful 1,200-second test is a major breakthrough for India's hypersonic programme. It validated the design of the actively cooled combustor and showcased indigenous technologies such as liquid hydrocarbon fuel and thermal barrier coatings.
- Hypersonic technology strengthens India's

strategic deterrence by improving long-range precision strike capability and reducing dependence on foreign defence systems under the vision of Atmanirbhar Bharat.



Conclusion:

Despite challenges such as extreme heat, guidance complexity, and high development costs, the DRDL scramjet test marks a historic achievement. It positions India among leading nations like the United States, Russia, and China in the global hypersonic race and enhances India's future defence preparedness.

India's Successful Advanced Agni Missile Trial with MIRV Technology

Context:

Recently, The Defence Research and Development Organisation successfully conducted a flight trial of an Advanced Agni missile equipped with Multiple Independently Targetable Re-entry Vehicle (MIRV) technology from Dr APJ Abdul Kalam Island. The missile successfully delivered multiple payloads to different targets across the Indian Ocean Region.

About Agni Missile:

- The Agni missile series forms the backbone

of India's strategic deterrence system and was developed under the Integrated Guided Missile Development Programme (IGMDP).

- These ballistic missiles are designed for long-range precision strikes and nuclear deterrence. Over time, the Agni series has evolved significantly in range, accuracy, mobility, and technological sophistication.
- Agni-I to Agni-IV have ranges from 700 km to 3,500 km and can carry nuclear warheads. The latest Agni-5 missile has a range exceeding 5,000 km and is capable of intercontinental strike capability. It uses a three-stage solid-fuel propulsion system and advanced navigation technologies.

DRDO labs and domestic industries, the missile incorporates advanced guidance, propulsion, navigation, and re-entry technologies, reflecting India's growing expertise in strategic systems.

What is MIRV Technology?

- MIRV (Multiple Independently Targetable Re-entry Vehicle) technology allows a single missile to carry multiple warheads, each capable of striking different targets independently.
- After reaching space, the missile releases multiple re-entry vehicles that follow separate trajectories toward assigned targets. This makes interception extremely difficult and significantly increases strategic effectiveness.
- The successful integration of MIRV technology places India among a select group of advanced missile-capable nations.

India Successfully Tests
ADVANCED
AGNI
MISSILE TEST
with MIRV Capability

1. Conducted the flight trial from Dr APJ Abdul Kalam Island, Odisha on 8th May, 2026
2. Multiple Independently Targeted Re-Entry Vehicle (MIRV) system
3. Target multiple strategic targets using a single missile system.
4. Missile developed by DRDO with the support of indigenous industries.

What is MIRV technology?

MIRV enables **single missiles** to **target multiple locations** hundreds of kilometers apart.

Agni missile | carries nuclear warheads, has over 5,000 km range, aimed at countering China.

Known countries with MIRV-equipped missiles include **US, Russia, China, France, and UK.**

MIRV-equipped missiles can be launched from **land or sea**, including from submarines.

Each re-entry vehicle can be independently targeted — they are all launched from one missile, but hit different targets.

Features of the Advanced Agni Missile:

- The tested Advanced Agni missile is believed to have a range exceeding 5,000–5,500 km, placing it in the intercontinental ballistic missile category. It can carry multiple warheads using MIRV capability and strike different strategic targets simultaneously.
- Developed by the Defence Research & Development Laboratory along with other

Significance of the Successful Trial:

- The successful test is a major boost to India's strategic deterrence, enabling one missile to hit multiple targets and improving strike efficiency. It confirms advances in precision targeting, guidance, and re-entry technology, strengthening national security.
- MIRV-equipped missiles also enhance India's second-strike capability by carrying multiple warheads that can overwhelm enemy defences. This supports the doctrine of credible minimum deterrence and improves strategic stability in a nuclear context.

Strategic Importance for India:

- The successful Agni missile test strengthens India's geopolitical and strategic position. The extended range enables India to cover a vast geographical area, enhancing deterrence across Asia and beyond.
- In the context of regional security challenges and military modernization by neighboring countries, such capabilities are crucial for maintaining strategic balance. It also supports the vision of Atmanirbhar Bharat by promoting indigenous defence production.

DRDO's ULPGM-V3 Missile Trials

Context:

Recently, The Defence Research and Development Organisation (DRDO) has successfully completed final development trials of the Unmanned Aerial Vehicle Launched Precision Guided Missile (ULPGM-V3) at a test range near Kurnool. The system has been tested in both air-to-ground and air-to-air modes, marking a significant milestone in India's indigenous defence capability under the Aatmanirbhar Bharat initiative.

About ULPGM-V3:

- The ULPGM-V3 stands for Unmanned

Aerial Vehicle Launched Precision Guided Missile-V3, an indigenous missile system developed by India's Defence Research and Development Organisation (DRDO).

- It is a lightweight, precision-guided missile designed to be launched from drones and unmanned aerial vehicles (UAVs). The missile is capable of engaging both ground and aerial targets with high accuracy. The latest V3 version is an upgraded variant of the earlier ULPGM-V2 system and includes improved seekers, modular warheads, and enhanced operational flexibility.

Key Features of ULPGM-V3:

- The ULPGM-V3 incorporates several advanced technologies that significantly improve combat effectiveness. These include:
 - » High-definition dual-channel seeker
 - » Day-and-night operational capability
 - » Fire-and-forget targeting
 - » Two-way data link
 - » Post-launch target update system
 - » Integrated Ground Control System (GCS)
- The dual-channel seeker allows the missile to track targets more effectively under different environmental conditions. Meanwhile, the two-way data link enables operators to update target information even after launch, increasing battlefield flexibility.

About fire-and-forget" capability:

- A fire-and-forget missile can independently track and destroy its target after launch without requiring continuous operator guidance.
- Once the ULPGM-V3 locks onto a target and is launched from the UAV, the missile's onboard guidance system takes over. This allows the launching drone to quickly reposition or retreat from hostile zones, improving survivability during combat operations.

Operational and Strategic Applications:

- The missile has been designed as a multi-role weapon system capable of attacking:
 - » Enemy tanks and armored vehicles
 - » Bunkers and fortified structures
 - » Helicopters
 - » Drones and low-flying aerial threats
 - » High-value tactical targets
- The missile uses modular warheads, meaning different warhead types can be selected depending on mission requirements. Some configurations include anti-armour warheads, penetration-cum-blast warheads for bunkers, and pre-fragmentation warheads for wider lethality zones.

- » Air-defense against drones and helicopters
- The ability to launch precision-guided missiles from UAVs is especially valuable in high-risk combat zones where manned aircraft may face greater danger. Defense experts see ULPGM-V3 as part of India's broader shift toward network-centric and unmanned warfare systems.

About DRDO:

- The Defence Research and Development Organisation is India's premier defence research agency under the Ministry of Defence, established in 1958. It operates a large network of laboratories across India and plays a central role in developing indigenous military technologies.

Mandate of DRDO:

- » Design and development of advanced defence systems
- » Achieving self-reliance in critical military technologies
- » Reducing dependence on imports in defence equipment
- » Strengthening India's strategic and technological autonomy

Conclusion:

The ULPGM-V3 trials mark a major step in India's indigenous precision strike capability and Aatmanirbhar Bharat in defence. By integrating UAV platforms with advanced missile systems and a strong domestic industrial base, India is advancing towards next-generation warfare readiness while strengthening national security and export potential.

DRDO SUCCESSFULLY COMPLETES ULPGM-V3 TRIALS
 UNMANNED AERIAL VEHICLE LAUNCHED PRECISION GUIDED MISSILE

A giant leap for Aatmanirbhar Bharat in precision strike capabilities

TRIAL LOCATION: DRDO Test Range, Kurnool, Andhra Pradesh

MODES TESTED: Air-to-Ground, Air-to-Air

CONTROL SYSTEM: Integrated Ground Control System (IGCS) with advanced automation

HOW ULPGM-V3 WORKS:

- PLANNING & MISSION SETUP:** Mission is planned on Ground Control System (IGCS). Target data, flight path & parameters are uploaded.
- UAV LAUNCH:** The UAV takes off carrying the ULPGM-V3 missile to the designated area.
- WEAPON RELEASE:** At the desired point, the missile is released from the UAV.
- GUIDANCE TO TARGET:** ULPGM-V3 uses inertial navigation with GNSS and an advanced seeker for precise navigation.
- TARGET ENGAGEMENT:** The missile locks on using its dual-channel seeker and neutralizes the target with high accuracy.
- MISSION FEEDBACK:** Two-way data link sends real-time telemetry & impact confirmation back to the IGCS.

KEY FEATURES:

- Day & Night Strike Capability
- Two-Way Data Link
- High Definition Dual Channel Seeker
- Modular Warheads (Anti Tank, Bunker Buster, Fragmentation)
- High Precision & Low Collateral Damage
- Can be launched from DRDO-developed UAVs

ULPGM-V3
 Advanced, Precise, Indigenous.
ENGAGEMENT CAPABILITY: Designed to engage a wide range of threats

DEVELOPED & PRODUCED IN INDIA:

- Developed by: DRDO
- Production Partners: Bharat Dynamics Limited (BDL), Adani Defence Systems & Technologies Limited
- Integrated on UAVs by: Newspace Research & Technologies
- Fully Indigenous Ecosystem - From Design to Deployment

HOW ULPGM-V3 BENEFITS INDIA:

- ENHANCES STRIKE CAPABILITY:** Enables precise engagement of high-value targets even in denied or high-risk environments.
- BOOST FOR DRONE WARFARE:** Provides UAVs with long-range, precision strike capability - a force multiplier.
- AATMANIRBHAR BHARAT IN ACTION:** Strengthens India's self-reliance in critical military technologies and reduces dependency on imports.
- COST-EFFECTIVE & SCALABLE:** Indigenous production ensures cost efficiency and the ability to scale up for future needs.
- STRATEGIC DETERRENCE:** Enhances deterrence against adversaries with credible, accurate and versatile precision capabilities.
- EXPORT POTENTIAL:** A world-class indigenous system with strong potential in the global defence market.

“ ULPGM-V3 is a strategic milestone that showcases India's technological prowess and our commitment to a secure and self-reliant future.
 - Raksha Mantri Shri Rajnath Singh

Significance:

- The missile gives India a powerful indigenous precision-strike weapon suitable for modern battlefield environments. It enhances:
 - » Tactical drone warfare capability
 - » Precision strike operations
 - » Anti-armour warfare
 - » Border surveillance strike readiness

Place in News

Kuno National Park

Recently, under India's cheetah reintroduction program at Kuno National Park, 57 cheetahs (including 32 cubs born in India) were recorded in the 2026 annual census.

About Kuno National Park

- Located in Sheopur district of Madhya Pradesh.
- Covers about 748 sq km of dry deciduous forest and grassland.
- The Kuno River, a tributary of the Chambal River, flows through the park.
- Notified as a National Park in 2018.
- Forms part of the proposed Kuno–Madhav landscape.
- Shares ecological connectivity with the National Chambal Sanctuary.



Prelims Facts:

- **Cheetah:** Schedule I species under the Wildlife (Protection) Act, 1972.
- **Global conservation status:** Vulnerable (IUCN).
- **Asiatic cheetah:** Critically Endangered.
- **River sequence:** Kuno → Chambal → Yamuna → Ganga.

Kolleru Lake

Recently, the National Green Tribunal (NGT) directed the Andhra Pradesh government to submit a fresh compliance/action report regarding aquaculture encroachments in the lake's protected +5 contour area.

About Kolleru Lake

- Located between the Krishna and Godavari river deltas in Andhra Pradesh.
- Spread across Eluru and West Godavari districts.
- Considered India's largest natural freshwater floodplain lake by area.
- Fed primarily by the Budameru and Tammileru streams.
- Connected to the Bay of Bengal through the Upputeru drain.

Significance:

- Designated as a Ramsar Wetland in 2002.
- Notified as the Kolleru Wildlife Sanctuary in 1999.
- Serves as an important habitat for resident and migratory waterbirds.



- Functions as a major flood-balancing reservoir between the Krishna and Godavari river systems.

Biodiversity:

- Important migratory bird species include:
 - » Spot-billed Pelican (Grey Pelican)
 - » Painted Stork
 - » Glossy Ibis
 - » Asian Openbill

Strait of Hormuz

A multinational convoy escort initiative was recently launched in the Strait of Hormuz region. Under this maritime security framework, India deployed naval assets as part of 'Operation Sankalp-II' to ensure the safety of shipping routes and energy supplies passing through the strait.

About the Strait of Hormuz:

- A narrow waterway connecting the Persian Gulf with the Gulf of Oman.
- Separates Iran in the north from Oman (specifically the Musandam Peninsula) in the south.
- At its narrowest point, the strait is approximately 33 km wide.
- Contains designated shipping lanes for inbound and outbound maritime traffic.



Geographical Features:

- Connects the Persian Gulf to the Gulf of Oman, which in turn opens into the Arabian Sea.
- Hormuz Island is located within Iranian territory.
- The Musandam Peninsula is an Omani exclave separated from mainland Oman by territory of the United Arab Emirates.

Mozambique

The first India–Mozambique Strategic Dialogue was held in Mozambique in May 2026.

About Mozambique:

- Located on the southeastern coast of Africa along the Indian Ocean.
- Has a coastline of approximately 2,500 km.
- **Capital city:** Maputo.
- It shares borders with “South Africa, Eswatini, Zimbabwe, Zambia, Malawi, Tanzania”.
- Separated from Madagascar by the Mozambique Channel.

Significance

- A strategically important Indian Ocean nation with growing energy and maritime importance.

- Hosts major offshore natural gas reserves, particularly in the Cabo Delgado region.
- Important partner for India in maritime security, energy cooperation, and agricultural trade.

Prelims Facts:

- **Official language:** Portuguese (Mozambique is a Lusophone country).
- Joined the Commonwealth of Nations in 1995 despite having no British colonial history.
- The Zambezi River flows through Mozambique before emptying into the Indian Ocean.
- The Mozambique Channel is one of the world's important maritime shipping routes.
- **Capital:** Maputo.
- **Currency:** Mozambican Metical.



Kaziranga National Park

Recently, the Assam government released the latest rhino census for Kaziranga National Park, recording a count of 2,786 one-horned rhinoceroses. This is an increase of 173 compared to 2022 and represents the highest population ever recorded in the park.

About Kaziranga National Park:

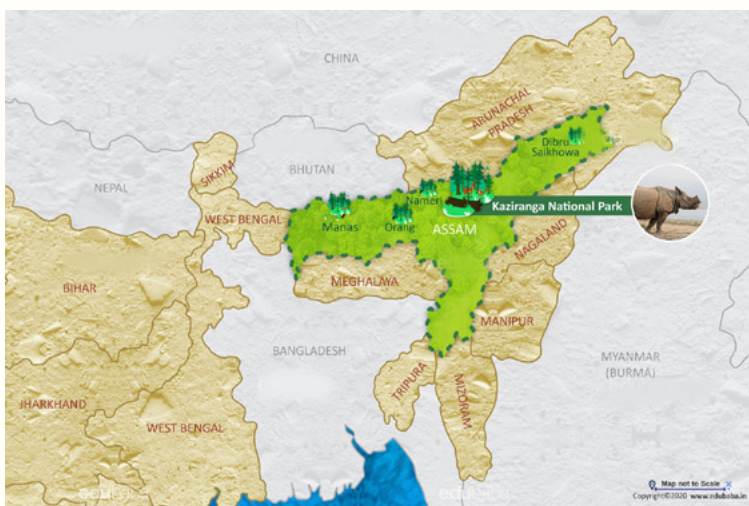
- Located on the southern bank of the Brahmaputra River in Golaghat and Nagaon districts of Assam. Covers approximately 1,090 sq km.
- Characterized by tall elephant grasslands, marshes, and tropical moist mixed deciduous forests. The Diphlu River forms its southern boundary.

Significance

- Holds nearly two-thirds of the world's wild population of the Greater One-Horned Rhinoceros.
- One of India's most important biodiversity conservation landscapes.
- Recognized as a:
 - » National Park
 - » Tiger Reserve (notified in 2007)
 - » UNESCO World Heritage Centre
 - » World Heritage Site (1985)

Biodiversity:

- Kaziranga is famous for the "Big Five" the one-horned rhinoceros, Asian elephant, Bengal tiger, wild water buffalo, and Eastern swamp deer.



Power Packed News

IPL 2026: Royal Challengers Bengaluru Win Back-to-Back Titles

- On 31 May 2026, Royal Challengers Bengaluru (RCB) created history by winning their second consecutive Indian Premier League (IPL) title. In the final played at the Narendra Modi Stadium, RCB defeated Gujarat Titans (GT) by five wickets. With this victory, RCB, led by Rajat Patidar, became only the third team in IPL history after Mumbai Indians and Chennai Super Kings to successfully defend their title.
- After losing the toss, Gujarat Titans posted 155/8 in their allotted overs, with Washington Sundar contributing an unbeaten 50 runs. In reply, RCB chased down the target in just 18 overs. Star batter Virat Kohli played a match-winning unbeaten knock of 75 runs off 42 balls and was named Player of the Match. The season's major individual awards were:
 - » **Orange Cap:** Vaibhav Suryavanshi of Rajasthan Royals for scoring 776 runs, the highest in the season.
 - » **Purple Cap:** Kagiso Rabada of Gujarat Titans for taking 29 wickets.
 - » **Most Valuable Player (MVP):** Washington Sundar for his outstanding all-round performance.
 - » **Emerging Player of the Season:** Rasikh Salam Dar of RCB for his impressive bowling displays.

National Sports Board (NSB) Rules and National Sports Tribunal (NST) Rules, 2026

- The Ministry of Youth Affairs and Sports has notified the National Sports Board (NSB) Rules, 2026 and the National Sports Tribunal (NST) Rules, 2026, marking a significant reform in India's sports governance framework. These rules have been introduced under the National Sports Governance Act, 2025 with the objective of enhancing transparency, ensuring speedy dispute resolution, and promoting digital governance in sports administration.

Role of the National Sports Board (NSB)

- The NSB will serve as the apex regulatory body responsible for recognizing national sports federations and monitoring their compliance with governance standards. Its Chairperson and two members will be appointed through a special Search-cum-Selection Committee constituted by the Central Government. They will serve for a term of three years or until attaining the age of 65 years, whichever is earlier. To ensure financial accountability, the Board's accounts will be audited annually by the Comptroller and Auditor General of India.

National Sports Tribunal (NST) and Digital Governance

- The NST has been established as an independent quasi-judicial body for the speedy and cost-effective resolution of sports-related disputes. Such disputes will no longer be taken to civil courts. To prevent conflicts of interest, no NST member may hold any position in a sports federation.
- A dedicated digital portal will facilitate online filing of cases, issuance of notices, submission of responses, and document management. Hearings may be conducted virtually, while all orders will be digitally signed and securely stored on the portal. These reforms are expected to curb arbitrariness in sports administration and make India's sporting ecosystem more professional, transparent, and athlete-centric.

Renowned Urdu Poet Dr. Bashir Badr Passes Away

- Celebrated Urdu poet and Padma Shri awardee Dr. Bashir Badr passed away on 28 May 2026 in Bhopal at the age of 91. He had been battling age-related ailments and dementia for several years.
- Born on 15 February 1935 in Ayodhya, Dr. Badr completed his higher education at Aligarh Muslim University. He is widely credited with bringing Urdu poetry closer to ordinary people by using simple, conversational language rather than the traditionally complex style of literary gatherings. His ghazals resonated deeply with common social experiences and emotions.
- In recognition of his immense contribution to literature, the Government of India conferred upon him the Padma Shri in 1999. In the same year, he received the Sahitya Akademi Award for his celebrated poetry collection Aas. Following the 1987 Meerut riots, in which he lost both his home and many unpublished manuscripts, he made Bhopal his permanent residence.
- Some of his notable works include Aas, Ikai, Image, Aamad, Ujale Apni Yaadon Ke, Mohabbat Aasman Hai, Ghazal, and Saat Aasman Hain.

UNESCO Survey Recognizes Kumbhalgarh Wall with Global Distinction

- In a recent official survey conducted under the UNESCO World Heritage framework, the historic wall of Kumbhalgarh Fort in Rajasthan has been recognized as the world's second-longest continuous and intact wall after the Great Wall of China.
- Located in the Aravalli Hills of Rajasthan's Rajsamand district, Kumbhalgarh Fort was designated a UNESCO World Heritage Site in 2013. Stretching approximately 36 kilometres through rugged mountain terrain, the massive fortification is between 15 and 25 feet wide, making it one of the most remarkable defensive structures ever built.
- The fort was constructed between 1443 and 1458 CE by the renowned ruler Rana Kumbha under the supervision of the celebrated architect Mandan. It is also known as the birthplace of the legendary warrior king Maharana Pratap.
- The recognition highlights the extraordinary achievements of ancient Indian military architecture and engineering, demonstrating how these structures have remained strong, preserved, and functional even after several centuries.

Successful Test of the Universal Rocket Launch System 'Suryastra'

- India's Defence Minister, Rajnath Singh, officially launched the country's first indigenous universal rocket launch system, Suryastra, with a strike range of 300 kilometres, at Shirdi in Maharashtra. The development marks a major strategic achievement under the Make in India and Atmanirbhar Bharat initiatives.
- The advanced system has been developed by Pune-based NIBE Limited in technical collaboration with Elbit Systems. Suryastra is a multi-calibre platform, capable of launching rockets, guided missiles, and loitering munitions (suicide drones) of varying ranges and calibres from a single launcher without major modifications.
- The system is designed primarily for precision surface-to-surface strikes at ranges of 150 km and 300 km. It can also deploy loitering munitions with a range of up to 100 km. During trials conducted at the Integrated Test Range, the system achieved a Circular Error Probable (CEP) of less than five metres, demonstrating exceptional accuracy.

- Mounted on a powerful 6×6 Tatra truck, Suryastra possesses a “Shoot-and-Scout” capability, enabling it to relocate immediately after firing to evade enemy counterattacks. To strengthen the Indian Army’s deep-strike capability, the Army has signed an emergency procurement contract worth approximately Rs.293 crore for the system.

Sansad Ratna Awards 2026

- The Sansad Ratna Awards 2026 have been announced by the Prime Point Foundation. This year, a total of 12 Members of Parliament (10 from the Lok Sabha and 2 from the Rajya Sabha) and four Parliamentary Committees have been selected for their outstanding performance.
- Maharashtra has the highest representation, with five MPs receiving the honour. Among them is Lok Sabha MP Smita Uday Wagh, who continued to actively participate in parliamentary proceedings while battling cancer. Other prominent awardees include Jagdambika Pal, Nishikant Dubey, P. P. Chaudhary, Dr. Shrikant Shinde, and Rajya Sabha member Medha Kulkarni.
- The Parliamentary Committees on Agriculture, Finance, Rural Development, and Coal & Mines have also been selected for recognition. The Agriculture Committee is chaired by Charanjit Singh Channi, while the Finance Committee is headed by Bhartruhari Mahtab.
- Instituted in 2010 following a suggestion by A. P. J. Abdul Kalam, the award is presented by a civil society organization rather than a government body. Winners are selected by a high-level jury based on official parliamentary data, including attendance, participation in debates, questions raised, and private member bills introduced. The historic 150th Sansad Ratna Award will be presented in New Delhi in July 2026.

Raghav Chadha Appointed Chairman of the Rajya Sabha Committee on Petitions

- Rajya Sabha Chairman C. P. Radhakrishnan has reconstituted the prestigious Committee on Petitions of the Upper House and appointed Raghav Chadha as its new Chairman. According to an official notification issued by the Rajya Sabha Secretariat, the appointment came into effect on 20 May 2026.
- The ten-member committee includes several experienced parliamentarians, namely Harsh Mahajan, Ghulam Ali, Shambhu Sharan Patel, Mayankkumar Nayak, Mastan Rao Yadav Beedha, Jebi Mather Hisham, Subhashish Khuntia, Rwngrwa Narzary, and Santosh Kumar P.
- The Committee on Petitions plays a vital role in India’s parliamentary system. It examines petitions, public grievances, and matters of public importance submitted by citizens to Parliament. After detailed scrutiny, the committee presents its findings and recommendations to the government and the House, helping improve administrative policies and governance.
- Established in 1952, the Committee on Petitions is among the oldest standing committees of the Rajya Sabha.

United Nations Military Gender Advocate of the Year 2025 Award

- Indian Army officer Major Abhilasha Barak has been honoured with the prestigious United Nations Military Gender Advocate of the Year 2025 Award. She is currently serving as a peacekeeper with the United Nations Interim Force in Lebanon in Lebanon.
- The award recognizes her exceptional contribution to women’s empowerment, gender equality,

and inclusive peacebuilding. During her deployment, Major Barak played a significant role in engaging with local women and adolescent girls, conducting community outreach programmes, and providing gender-sensitivity training to peacekeepers. Her efforts helped strengthen trust and cooperation between local communities and United Nations peacekeeping personnel.

- She is the third Indian officer to receive this distinction. Previously, Major Suman Gawani (2019) and Major Radhika Sen (2023) were also honoured with the award.
- This achievement highlights India's active contribution to United Nations peacekeeping operations and its commitment to the Women, Peace and Security agenda.

Ministry Launches Two New Digital Platforms: 'JEEVAN' and 'SHATAYU'

- The Ministry of Social Justice and Empowerment has launched two landmark digital platforms aimed at enhancing the welfare and safety of senior citizens across India. Unveiled by Union Minister Virendra Kumar, the platforms are named JEEVAN (Joint Elderly Empowerment and Virtual Assistance Network) mobile application and SHATAYU (Senior Holistic Care Assistance and Training For Your Utility) Caregiver Dashboard. The initiative seeks to improve elderly citizens' access to healthcare services and build a robust care economy in the country.
- The JEEVAN App serves as a single-window solution for senior citizens. It provides information on government schemes, welfare programmes, and ministry-supported senior citizen homes. The application also offers emergency assistance features and a user-friendly interface designed to promote digital inclusion among the elderly.
- The SHATAYU Dashboard, on the other hand, functions as a comprehensive database of certified geriatric caregivers across India. It enables authorities to track the availability of trained caregivers at the state and district levels. The initiative is expected to contribute significantly to making India's elderly population safer, more self-reliant, and socially inclusive.

Legislative Assembly Elections and Results, 2026

The results of the Legislative Assembly elections held in May 2026 in five states and union territories—West Bengal, Assam, Tamil Nadu, Puducherry, and Kerala—were announced on 4 May 2026. The newly elected Chief Ministers took oath during the second week of May. The elected Chief Ministers and their respective parties are as follows:

- **West Bengal:** Suwendu Adhikari was sworn in as Chief Minister after the Bharatiya Janata Party secured a historic victory in the state.
- **Tamil Nadu:** Popular actor-turned-politician C. Joseph Vijay led the Tamilaga Vettri Kazhagam (TVK) to a decisive victory and assumed office as the new Chief Minister.
- **Assam:** Himanta Biswa Sarma took oath for a second consecutive term after the BJP-led National Democratic Alliance (NDA) secured a comfortable majority.
- **Puducherry:** N. Rangasamy was sworn in as Chief Minister for the fifth time. His party, the All India N.R. Congress (AINRC), in alliance with the BJP, achieved a clear majority.
- **Keralam:** V.D. Satheesan sworn in as the Chief Minister of Kerala. This victory marks the return to power of the Congress-led United Democratic Front (UDF).

Prime Minister Modi Receives FAO Agricola Medal 2026

- Prime Minister Narendra Modi was recently awarded the prestigious Agricola Medal 2026 at the

headquarters of the Food and Agriculture Organization (FAO) in Rome, Italy. The honour was conferred in recognition of his leadership in promoting food security, sustainable agriculture, and rural development, as well as India's contributions in these fields.

- Dedicating the award to India's farmers and agricultural scientists, the Prime Minister highlighted initiatives such as "Per Drop More Crop," micro-irrigation, precision farming, and technology-driven agricultural reforms. He emphasized that Digital Public Infrastructure (DPI), artificial intelligence-based advisory systems, drones, remote sensing technologies, and sensor-enabled machinery are making Indian agriculture more productive and climate-resilient.
- Over the past decade, India has developed nearly 3,000 climate-resilient crop varieties, which are contributing to global food security, particularly in countries of the Global South.

Joint Military Exercise 'CINBAX-II 2026'

- The second edition of the India–Cambodia joint military exercise CINBAX-II 2026 concluded successfully in Kampong Speu Province, Cambodia. The bilateral exercise was conducted over 14 days, from 4 May to 17 May 2026, with the primary objective of strengthening interoperability and operational cooperation between the armed forces of both countries.
- The Indian contingent comprised 120 personnel from the Maratha Light Infantry, while 160 troops from the Royal Cambodian Army participated in the exercise. Special emphasis was placed on counter-terrorism operations in sub-conventional and semi-urban environments.
- The participating soldiers jointly trained in drone operations, sniper tactics, counter-drone systems, and Humanitarian Assistance and Disaster Relief (HADR) missions. The exercise was conducted in accordance with Chapter VII of the United Nations Charter.
- CINBAX-II represents an important step in strengthening India's Act East Policy and enhancing defence and security cooperation in the Indo-Pacific region. The first edition of the exercise was held in Pune, India, in December 2024.

Taiwan Travelogue Wins the International Booker Prize 2026

- At a grand ceremony held at Tate Modern on 19 May 2026, Taiwanese author Yang Shuang-zi and translator Lin King were jointly awarded the prestigious International Booker Prize 2026 for their acclaimed novel Taiwan Travelogue.
- This marks a historic moment in global literature, as Taiwan Travelogue has become the first novel originally written in Mandarin Chinese to win the International Booker Prize.
- Set against the historical and colonial backdrop of Japanese-ruled Taiwan in the 1930s, the novel explores the complexities of history, power, class, and colonialism through the culinary journey and evolving relationship of two women. Praising the work, the judges described it as an exceptional blend of "romance and a sharp colonial novel."
- The prize money of £50,000 (approximately Rs.53 lakh) will be shared equally between the author & the translator. India achieved this global literary distinction in 2022 when Geetanjali Shree won the International Booker Prize for her Hindi novel Tomb of Sand (Ret Samadhi).

RBI Approves Record Surplus Transfer of Rs. 2.87 Lakh Crore to the Government

- At its 623rd meeting, the Central Board of Directors of the Reserve Bank of India (RBI)

approved a record surplus transfer of ₹2,86,588.46 crore (approximately ₹2.87 lakh crore) to the Central Government for the financial year 2025–26. This represents the largest dividend payout in India's economic history.

- Under Section 47 of the Reserve Bank of India Act, 1934, the RBI is legally required to transfer its excess profits to the Government after making provisions for contingency reserves and other buffers. The surplus is determined according to the revised Economic Capital Framework recommended by the Bimal Jalan Committee in 2019, which requires the Contingent Risk Buffer (CRB) to remain within the range of 5.5% to 7.5%.
- The substantial surplus was supported by active foreign exchange market operations, strong returns on foreign currency assets amid elevated global interest rates, and increased interest income from domestic government securities (G-Secs).
- The transfer is expected to strengthen fiscal consolidation efforts by boosting non-tax revenue receipts. It will provide significant relief in maintaining the government's fiscal deficit targets, particularly amid geopolitical tensions in West Asia and volatile crude oil prices. The additional funds will also act as a fiscal cushion, enabling continued investment in infrastructure projects without increasing market borrowings.

East Bengal Crowned National Champions After 22 Years

- In a landmark achievement for Indian football, East Bengal FC won the 2025–26 Indian Super League (ISL) title, ending a 22-year wait for a national championship. The club secured the title by defeating Inter Kashi 2–1 in the final league fixture.
- East Bengal's previous national title came in the 2003–04 National Football League (NFL) season. In the decisive match, Inter Kashi took an early lead, but East Bengal staged a remarkable comeback to secure victory.
- A key contributor to the club's success was Moroccan striker Youssef Ezzejjari, who emerged as the team's leading goal scorer during the season. Under the leadership of head coach Oscar Bruzon, East Bengal displayed impressive consistency throughout the campaign.
- This triumph signifies more than just the winning of a trophy; it represents the resurgence of traditional football clubs in India. With multiple teams remaining in contention until the final matchday, the season showcased the growing competitiveness and popularity of Indian football. East Bengal's historic success is expected to inject new energy into the sport and further strengthen football culture across the country.

Multinational Military Exercise 'PRAGATI 2026'

- The first edition of the multinational military exercise PRAGATI 2026 was successfully conducted by the Indian Army at the Umroi Military Station in Meghalaya from 20 to 30 May 2026.
- PRAGATI stands for "Partnership for Regional Armies Growth and Transformation in the Indian Ocean Region." The large-scale exercise brought together more than 400 military personnel from 13 countries, including India, Bhutan, Cambodia, Indonesia, Laos, Malaysia, Maldives, Myanmar, Nepal, the Philippines, Seychelles, Sri Lanka, and Vietnam.
- The two-week exercise focused primarily on counter-terrorism and counter-insurgency operations in semi-mountainous and jungle environments. Integrated multinational teams practiced advanced tactical skills such as ambush operations, helicopter slithering, improvised explosive device (IED) detection, and urban warfare.

- The primary objective of the exercise was to enhance interoperability, coordination, and mutual understanding among participating armed forces in addressing emerging global security challenges. PRAGATI 2026 reflects India's growing commitment to regional defence cooperation and collective security in the Indian Ocean Region.

Digital Labour Chowk 'ShramMitra' App

- Haryana Labour Minister Anil Vij has launched the landmark ShramMitra mobile application to modernize the state's unorganized labour sector. The digital initiative aims to reduce dependence on traditional labour chowks (labour gathering points) and directly connect daily wage earners and skilled workers with employers.
- The app functions as an electronic employment exchange, enabling workers such as masons, plumbers, carpenters, and electricians to explore job opportunities from their homes.
- Key features of the app include:
 - » **Trilingual Support:** Available in Hindi, English, and Punjabi.
 - » **Geo-Mapping Technology:** Allows employers and workers to track live locations and accurately estimate distances.
 - » **Elimination of Middlemen:** Both parties can directly negotiate wages and working hours through the platform.
- In the initial phase, the Haryana Government has uploaded data of approximately 75,000 registered workers onto the platform. The initiative is expected to enhance transparency, efficiency, and access to dignified livelihoods in the state's labour market.

ICRA Revises India's GDP Growth Forecast Downward

- Domestic rating agency ICRA Limited has lowered India's GDP growth forecast for FY 2026–27 from 6.5% to 6.2% amid growing global uncertainties.
- According to Chief Economist Aditi Nayar, the downward revision is primarily driven by ongoing geopolitical tensions in West Asia and a sharp increase in crude oil prices.
- ICRA has raised its estimate for average crude oil prices during FY 2026–27 from USD 85 to USD 95 per barrel. Since India imports more than 85% of its oil requirements, higher prices are exerting direct pressure on domestic inflation and the Current Account Deficit (CAD).
- In addition, disruptions in global supply chains have weakened India's export performance and increased margin pressures on manufacturing industries. The depreciation of the Indian rupee against the US dollar and the possibility of higher fuel subsidies may also adversely affect the government's fiscal deficit.
- The revised forecast indicates that despite strong domestic demand, global developments are constraining India's economic momentum. Future growth prospects will depend significantly on improvements in global economic and geopolitical stability.
- **About ICRA:** ICRA (Investment Information and Credit Rating Agency) is one of India's leading credit rating agencies. It evaluates the financial strength of companies, banks, government institutions, and various financial instruments and assigns credit ratings accordingly. Its headquarters is located in Gurugram.

BCCI Excluded from the Purview of the RTI Act

- In a significant ruling delivered in May 2026, the Central Information Commission (CIC) held

that the Board of Control for Cricket in India does not fall under the ambit of the Right to Information (RTI) Act, 2005. Reversing its 2018 decision, the Commission clarified that the BCCI is not a “public authority” under Section 2(h) of the RTI Act. Key Legal Grounds

- » **Nature of Establishment:** The BCCI is an autonomous private body registered under the Tamil Nadu Societies Registration Act. It was not established by the Constitution or by any law enacted by Parliament.
- » **Absence of Government Funding and Control:** The Board is financially self-sufficient and does not receive direct or indirect financial assistance from the government. According to the CIC, tax exemptions alone do not constitute “substantial government financing.”
- The Commission relied on the judgment of the Zee Telefilms Case, in which the Supreme Court held that the BCCI is not “State” within the meaning of Article 12 of the Constitution.
- The ruling clarifies the definition of a “public authority” and establishes that merely performing public functions does not automatically make a private entity accountable under the RTI Act. The decision has reignited the debate between transparency and institutional autonomy in administrative law.

India’s First Satellite-Tagged Ganga Softshell Turtle Released in Kaziranga

- On the occasion of Endangered Species Day 2026 (15 May), India’s first satellite-tagged Ganga Softshell Turtle (*Nilssonina gangetica*) was released along the northern bank of the Brahmaputra River in Kaziranga National Park and Tiger Reserve.
- The project is a collaborative initiative of the Wildlife Institute of India and the Assam Forest Department under the Ministry of Environment, Forest and Climate Change (MoEFCC). It is funded by the National Geographic Society. A satellite transmitter attached to the turtle’s carapace (shell) will transmit real-time data via satellite, helping researchers understand seasonal movements, home ranges, and nesting sites of turtles across the Brahmaputra Basin.
- The Ganga Softshell Turtle is recognized by its large size and distinctive arrow-shaped markings on the upper part of its head. It is a large freshwater omnivore and serves as an apex scavenger, feeding on river debris and dead organisms, thereby helping maintain aquatic ecosystem health.

Conservation Status

- » **IUCN Red List:** Ganga Softshell Turtle – Endangered
- » **Wildlife (Protection) Act, 1972:** Schedule I
- » **CITES:** Appendix I
- The initiative highlights Assam’s global biodiversity significance. Of the eight species of softshell turtles found in India, five are found in the Kaziranga landscape alone, underscoring the region’s importance for freshwater turtle conservation.

Saurabh Vijay Appointed New CEO of UIDAI

- Senior IAS officer Saurabh Vijay of the 1998 batch (Maharashtra cadre) has been appointed as the new Chief Executive Officer (CEO) of the Unique Identification Authority of India. In addition, the Ministry of Electronics and Information Technology (MeitY) entrusted him with the additional charge of CEO of the IndiaAI Mission in June 2026.
- The appointment places leadership of India’s largest digital identity ecosystem (Aadhaar) and

its emerging artificial intelligence ecosystem under a single administrative officer, reflecting a significant policy convergence. This move is expected to accelerate the development of Digital Public Infrastructure (DPI) and promote the growth of Responsible AI.

- UIDAI's extensive experience in large-scale data management can be leveraged under the IndiaAI Mission to develop sovereign AI models, enhance AI-driven citizen services, and strengthen cloud computing infrastructure. An alumnus of Indian Institute of Technology Delhi with a degree in Civil Engineering and administrative experience at the World Bank, Saurabh Vijay's dual role is seen as a strategic step toward transparent welfare delivery and technology-driven governance.

Squadron Leader Sanya Achieves Historic Milestone

- Squadron Leader Sanya has become the first woman officer in the 93-year history of the Indian Air Force to attain the prestigious Category-A Qualified Flying Instructor (Cat-A QFI) qualification, the highest instructional rating in military aviation.
- She was honoured for this historic achievement by Air Chief Marshal A. P. Singh.
- **QFI Grading System in the IAF:** The Indian Air Force uses a three-tier grading system to assess the instructional and operational competence of flying instructors:
 - » **Cat-C:** Awarded to new or probationary instructors.
 - » **Cat-B:** Granted to instructors qualified to provide standard pilot training.
 - » **Cat-A:** The highest level in military aviation. Holders of this qualification are recognized as master instructors, authorized to train not only new pilots but also junior instructors and evaluate advanced flying skills.
- Her achievement demonstrates the increasing inclusion of women in key leadership and instructional roles within the armed forces, extending beyond combat positions. It also reinforces the principle of merit-based selection and represents a significant step toward breaking traditional barriers in military service.

Bharat Marine Insurance Pool (BMIP)

- Amid the ongoing West Asian crisis and geopolitical tensions in the Red Sea region, the Government of India has launched the Bharat Marine Insurance Pool (BMIP) with a corpus of USD 1.5 billion (approximately ₹13,905 crore). The initiative, introduced by the Department of Financial Services (DFS) under the Ministry of Finance, is aimed at strengthening India's maritime sector and enhancing self-reliance in global trade.
- The most significant feature of the BMIP is the USD 1.4 billion sovereign guarantee provided by the Government of India. Managed by General Insurance Corporation of India, the scheme offers comprehensive coverage for Hull and Machinery, Cargo, and War Risks.
- Claims of up to USD 100 million per incident will be settled through the pool's internal funds, while larger claims will be backed by the sovereign guarantee.

Significance of BMIP:

- » Reduces India's dependence on foreign marine insurance clubs.
- » Ensures stable and affordable insurance premiums for Indian importers and exporters during global crises.
- » Helps prevent large outflows of premium payments to overseas insurers.
- » Strengthens India's maritime and trade security architecture.

- This ten-year initiative is expected to be a game-changer in establishing India as a major force in global maritime commerce while enhancing the country's economic security.

Museveni Begins Seventh Presidential Term in Uganda

- Ugandan President Yoweri Museveni, aged 81, was sworn in for a seventh consecutive term on 12 May 2026 at the Kololo Independence Grounds in Kampala. His inauguration marks another significant chapter in modern African political history.
- Museveni secured a decisive victory in the January 2026 general elections, receiving 71.65% of the vote. As a result, his rule—already spanning four decades—has now entered its fifth decade. To extend his tenure, Museveni oversaw constitutional amendments that removed presidential term limits in 2005 and abolished the presidential age limit in 2017. Critics view these changes as indicative of shrinking democratic space in parts of Africa.
- While supporters regard him as a guarantor of regional security and economic stability, opposition leader Bobi Wine has alleged widespread electoral irregularities and human rights violations during the election process.
- For India, Uganda remains an important partner within the Global South and the African Union. Museveni's continued leadership is expected to provide policy continuity in India-Uganda defence cooperation, trade agreements, and broader strategic engagement.

SEHAT Mission Launched

- The Government of India launched the SEHAT Mission on 11 May 2026 in New Delhi. It is the first initiative of its kind in the country to integrate the health and agriculture sectors. SEHAT stands for Science Excellence for Health through Agricultural Transformation.
- The mission is a joint national initiative of India's two premier research organizations—the Indian Council of Agricultural Research and the Indian Council of Medical Research. It is built around the vision of "Healthy Food, Healthy Farms, and Healthy India." Its primary objective is to integrate agriculture, nutrition, and public health.
- The mission aims to shift India's healthcare approach from a predominantly curative model to a preventive healthcare framework. Under the initiative, 203 biofortified crop varieties developed by ICAR will undergo clinical evaluation by ICMR. The programme is expected to help address malnutrition while contributing to the prevention and management of major diseases such as diabetes, hypertension, and cancer.
- In addition to enhancing agricultural productivity, the mission will strengthen the One Health approach, which recognizes the interconnectedness of human, animal, and environmental health.

1% Welfare Cess Notified for Construction Workers

- The Ministry of Labour and Employment has notified a 1% Construction Welfare Cess under Section 100(1) of the Code on Social Security, 2020 to strengthen social security coverage for millions of construction workers across the country. The new provision came into effect nationwide on 1 May 2026 and replaces the earlier law enacted in 1996.
- Under the notification, employers will be required to contribute 1% of the total cost of commercial and other construction projects as welfare cess. However, individuals constructing private houses costing less than ₹50 lakh have been exempted from this levy.

- The funds collected through the cess will be deposited with state-level Building and Other Construction Workers (BOCW) Welfare Boards. These resources will be used to enhance welfare schemes for construction workers in the unorganized sector, including free healthcare facilities, life insurance, financial assistance, pensions, and education for their children—for construction workers in the unorganized sector. This measure will provide a robust social security net for the country's most vulnerable workforce.

National Florence Nightingale Awards 2026

- On the occasion of International Nurses Day, 12 May 2026, President Droupadi Murmu presented the National Florence Nightingale Awards 2026 at the Rashtrapati Bhavan.
- A total of 15 nursing professionals from across the country were honoured for their exemplary contributions to healthcare and nursing services. Union Health and Family Welfare Minister J. P. Nadda was also present at the ceremony. Among the awardees were:
 - » Pooja Parmar Rana from Uttarakhand, recognized for achieving 100% COVID-19 vaccination coverage in remote mountainous regions.
 - » Dr. Shravan Kumar Dhaka from Delhi, honoured for his contributions to public health services.
 - » Ujjwala Mahadev Soyam from Maharashtra, recognized for outstanding maternal and child healthcare services in Naxal-affected areas.
- Each recipient received a certificate, a medal, and a cash award of Rs.1,00,000.
- Established in 1973 by the Ministry of Health and Family Welfare, the award is named in memory of Florence Nightingale and represents India's highest recognition for nursing professionals who render exceptional and selfless service to society.

West Bengal Launches 'Annapurna Bhandar Yojana'

- Newly elected West Bengal Chief Minister Suwendu Adhikari has formally launched the first phase of the Annapurna Bhandar Yojana, a welfare scheme aimed at enhancing the economic empowerment of women in the state.
- The scheme replaces the previous Lakshmir Bhandar Scheme and doubles the financial assistance provided to eligible beneficiaries to Rs.3,000 per month.
- The benefits will be available to women aged 25 to 60 years who are permanent residents of West Bengal. However, income taxpayers and government pensioners will not be eligible under the scheme. To ensure transparency and proper targeting of beneficiaries, the state government has mandated fresh registration and rigorous field verification for all eligible applicants within the next 90 days.
- According to official estimates, nearly 20 million women (2 crore) across the state are expected to benefit from the programme. In addition, the government has announced free travel for women on state-run buses through the "Pink Ticket" system, aimed at improving women's safety, mobility, and convenience throughout West Bengal.

'One Case One Data' Initiative and AI Chatbot 'Su Sahay'

- The Supreme Court of India has taken a historic step toward the digitization of judicial services. Chief Justice Justice Surya Kant announced the "One Case One Data" initiative to integrate the country's judicial infrastructure and eliminate data inconsistencies across participating

courts.

- Under this technology-driven reform, judicial records from taluka courts, district courts, High Courts, and the Supreme Court will be brought onto a unified platform. Every case in the country will be assigned a unique digital identity, similar to an Aadhaar number, enabling seamless tracking of case history and eliminating the need to repeatedly create and submit documents at different judicial levels.
- Alongside this initiative, the Supreme Court has launched “Su Sahay,” an AI-powered chatbot designed to assist citizens and legal professionals. Developed in collaboration with the National Informatics Centre, the chatbot will guide users visiting the Supreme Court website in accessing case status updates, procedural guidelines, and various e-services.
- The integrated digital ecosystem is expected to enhance transparency, improve judicial efficiency, and help reduce the backlog of pending cases in Indian courts.

Saudi Arabia Joins the International Big Cat Alliance (IBCA)

- Saudi Arabia has officially joined the International Big Cat Alliance (IBCA) as its 26th member country, marking a significant development in global wildlife conservation and biodiversity protection.
- The IBCA was launched by Prime Minister Narendra Modi in 2023 on the occasion of the 50th anniversary of Project Tiger. The alliance is headquartered in New Delhi. With Saudi Arabia's inclusion, the alliance now consists of 26 member countries and 5 observer countries. Existing members include nations such as India, Russia, Nepal, and Malaysia. The alliance aims to:
 - » Prevent illegal poaching of big cats worldwide.
 - » Protect and restore their habitats.
 - » Promote scientific cooperation and knowledge sharing among member nations.
- This alliance focuses primarily on the conservation of seven big cat species: tiger, lion, leopard, snow leopard, cheetah, jaguar, and puma. The first five of these are found in India. This global alliance will also prove instrumental in maintaining ecological balance and mitigating the impacts of climate change.

Jharkhand Achieves Zero Dropout Rate at the Primary Education Level

- According to the “School Education System in India” report released by the NITI Aayog in May 2026 and the latest UDISE+ data, Jharkhand has achieved a remarkable milestone by recording a zero (0%) dropout rate at the primary education level (Classes 1–5) during the academic year 2024–25.
- The state successfully reduced its primary-level dropout rate from 6.41% in 2014–15 to 0%, reflecting substantial improvements in school education outcomes.
- Significant progress has also been recorded at higher levels of schooling:
 - » Upper Primary (Classes 6–8): Dropout rate declined from 7.42% to 1.7%.
 - » Secondary Level (Classes 9–10): Dropout rate reduced from 23.2% to just 3.5%.
- In terms of improvement at the secondary level, Jharkhand ranks as the fourth-best performing state in India. The transition rate from primary to upper primary education has reached 89.6%, placing the state fourth nationally in this indicator as well.
- Despite these achievements, the report highlights a significant shortage of teachers. Currently:
 - » 99,565 teaching positions remain vacant at the elementary and secondary levels.
 - » 9,172 schools are functioning with only a single teacher.

- » The state's student-teacher ratio is 26:1, compared to the national average of 20:1.
- These findings indicate that while Jharkhand has made impressive gains in reducing dropout rates and improving educational access, addressing teacher shortages remains a key challenge for sustaining long-term progress in the education sector.

India's Growth Forecast Revised Downward Amid Global Uncertainties

- Credit rating agency S&P Global has revised India's GDP growth forecast for FY 2026–27 downward to 6.6%, a reduction of 50 basis points (0.5%) from its earlier estimate. The agency cited global economic uncertainties, weak external demand, and ongoing geopolitical tensions as the primary reasons for the downgrade.
- Although India continues to remain one of the world's fastest-growing major economies, global economic slowdown may adversely affect exports, manufacturing activity, and private investment. Slower growth in major economies such as the United States, Europe, and China could impact India's trade performance and investment inflows.
- However, strong domestic demand, increased government capital expenditure, the expanding digital economy, and continued infrastructure investments are providing significant support to economic growth. In this context, the Reserve Bank of India (RBI) will need to carefully balance inflation control with measures aimed at sustaining economic growth.

JANANI Portal and Digital Governance

- The Government of India has launched JANANI (Journey of Antenatal, Natal and Neonatal Integrated Care), an integrated digital platform designed to strengthen maternal and child healthcare services. The portal is an upgraded version of the existing Reproductive and Child Health (RCH) Portal.
- JANANI creates a comprehensive digital health record covering a woman's entire reproductive life cycle, including antenatal care (ANC), childbirth, and postnatal care. Each beneficiary receives a QR-enabled Maternal and Child Health (MCH) Card, ensuring portability and easy access to health records from anywhere in the country.
- The platform includes:
 - » Automated alerts for high-risk pregnancies.
 - » Real-time monitoring dashboards.
 - » Timely intervention mechanisms for healthcare providers.
- JANANI is integrated with the Ayushman Bharat Digital Mission (ABDM) through the ABHA ID system and interoperates with national platforms such as U-WIN (immunization) and POSHAN (nutrition).
- India has made notable progress in reducing the Maternal Mortality Ratio (MMR), which stands at 97 deaths per 100,000 live births according to the Sample Registration System (SRS) 2018–20. However, achieving the Sustainable Development Goal (SDG) 3 target of reducing MMR below 70 by 2030 requires continuous monitoring and improved healthcare delivery.
- The portal is particularly beneficial for migrant populations, as it ensures continuity of care regardless of geographical movement. Beyond being a database, JANANI represents a significant example of Digital Public Infrastructure (DPI) in healthcare, improving accountability, service delivery, and maternal and child health outcomes.

Pulitzer Prize 2026

- In May 2026, Indian journalists Anand R. K. and Suparna Sharma received the prestigious Pulitzer Prize for their investigative reporting on digital surveillance and cyber fraud.
- They were honoured in the Illustrated Reporting and Commentary category for Bloomberg’s project “trAPPed.” The report narrates the story of a neurologist from Lucknow who became a victim of a “digital arrest” scam. Through a combination of compelling visuals and narrative journalism, the project exposed the alarming realities of modern cybercrime.
- Another Indian journalist, Aniruddha Ghosal, also received a Pulitzer Prize as part of an Associated Press (AP) team recognized for its investigation into the global use of mass surveillance technologies.
- These achievements underscore India's growing soft power in the global media landscape and highlight the vital role of independent journalism in addressing contemporary challenges.
- About the Pulitzer Prize
- The Pulitzer Prize was established in 1917 through the will of Joseph Pulitzer. Administered by Columbia University, it is widely regarded as one of the world’s most prestigious honours in the fields of journalism, literature, and musical composition.

Whitley Awards 2026

- Indian conservationists Parveen Shaikh of the Bombay Natural History Society and Dr. Barkha Subba have been honoured with the prestigious Whitley Award 2026. The award is presented by the UK-based charity Whitley Fund for Nature (WFN) in recognition of outstanding grassroots conservation efforts.
- Parveen Shaikh received the award for her work in conserving the endangered Indian Skimmer. More than 90% of the species' global population is found in India. Her innovative “Guardian Model” along the Chambal River has helped increase the bird’s population from around 400 individuals to nearly 1,000.
- Dr. Barkha Subba was honoured for her efforts to conserve the vulnerable Himalayan Salamander in Darjeeling. The species is known for its philopatry—the tendency to return to its birthplace for breeding—which makes it highly susceptible to habitat destruction.
- Both conservationists have emphasized community participation by involving local residents as “guardians” of ecosystems, thereby strengthening conservation outcomes at the grassroots level.
- Parveen Shaikh plans to utilize the award funding to replicate the successful Chambal conservation model in Prayagraj, particularly around the Ganga–Yamuna confluence.
- This recognition reinforces India's commitment to biodiversity conservation under the Wildlife Protection Act, 1972 and global biodiversity goals such as the Kunming-Montreal Global Biodiversity Framework.



About the Whitley Award:

- The Whitley Award was established in 1993 by Edward Whitley under the Whitley Fund for Nature. It recognizes exceptional grassroots conservation leaders from the Global South and is often referred to as the “Green Oscar” of the environmental sector. Award recipients receive £50,000 in funding to expand and strengthen their conservation projects.

MCQs Based on Current Affairs

1. **With reference to the appointment of the United Nations Secretary-General (UNSG), consider the following statements:**

1. The Secretary-General is appointed by the General Assembly upon the recommendation of the Security Council.
2. A recommendation for the post requires at least 9 votes in the Security Council, including the concurring votes of all five permanent members.
3. The UN Charter explicitly mandates a practice of geographical rotation among regional groups for the selection of the Secretary-General.

Which of the statements given above is/are correct?

- A: 1 and 2 only
B: 2 only
C: 2 and 3 only
D: 1, 2, and 3

2. **Consider the following statements regarding the role and significance of the Secretary-General of the United Nations:**

1. The Secretary-General is described as the Chief Administrative Officer under the UN Charter.
2. The Secretary-General has the authority to directly impose sanctions on member states.
3. The Secretary-General can bring matters threatening international peace and security to the Security Council.
4. The Secretary-General often acts as a global spokesperson on issues like climate change and inequality.

Which of the statements given above are correct?

- A: 1 and 2 only
B: 1, 3 and 4 only
C: 2, 3 and 4 only
D: 1, 2, 3 and 4

3. **With reference to India's First Green Methanol Plant at Kandla, consider the following statements:**

1. It is the first plant in India to produce methanol using *Prosopis juliflora*, an

invasive shrub, as a feedstock.

2. The technology involves converting biomass into syngas through a process that sits between combustion and pyrolysis.
3. The project is a joint initiative of the Deendayal Port Authority and Assam Petrochemicals Limited.

Which of the statements given above is/are correct?

- A: 1 and 2 only
B: 2 only
C: 2 and 3 only
D: 1, 2, and 3

4. **Consider the following statements regarding the 'Padma Dori' initiative:**

1. It connects the textile traditions of Northeast India and Madhya Pradesh.
2. It integrates Eri silk and Chanderi textiles.
3. Its objective is only to increase exports.

Options:

- A: 1 and 2 only
B: 1 and 3 only
C: 2 and 3 only
D: 1, 2, and 3

5. **With reference to the recent declaration of Sikkim as India's first paperless state judiciary, consider the following statements:**

1. The declaration was made under the guidelines of the e-Courts Mission Mode Project Phase II.
2. The paperless system enables all legal processes, including filings and hearings, to be conducted digitally.
3. This initiative makes Sikkim the only state in India to adopt digital court systems.

Which of the statements given above is/are correct?

- A: 1 and 2 only
B: 2 only
C: 2 and 3 only
D: 1, 2, and 3

6. **Consider the following statements regarding INS Mahendragiri:**

1. It is the final ship of the Project 17A (Nilgiri-

class) frigates being constructed for the Indian Navy.

2. The ship is built using Integrated Modular Construction techniques by Garden Reach Shipbuilders & Engineers (GRSE), Kolkata.
3. It is equipped with the Barak-8 Long-Range Surface-to-Air Missile (LR-SAM) system.

Which of the statements given above is/are correct?

- A: 1 and 2 only
 B: 3 only
 C: 2 and 3 only
 D: 1, 2, and 3

7. With reference to 'Mission Drishti', recently in the news, consider the following statements:

1. It is India's largest privately built spacecraft launched into orbit.
2. It was launched using the Polar Satellite Launch Vehicle (PSLV) by ISRO.
3. The satellite employs 'OptoSAR' technology, which integrates optical imaging with Synthetic Aperture Radar (SAR).

Which of the statements given above are correct?

- A: 1 and 2 only
 B: 1 and 3 only
 C: 2 and 3 only
 D: 1, 2, and 3

8. The 'Indian Space Policy 2023' and recent reforms aim to transform India's space sector. In this context, consider the following pairs of institutions and their primary roles:

Institution	Primary Role
IN-SPACe	Single-window autonomous regulator for private space players.
NSIL	Commercial arm of ISRO focused on technology transfer.
Agnikul Cosmos	Developed India's first private rocket, Vikram-S.

How many of the pairs given above are correctly matched?

- A: Only one
 B: Only two
 C: All three

D: None

9. Consider the following statements regarding the Panchayat Advancement Index (PAI) 2.0 released by the Ministry of Panchayati Raj:

1. It is a multi-dimensional framework designed to assess the Localization of Sustainable Development Goals (LSDGs) at the Gram Panchayat level.
2. The index covers all Gram Panchayats in India, including West Bengal, to assess performance for the FY 2023-24.
3. Based on the final composite score, a significant number of Panchayats (roughly 5%) fell into the top "Achiever" (90-100 score) category.

Which of the statements given above is/are correct?

- A: 1 only
 B: 1 and 3 only
 C: 2 and 3 only
 D: 1, 2, and 3

10. Consider the following statements regarding the Naval Anti-Ship Missile – Short Range (NASM-SR) recently tested by India:

1. It is India's first indigenously developed helicopter-launched anti-ship missile.
2. The missile uses a liquid-propellant engine for maximum speed.
3. It employs a sea-skimming trajectory to avoid detection by enemy radars.

Which of the statements given above is/are correct?

- A: 1 and 2 only
 B: 1 and 3 only
 C: 2 and 3 only
 D: 1, 2, and 3

11. Consider the following statements regarding the BrahMos missile:

1. It is a joint venture between India and Russia
2. It is a supersonic cruise missile
3. India is considering selling it to Vietnam

Select the correct answer:

- A: 1 and 2 only
 B: 1 and 3 only
 C: 2 and 3 only

D: 1, 2, and 3

12. With reference to the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016, consider the following statements:

1. Aadhaar is a proof of both identity and citizenship of India.
 2. Aadhaar is mandatory for accessing all private and public services.
 3. The Unique Identification Authority of India (UIDAI) is a statutory body under the Act.
- Which of the statements given above is/are correct?

A: 1 and 2 only
 B: 1 and 3 only
 C: 2 and 3 only
 D: 1, 2, and 3

13. With reference to the recent suspected Hantavirus outbreak on a cruise ship near Cape Verde, consider the following statements regarding Hantavirus:

1. Hantavirus is a zoonotic disease primarily transmitted to humans through direct contact with infected human carriers.
 2. It causes two major diseases: Hantavirus Pulmonary Syndrome (HPS) and Hemorrhagic Fever with Renal Syndrome (HFRS).
 3. Currently, there is no specific vaccine or antiviral treatment available for Hantavirus.
- Which of the statements given above is/are correct?

A: 1 and 2 only
 B: 1 and 3 only
 C: 2 and 3 only
 D: 1, 2, and 3

14. With reference to juvenile crimes in India, consider the following statements:

1. Under the Juvenile Justice (Care and Protection of Children) Act, 2015, every person below 18 years of age is considered a juvenile.
2. In cases of heinous offences, juveniles between 16–18 years of age may be tried as adults under special circumstances.

3. The Juvenile Justice Board consists only of police officials.

Which of the above statements are correct?

A: 1 and 2 only
 B: 1 and 3 only
 C: 2 and 3 only
 D: 1, 2, and 3

15. With reference to the Commonwealth Games, consider the following statements:

1. The Commonwealth Games are held once every four years.
2. Only Asian countries are allowed to participate in these games.
3. India hosted the Commonwealth Games in 2010.

Which of the above statements are correct?

A: 1 and 2 only
 B: 2 only
 C: 1 and 3 only
 D: 1, 2, and 3

16. With reference to Algeria, consider the following statements:

1. Algeria is the largest country in Africa by area.
2. Its northern boundary touches the Mediterranean Sea.
3. Algeria is located in West Africa.

Which of the above statements are correct?

A: 1 and 2 only
 B: 2 only
 C: 2 and 3 only
 D: 1, 2, and 3

17. Recently, Vice Admiral Krishna Swaminathan was appointed as the Chief of the Indian Navy. With reference to the Chief of the Indian Navy, consider the following statements:

1. The Navy Chief is the highest-ranking military officer of the Indian Navy.
2. The Indian Navy plays an important role in India's maritime security.
3. The appointment of the Navy Chief is made by the President of India.

Which of the statements given above are correct?

A: 1 and 2 only

- B: 2 only
 C: 2 and 3 only
 D: 1, 2, and 3

18. With reference to the IndiaAI Mission, consider the following statements:

1. It is a flagship initiative under the Ministry of Science and Technology, approved with a budget of Rs.10,371.92 crore for five years.
2. The mission aims to build sovereign AI infrastructure with a capacity of over 10,000 GPUs.
3. It focuses on developing indigenous AI models and datasets specifically for agricultural, educational, and healthcare sectors.

Which of the statements given above is/are correct?

- A: 1 and 2 only
 B: 1 and 3 only
 C: 2 and 3 only
 D: 1, 2, and 3

19. With reference to the Indian Council of Medical Research (ICMR), consider the following statements:

1. It was established in 1911 as the Indian Research Fund Association (IRFA) and later renamed as Indian Council of Medical Research (ICMR).
2. It operates as an autonomous organization under the Ministry of Science and Technology.
3. It is responsible for formulating, coordinating, and promoting biomedical research in India.

Which of the statements given above is/are correct?

- A: 1 and 2 only
 B: 2 only
 C: 1 and 3 only
 D: 1, 2, and 3

20. With reference to the recently tested 'Tactical Advanced Range Augmentation (TARA)' glide weapon system, consider the following statements:

1. It is a missile system developed in

collaboration with a foreign partner to ensure high-speed target acquisition.

2. It converts conventional unguided bombs into precision-guided smart weapons using wings and guidance systems.
3. It has a range of over 200 km.

Which of the statements given above is/are correct?

- A: 1 and 2 only
 B: 2 only
 C: 2 and 3 only
 D: 1, 2, and 3

21. Regarding the transition from MGNREGS to the proposed "Viksit Bharat – Guarantee for Rozgar and Aajeevika Mission (Gramin) Act, 2025," which of the following changes is/are projected?

1. The legal guarantee of work is proposed to be reduced from 100 days to 75 days to reduce fiscal burden.
2. The funding structure is shifting to a 60:40 Centre–State split.
3. The mechanism is shifting from a purely demand-driven system to a supply-based allocation.

Select the correct answer using the code given below:

- A: 1 and 2 only
 B: 2 only
 C: 2 and 3 only
 D: 1, 2, and 3

22. With reference to Bureau of Indian Standards (BIS) consider the following statements:

1. BIS acts as India's National Standards Body and represents the country in international bodies like the ISO.
2. BIS functions under the administrative control of the Department of Space (DoS).
3. BIS is responsible for harmonizing Indian standards with global frameworks to support the "Make in India" initiative.

Which of the statements given above is/are correct?

- A: 1 and 2 only
 B: 1 and 3 only
 C: 2 and 3 only

D: 1, 2, and 3

23. Consider the following statements regarding Hypersonic Missiles:

1. Unlike conventional ballistic missiles, hypersonic weapons can fly at lower altitudes and change direction, making them highly unpredictable.
2. Hypersonic Glide Vehicles (HGVs) use scramjet engines for continuous, fuel-efficient atmospheric flight.
3. Hypersonic Cruise Missiles (HCMs) require carrying their own oxidizers to sustain combustion.

Which of the statements given above is/are correct?

- A: 1 and 2 only
 B: 1 and 3 only
 C: 2 and 3 only
 D: 1, 2, and 3

24. With reference to the MIRV (Multiple Independently Targetable Re-entry Vehicle) technology, consider the following statements:

1. It allows a single missile to carry only one large warhead that can maneuver to evade enemy radars.
2. After reaching space, the missile releases multiple re-entry vehicles that follow separate trajectories toward different targets.
3. The successful integration of this technology places India among a select group of global nations.

Which of the statements given above is/are correct?

- A: 1 and 2 only
 B: 2 only
 C: 2 and 3 only
 D: 1, 2, and 3

25. Regarding the recent Advanced Agni Missile trial, consider the following statements:

1. The trial was conducted from the Satish Dhawan Space Centre in Sriharikota.
2. The missile has a range exceeding 5,000–5,500 km, placing it in the Intercontinental Ballistic Missile (ICBM) category.

3. It validates India's credible minimum deterrence and second-strike capability.

Which of the statements given above is/are correct?

- A: 1 and 2 only
 B: 1 and 3 only
 C: 2 and 3 only
 D: 1, 2, and 3

26. Consider the following statements about the Rusty-Spotted Cat:

1. It is endemic to the Indian subcontinent and is listed as Vulnerable on the IUCN Red List.
2. In India, it is granted the highest level of legal protection by being listed under Schedule I of the Wildlife (Protection) Act, 1972.
3. The recent sighting of a breeding population in the Aravalli scrublands demonstrates that fragmented habitats near urban areas can still support rare biodiversity.

Which of the statements given above is/are correct?

- A: 1 and 2 only
 B: 2 only
 C: 2 and 3 only
 D: 1, 2, and 3

27. Consider the following statements regarding the 'Holistic Development of Great Nicobar Island' project:

1. The project includes the construction of an International Container Transshipment Terminal (ICTT) at Galathea Bay.
2. Great Nicobar Island is situated in close proximity to the Strait of Malacca, a critical maritime chokepoint through which nearly 80% of China's oil imports pass.
3. The project has been completely stalled by the National Green Tribunal (NGT) due to concerns regarding the Shompen tribe and leatherback turtle nesting sites.

Which of the statements given above is/are correct?

- A: 1 and 2 only
 B: 2 only
 C: 2 and 3 only
 D: 1, 2, and 3

28. With reference to the Viksit Bharat – Guarantee for Rozgar and Aajeevika Mission (Gramin) Act, 2025 (VB-G RAM G Act), consider the following statements:

1. The Act increases the statutory employment guarantee from 100 days to 125 days per rural household annually.
2. It introduces a provision allowing states to pause the mission's employment activities for up to 60 days during peak agricultural seasons.
3. The Act mandates the payment of wages within 15 days, with a failure to do so incurring a 0.05% daily compensation for the delay.

Which of the statements given above are correct?

- A: 1 and 2 only
 B: 2 only
 C: 2 and 3 only
 D: 1, 2, and 3

29. Consider the following statements regarding the International Big Cat Alliance (IBCA):

1. The IBCA officially became a treaty-based intergovernmental organization in 2025.
2. Membership is restricted only to countries where these big cat species naturally occur (range countries).
3. The alliance is implemented domestically through the National Tiger Conservation Authority (NTCA).
4. The IBCA's institutional framework is broadly modeled on the International Solar Alliance.

Which of the statements given above are correct?

- A: 1 and 2 only
 B: 1,3 and 4 only
 C: 1, 2 and 3 only
 D: 1, 2, 3 and 4

30. Consider the following statements regarding the 2026 World Press Freedom Index released by Reporters Without Borders (RSF):

1. The 2026 report indicates that the global average score for press freedom has reached its highest level in 25 years.

2. The index evaluates countries based on five core indicators: political context, legal framework, economic conditions, sociocultural environment, and safety of journalists.

3. According to the 2026 findings, the legal indicator registered the steepest global decline.

Which of the statements given above is/are correct?

- A: 1 and 2 only
 B: 1 and 3 only
 C: 2 and 3 only
 D: 1, 2, and 3

31. With reference to India's performance in the 2026 World Press Freedom Index, consider the following statements:

1. India was ranked 157th out of 180 countries, showing an improvement compared to its 2025 ranking.
2. The report highlighted concentrated media ownership and violence against journalists as major concerns for India.
3. India ranks higher than its immediate neighbors Pakistan and Sri Lanka in the 2026 index.

Which of the statements given above is/are correct?

- A: 1 and 2 only
 B: 2 only
 C: 2 and 3 only
 D: 1, 2, and 3

32. With reference to the International Fund for Agricultural Development (IFAD), consider the following statements:

1. It was established as a specialised agency of the United Nations following the World Food Conference.
2. It is headquartered in Geneva, Switzerland, and focuses exclusively on rural poverty eradication and food security.
3. It functions as a co-investment platform that pools both public and private resources.

Which of the statements given above are correct?

- A: 1 and 2 only

- B: 2 only
 C: 1 and 3 only
 D: 1, 2, and 3

33. With reference to the 'Global Forest Goals Report 2026' released by the United Nations Department of Economic and Social Affairs (UN DESA), consider the following statements:

1. Global forest cover increased slightly between 2015 and 2025 due to reforestation campaigns in Africa and South America.
2. The report identifies rising demand for fuelwood and charcoal as a major driver of forest degradation in developing regions.
3. Primary forests, which are crucial for biodiversity, witnessed a total loss of over 40 million hectares in the last decade.

Which of the statements given above is/are correct?

- A: 1 and 2 only
 B: 2 only
 C: 2 and 3 only
 D: 1, 2, and 3

34. Regarding India's forest conservation and restoration targets as of 2025, consider the following statements:

1. India has achieved its target of 33% forest and tree cover, standing at 35% as per 2025 data.
2. Under the Bonn Challenge, India has pledged to restore 26 million hectares of degraded land by 2030.
3. The Compensatory Afforestation Fund (CAMPA) and the Green India Mission are key initiatives to meet these restoration targets.

Which of the statements given above is/are correct?

- A: 1 and 2 only
 B: 1 and 3 only
 C: 2 and 3 only
 D: 1, 2, and 3

35. Consider the following statements regarding the BRICS grouping and its recent Foreign Ministers' Meeting:

1. The recent meeting in New Delhi concluded

with the unanimous adoption of a Joint Declaration outlining the bloc's unified stance on West Asian maritime security.

2. The expanded BRICS+ configuration currently includes Egypt, the United Arab Emirates, Ethiopia, Indonesia, and Iran.
3. The New Development Bank (NDB), which finances infrastructure projects for the bloc, is headquartered in New Delhi.

Which of the statements given above is/are correct?

- A: 1 and 2 only
 B: 2 only
 C: 2 and 3 only
 D: 1, 2, and 3

36. Consider the following statements regarding the Ganges soft-shell turtle (*Nilssonina gangetica*):

1. It is legally protected under Schedule I of the Wildlife Protection Act (WPA), 1972.
2. The species is endemic only to the river systems of the Ganga and Brahmaputra.
3. It has a distinctive arrowhead-shaped marking on its head.
4. Its conservation status on the IUCN Red List is Critically Endangered.

Which of the statements given above are correct?

- A: 1 and 2 only
 B: 1 and 3 only
 C: 1, 2 and 3 only
 D: 1, 2, 3 and 4

37. Consider the following statements regarding Ebola Virus Disease (EVD):

1. It is a zoonotic disease caused by viruses belonging to the genus Orthoebolavirus.
2. The Bundibugyo strain of the Ebola virus has multiple WHO-approved vaccines and therapeutic treatments available globally.
3. Upon declaring a Public Health Emergency of International Concern (PHEIC), the WHO mandates that all countries impose strict international travel and border restrictions.

Which of the statements given above is/are correct?

- A: 1 only
 B: 1 and 3 only

- C: 2 and 3 only
D: 1, 2, and 3

38. Consider the following statements regarding the sanctioned strength of the Supreme Court of India:

1. The sanctioned strength of judges in the Supreme Court is determined by the President of India on the advice of the Chief Justice of India.
 2. The Supreme Court began functioning in 1950 with a total sanctioned strength of eight judges, which included seven puisne judges and one Chief Justice.
 3. The Supreme Court (Number of Judges) Amendment Ordinance, 2026, increased the sanctioned strength of the apex court to 38 judges (37 judges and 1 Chief Justice).
- Which of the statements given above is/are correct?

- A: 1 and 2 only
B: 1 and 3 only
C: 2 and 3 only
D: 1, 2, and 3

39. Which of the following provisions/mechanisms under the Indian Constitution mandates a minimum number of judges to sit for deciding cases involving the interpretation of the Constitution?

- A: Article 124(3)
B: Article 131
C: Article 145(3)
D: Article 143

40. Consider the following statements regarding the dispute resolution mechanism under the Indus Waters Treaty (IWT):

1. The Permanent Indus Commission (PIC) serves as the first tier of dispute resolution, where commissioners from both countries address technical and operational issues.
2. A Neutral Expert is appointed to deal with legal disputes and treaty interpretations, and their decisions are advisory in nature.
3. The Court of Arbitration (CoA) is a seven-member tribunal based at The Hague that handles technical and engineering disputes

unresolved by the PIC.

Which of the statements given above is/are correct?

- A: 1 only
B: 2 only
C: 2 and 3 only
D: 1, 2, and 3

41. Consider the following statements regarding the newly established India–Sweden Strategic Partnership (2026–2030):

1. The partnership is primarily guided by four core pillars, which include strategic dialogue for security and a next-generation economic partnership.
2. The Sweden–India Technology and Artificial Intelligence Corridor (SITAC) was endorsed to accelerate collaboration in digital infrastructure and advanced technologies.
3. As part of the sustainability cooperation, both nations launched the Leadership Group for Industry Transition (LeadIT) at the UN Climate Action Summit in 2026.

Which of the statements given above is/are correct?

- A: 1 and 2 only
B: 1 and 3 only
C: 2 and 3 only
D: 1, 2, and 3

42. With reference to the recent diplomatic engagements between India and Sweden, consider the following statements:

1. India and Sweden established diplomatic ties in 1948 and Sweden previously hosted the first India–Nordic Summit in 2018.
2. Prime Minister Narendra Modi was conferred Sweden's highest honour for a foreign head of government, the Royal Order of the Polar Star.
3. India and Sweden have agreed to establish an India–Sweden SME and Start-up Platform to support innovation-driven entrepreneurship.

Which of the statements given above is/are correct?

- A: 1 and 2 only
B: 1 and 3 only

- C: 2 and 3 only
 D: 1, 2, and 3

43. Consider the following statements regarding the recently repatriated 11th-century Chola copper plates (Leiden Copper Plates):

1. The plates contain inscriptions written entirely in the Sanskrit language.
 2. They record the grant of the Anaimangalam village to a Buddhist vihara built by the rulers of the Srivijaya kingdom.
 3. These artefacts were acquired by a Dutch missionary in the 18th century and were housed at Leiden University since 1862.
- Which of the statements given above is/are correct?

- A: 1 and 2 only
 B: 1 and 3 only
 C: 2 and 3 only
 D: 1, 2, and 3

44. With reference to the administration and society of the Chola Dynasty, consider the following statements:

1. The Chola administration featured a highly centralized monarchy with strong village self-governance institutions like the ur and sabha.
 2. The empire is historically known for its isolationist policies, exclusively focusing on the agrarian economy of the deep South.
 3. The Chola rulers were predominantly followers of Shaivism but also patronized other faiths such as Buddhism and Hinduism.
- Which of the statements given above is/are correct?

- A: 1 and 2 only
 B: 1 and 3 only
 C: 2 and 3 only
 D: 1, 2, and 3

45. Consider the following statements regarding the recently tested ULPGM-V3 missile:

1. It is exclusively designed to engage heavily armored ground vehicles such as tanks.
2. It features a "fire-and-forget" capability, allowing the launching drone to quickly

reposition or retreat after firing.

3. It can be operated in both air-to-ground and air-to-air modes.

Which of the statements given above is/are correct?

- A: 1 and 2 only
 B: 1 and 3 only
 C: 2 and 3 only
 D: 1, 2, and 3

46. With reference to the recent 3rd India–Nordic Summit (2026), consider the following statements:

1. The plurilateral dynamic was formally elevated to a "Green Technology and Innovation Strategic Partnership."
2. The Nordic countries officially reiterated their support for India's permanent membership in a reformed UN Security Council (UNSC).
3. The summit officially concluded the India–EFTA Trade and Economic Partnership Agreement (TEPA).

Which of the statements given above is/are correct?

- A: 1 and 2 only
 B: 1 and 3 only
 C: 2 and 3 only
 D: 1, 2, and 3

47. Consider the following statements regarding the Strait of Hormuz:

1. It is the only sea passage connecting the Persian Gulf to the open ocean.
2. It accounts for approximately one-fifth of the world's global oil and liquefied natural gas (LNG) flows.
3. Over 80% of the oil and LNG transiting through the strait is destined for Asian markets.

Which of the statements given above is/are correct?

- A: 1 and 2 only
 B: 1 and 3 only
 C: 2 and 3 only
 D: 1, 2, and 3

48. Consider the following statements regarding the Supreme Court's interpretation of Article

21 in the context of stray dog management:

1. The Right to Life under Article 21 includes the "freedom from fear in public spaces" for citizens.
2. Animal welfare principles under Article 51A(g) take precedence over a citizen's right to safety and mobility in public areas.
3. The Supreme Court declared that stray dogs have an unrestricted fundamental right to occupy all public places.

Which of the statements given above is/are correct?

- A: 1 only
 B: 1 and 3 only
 C: 2 and 3 only
 D: 1, 2, and 3

49. Consider the following statements regarding the India–Italy relations:

1. Recently, The bilateral ties were elevated from a Strategic Partnership to a "Special Strategic Partnership".
2. The countries set a target to raise bilateral trade to Euro 20 billion by 2029.
3. Italy formally withdrew its support for the India–Middle East–Europe Economic

Corridor (IMEEC).

Which of the statements given above are correct?

- A: 1 and 2 only
 B: 2 only
 C: 2 and 3 only
 D: 1, 2, and 3

50. Consider the following statements regarding the law of Sedition (Section 124A of the IPC) in India:

1. More criticism of the government constitutes sedition.
2. It is a cognizable and non-bailable offence.
3. The Supreme Court of India in the Kedar Nath Singh vs. State of Bihar (1962) case ruled that the sedition law violates the right to freedom of speech and expression.

Which of the statements given above is/are correct?

- A: 1 and 2 only
 B: 2 only
 C: 2 and 3 only
 D: 1, 2, and 3

ANSWER

1	A
2	B
3	A
4	A
5	A
6	B
7	B
8	B
9	A
10	B

11	D
12	B
13	C
14	C
15	C
16	A
17	D
18	C
19	C
20	B

21	C
22	B
23	B
24	C
25	C
26	C
27	A
28	D
29	B
30	C

31	A
32	C
33	B
34	C
35	B
36	B
37	A
38	C
39	C
40	A

41	A
42	D
43	C
44	B
45	C
46	A
47	D
48	A
49	A
50	B



फिर लहराया परचम

इसी परम्परा को आगे बढ़ते हुए...

इस वर्ष भी **UPPCS 2024** में **300+** चयन
(ध्येय IAS टीम एवं छात्रों द्वारा किये गए प्रतिबद्ध और समर्पित प्रयासों का परिणाम)

ध्येय IAS की तरफ से UPPCS-2024 में अंतिम रूप से चयनित
सभी सफल अभ्यर्थियों को हार्दिक शुभकामनाएँ



ANANAYA TRIVEDI
RANK 02 (SDM)



ANAMIKA MISHRA
RANK 04 (SDM)



DEEPTHI VERMA
RANK 06 (SDM)



POOJA TIWARI
RANK 07 (SDM)



ANURAG PANDEY
RANK 08 (SDM)



SUSHMA YADAV
RANK 13 (SDM)



SONAM YADAV
RANK 20 (SDM)



PANKAJ VERMA
RANK 22 (SDM)



ANURAG PRATAP SINGH
RANK 23 (SDM)



SHWETA DWIVEDI
RANK 29 (SDM)



KRITIKA CHAUDHARY
RANK 30 (SDM)



SONALI SINGH
RANK 32 (SDM)



VINAI KUMAR
RANK 33 (SDM)



ANJOLIE GUPTA
Dy.SP



AKRITI SHUKLA
Dy.SP



ANIMESH AWASTHI
Dy.SP



BRAJENDRA KUMAR
Dy.SP



ROSHANI PATEL
ACCI



KAUTILYA SHUKLA
ACCT



SUDHANSHU SINGH
ACCT



SAHIL VERMA
ACCT



PRAGATI VERMA
ACCT



KRATI GAUTAM
ACCT



NIDHI VERMA
ACCT



ANAMIKA BAJPAI
ACCT



MEENU RAWAT
ACCT



ALOK YADAV
ACCT



AKHILESH KUMAR
ACCT



PAWAN KUMAR MISHRA
ACCT



HARSH TIWARI
ACCT



SHIVANI SINGH
ACCT



SONU KUMAR
ACCT



NIDHI SAHU
ACCT



ANJALI SINGH
ACCT



SUKRIT SINGH
ACCT



ANSHIKA SINGH
ACCT



SHUBHAM KUMAR GUPTA
ACCT



KRATI BHANTI
ACCT



ISHA SRIVASTAVA
ACCT



VIKAS KUMAR PATEL
ACCT



SWATI MISHRA
ACCT



SHIVAM VISHWAKARMA
ACCT



SAMEER RAI
ACCT



MAYANK KUMAR PATEL
ACCT



ASHOK KUMAR SINGH
ACCT



KARUNA SAGAR SHUKLA
ACCT



ASHISH KUMAR SAINI
ACCT



PRINCY YADAV
ACCT



SAKET KUMAR GUPTA
ACCT



PREM SHANKAR SINGH
ACCT



DEEPAK GUPTA
ACCT



AKASH YADAV
ACCT



PRASOON YADAV
ACCT



ARVIND KUMAR SAROJ
ACCT



VIKAS
ACCT



RAJAT KANAUJIYA
ACCT



PRAGYA SACHAN
ACCT



SARVESH KUMAR
ACCT



VINAY KUMAR
ACCT



MONAL GAUTAM
ACCT



AKSHITA SHAGUN
ACCT



VIPIN SINGH
ACCT



RITIKA SHUKLA
ACCT