



January 2026

Year: 08 No: 01

PERFECT

Monthly Current Affairs Magazine



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In This Edition...

- Dhruva Tag Service
- SHANTI Act 2025
- Sabka Bima Sabki Raksha (Amendment of Insurance Laws) Bill, 2025
- Indian PM visited to Jordan, Ethiopia and Oman
- Operation Sagar Bandhu
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and more Important Topics...



India-Russia Relations in the Changing Global Environment

NEW BATCH UPSC (IAS)

Starting

 **27 JAN 2026**



Hindi Medium - 08:30 AM
English Medium - 05:30PM

Kumud Ranjan

Faculty of Polity and Governance

(20 years experience)



Aliganj, Lucknow



9506256789

Message



An officer with a right mindset is an officer that a nation aspires for. A right mindset doesn't necessarily comprise unlimited jargon of knowledge rather a right amount of knowledge and its appropriate execution. Especially, when it comes to UPSC and State PSCs preparation, the crux is not to accumulate the knowledge but its effective implementation and utilization in tackling any situation. The situation here can be anything from UPSC CSE Prelims to the major issues that need to be addressed. The journey is hard but it is worth.

Perfect 7 has been part of many UPSC and State PSCs aspirants in their journey of becoming well reputed officers serving nationally and internationally. The magazine itself had gone through constant ebb and flows of change and improvements. Now, that the magazine is in its monthly era, I hope it becomes your perfect preparation partner and guides you through this ever learning endeavor of Civil Services Preparation.

With Best wishes.

Vinay Singh
Founder
Dhyeya IAS

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-: Credits :-

PIB, PRS, AIR, ORF, Prasar Bharati, Yojana, kurukshestra, The Hindu, Down to Earth, The Indian Express, India Today, WION, Deccan Herald, The Times of India, Hindustan Times, The Economic Times, BBC, Dainik Jagran, Dainik Bhaskar and Others

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Indian Society & Art and Culture

UNESCO Intangible Cultural Heritage Safeguarding: India's Emerging Leadership Role on the Global Platform

Context:

Recently, India successfully concluded the 20th session of the Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage (ICH) of UNESCO at the historic Red Fort, New Delhi. The six-day meeting marked the first time India hosted this important UNESCO committee, reinforcing its growing leadership in cultural diplomacy and global heritage governance.

The session witnessed the inscription of Deepavali (Diwali) on UNESCO's Representative List of the Intangible Cultural Heritage of Humanity, making it the 16th ICH element from India. The event highlighted the convergence of India's tangible and intangible heritage and showcased its civilisational depth on a global platform.

Why It Matters?

- Intangible Cultural Heritage (ICH) encompasses traditions, performing arts, rituals, crafts, languages, festivals, and other non-tangible expressions that communities recognise as part of their cultural heritage.
- The Committee provides a global platform for policy dialogue, listings, monitoring, and capacity-building to safeguard living heritage in a rapidly globalising world.
- This session was particularly noteworthy as India hosted the Committee for the first

time, at the historic Red Fort, New Delhi, underscoring its commitment to cultural diplomacy and heritage safeguarding.

Key Outcomes of the 20th Session:

- **Major Inscriptions and Recognitions:** Deepavali (Diwali), the pan-Indian festival of lights, was officially inscribed on the UNESCO Representative List of the Intangible Cultural Heritage of Humanity, recognising its cultural, social, and symbolic significance globally.
- **Volume of Nominations and Listings:** The session examined a substantial number of heritage nominations from multiple countries and inscribed several new elements onto UNESCO's lists, reflecting the diversity of living traditions worldwide.
- **Decisions on Future Sessions:** The Committee decided that the 21st session will be held in Xiamen, China (30 November–5 December 2026), demonstrating continued global rotation and participation.

Background:

- Recognising the growing threat to living cultural traditions due to globalisation, rapid social change, urbanisation, and limited resources, UNESCO adopted the Convention for the Safeguarding of the Intangible Cultural Heritage on 17 October 2003 during its 32nd General Conference in

Paris.

- The Convention acknowledged that oral traditions, performing arts, rituals, social customs, craftsmanship, and traditional knowledge systems form the backbone of cultural identity but remain vulnerable without institutional support. A key feature of the Convention was its community-centric approach, placing indigenous communities, groups, and individual practitioners at the heart of safeguarding efforts.
- It underscored:
 - » The interdependence of tangible and intangible heritage
 - » The need for international cooperation and assistance
 - » The importance of intergenerational transmission, especially among youth
- The Convention laid the foundation for:
 - » UNESCO's Intangible Cultural Heritage Lists
 - » The work of the Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage

Objectives of the 2003 Convention:

- The Convention seeks to:
 - » Safeguard intangible cultural heritage
 - » Ensure respect for the heritage of communities, groups, and individuals
 - » Raise awareness at local, national, and international levels
 - » Promote global cooperation and mutual assistance

Functions of the Intergovernmental Committee:

- The Intergovernmental Committee for the Safeguarding of ICH plays a central role in implementing the Convention by:
 - » Monitoring and promoting Convention objectives
 - » Recommending best practices for safeguarding ICH
 - » Preparing plans for the utilisation of the ICH Fund
 - » Mobilising additional financial resources
 - » Drafting and updating Operational Directives

- » Examining periodic reports from States Parties
- » Deciding on:
 - » Inscription of elements on UNESCO's ICH Lists
 - » Granting of international assistance

India's Intangible Cultural Heritage: A National & Global Asset:

- India's intangible cultural heritage is a living resource, contributing far beyond cultural symbolism.
 - » **Social & Cultural Identity:** ICH preserves linguistic, regional, tribal, religious, and community identities, strengthening social cohesion and pluralism in a diverse society.
 - » **Livelihoods & Crafts Economy:** Traditional crafts, folk arts, rituals, and cultural tourism sustain millions of artisans and performers, particularly in rural and marginalised regions. Safeguarding ICH supports inclusive and sustainable development.
 - » **Education & Knowledge Transmission:** ICH embodies traditional ecological wisdom, oral histories, craftsmanship techniques, and indigenous knowledge systems, enriching education and ensuring intergenerational continuity.
 - » **Cultural Diplomacy & Soft Power:** Festivals, dances, crafts, and rituals reflect India's values and diversity, enhancing soft power, people-to-people connections, and international cultural influence. Hosting the UNESCO session amplified this impact.
 - » **Global Heritage Leadership:** India's active role strengthens equitable and community-sensitive global heritage governance, positioning it as a key voice among developing nations.

India's Contributions to Safeguarding ICH:

- To systematise preservation efforts, the Ministry of Culture launched the "Scheme for Safeguarding the Intangible Heritage and Diverse Cultural Traditions of India."
- **Key features:**

- » Revitalisation of practitioners, institutions, scholars, and communities
- » Support for documentation, ICH inventories, workshops, performances, and training
- » Assistance in preparing UNESCO nomination dossiers
- » Promotion of education-culture integration
- » Skill development support under the NVEQF framework

■ Additionally, the Sangeet Natak Akademi (SNA) conducts capacity-building programmes, training practitioners and spreading awareness of ICH values.

India's Intangible Cultural Heritage Inscribed by UNESCO

India is a State Party to the 2003 Convention and now has 16 elements on UNESCO's ICH List, with Deepavali (2025) being the latest.

Snapshot of India's Inscribed Elements

- » **Festivals & Rituals**
 - Ramlila (2008)
 - Ramman (2009)
 - Kumbh Mela (2017)
 - Durga Puja (2021)
 - Garba (2023)
 - Deepavali (2025)
- » **Performing Arts**
 - Kutiyattam (2008)
 - Chhau Dance (2010)
 - Kalbelia (2010)
 - Mudiyettu (2010)
 - Sankirtana (2013)
- » **Traditions & Knowledge**
 - Vedic Chanting (2008)
 - Buddhist Chanting of Ladakh (2012)
 - Yoga (2016)
- » **Crafts**
 - Thatheras' brass and copper craft (2014)
- » **Multinational**
 - Nowruz / Nawrouz (2016)



Source: Ministry of Culture, GoI

Implications of the UNESCO Meet:

- **Cultural Diplomacy & Soft Power:** India's leadership in cultural governance strengthens its global image, projecting it as a nation that respects and promotes living heritage. Hosting the meet amplifies India's soft power and people-to-people diplomacy, particularly among developing countries.
- **International Cooperation & Policy Influence:** The meet provided India with a platform to influence UNESCO policy, advocate community-sensitive heritage preservation, and share best practices for safeguarding intangible traditions globally.
- **Boost to Heritage Tourism & Economy:** Recognition of Deepavali and other cultural practices encourages heritage tourism, supporting artisans, performers, and local communities, and generating economic and social benefits.
- **Strengthening Domestic Heritage Governance:** The event highlighted the importance of structured national initiatives such as the

ICH Scheme and Sangeet Natak Akademi programmes, encouraging documentation, capacity-building, and education-culture integration at scale.

■ **Community Empowerment:** By placing communities at the centre of heritage protection, the meet reinforced participatory preservation, ensuring safeguarding efforts remain inclusive and sustainable.

Conclusion:

The successful hosting of the UNESCO ICH Committee meeting in India reflects the country's evolving leadership in cultural governance, its commitment to community-based heritage preservation, and its strategic use of culture as a tool of soft power and diplomacy. By bridging tradition with modern governance frameworks, India has reaffirmed that safeguarding living heritage is essential not only for cultural continuity but also for sustainable and inclusive development in a globalised world.

Short Issues

Government Data on Malnutrition Challenges in India

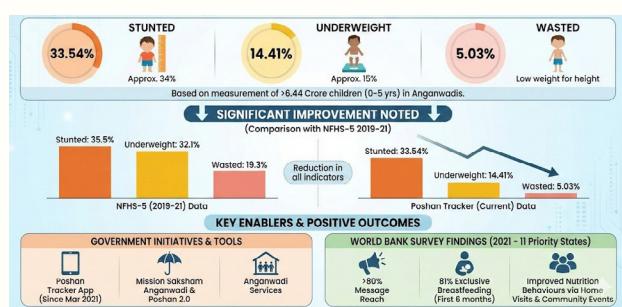
Context:

The Government of India recently informed Parliament that about 34% of children under five years are stunted, while 15% are underweight, according to data from the Poshan Tracker. The statistics reflect ongoing challenges in child nutrition, despite notable improvements in recent years.

Key Findings from the Poshan Tracker:

- The Poshan Tracker, a digital application launched in March 2021, monitors children enrolled in Anganwadi Centres (AWCs) across the country.

- As of October 2025, over 6.44 crore children aged 0–5 years were measured for height and weight.
- Data indicates:
 - » 33.54% children are stunted (low height-for-age)
 - » 14.41% children are underweight (low weight-for-age)
 - » 5.03% children are wasted (low weight-for-height)



Comparison with NFHS-5:

- According to the National Family Health Survey-5 (2019–21):
 - » Stunting: 35.5%
 - » Underweight: 32.1%
 - » Wasting: 19.3%
- The data suggests a gradual improvement in malnutrition indicators, but the prevalence remains high.

Key Nutrition Schemes to Counter Malnutrition in India

- **Mission Poshan 2.0 (Saksham Anganwadi & POSHAN Abhiyaan)**
 - » **Key Features / Components:**
 - Integrates Anganwadi Services & Poshan Abhiyaan
 - Focus on maternal & child nutrition, immunity, BCC
 - Strengthens Anganwadi infrastructure
 - Uses Poshan Tracker for real-time monitoring
 - » **Target Group:** Children (0–6 yrs), Pregnant Women, Lactating Mothers, Adolescent Girls
 - » **Objective:** Reduce stunting, wasting, anaemia; improve service delivery & nutrition behaviour
- **Integrated Child Development Services (ICDS)**
 - » **Key Features / Components:**
 - Supplementary nutrition
 - Growth monitoring
 - Immunization support
 - Health check-ups
 - Nutrition & early childhood education
 - » **Target Group:** Children (0–6 yrs), Pregnant & Lactating women, Adolescent girls
 - » **Objective:** Provide integrated early childhood care & nutrition
- **PM POSHAN (Mid-Day Meal)**
 - » **Key Features / Components:**
 - Cooked meals for school children

- Enhances nutrition, attendance, learning outcomes

- » **Target Group:** School children (Class 1–8)
- » **Objective:** Improve school nutrition & reduce classroom hunger

Pradhan Mantri Matru Vandana Yojana (PMMVY)

- » **Key Features / Components:**
 - Cash transfers during pregnancy & lactation
 - Incentives for antenatal care, rest, institutional delivery
- » **Target Group:** Pregnant & lactating mothers
- » **Objective:** Improve maternal nutrition & reduce IMR, MMR

Scheme for Adolescent Girls (SAG)

- » **Key Features / Components:**
 - Nutrition supplementation
 - Health & hygiene education
 - Life skills training
- » **Target Group:** Adolescent girls (11–18 years)
- » **Objective:** Improve nutritional & health status, empower adolescent girls

National Strategy & Convergence (NITI Aayog & Ministries)

- **National Nutrition Strategy (NITI Aayog)**
 - » **Key Features:**
 - Target to reduce all forms of malnutrition by 2030 (aligned with SDG-2)
 - Focus on dietary diversity, maternal health, early childhood development
 - » **Objective:** Achieve a malnutrition-free India
- **Convergence Across Ministries**
 - » **Ministries involved:**
 - WCD (Women & Child Development)
 - Health & Family Welfare
 - Education
 - Rural Development
 - Jal Shakti & Food Processing
 - » **Objective:** Ensure coordinated action

across first 1,000 days, school age, and adolescence

- **Poshan Maah (Nutrition Month)**

- » **Key Features:**

- Annual national campaign
- Community engagement via Anganwadis, schools, gram panchayats

- » **Objective:** Mass awareness for nutrition & behaviour change

Conclusion:

While India has made progress in reducing malnutrition among children under five, the data indicates that a third of children are still stunted and one-sixth underweight. Programs like Poshan Tracker and Mission Poshan 2.0 are crucial tools for targeted intervention, but sustained focus on maternal and child health, nutrition awareness and poverty alleviation is essential to achieve long-term improvements.

Deepavali Included in UNESCO's Intangible Cultural Heritage List

Context:

India's major religious and cultural festival, Deepavali, has been inscribed in the UNESCO Representative List of the Intangible Cultural Heritage of Humanity for the year 2025. This decision was announced during the 20th session of UNESCO's Intergovernmental Committee, held in New Delhi, where representatives of 194 member countries participated. Deepavali has now become India's 16th element to be included in this prestigious list. The inscription significantly strengthens India's soft power and enhances its cultural diplomacy at the global level.

Significance of Deepavali's Inscription:

- Deepavali is the most widely celebrated festival in India. It symbolizes the victory of light over darkness, good over evil, and knowledge over ignorance. It is not merely

a religious event; Deepavali reflects the cultural diversity, social harmony, and core civilizational values of Indian society.

- Its inclusion in UNESCO's list reinforces its global cultural identity, indicating that the festival continues to flourish as a living cultural expression, not only within India but also across the international community.

Importance of Being Inscribed in the UNESCO List:

- **Global Recognition and Preservation:** Deepavali's inscription grants the festival international recognition and support efforts related to documentation, preservation, and safeguarding of its traditional practices. Through UNESCO's framework, guidance on best practices, safeguarding strategies, and access to resources become available.
- **Cultural Diplomacy and India's Soft Power:** The inclusion strengthens India's soft power and enhances its standing in global cultural diplomacy. It boosts India's representation as a custodian of diverse cultural traditions and promotes international respect for Indian civilization and its practices.
- **Tourism and Local Economy:** Global recognition of Deepavali is expected to promote cultural tourism, benefitting local artisans, craft communities, small industries, and festival-related economic activities. This, in turn, supports the preservation of traditional craftsmanship and cultural arts.

UNESCO's Intangible Cultural Heritage (ICH) List:

- UNESCO's ICH list includes cultural practices, skills, festivals, oral traditions, performing arts, social practices and traditional knowledge systems that are transmitted across generations without a physical form, yet remain central to cultural identity.
- These elements represent living traditions, not material objects.

- The aim of the Representative List is to raise awareness about the importance of cultural diversity and ensure the safeguarding of such traditions.
- UNESCO broadly classifies ICH elements into five domains:
 - » Oral traditions and expressions
 - » Performing arts
 - » Social practices, rituals, and festive events
 - » Knowledge related to nature and the universe
 - » Traditional craftsmanship
- These categories highlight practices that strengthen cultural identity, community participation, and social continuity.

India's Elements in UNESCO's ICH List:

No.	Element	Category/Type
1	Kutiyattam	Sanskrit Theatre (Performing Arts)
2	Tradition of Vedic Chanting	Oral/Religious Tradition
3	Ramlila	Socio-religious Performance
4	Ramman	Religious Festival/ Ritual
5	Chhau Dance	Folk Dance/ Performing Art
6	Kalbelia Folk Songs and Dance	Folk Dance
7	Mudiyettu, Kerala	Ritual Theatre/ Dance
8	Buddhist Chanting of Ladakh	Religious Expression
9	Sankirtana of Manipur	Ritual Singing/ Dancing
10	Thatheras of Jandiala Guru	Traditional Craftsmanship
11	Navroz	Festival (Parsi Community)
12	Yoga	Socio-physical-spiritual Practice

13	Kumbh Mela	Religious-Social Festival
14	Durga Puja of Kolkata	Socio-religious Festival
15	Garba of Gujarat	Folk Dance/Festive Event
16	Deepavali	Festival/Socio-religious Expression

Conclusion:

Deepavali's inclusion in UNESCO's Intangible Cultural Heritage List is a significant milestone that recognizes India's rich cultural heritage and vibrant traditions at the global stage. It highlights India's commitment to preserving cultural diversity and strengthens international cultural dialogue. The move enhances India's soft power and underscores the global relevance of its living traditions.

Tamil Nadu Receives 5 New Geographical Indication (GI) Tags

Context:

Recently, five new products from Tamil Nadu (TN) received Geographical Indication (GI) tags from the Geographical Indications Registry (GIR) under the Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce & Industry (MoC&I).

About New GI-Tagged Products:

- Woraiyur Cotton Sari
- Kavindapadi Nattu Sakkrai (Jaggery Powder)
- Namakkal Makkal Pathirangal (Soapstone Cookware)
- Thooymallai Rice (Traditional Rice Variety)
- Ambasamudram Choppu Samaan (Wooden Toys)
- **Significance:** TN's total GI-tagged products now stand at 74, making it the second-highest state in India for GI-certified items, after Uttar Pradesh.

About Woraiyur Cotton Sari:

- **Applicant:** Woraiyur Devanga Handloom Weavers' Co-operative Society (2022)
- **Production Area:** Woraiyur, Kottathur, Paithamparai, and nearby clusters
- **Weavers:** Devanga Chettiar community
- **Key Features:**
 - » Unique Korvai border with continuous block-colour patterns and geometric motifs
 - » Body & border feature mango, bangle, geometric shapes, and pearl designs
- **Significance:** Originates from the historic weaving clusters of Manamedu, Tiruchi district, dating back to the Chola Empire

About Thooyamalli Rice:

- **Location:** Native to TN, now mainly cultivated in Kancheepuram district
- **Unique Features:** Fragrant aroma, shiny grains, also called "pearl rice"
- **Samba crop duration:** 135–140 days, including nursery period
- **Health Benefits:**
 - » Rich in fiber, protein, iron, calcium
 - » Low Glycemic Index, beneficial for diabetes patients



About Ambasamudram Choppu Saman (Wooden Toys):

- **Applicant:** Ambasamudram Bharani Mara Varna Kadasal Artisans Welfare Association, supported by Poompuhar
- **Manufacturing Area:** Ambasamudram, Tirunelveli district
- **Key Features:**

- » Small, brightly coloured toys
- » **Shapes:** miniature kitchen utensils (choppu saman), spinning tops (pambaram)
- » **Materials:** Traditionally Neolamarckia cadamba, teak, rosewood; now rubberwood, eucalyptus

About Namakkal Makkal Pathirangal (Soapstone Cookware):

- **Applicant:** Namakkal Stone Products Manufacturers & MSME Technology Development Centre
- **Significance:**
 - » Ideal for cooking food containing tamarind, lime, and safe for storing pickles, milk, curd
 - » Corrosion-resistant and non-toxic

About Kavindapadi Nattu Sakkrai (Jaggery Powder):

- **Applicant:** TN State Agricultural Marketing Board, supported by NABARD & Madurai Agri Business Incubation Forum
- **Key Feature:** Golden-brown, sweet jaggery powder from Erode district
- **Major Producer Area:** Kavindapadi belt, supported by Lower Bhavani Project canal irrigation

About Geographical Indication (GI) Tag

- **Definition:** Identifies products originating from a specific region with unique qualities or reputation linked to that origin (e.g., Darjeeling Tea, Basmati Rice)
- **Legal Basis (India):** Geographical Indications of Goods (Registration and Protection) Act, 1999
- **Governing Body:** DPIIT, MoC&I
- **Registry:** Geographical Indications Registry, Chennai
- **International Alignment:** WTO TRIPS Agreement
- **Validity:** 10 years, renewable

Benefits of GI Tags:

- **Economic:** Boosts marketability, exports, and income for local producers

- **Cultural:** Preserves traditional knowledge, skills, and regional identity
- **Legal:** Protects against counterfeiting and unauthorized use
- **Developmental:** Promotes rural development, artisan livelihoods, and Atmanirbhar Bharat

Centre Not Considering Proposal to Classify Denotified Tribes (DNTs)

Context:

The Union Government informed the Rajya Sabha that it is not considering any proposal to classify Denotified, Nomadic and Semi-Nomadic Tribes (DNT/NT/SNT) into SC, ST or OBC categories afresh. This decision comes despite earlier efforts to review their status and long-standing demands for clearer categorisation.

- The Centre's response indicates that it is not pursuing fresh inclusion or movement of these communities into the SC, ST, or OBC lists, even though several committees, including the Idate Commission (2017) and the AnSI study (completed in 2023), recommended such classification.

About Denotified Tribes:

- Denotified Tribes are communities that were once labelled as "criminal tribes" under the Criminal Tribes Act of 1871, a discriminatory colonial law that branded many nomadic groups as hereditary offenders.
- The Act was repealed in 1952, and these communities were officially "denotified." However, stigmatization, police harassment, socio-economic marginalisation, lack of land rights, and exclusion from welfare schemes have persisted for decades.
- Today, DNTs, Nomadic Tribes (NTs), and Semi-Nomadic Tribes (SNTs) are spread across different social categories "SC, ST and OBC" depending on state-level classifications, creating uneven access to benefits.

About Anthropological Survey of India Recommended:

- The ethnographic study commissioned in 2019 and completed by the Anthropological Survey of India (AnSI) in 2023 examined 268 communities historically associated with DNT/NT/SNT categories.
- The report recommended:
 - » Fresh classification for 85 communities,
 - » Reclassification for nine communities, and
- This study was part of a larger initiative led by the Development and Welfare Board for Denotified, Nomadic, and Semi-Nomadic Communities (DWBDNC) and was based on earlier findings, including the Idate Commission (2017).

Concerns Raised by Experts and Civil Society:

- Despite the government's stand, several concerns persist:
 - » **Fragmented Classification:** Being divided across SC/ST/OBC lists results in unequal access to benefits. Some DNTs receive full support, while others remain outside formal protection.
 - » **Lack of Reliable Data:** No comprehensive national survey exists on DNT socio-economic status, making policy design difficult.
 - » **Continuing Stigma:** Even today, many DNT groups face police profiling, lack of identity documents, and limited political representation.
 - » **Inadequacy of Existing Schemes:** Implementation gaps, low awareness, and budgetary limitations restrict the impact of welfare initiatives.

Conclusion:

The Centre's statement that it is not considering a proposal to classify Denotified Tribes separately reflects constitutional limitations and administrative complexity. However, the historical injustices faced by DNTs and

persistent social exclusion highlight the need for robust welfare delivery, targeted support, and improved data collection.

Hornbill Festival 2025

Context:

The 26th edition of the Hornbill Festival was held from 1 to 10 December, 2025 coinciding with Nagaland's Statehood Day. This year featured strong international participation: six "country partners" - France, Ireland, Switzerland, the United Kingdom, Malta, and Austria - along with a "state partner", Arunachal Pradesh.

Key features of the festival:

- During the 10-day festival, visitors can experience a rich and immersive display of Naga culture and contemporary vibrancy:
 - » **Tribal Showcases & Cultural Performances:** All major tribes of Nagaland come together to present their unique dances, music, war-cries, folklore enactments, and traditional rituals.
- **Morungs & Heritage Exhibits:** Traditional tribal huts ("morungs") are set up, showcasing artefacts, traditional arts, wooden carvings, tribal attire, and community life.
- **Handicrafts & Local Arts:** Hand-woven textiles, beadwork, bamboo-cane crafts, wood-carvings, traditional jewellery, giving artisans a platform to exhibit their work and sell crafts, thereby supporting livelihood.
- **Cuisine & Traditional Food Culture:** Local Naga cuisine, including smoked meat, bamboo-shoot dishes, fermented foods offering a taste of Naga gastronomic tradition.
- **Games, Sports & Indigenous Activities:** Traditional games, wrestling, archery, drum performances, and other cultural-sporting events.

Significance of Hornbill Festival 2025:

- **Cultural Preservation & Revival:**
 - » Serves as a living platform to preserve

and showcase Naga tribal traditions, folklore, music, crafts, and collective memory.

- » Becomes especially important in 2025 amid rapid globalization and cultural homogenization.
- » Helps transmit indigenous knowledge systems to younger generations and global audiences.



Tourism & Economic Impact:

- » The international participation expected to boost domestic and foreign tourist inflow.
- » Generates local employment for artisans, musicians, homestays, transport operators, vendors, and cultural performers.
- » Contributes to sustainable economic development in the Northeast, a region historically outside mainstream tourism circuits.

Cultural Diplomacy & Soft Power:

- » Acts as a cultural diplomacy platform by hosting foreign "country partners."
- » Enhances India's soft power by showcasing rich tribal cultures, pluralism, and indigenous traditions.
- » Fosters global understanding and intercultural exchange.

Inter-Community Unity & National Integration:

- » All Naga tribes participate collectively, strengthening social cohesion and unity in diversity.
- » Encourages dialogue and solidarity among different ethnic groups.
- » Promotes national integration while

respecting cultural autonomy.

- **Promotion of Identity, Heritage & Tribal Rights:**

- » Provides visibility and recognition to marginalized tribal communities.
- » Helps preserve intangible heritage and oral traditions.
- » Reinforces respect for tribal identity, history, and rights in national development discourse.

WADA Report on Doping

Context:

The World Anti-Doping Agency (WADA), in its annual report published on 16 December 2025, ranked India as the world's worst doping offender for the third consecutive year. India recorded 260 positive cases out of 7,113 samples collected in 2024. The findings come at a sensitive time, as India prepares to host the 2030 Commonwealth Games and harbours ambitions of hosting the 2036 Olympic Games.

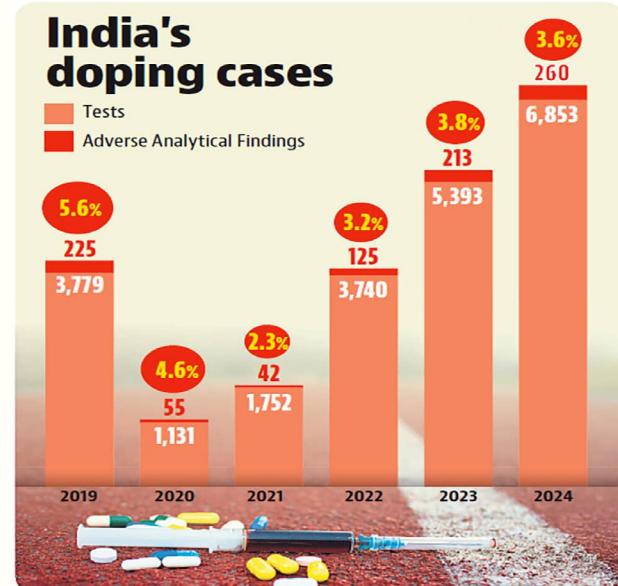
Key Findings of the WADA Report:

- India recorded the highest number of doping violations globally in 2024.
- Athletics (76 cases) topped the list, followed by weightlifting (43) and wrestling (29).
- Other countries with high violation numbers included France (91), Italy (85), Russia and the United States (76 each), Germany (54), and China (43).
- India had also topped the global doping list in 2022 and 2023, indicating a persistent trend rather than an isolated aberration.

Recent Incidents Highlighting the Problem:

- In July 2025, U-23 wrestling champion and Paris Olympics quarter-finalist Reetika Hooda tested positive for banned substances and was provisionally suspended.
- During the Indian University Games, reports emerged of athletes avoiding competition venues due to the presence of anti-doping officials, reflecting fear, lack of awareness,

and weak deterrence mechanisms.



Reasons behind India's High Doping Numbers:

- **Overrepresentation of Strength Sports:** Athletics, weightlifting, and wrestling rely heavily on strength and endurance, making them more susceptible to anabolic steroid abuse.
- **Livelihood and Performance Pressure:** Government jobs, cash rewards, and social mobility linked to sporting success encourage risk-taking behaviour, particularly among young athletes.
- **Low Awareness at the Grassroots Level:** There is limited understanding of prohibited substances, Therapeutic Use Exemptions (TUEs), and the risks of contaminated supplements.
- **Unregulated Supplement Market:** Easy access to unverified nutritional supplements, often lacking proper labelling and quality control, increases inadvertent doping risks.
- **Institutional Limitations:** Despite expanded testing, the National Anti-Doping Agency (NADA) faces capacity constraints given India's vast and decentralised athlete base.

Implications for India:

- **Reputational Damage:** India's credibility as a responsible sporting nation is undermined.
- **Hosting Ambitions at Risk:** Persistent doping concerns could adversely affect India's prospects of hosting major global sporting events.
- **Athlete Careers Jeopardised:** Young athletes face lengthy bans, derailing careers and leading to a loss of sporting talent.
- **Increased International Scrutiny:** The International Olympic Committee (IOC) has urged India to "set its house in order".

About WADA:

- The World Anti-Doping Agency (WADA) is an independent international organisation that promotes, coordinates, and monitors the global fight against doping in sport.
- **Establishment and Structure:**
 - » **Established:** 1999
 - » **Founded by:** A partnership between the International Olympic Committee (IOC) and governments worldwide
 - » **Headquarters:** Montreal, Canada
 - » **Mission:** To protect athlete health and ensure fairness, integrity, and clean competition in sport

Conclusion:

India's repeated top ranking in global doping violations reflects systemic weaknesses rather than isolated misconduct. While increased testing has improved detection, sustainable progress will require grassroots education, stronger institutional capacity, regulatory oversight of supplements, and ethical reform. As India aspires to emerge as a global sporting powerhouse, combating doping must be treated as a governance and integrity challenge central to the nation's sporting future.

Kashi Tamil Sangamam 4.0

Context:

Kashi Tamil Sangamam 4.0 (KTS 4.0) concluded on 15 December 2025, following a two-week-

long celebration held from 2–15 December 2025. The event was themed "Let Us Learn Tamil – Tamil Karkalam (Karpom Tamil)" and aimed at deepening cultural and linguistic ties between Tamil Nadu and Kashi (Varanasi). The initiative aligns with the Government of India's Ek Bharat Shreshtha Bharat vision, which seeks to promote inter-regional understanding and civilisational harmony.

Background:

- **Inception:** Launched in 2022, Kashi Tamil Sangamam celebrates the historical, spiritual, and cultural linkages between Kashi and Tamil Nadu.
- **Organisers:** Ministry of Education, Government of India, with IIT Madras and Banaras Hindu University (BHU) as knowledge partners.
- **Previous Editions:** Conducted in 2022, 2023, and earlier in 2025, featuring cultural, educational, and knowledge exchanges.

Objectives:

- Strengthen cultural and linguistic bonds between Tamil Nadu and Kashi.
- Facilitate people-to-people interactions through education, art and heritage-based activities.
- Promote the learning and appreciation of the Tamil language across India.

Participants:

- Over 1,400 delegates from Tamil Nadu, including students, teachers, artists, writers, farmers, and spiritual scholars.
- Active engagement with local communities, schools, and universities in Varanasi and surrounding regions.

Key Programmes:

Programme	Description
Tamil Karkalam	Teaching Tamil in Varanasi schools to promote multilingualism.

Tamil Karpom	Study tours for students from Kashi to Tamil Nadu, providing exposure to Tamil culture and traditions.
Sage Agastya Vehicle Expedition	A cultural and civilisational journey tracing the ancient route from Tenkasi (Tamil Nadu) to Kashi, highlighting historical and cultural connections.
Cultural Evenings	Performances at Namo Ghat and other venues showcasing North-South artistic traditions, music, and dance forms.
Valedictory Function	The grand finale held at Rameswaram, celebrating cultural convergence and civilisational unity.

Significance:

- **Cultural Integration:** Demonstrates India's civilisational continuum and reinforces the principle of unity in diversity.
- **Linguistic Promotion:** Encourages cross-learning between Tamil- and Hindi-speaking regions.
- **Educational & Social Impact:** Promotes academic exchange, heritage exposure, and civilisational awareness among youth.
- **National Cohesion:** Strengthens the Ek Bharat-Shreshtha Bharat ethos by fostering enduring North-South bonds.

Conclusion:

Kashi Tamil Sangamam 4.0 exemplifies India's rich linguistic, cultural, and spiritual heritage by bridging regions through education, art, and shared civilisational memory. By linking Kashi's spiritual legacy with Tamil Nadu's literary and cultural traditions, the Sangamam promotes national integration, intercultural dialogue, and linguistic diversity, while nurturing the next generation's appreciation for India's pluralistic civilisational ethos.

NITI Aayog's Roadmap for the Internationalisation of Higher

Education in India

Context:

Recently, NITI Aayog proposed a comprehensive roadmap for the internationalisation of higher education in India. The report, titled "Internationalisation of Higher Education in India: Prospects, Potential, and Policy Recommendations", highlights India's limited global footprint in higher education and recommends structural, financial, and regulatory reforms aligned with the National Education Policy (NEP), 2020.

Key Concerns in Higher Education:

- The report highlights a stark inbound-outbound imbalance in student mobility:
 - » In 2024, for every one international student studying in India, 28 Indian students went abroad for higher education.
 - » As of 2022, India hosted only around 47,000 international students, far below major global education hubs.
- This imbalance has resulted in:
 - » Brain drain
 - » Loss of foreign exchange
 - » Weak global academic influence

Future Vision:

- Using forecasting models, NITI Aayog estimates that by 2047, India could host 7.89 lakh to 11 lakh international students.
- Internationalisation is viewed as critical for:
 - » Academic excellence
 - » Research collaboration
 - » Soft power projection
 - » Knowledge-driven economic growth

Major Policy Recommendations by NITI Aayog:

- **Bharat Vidya Kosh – National Research Fund**
 - » Proposal to establish a USD 10 billion research sovereign wealth fund.
- **Funding structure:**
 - » 50% from the Indian diaspora and

- philanthropy
- 50% matching contribution from the Central Government
- » **Objectives:**
 - Support cutting-edge research
 - Enhance the global competitiveness of Indian universities
- **Vishwa Bandhu Scholarships and Fellowships**
 - » **Vishwa Bandhu Scholarship:**
 - » To attract international students to Indian institutions.
 - » **Vishwa Bandhu Fellowship:**
 - To attract foreign faculty and global research talent.
 - » **Aims:**
 - Improve campus diversity
 - Promote global academic exchange
 - Reverse academic isolation
- **Erasmus+-like Academic Mobility Programme**
 - » Proposal for an India-led international academic mobility programme, modelled on the EU's Erasmus+.
 - » Focus areas include:
 - Student exchange
 - Joint degree programmes
 - Credit transfer mechanisms
 - Collaborative research initiatives
- **Regulatory and Institutional Reforms**
 - » Rationalisation of regulations to enable:
 - Foreign universities to establish campuses in India
 - Joint and dual degree programmes
 - » These reforms complement:
 - The Viksit Bharat Shiksha Adhishtan Bill, 2025
 - The proposed Standards Council (Manak Parishad) to develop non-binding internationalisation frameworks
- **Curriculum, Rankings, and Branding**
 - » Curriculum modernisation aligned with global academic standards.
 - » Expansion of NIRF ranking parameters to include:

- International faculty
- Foreign students
- Global research collaborations
- » Strengthened branding, communication, and outreach strategies to position India as a preferred global study destination.

Significance of the Recommendations:

- **Educational Impact**
 - » Enhances quality, diversity, and global relevance of Indian higher education.
 - » Encourages interdisciplinary learning and research-led institutions.
- **Economic and Strategic Impact**
 - » Generates foreign exchange earnings.
 - » Strengthens the knowledge economy and innovation ecosystem.
 - » Enhances India's soft power and educational diplomacy.
- **Alignment with NEP 2020**
 - » Advances NEP objectives of:
 - Global competitiveness
 - Multidisciplinary education
 - Research-driven universities

Conclusion:

NITI Aayog's roadmap represents a strategic shift from India being a net exporter of students to emerging as a global education destination. By integrating innovative funding mechanisms, regulatory reforms, and international collaboration, the proposal lays a robust foundation for achieving the vision of NEP 2020 and positioning India as a global knowledge powerhouse by 2047.

Key terms used in Mann Ki Baat Programme

Context:

On 28 December 2025, Prime Minister Narendra Modi addressed the nation in the 129th episode of Mann Ki Baat, his final broadcast of the year. The address highlighted India's achievements across security, culture, science, governance, and people-driven initiatives, reflecting

the government's emphasis on inclusive development and cultural pride.

Tamil Language Initiatives:

- During Mann Ki Baat, the Prime Minister underscored efforts to promote Tamil—one of the world's oldest living classical languages—both domestically and internationally.
- The Fiji Tamil Language Project aims to reconnect descendants of Girmitiyas with their linguistic and cultural roots through the deployment of Tamil teachers in Fiji Sangam schools.
- Simultaneously, the Kashi Tamil Sangamam (KTS) strengthens North-South cultural linkages. The fourth edition, KTS 4.0, themed “Tamil Karkalam”, encourages Hindi-speaking youth in Varanasi to learn Tamil. Together, these initiatives highlight India's cultural unity, diaspora outreach, and linguistic inclusiveness.

Buddhist Stupas of Zehanpora-Baramulla:

- The Prime Minister also drew attention to the discovery of ancient Buddhist stupas near Baramulla, emphasising Kashmir's rich and plural civilisational heritage.



- The Kushan-era archaeological complex at Zehanpora, dating back nearly 2,000 years, includes stupas, monastic structures, pottery, and Gandharan-style terracotta art. Linked to ancient trade routes and visited by the Chinese traveller Xuanzang, the site reshapes historical understanding of Kashmir as a significant centre of Buddhism.
- The Prime Minister highlighted how

archaeology helps revive forgotten histories, strengthens national pride, and serves as a bridge between the past and the present.

Parvati Giri:

- Referring to the forthcoming 77th Republic Day, the Prime Minister remembered Parvati Giri of Odisha as an unsung hero of India's freedom struggle. She joined the Quit India Movement at the age of 16 and later devoted her life to social service, earning the title “Mother Teresa of Western Odisha.”
- Her contributions included establishing orphanages, working for tribal welfare, leprosy eradication, and prison reforms. She consciously declined political office to continue serving society. Her birth centenary in 2026 highlights grassroots leadership, women's participation in nation-building, and Gandhian ideals of selfless service.



Narasapuram Lace Craft, Andhra Pradesh:

- The Prime Minister praised the Narasapuram lace craft as a model of how traditional skills can drive women-led development. This nearly 150-year-old handmade crochet lace tradition, now a GI-tagged product, provides livelihoods to lakhs of women across rural Andhra Pradesh.
- Originating in Narsapur, located on the banks of the Godavari, the craft is known for its intricate crochet designs. With support from the state government, NABARD, and the Export Promotion Council for Handicrafts (EPCH), artisans receive skill training, design innovation, and improved market access, strengthening rural and women-centric economic empowerment.

Polity & Governance

From Punishment to Rehabilitation: A Reformed Justice Model in the Indian Prison System

Context:

Recently, in December Chief Justice of India (CJI) Surya Kant inaugurated statewide skill development centers, ITI-level vocational training modules, and polytechnic diploma courses in Haryana jails. This initiative marks a significant shift in the approach of Indian prisons, emphasizing rehabilitation, reform, and reintegration rather than a purely punitive model of incarceration. This initiative aligns with the United Nations Nelson Mandela Rules and modern approaches to correctional justice, which place a strong emphasis on equality, employability, and mental health.

The New Vision for Modern Prisons:

- ❖ **Technology and Digital Skills as the Core of Rehabilitation**
 - » Prison training should reflect the “economy of tomorrow.” With rapid changes in the labour market, he argued that inmates must develop skills that hold relevance beyond prison walls—such as digital literacy, logistics management, and new-age vocational abilities.
 - » This shift signals a move away from traditional crafts taught in prisons toward high-value skills that increase employability. According to him, the goal is not just training but enabling real opportunities after release.
- ❖ **Industry Collaboration: Adopting Prisons for Apprenticeships**

- » A key proposal is encouraging deeper collaboration between prisons and private companies. The CJI suggested that industries could “adopt” prisons, offer apprenticeships, conduct training, and ultimately employ trained inmates.
- » This model has the potential to break the stigma associated with hiring former prisoners while giving inmates structured work experience, steady income, and dignity.

❖ UK-Style Electronic Monitoring for Low-Risk Convicts

- » One of his most striking suggestions draws from the United Kingdom’s system of electronically monitored convicts. Referring to work undertaken with a Bengaluru-based tech company, he noted that offenders can be allowed to stay at home within a defined radius, with their movements tracked through a chip and advanced software. This approach supports:
 - Continued family life
 - Emotional and financial stability
 - Reduced psychological harm
 - Better outcomes for children, who often suffer silently when a parent is incarcerated
- » The model balances supervision with humanity, easing the harsh social consequences of incarceration.

❖ Expansion of Open Prisons

- » The CJI also called for creating more open

prisons—low-security facilities where inmates live with minimal restrictions and engage in productive work.

- » Open prisons have already shown success in Rajasthan and are internationally recognised for reducing recidivism, building responsibility, and boosting mental well-being.

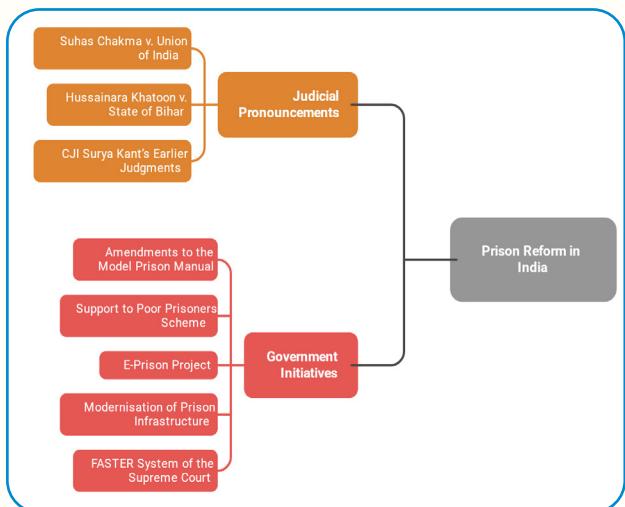
Why Reformative Justice Matters?

- ❖ CJI Kant emphasised that reintegration is not an afterthought but central to a functional criminal justice system. When individuals leave prisons without education, skills, counselling, or community support, they face marginalisation, unemployment, and isolation—conditions that can push them back into crime.
- ❖ He noted that prisons, or “correctional homes,” should prevent—not deepen—disadvantages. Reformative justice, therefore, demands coordinated action, measurable outcomes, and institutions that focus on renewal rather than repeated incarceration.

Legal and Administrative Framework of Indian Prisons:

- ❖ **Constitutional Scheme**
 - » Prisons fall under the State List (Entry 4, Seventh Schedule), making state governments primarily responsible for administration, infrastructure, and management of prisoners.
 - » However, the Union Ministry of Home Affairs (MHA) provides policy guidance, funding support, and model frameworks to promote uniform standards across states.
- ❖ **From Colonial Laws to Modern Legislation**
 - » For over a century, Indian prisons were governed by the Prisons Act, 1894, and state-specific prison manuals rooted in colonial ideas of control. To move beyond this outdated framework, the MHA introduced the Model Prisons and Correctional Services Act, 2023.
 - » This new law:
 - Replaces colonial provisions

- Integrates the Prisoners Act, 1900 and Transfer of Prisoners Act, 1950
- Encourages states to adopt modern, humane and correction-focused principles



Judicial Pronouncements Shaping Prison Reform:

- ❖ **Suhas Chakma v. Union of India (2024):** The Supreme Court recognised open prisons as a viable solution to overcrowding and an important tool for rehabilitation.
- ❖ **Hussainara Khatoon v. State of Bihar (1979):** This landmark judgment established speedy trial as a fundamental right under Article 21, leading to the release of thousands of undertrial prisoners languishing in jails.
- ❖ **CJI Surya Kant's Earlier Judgments:** In the Jasbir Singh case, he held that conjugal visits or artificial insemination for prisoners is part of their fundamental right, underscoring dignity even in custody.

Recent Measures & Government Initiatives:

- ❖ **Amendments to the Model Prison Manual (2016):** Following directions of the Supreme Court in Sukanya Santha v. Union of India, the MHA amended rules to eliminate caste-based discrimination within prisons—an important step toward equality and humane treatment.
- ❖ **Support to Poor Prisoners Scheme:** Financial assistance is provided to help poor

prisoners who cannot pay fines or secure bail due to economic constraints. This reduces unnecessary detention of indigent individuals.

- ❖ **E-Prison Project:** A nationwide digital system developed by NIC that maintains comprehensive prisoner records, streamlines management, and improves transparency.
- ❖ **Modernisation of Prison Infrastructure:** Funds are provided to upgrade security, surveillance, and technological tools in jails, matching modern standards.
- ❖ **FASTER System of the Supreme Court:** The Fast and Secured Transmission of Electronic Records (FASTER) ensures that bail orders reach prison authorities immediately, reducing delays in release.

Expert Committee Recommendations:

- ❖ **Principles Laid Down by the Supreme Court:** Three core ideas must guide prison administration:
 - » A prisoner does not become a non-person
 - » A prisoner retains all human rights except those restricted by lawful imprisonment
 - » Suffering inherent in incarceration must not be aggravated by the state
- ❖ **Parliamentary Committee Suggestions**
 - » Use technology such as trackable bracelets for monitoring out-on-bail offenders
 - » Renovate historic prisons and encourage heritage tourism
 - » Create Prison Development Funds for inmate welfare
- ❖ **Justice A.N. Mulla Committee**
 - » Establish an All India Prisons & Correctional Service
 - » Make after-care, rehabilitation, and probation central to prison work
 - » Allow press and public inspections to promote transparency
 - » Minimise undertrials and keep them separate from convicts
- ❖ **Justice Amitava Roy Committee**

- » Set up fast-track courts for petty and long-pending cases
- » Use video conferencing for producing elderly or sick prisoners
- » Establish dedicated women's prisons and welfare schemes for transgender inmates
- » Ensure strict segregation of undertrials, first-time offenders, and convicts

The Way Forward:

- ❖ **Data-Driven Correctional Systems:** The CJI emphasised tracking behavioural progress and post-release outcomes. Data helps evaluate what works, improve programmes, and reduce repeat offences.
- ❖ **Humanised Punishment and Rehabilitation:** The system should focus on dignity, mental health, counselling, and social reintegration. A humane environment reduces violence and supports transformation.
- ❖ **Technology as an Enabler, Not a Threat:** Electronic monitoring, digital skills, and smart administrative tools can modernise the system and create transparency.
- ❖ **Industry and Community Partnerships:** Employment is the strongest deterrent to reoffending. Stronger ties between prisons, industries, NGOs, and local communities can create sustainable support networks.

Conclusion:

India's correctional landscape is shifting toward a more humane and forward-looking approach. The Model Prisons Act, judicial pronouncements, and emerging technological interventions reflect a growing recognition that justice is not limited to punishment—it must uphold dignity, rights and the possibility of change. If prisons are redesigned as centres of learning, skill-building, emotional healing, and community reintegration, they can break the cycle of crime and contribute meaningfully to society. The challenge now lies in implementing these ideas with consistency, compassion, and long-term commitment.

Short Issues

Forfeiture of SC Benefits Upon Conversion to Christianity

Context:

Recently, the Allahabad High Court directed the Uttar Pradesh government to ensure that individuals who convert from a Scheduled Caste (SC) background to Christianity automatically forfeit reservation benefits linked to their SC identity. The directive was issued in a case involving Jitendra Sahani, accused of promoting religious enmity and allegedly misrepresenting his caste and religion in court documents.

Background of the Case:

- The case involves Jitendra Sahani, booked under Sections 153-A (promoting enmity) and 295-A (insulting religious beliefs) of the IPC.
- Allegation: Sahani, originally Hindu, had converted to Christianity, held prayer meetings, and allegedly made offensive remarks about Hindu deities.
- FIR filed based on witness Lakshman Vishwakarma, who claimed Sahani mocked Hindu deities and encouraged villagers to convert for “economic benefit” and social respect.
- Sahani, in court affidavit, described himself as a Hindu and claimed Scheduled Caste (SC) status, creating a contradiction.

Constitutional and Legal Framework on SC Status and Conversion:

- **Constitution (Scheduled Caste) Order, 1950 (Article 341):**
 - » Paragraph 3: “No person who professes a religion different from the Hindu, Sikh or Buddhist religion shall be deemed to be a member of a Scheduled Caste.”
 - » Implication: Conversion to Christianity or Islam terminates SC status.
- **Article 366(24) of the Constitution:**
 - » Defines Scheduled Castes as groups notified under Article 341.
 - » SC identity is legally inseparable from

religion.

- **SC/ST (Prevention of Atrocities) Act:**
 - » Adopts same definitions, reinforcing that caste identity is tied to religion.

Judicial Precedents:

- **Soosai v. Union of India (1986):** A Christian convert from a caste listed in 1950 SC Order was barred from SC status under Paragraph 3.
- **C. Selvarani Case (2024):** Upon baptism and conversion to Christianity, a person ceases to belong to their original caste. Conversion done solely to claim reservation benefits is not permissible as it defeats the social purpose of reservation.

Allahabad High Court Observations:

- The Court refused to quash the case against Sahani.
- Concerned with inconsistent identities: accused described as Christian priest in FIR but claimed Hindu SC in court.
- Held that Article 25 (religious freedom) does not allow maintenance of incompatible identities.
- Noted that retaining SC benefits post-conversion would amount to a “fraud on the Constitution.”
- Directed that trial court must examine the discrepancy in religious and caste identity.

Significance of the Case:

- Highlights the link between religion and SC status under Indian law.
- Reaffirms Supreme Court precedents: conversion to Christianity/Islam ends legal SC identity.
- Shows how reservation benefits are tied to constitutional classification and social policy, not merely claimed identity.
- Impacts policy and administration: state authorities may need to verify SC/ST status in cases of religious conversion to prevent misuse.

Health & National Security Cess

Context:

Parliament recently passed the Health Security & National Security Cess Bill, 2025. The bill aims to augment funding for health and national security with the imposition of cess on production of pan masala.

Key Features of the bill:

- **A Combined Health & National Security Cess**
 - » Proposed as a unified cess to fund health infrastructure and national defence needs.
 - » Intended to ensure stable financing for long-term priority sectors.
- **Applicable Only on Demerit Goods:**
 - » The cess will not be levied on essential commodities or everyday consumption goods.
 - » It targets demerit goods such as pan masala, known to cause health risks.
- **Levy Based on Production Capacity:**
 - » The cess will be imposed on the manufacturing capacity or machines installed, rather than actual production or consumption.
 - » This bypasses the consumption-based GST/excise model.
- **No Burden on Essential Commodities:**
 - » The government clarified that essential goods are fully exempt to protect common households from inflationary impact.

Objectives & Rationale:

- **Public Health Objective:**
 - » To discourage consumption of harmful goods by making them costlier.
 - » Intended to reduce long-term public health burden associated with tobacco and pan masala products.
- **National Security and Fiscal Resources:**
 - » Rising expenditure on defence and security requires steady, predictable

revenue.

- » With the earlier GST compensation cess winding down, new sources of revenue are needed.

Predictable, Dedicated Funding:

- » Establishes a statutory, ring-fenced stream of funds rather than relying on ad-hoc budget allocations.

A Brief on Health Security & National Security Cess Bill, 2025

Introduced: Lok Sabha, 1 December 2025

What: Cess on pan masala manufacturing (machine/process-based, not goods-based)

Why: Ring-fenced revenue for defence preparedness + pandemic-resilient health infrastructure (post-COVID gaps)

How: Transparent capacity-based assessment (machine speed + weight) replaces discretionary evasion; price-based deterrence reduces tobacco consumption.

Revenue Sharing & Federal Structure:

- **Sharing with States:**
 - » Unlike many past cesses retained solely by the Centre, the HS-NS Cess revenue will be shared with States.
 - » Funds will be earmarked for state-level health programmes.
- **Strengthening Cooperative Federalism:**
 - » Enhances state participation in health sector financing.
 - » Represents a shift toward more inclusive fiscal federalism.

Significance:

- **Targeted Sin-Goods Taxation:** Taxes harmful/de-merit goods while protecting essential consumption. Aligns taxation with public health goals.
- **Resource Mobilisation for Priority Sectors:**

Supports chronically under-funded public health systems. Enhances fiscal space for defence and national security.

- **Greater Fiscal Accountability:** Earmarking and sharing of revenue increases transparency in utilisation.
- **Behavioural Impact:** Capacity-based taxation may deter expansion of demerit-good manufacturing units.

Concerns & Challenges:

- **Burden on Small Producers / MSMEs:** Capacity-based levy may disproportionately affect small-scale producers.
- **“Cessification” of Governance** Excessive use of cesses may:
 - » Reduce transparency,
 - » Bypass divisible pool norms,
 - » Weaken broader structural tax reforms.
- **Complex Tax Structure:** Adds another layer over GST & excise, increasing compliance and administrative burden.

Conclusion:

The Health Security se National Security Cess Bill, 2025 represents a significant step towards establishing a stable and transparent revenue channel dedicated to strengthening India's Public Health Systems and National Security capabilities. By adopting a capacity-based levy structure supported by a robust compliance and enforcement framework, the Bill ensures predictability in revenue mobilisation while maintaining accountability through oversight.

Artificial Intelligence in the Indian Judiciary

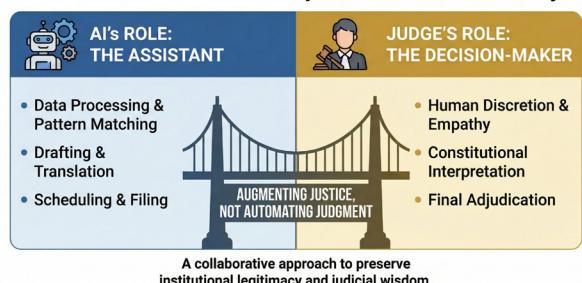
Context:

Recently While hearing a PIL seeking guidelines to prevent the misuse of AI in courts, the Supreme Court of India cautioned that judges will be “very cautious” in adopting AI and that it will never replace judicial decision-making.

Background:

- AI refers to computer systems capable of performing tasks requiring human intelligence, such as reasoning, learning, and problem-solving.
- In the judiciary, AI is seen as a tool to assist judges, lawyers, and court administration in handling legal research, case management, and data analysis.
- India's judiciary, burdened with over 4 crore pending cases, faces severe delays, making AI a potential solution for efficiency.

The Human-AI Partnership in the Indian Judiciary



Concerns with AI Use in Judiciary:

- **Hallucinations**
 - » GenAI can generate fictitious outputs, such as fake judgments, precedents, or research material.
 - » Example: In the UK High Court, lawyers submitted AI-generated legal arguments citing non-existent cases, highlighting risks of reliance on AI.
- **Disparate Treatment**
 - » Improperly developed or deployed AI systems may treat individuals or groups differently, perpetuating biases based on gender, caste, class, or socioeconomic status.
- **Lack of Transparency**
 - » Many AI algorithms function as “black boxes,” making it difficult to understand the rationale behind outputs.
 - » This lack of transparency can compromise the fairness and accountability of judicial decision-making.

Potential Benefits of AI in Judiciary:

- **Efficiency, Case Management, and Reduced**

Pendency

- » Automates document management, scheduling, retrieving precedents, and summarizing cases.
- » Predicts case delays, enabling better resource allocation and prioritization.
- » Streamlines administrative workflows, helping reduce India's case backlog.

▪ Improved Access, Transparency and Inclusivity

- » Translation, voice-to-text, and case summarization improve access for linguistic minorities and remote litigants.
- » Reduces human error in record-keeping and enhances retrieval of past judgments.
- » Digitization fosters transparency and consistency across courts.

▪ Aid to Judicial Reasoning

- » Supports judges and lawyers in legal research, highlighting precedents and summarizing judgments.
- » Assists in analyzing large datasets in complex cases, while the final decision remains with the judge.
- » Enhances judicial capacity without replacing human discretion.

Conclusion:

AI presents a double-edged sword: improves efficiency and access but risks opacity, bias, and undermining discretion. Supreme Court's cautious approach, keeping AI as a support tool is prudent. Gradual, regulated adoption is necessary: training judges, auditing AI outputs, ensuring transparency, and establishing legal frameworks. Proper integration can enhance "speedy, just, and equitable justice" without compromising the rule of law.

Supreme Court Ruling on Illegal Migration

Context:

The Supreme Court of India has recently

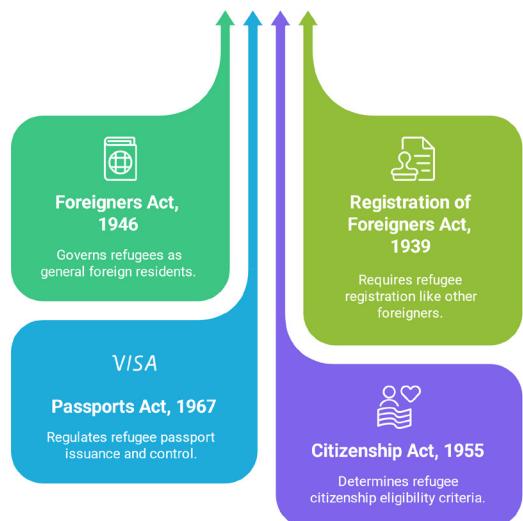
delivered a landmark ruling while hearing a habeas corpus petition regarding detained Rohingya immigrants, the Court categorically stated that intruders and illegal immigrants possess no legal right to migrate to, reside in, or settle in India. This ruling reaffirms India's sovereign authority over its borders and highlights the distinction between the rights of citizens and non-citizens under the Constitution.

Key Highlights of the Supreme Court Ruling:

▪ Distinction Between Citizen Rights and Foreigner Rights:

- » The Court clarified that Article 19(1)(e)—the right to reside and settle anywhere in India—is a citizen-specific fundamental right.
- » Foreigners, including illegal migrants, fall under the Foreigners Act, 1946, which grants the Union government full power to detect, detain, and deport unauthorized entrants.

Legal and Institutional Framework



- **Prioritization of National Resources:**
 - » The Court emphasized that India's limited resources must serve its large domestic population living in poverty.
 - » The Court warned that the State cannot "roll out a red carpet" for those who entered illegally at the cost of citizens' welfare.
- **Sovereignty, Security, and Demographic Concerns:**
 - » Recalling its 2005 observation regarding Assam, the Court reiterated that large-scale illegal migration can cause "external aggression and internal disturbance".
 - » Upholding Article 355, the Court stressed the Union's duty to protect states against such demographic disruptions and safeguard sovereignty.
- **Humanitarian Protection vs. Legal Status:**
 - » The Court acknowledged that Article 21 applies to "all persons"—including non-citizens.
 - » However, protection from torture or arbitrary detention does not translate into a right to remain in India, nor does it shield illegal migrants from deportation under Indian law.

India's Position in International Refugee Law:

- **India Not a Signatory to UN Refugee Convention (1951)**
 - » India has deliberately chosen not to join the 1951 Refugee Convention or its 1967 Protocol.
 - » This provides policy flexibility to address refugee situations based on domestic priorities and security assessments rather than binding international obligations.
- **Recognition of Customary International Law**
 - » India informally acknowledges the principle of Non-Refoulement (no forced return to persecution) as a customary international norm, but this is not

codified.

Legal and Institutional Framework:

- **Statutory Laws:** Refugees are governed by the same laws that apply to all foreigners:
 - » Foreigners Act, 1946
 - » Registration of Foreigners Act, 1939
 - » Passports Act, 1967
 - » Citizenship Act, 1955
- None of these laws define "refugee", creating a legal vacuum.

Conclusion:

The Supreme Court's ruling marks a critical reaffirmation of India's sovereign right to regulate its borders and immigration. It highlights the constitutional divide between citizens and non-citizens, prioritizes national security and resource allocation, and underscores the absence of a dedicated refugee law in India.

Central Excise Amendment Bill 2025

Context:

The Rajya Sabha passed the Central Excise (Amendment) Bill, 2025, on December 4, 2025. This bill had already been passed by the Lok Sabha on December 3. The Bill seeks to amend the Central Excise Act, 1944, to raise the excise duty on tobacco products.

Background:

- Central excise duties on many items were repealed with the introduction of the Goods and Services Tax (GST) in 2017, except for certain items such as tobacco and tobacco products.
- Along with GST, GST compensation cess was also introduced on products such as tobacco to compensate states for revenue loss due to the introduction of GST.
- Thus, tobacco and tobacco products are currently subject to GST, compensation cess, and central excise duty. The compensation cess is planned to be discontinued.

The Central Excise (Amendment) Bill, 2025



About the Central Excise (Amendment) Bill:

- The Bill proposes to amend the Central Excise Act, 1944 to enable fresh central excise duties on tobacco and related products once the GST compensation cess ends.
- At the same time, the government has introduced a companion measure, the Health Security and National Security Cess Bill, 2025, which seeks to levy a new cess on pan masala manufacturing - and potentially other designated "sin" goods - to further secure fiscal revenues.

Key provisions:

- Increase in Excise Duty on Tobacco:** Unmanufactured tobacco, such as sun-cured tobacco leaves, will see duty rise from 64% to 70%.
- Increase on Cigarettes:** Current excise duties on cigarettes range between Rs 200 and Rs 735 per thousand; under the Bill, this will be increased to Rs 2,700–11,000 per thousand.
- Other Tobacco Products:** Chewing tobacco duty will rise from 25% to 100%; hookah and gudaku tobacco from 25% to 40%; and smoking mixtures for pipes and cigarettes from 60% to 325%.
- The Bill ensures that the discontinuation of GST compensation cess does not reduce the effective tax collection on tobacco, maintaining revenue neutrality.

Implications:

- Revenue Generation:** The increase in excise

duty will safeguard central government revenue, especially in the absence of GST compensation cess.

- Health Policy Alignment:** Higher taxation on tobacco aligns with public health goals by discouraging consumption of tobacco products.
- State Revenues:** As GST on tobacco continues to be collected, states will also maintain their revenue streams, supporting fiscal federalism.
- Market Impact:** Substantial increase in duties, particularly on cigarettes and smoking mixtures, may lead to higher prices, impacting consumption patterns and potentially encouraging illicit trade if enforcement is weak.

Conclusion:

The Central Excise (Amendment) Bill, 2025 is a strategic measure to maintain revenue neutrality following the discontinuation of the GST compensation cess. By increasing excise duties on tobacco and tobacco products, the Bill not only protects government revenues but also supports public health objectives. However, careful monitoring and strict enforcement will be necessary to prevent evasion and ensure that the fiscal and health benefits of the amendments are realized effectively.

Digital Arrest Scams

Context:

The Supreme Court recently ordered the CBI to take over investigations into digital arrest scams across India.

About Digital Arrest:

- A digital arrest is a form of online extortion in which fraudsters:
 - Impersonate officials from agencies like the CBI, ED, or Police;
 - Accuse victims of being involved in criminal or financial fraud cases;
 - Conduct fake interrogations over video

- calls;
- » Threaten the victims with arrest, imprisonment, or asset seizure unless they transfer money.
- Once victims comply, the fraudsters disappear, often after extracting large sums via cryptocurrency, wire transfers, or digital wallets. Over Rs.3,000 crore has already been lost by victims, mainly senior citizens.

Why Digital Arrests are Rising:

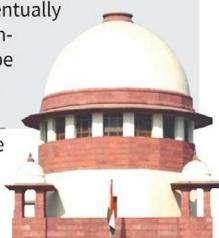
- **Explosion of Digital Transactions:** Increased online payment usage widens opportunities for fraud.
- **Low Cyber Awareness:** Many users lack knowledge about digital safety and verification processes.
- **Technological Sophistication:** Use of AI-generated voices, deepfakes, and realistic video simulations.
- **Weak Global Enforcement:** Southeast Asian scam hubs exploit jurisdictional loopholes.
- **Psychological Targeting:** Criminals exploit public fear of law enforcement and authority

Tough action

The Supreme Court has asked the Central Bureau of Investigation (CBI) to crack down on 'digital arrest' scammers

THREE CATEGORIES OF CYBER SCAMS IDENTIFIED BY SC

- **Digital arrests:** Victims are made to believe government authorities are entitled to their hard-earned money, and they are subjected to coercive acts of extortion
- **Investment scams:** Victims are lured by attractive investment schemes to deposit large amounts, but eventually are duped of the money. The fraudsters continue to coin different terminologies to dupe victims. In some of the cases, the money is sought in the name of 'advance tax'
- **Part-time jobs:** Victims are paid for 'free tasks' like positive reviews or watching YouTube. They are later made to pay huge amounts for 'premium tasks'



Supreme Court's Key Directions:

- **CBI Given a Free Hand:** CBI to lead the investigation into digital arrest scams across India.
- **Override of State Consent:** Court directly asked States to grant CBI consent under

Section 6, DSPE Act, which is rare and allowed only in exceptional circumstances.

- **CBI to Form a Special Multi-State Team**
 - » Identify police officials from States.
 - » Include domain experts in cyber forensics, finance, and digital transactions.
 - » Conduct pan-India coordinated investigation.
- **Interpol Coordination:** CBI must work with Interpol to trace:
 - » International cybercrime networks,
 - » Global money laundering routes,
 - » Safe havens of fraudsters abroad.
- **RBI to Be Involved:**
 - » SC issued notice to RBI.
 - » RBI must explain how Artificial Intelligence/Machine Learning (AI/ML) technologies can be used to detect:
 - Money laundering,
 - Mule accounts,
 - Suspicious banking patterns.
- **Cybercrime Coordination Centers:** States and UTs must:
 - » Establish regional cybercrime coordination centres,
 - » Link them with the Indian Cybercrime Coordination Centre (I4C),
 - » Strengthen data compilation and preventive mechanisms.

Government & Institutional Response:

Initiative	Description
Indian Cyber Crime Coordination Centre (I4C)	Coordinates with banks, telecoms, and fintech firms to track cybercrime patterns.
Blocking Spoofed Calls	Systems developed with telecom service providers (TSPs) to block fake international numbers.
National Cyber Crime Reporting Portal	Citizens can report scams online at cybercrime.gov.in.

CERT-In Guidelines	Advises public to verify calls, avoid sharing personal data, and not install suspicious apps.
Inter-Ministerial Committee (May 2024)	Formed to tackle transnational cybercrime networks operating from Southeast Asia.

Conclusion:

The digital arrest epidemic exposes the dark side of India's digital revolution — where technology designed for efficiency becomes a weapon of coercion. The Supreme Court's direction signals an urgent need for coordinated action between government, law enforcement, judiciary, and citizens.

Private Member Bill on Anti-Defection Reform

Context:

Recently, Congress MP Manish Tewari has introduced a private member's bill in Lok Sabha seeking a major reform of India's Anti-Defection Law (Tenth Schedule). This is third attempt (after 2010 and 2021) to loosen party control over MPs' votes.

Key Provisions of the Proposed Bill:

- Whip applicability restricted to only the following:
 - Confidence motion
 - No-confidence motion
 - Adjournment motion
 - Money bills
 - Other financial matters affecting government stability
- For all other bills and motions, MPs can vote freely based on:
 - Personal judgement
 - Constituency interests
 - Policy reasoning
- Procedural reforms proposed:**
 - Party directions must be announced publicly by Speaker/Chairman.

- Defiance would cause automatic cessation of membership.
- MP can file an appeal within 15 days.
- Presiding officer must dispose of the appeal within 60 days.

About Anti-Defection Law (10th Schedule):

- Introduced by: 52nd Amendment Act, 1985
- Purpose:**
 - Curb "Aya Ram Gaya Ram" politics of frequent party-switching.
 - Ensure government stability.
 - Maintain party discipline and curb corruption.
- Applicability:** MPs (Lok Sabha/Rajya Sabha) and MLAs/MLCs (State Assemblies).

Grounds for Disqualification:

- Voluntary Resignation:** Giving up party membership.
- Defying Party Whip:** Voting or abstaining against party directive without permission.
- Independent Members:** Joining a party after election.
- Nominated Members:** Joining a party after 6 months of taking seat.

WHAT THE BILL PROPOSES?

- MPs should be **free to vote independently** on most bills & motions
- Party whip should **apply only to matters impacting government stability**



- Seeks to **amend Anti-Defection Law**

Exceptions:

- Merger:** If 2/3rds of members of a party merge with another party (91st Amendment, 2003).

- **No-Confidence Vote:** Party may permit members to vote against or abstain.

Deciding Authority & Judicial Review:

- **Presiding Officer:** Speaker/Chairman decides disqualification.
- **Judicial Review:** Decisions are reviewable in courts (Supreme Court, Kihoto Hollohan vs Zachilhu, 1992).

Criticism of Current Anti-Defection Regime:

- Excessive use of the whip has:
 - » Reduced Parliament's capacity to function as a deliberative and quasi-judicial body.
 - » Undermined oversight, especially in financial accountability.

Private Member's Bills (PMBs):

- **Definition:**
 - » A Private Member is any MP (elected or nominated) other than a Minister.
 - » A bill introduced by such an MP is called a Private Member's Bill.
 - » Drafting responsibility lies with the MP introducing it.
- **Mechanism:**
 - » **Notice:** One-month notice before introduction, with Speaker/Chairman's permission.
 - » **Time Allocation:**
 - Lok Sabha: Last 2.5 hours of business every Friday.
 - Rajya Sabha: 2.5 hours (2:30–5:00 p.m.) on alternate Fridays.
 - » **First PMB Passed:** Muslim Wakfs Bill, 1952 (Syed Mohammed Ahmad Kasmi).

Conclusion:

The proposed bill highlights the tension between party control and legislative freedom in India. While the Anti-Defection Law was designed to ensure stability, it has often curtailed MPs' independence. Reforming the law to allow conscience-based voting, except on matters affecting government survival, could strengthen democracy by making lawmakers

more accountable to their constituents rather than just to party whips.

India Post Launched DHRUVA the Dhruv Tag service

Context:

On 5th December 2025, India Post, under the Department of Posts (DoP) and Ministry of Communications, launched DHRUVA—Digital Hub for Reference and Unique Virtual Address. This initiative builds upon the DIGIPIN ecosystem and is aimed at creating a citizen-friendly digital address system in India. DHRUVA is conceptualized as an Address-as-a-Service (AaaS) platform, facilitating standardised, geo-coded addresses that can be used across government and private sector services.

About DHRUVA:

- DHRUVA has been compared to UPI IDs for addresses, enabling easy sharing and verification of address information. The system complements traditional postal addressing by:
 - » Providing Digital Address Identifiers (DAIs)
 - » Enabling standardised representation of addresses and postcodes
 - » Allowing generation, validation, and exchange of address information in a consent-based mechanism
 - » Facilitating registration of Address Service Providers (ASPs) and authorisation of Address Validation Agencies (AVAs)
 - » Creating a national Network Administrator and governance architecture aligned with India's Digital Public Infrastructure (DPI) vision
 - » Ensuring grievance redressal, adjudication, and penalties
- The system also aligns with the Digital Personal Data Protection (DPDP) Act, safeguarding address data as personally

identifiable information (PII).

About DIGIPIN:

- DIGIPIN (Digital Postal Index Number) was India's first step toward a digital addressing system. Developed collaboratively by India Post, IIT Hyderabad and ISRO's NRSC, it divides the country into geo-coded grids for accurate address representation, especially in rural and densely populated areas lacking formal infrastructure.
- **Key features of DIGIPIN include:**
 - » Open-source, interoperable AaaS framework for public and private applications
 - » Integration with mapping platforms; for example- MapMyIndia adopted DIGIPIN to provide last-mile address connectivity
 - » Availability of geo-referenced data on Open Government Data Platform and GitHub

Significance of DHRUVA:

- **Enhanced Precision in Service Delivery:** Reduces errors in communication, postal services, and e-commerce deliveries.
- **Digital Public Infrastructure:** Strengthens India's DPI by providing an interoperable addressing system that can be used across sectors.
- **Geospatial Sovereignty:** Encourages domestic mapping solutions in line with India's 2021 Geospatial Data Guidelines, limiting foreign companies from hyper-precise mapping services.
- **Inclusivity:** Provides addresses to regions without formal recognition, facilitating financial inclusion, urban planning, and emergency services.
- **Public-Private Collaboration:** Enables integration of addresses in fintech, logistics, healthcare, and governance platforms.

Policy Implications:

- DHRUVA reflects India's commitment to indigenous, citizen-friendly digital solutions, creating an open, interoperable addressing

system.

- By complementing DIGIPIN, it aligns with India's geospatial policy, DPI goals, and data protection framework, while promoting innovation among Indian companies in the mapping and location services sector.

Conclusion:

DHRUVA marks a transformational step in India's addressing system, bridging traditional postal infrastructure with modern digital technology. By providing standardised, consent-based digital addresses, it is poised to enhance service delivery, boost e-governance efficiency, and support India's vision of a digitally empowered society.

Karnataka Hate Speech and Hate Crimes (Prevention) Bill, 2025

Context:

The Karnataka Hate Speech and Hate Crimes (Prevention) Bill, 2025 was recently tabled in the State Legislative Assembly, making Karnataka the first Indian state to introduce dedicated legislation defining and addressing hate speech. The Bill seeks to establish a specific legal framework to prevent the spread of hatred and social disharmony, as existing national laws, such as the Bharatiya Nyaya Sanhita (BNS), 2023 do not explicitly define "hate speech."

About Hate Speech (as defined in the Bill):

- **Hate Speech:** Any expression intended to cause injury, disharmony, or ill-will against a person, group, or community based on religion, caste, gender, sexual orientation, place of birth, language, disability, or tribe.
- **Hate Crime:** Any act of promoting, propagating, inciting, or abetting hate speech with the intent to create enmity or disharmony.

Key Provisions of the Bill:

- **Penalties:**

- » **First-time offenders:** 1–7 years imprisonment and Rs.50,000 fine
- » **Repeat offenders:** 2–10 years imprisonment and Rs.1,00,000 fine
- **Legal Classification:** Offences are cognisable, non-bailable, and triable by a Judicial Magistrate First Class (JMFC)
- **Intermediary Liability:** Online platforms and service providers may face penalties if they facilitate or enable hate-based offences
- **Online Content Removal:** Designated State officers may order blocking or removal of content containing hate speech or hate crime across digital platforms
- **Preventive Action:** Executive Magistrates and police officers of DySP rank and above may take preventive measures if a person or group is likely to commit hate speech or hate crime
- **Offences by Organisations:** Organisations/institutions can be held liable. Responsible persons may be prosecuted unless they can demonstrate due diligence to prevent the offence
- **Exceptions:** Content created in public interest, or for science, literature, art, learning, heritage, or religion, is exempt if it does not promote hatred or incite harm

Scope of 'Hate Crime' & Penalties

Definition: A 'hate crime' includes any act of promoting, propagating, inciting or abetting, or attempting hate speech to cause disharmony or feelings of enmity

First Offence: Imprisonment for a term of not less than one year, which may extend to seven years, with a fine of Rs 50,000.

Subsequent Offences: Imprisonment for a term of not less than two years, which may extend to 10 years, with a fine of Rs 1 lakh.

Constitutional Aspects:

- **Article 19(1)(a)- Freedom of Speech and Expression:** The Bill restricts speech that

incites hatred, enmity, or disharmony. Such limitations fall within the reasonable restrictions permitted under Article 19(2) in the interest of public order, decency, morality, and state security.

- **Article 21- Right to Life and Personal Liberty:** By criminalising hate crimes and targeted hostility, the Bill aims to safeguard individuals and communities from harm, thereby upholding the right to live with dignity.
- **Article 14- Right to Equality:** The Bill addresses discrimination based on religion, caste, gender, sexual orientation, and other protected characteristics, ensuring equal protection of the law for all citizens.

Conclusion:

The Karnataka Hate Speech and Hate Crimes (Prevention) Bill, 2025 seeks to strengthen social harmony, establish clear legal remedies for victims, and enable authorities to take preventive action before hate-driven violence escalates. However, critics caution that such legislation could be misused to curb free speech, underscoring the need for robust safeguards, transparent enforcement, and judicial oversight.

Supreme Court on Citizenship under CAA

Context:

Recently, The Supreme Court (SC) clarified that citizenship under the Citizenship (Amendment) Act, 2019 (CAA) would be granted only after verification of claims.

Background:

- Observations came from a Bench of Chief Justice Surya Kant and Justice Joymalya Bagchi on a petition filed by NGO Aatmaadeep.
- Petition highlighted fear among refugees from Afghanistan, Bangladesh, and Pakistan regarding potential statelessness due to the ongoing Special Intensive Revision (SIR) of electoral rolls.

Key Observations of the Supreme Court:

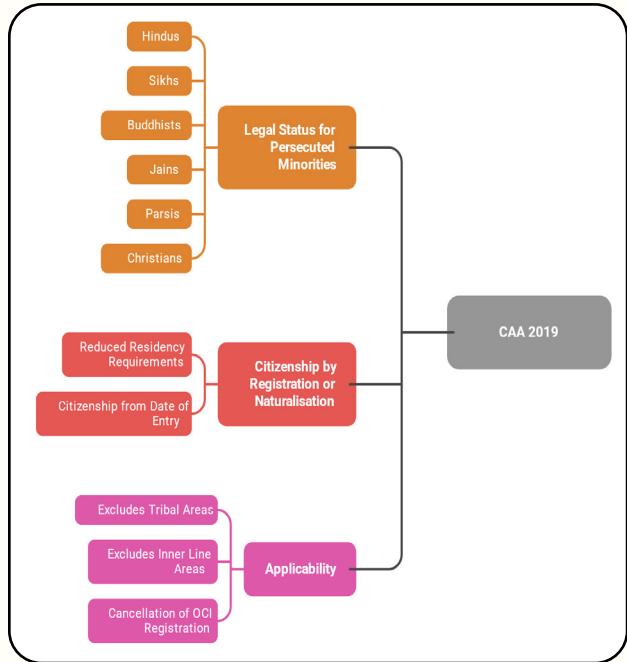
- **Citizenship Not Automatic:**
 - » Applying under CAA does not automatically confer citizenship.
 - » Applicants must fulfil statutory conditions and undergo scrutiny and verification.
- **Enforceable Rights vs Verification:** CAA provides enforceable rights to persecuted religious minorities. Authorities must verify:
 - » Minority status in country of origin (Afghanistan, Bangladesh, Pakistan)
 - » Date and nature of entry into India
 - » Eligibility under statutory provisions
- **Affected Communities:**
 - » **Religious minorities:** Hindus, Sikhs, Buddhists, Jains, Parsis, Christians
 - » Exempted from being considered “illegal migrants” if entered India on or before December 31, 2014 (Section 2(1)(b), CAA)
- **Naturalisation and Citizenship Certificates:**
 - » Section 6B allows these persons to apply for registration or naturalisation certificates.
 - » Petition alleged delays in issuance of certificates, risking constitutional issues.

Key Provisions of the CAA 2019:

- **Legal Status for Persecuted Minorities:**
 - » Grants legal status to Hindus, Sikhs, Buddhists, Jains, Parsis, Christians from Afghanistan, Bangladesh, Pakistan who entered India before Dec 31, 2014.
 - » Exempted from the Foreigners Act, 1946 and Passport (Entry into India) Act, 1920.
- **Citizenship by Registration or Naturalisation:**
 - » Reduced residency requirements for the specified communities.
 - » Citizenship deemed from date of entry, closing legal proceedings regarding migration status.
- **Applicability:**
 - » Excludes tribal areas in Assam,

Meghalaya, Mizoram, Tripura (Sixth Schedule) and Inner Line areas (Bengal Eastern Frontier Regulation, 1873).

- » Provisions for cancellation of OCI registration on grounds like fraud, criminal convictions, or legal violations.



Concerns Against the CAA 2019:

- Contradiction with Assam Accord (1985) and potential challenges to National Register of Citizens (NRC) update.
- Potential violation of Article 14 (equality before law) and principle of secularism.
- Exclusion of other refugee groups, e.g., Tamil Sri Lankans and Hindu Rohingya from Myanmar.
- Difficulty distinguishing illegal migrants from persecuted individuals.
- Possible strained bilateral relations with affected countries.
- Broad discretionary powers to cancel OCI registrations for minor and major infractions.

Conclusion:

The Supreme Court's observations emphasize that citizenship under the CAA is not automatic and must follow due verification and statutory

procedures. While the Act aims to protect persecuted minorities, it also raises legal, constitutional, and administrative challenges. The case highlights the importance of balancing rights with rule of law and ensuring proper implementation to prevent statelessness or disenfranchisement.

Forced Narco Tests Unconstitutional

Context:

Recently, the Supreme Court of India set aside a Patna High Court order permitting an involuntary narco test in *Amlesh Kumar v. State of Bihar* (2025). The apex court reaffirmed that forced narcoanalysis violates constitutional protections, in line with the principles laid down in *Selvi v. State of Karnataka* (2010).

About Narco Tests:

- A narco test involves the administration of sedative drugs, such as sodium pentothal (a barbiturate), to lower inhibitions and increase the likelihood of information disclosure.
- Functionally, narcoanalysis is similar to polygraph and brain-mapping tests, as all seek to extract concealed information by reducing conscious mental control.
- Although the procedure is non-violent, it intrudes into cognitive autonomy and mental privacy, thereby raising serious constitutional, legal, and ethical concerns.

Constitutional Protections Involved:

- **Right Against Self-Incrimination (Article 20(3)):**
 - » Protects an accused person from being compelled to provide testimonial evidence against themselves.
 - » Forced narco tests violate this right because statements made under drug-induced conditions are not the product of free will.
 - » In the absence of free and informed

consent, any information obtained is inadmissible as evidence.

- **Right to Personal Liberty and Privacy (Article 21):**

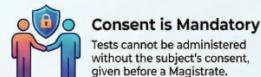
- » Encompasses bodily autonomy, mental privacy, and human dignity.
- » Forced narcoanalysis violates the requirement of “procedure established by law” by failing the tests of fairness, reasonableness, and non-arbitrariness.
- » This protection is linked to the Golden Triangle of Articles 14, 19, and 21, as articulated in *Maneka Gandhi v. Union of India* (1978), which mandates just, fair, and reasonable procedures.

Truth Serums & Lie Detectors: The Law in India



Landmark Ruling: *Selvi vs. State of Karnataka* (2010)

The Supreme Court ruled that forced tests are an affront to human dignity and liberty.



Consent is Mandatory
Tests cannot be administered without the subject's consent, given before a Magistrate.



Test Results Are Not "Confessions"
However, physical evidence discovered based on voluntary test results can be admitted in court.

Judicial Precedents Governing Narco Tests:

- ***Selvi v. State of Karnataka* (2010):**

- » Declared involuntary narco, polygraph, and brain-mapping tests unconstitutional.
- » Laid down mandatory safeguards, including:
 - » Consent must be free, informed, and recorded before a Judicial Magistrate.
 - » Strict medical and legal protocols must be followed during testing.
 - » Test results cannot serve as standalone evidence and require independent

corroboration.

▪ **Subsequent Judicial Reinforcements:**

- » Manoj Kumar Saini v. State of Madhya Pradesh (2023) and Vinobhai v. State of Kerala (2025) reaffirmed that narco test outcomes may only assist investigations and cannot directly establish guilt.

Consent and Ethical Principles:

- **Informed Consent:** Narco tests may be conducted only with the voluntary consent of the accused, including at the stage of defence evidence under Section 253 of the Bharatiya Nagarik Suraksha Sanhita (BNSS). However, there is no absolute right to demand such tests.
- **Ethical Foundations:** Drawing upon Kantian ethics, the Court emphasised that forced narcoanalysis violates:
 - » Human dignity
 - » Bodily and mental integrity
 - » Principles of natural justice

Implications for India's Criminal Justice System:

- **Strengthening Rights-Based Policing:** Reinforces procedural safeguards, ensuring investigative efficiency does not override fundamental rights.
- **Balancing Victims' and Accused Persons' Rights:** Judicial oversight promotes both effective investigation and constitutional protection.
- **Reasserting Judicial Consistency:** Continued reliance on Selvi and subsequent rulings ensures doctrinal stability, legal certainty, and protection of civil liberties.

Conclusion:

The Supreme Court's ruling in Amlesh Kumar v. State of Bihar (2025) underscores that constitutional morality must guide criminal investigations. By reaffirming autonomy, dignity, and personal liberty in the face of coercive investigative techniques, the judgment strengthens India's rights-based criminal justice framework and reinforces the primacy of

the Constitution over expediency.

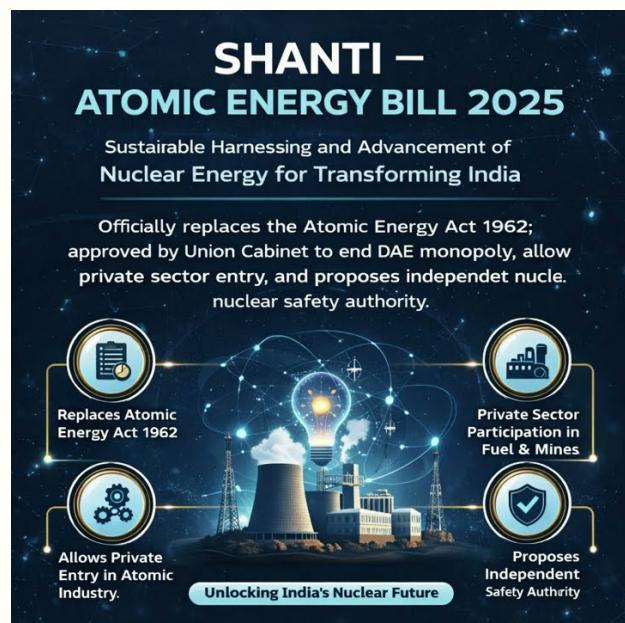
SHANTI Bill, 2025 (Atomic Energy Bill, 2025)

Context:

Recently, President Droupadi Murmu granted assent to the Sustainable Harnessing and Advancement of Nuclear Energy for Transforming India (SHANTI) Bill, 2025, officially titled the Atomic Energy Bill, 2025. The legislation aims to overhaul India's nuclear sector by enabling private investment and supporting the government's target of achieving 100 GW of nuclear power capacity by 2047.

Background:

- At present, the Atomic Energy Act prohibits private entities and state governments from operating nuclear power plants, leaving the Nuclear Power Corporation of India Limited (NPCIL) as the sole operator of all 24 commercial nuclear reactors in the country.



Key Features of the SHANTI Bill:

- **Private Sector Entry:** The Bill authorises private companies to participate across the nuclear energy value chain—from power

generation and reactor construction to equipment manufacturing, fuel fabrication, and other civil nuclear activities that were previously restricted under the Atomic Energy Act.

- **Unified Legal Framework:** It proposes to consolidate existing atomic energy legislation into a streamlined statute, facilitating licensing, safety compliance, dispute resolution, and regulatory clarity. This seeks to remove regulatory gaps that have historically deterred private investment.
- **Foreign Direct Investment (FDI):** The SHANTI Bill opens the sector to up to 49% foreign direct investment, enabling collaborations with global technology partners, strategic investors, and sovereign wealth funds.
- **Liability and Insurance Reforms:** The legislation contemplates revising nuclear liability provisions by capping equipment supplier liability and restructuring operator insurance through the Indian Nuclear Insurance Pool, aligning India's framework with international norms to improve investor confidence.
- **Regulatory Enhancements:** The Bill envisages the establishment of a new independent nuclear safety authority and possibly a specialised nuclear tribunal to ensure robust oversight, transparency, and regulatory certainty.

Strategic Significance:

- **Meeting Energy and Climate Goals:** India has set an ambitious target of achieving 100 GW of nuclear power capacity by 2047 to support its energy transition, decarbonisation pathway, and net-zero emissions target by 2070. As a stable baseload source, nuclear energy is critical in complementing renewable energy and reducing dependence on fossil fuels.
- **Unlocking Investment and Innovation:** The entry of private players is expected to unlock substantial capital inflows, accelerate the deployment of nuclear projects, and

promote technological innovation, including in Small Modular Reactors (SMRs) and next-generation nuclear technologies.

- **Boost to Domestic R&D:** By permitting private participation in nuclear research and technological development, India aims to create a competitive ecosystem that fosters indigenous innovation, skill development, and intellectual property creation.

Challenges Ahead:

- **Liability and Insurance Framework:** Effective reform of nuclear liability regimes remains crucial to reassure global technology providers and domestic investors who are cautious about exposure to nuclear risks.
- **Regulation and Oversight:** Establishing independent, credible regulators and adopting risk-based safety protocols will be essential to maintaining public trust and ensuring adherence to international safety standards.
- **Long Lead Times:** Nuclear power projects involve long gestation periods and high capital intensity, necessitating sustained policy stability, reliable financing mechanisms, and institutional capacity.

Conclusion:

The Cabinet's approval of the SHANTI Bill, 2025 marks a historic shift in India's nuclear policy—from a state-dominated model to a more inclusive, competitive, and innovation-driven framework. If enacted by Parliament and implemented effectively, the Bill could catalyse significant expansion in nuclear capacity, strengthen India's energy security, and accelerate the country's transition towards a low-carbon economy.

Sabka Bima Sabki Raksha (Amendment of Insurance Laws) Bill, 2025

Context:

Recently, the Sabka Bima Sabki Raksha

(Amendment of Insurance Laws) Bill, 2025 has granted assent by President Droupadi Murmu. This legislative reform aims to modernize India's insurance regulatory framework and significantly liberalize foreign investment norms in the sector.

Background:

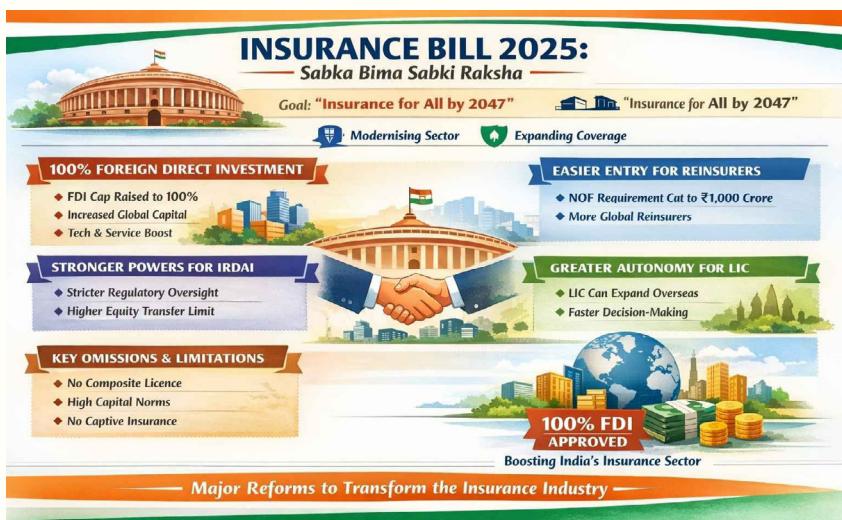
- India's insurance sector has historically been governed by three key statutes:
 - » The Insurance Act, 1938
 - » The Life Insurance Corporation (LIC) Act, 1956
 - » The Insurance Regulatory and Development Authority of India (IRDAI) Act, 1999
- The Bill seeks to amend these Acts to modernize regulations, liberalize investment norms, and enhance oversight in India's insurance sector.

Key Provisions of the Bill:

- **100% FDI in Indian Insurance Companies:** Increases the foreign direct investment (FDI) limit from 74% to 100%, allowing full foreign ownership.
- **Lower Net-Owned Fund Requirements for Foreign Re-insurers:** Reduces the minimum net-owned fund requirement from Rs.5,000 crore to Rs.1,000 crore, encouraging global participation.
- **Registration of Share Transfers:** IRDAI approval is required only when the value of shares transferred exceeds 5% of paid-up share capital, up from 1%.
- **Insurance Co-operative Societies:** Removes the minimum paid-up share capital requirement of Rs.100 crore, simplifying entry for co-operative insurers.
- **Applicability to SEZs and IFSCs:** Extends provisions for regulatory modifications to International Financial Services Centres

(IFSCs) and intermediaries operating in SEZs.

- **Expansion of Insurance Intermediaries:** Broadens the definition to include managing general agents and insurance repositories.



- **Enhanced Powers of IRDAI:** IRDAI can approve arrangements with non-insurance companies, supersede boards of insurers if policyholder interests are at risk, regulate remuneration and commissions, and inspect intermediaries.
- **Policyholders' Education and Protection Fund:** Establishes a Fund administered by IRDAI to protect policyholders and promote awareness, funded through grants, penalties, and other specified sources.

Expected Impact:

- **Capital Inflows and Competition:** Full foreign ownership is expected to attract long-term global capital, promote competition, and introduce international best practices in underwriting, risk management, and customer service.
- **Market Expansion and Penetration:** With insurance penetration in India below global averages, enhanced capital and competition could drive innovation, product diversity, digital adoption, and market expansion into underserved regions.
- **Strengthened Policyholder Protection:**

Provisions like the Policyholders' Education and Protection Fund, along with improved regulatory oversight, aim to boost consumer trust and safeguard policyholder interests.

- Structural and Regulatory Efficiency:** Amending legacy laws and creating unified regulatory norms will reduce compliance friction, simplify licensing, and empower IRDAI to act decisively in a rapidly evolving financial landscape.

Conclusion:

The Bill represents a major reform to modernise India's insurance ecosystem through liberalised investment and stronger regulation. By attracting global capital and enhancing policyholder protection, it advances the vision of inclusive insurance coverage for all by 2047.

Parliament Passes Bill to Repeal or Amend Obsolete Laws

Context:

Recently, Parliament passed the Repealing and Amending Bill, 2025, aimed at pruning the statute book by repealing or amending laws that have become obsolete, redundant, or outdated. This move forms part of the government's ongoing legislative reform and statute-simplification drive.

Key Provisions of the Bill:

- The Bill proposes to repeal 71 Acts that are considered obsolete or no longer relevant.
- It also seeks to amend four existing laws to correct drafting errors, update terminology, and remove discriminatory provisions.
- Examples of laws proposed for repeal include the Indian Tramways Act, 1886, the Levy Sugar Price Equalisation Fund Act, 1976, and the Bharat Petroleum Corporation Limited (Determination of Conditions of Service of Employees) Act, 1988.

Key Amendments:

- Indian Succession Act, 1925:** Section 213, which required certain religious groups to obtain court probate for wills in specific metropolitan areas, is removed.
- Disaster Management Act, 2005:** A drafting error in Section 30 is corrected by replacing the word "prevention" with "preparation".
- General Clauses Act, 1897 and Code of Civil Procedure, 1908:** The term "registered post" is updated to "speed post with registration" to align with contemporary postal services.

The Repealing & Amending Act, 2025

- ✓ Obsolete Laws are repealed
- ✓ Redundant Amendment Acts are removed



- ✓ Core Laws have been modified:
 - The General Clauses Act, 1897
 - The Code of Civil Procedures, 1908
 - The Indian Succession Act, 1925
 - The Disaster Management Act, 2005



- ✓ Judicial and Administrative Procedure are clarified
- ✓ Discriminatory / Colonial Legacy Elements are removed
- ✓ Savings Clause is modified
- ✓ Uniformity and clarity across legal processes is ensured



Objectives and Rationale:

- The principal objective is to remove archaic and irrelevant laws, thereby streamlining the legal framework to reflect current socio-economic realities.
- The government argues that such repeal enhances ease of living for citizens and supports ease of doing business by reducing regulatory clutter.
- The reforms are also intended to reverse the legacy of colonial-era legislation and make the legal framework more citizen-centric.

Broader Legislative Trend:

- The present Bill forms part of a larger pattern of statute rationalisation, with over 1,560 Central laws repealed since 2014 under the

current government's reform efforts.

- Historically, Parliament has periodically enacted Repealing and Amending Acts to prune the statute book; similar exercises were undertaken in earlier years, sometimes repealing dozens or even hundreds of obsolete laws.

Significance:

- **Legal clarity and accessibility:** Removing unnecessary laws reduces confusion and legal uncertainty for citizens, businesses, and enforcement agencies.
- **Governance efficiency:** A leaner statute book improves legislative coherence and enhances administrative efficiency.
- **Symbolic reform:** The exercise underscores the state's intent to align the legal framework with contemporary needs and constitutional values.

Conclusion:

The passage of the Repealing and Amending Bill, 2025 represents a focused parliamentary initiative to modernise India's legal framework by excising obsolete legislation and fine-tuning existing statutes. While such legal housekeeping supports broader goals of governance reform, it also requires careful scrutiny to ensure legislative balance and the protection of rights.

Child Trafficking

Context:

Recently, the Supreme Court of India described child trafficking and commercial sexual exploitation as a "deeply disturbing reality" in the country, highlighting their entrenched, organised, and systemic nature, which continues to persist despite the presence of multiple legal safeguards.

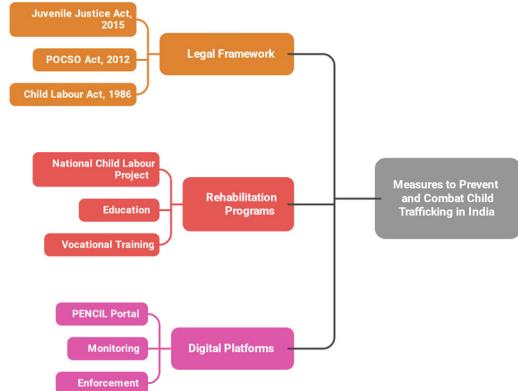
About the Judgment:

- The Supreme Court laid down important guidelines for trial courts to evaluate evidence involving minor victims in cases of trafficking and prostitution with greater

sensitivity and realism. The Court urged a departure from rigid, technical, or overly formal standards of proof, recognising the unique vulnerabilities of child victims.

- It observed that such crimes are part of a wider and deeply embedded pattern of organised exploitation, sustained by complex criminal networks that thrive even in the presence of legislative protections.

Measures to Prevent and Combat Child Trafficking in India



- The Court emphasised that trial courts must take into account the socio-economic and cultural vulnerabilities of minor victims, particularly those belonging to marginalised communities, as these factors often inhibit their ability to clearly articulate their experiences. It also noted that organised trafficking networks operate through deceptive, layered, and compartmentalised structures, making precise and consistent narration of events extremely difficult for victims.

- Importantly, the judgment clarified that a victim's failure to immediately resist, protest, or escape exploitation should not be treated as a ground to discredit testimony. Minor inconsistencies, the Court held, must be assessed with judicial sensitivity, contextual understanding and human realism, rather than suspicion.

Measures to Prevent and Combat Child Trafficking in India:

- **Juvenile Justice (Care and Protection of Children) Act, 2015:** Provides for care, protection, rehabilitation, and reintegration of trafficked and vulnerable children.
- **Protection of Children from Sexual Offences (POCSO) Act, 2012:** Offers a comprehensive legal framework to protect children from sexual abuse, with child-friendly investigation and trial procedures.
- **Child and Adolescent Labour (Prohibition and Regulation) Act, 1986:** Prohibits employment of children below 14 years and bans hazardous occupations for adolescents aged 14–18.
- **National Child Labour Project (NCLP):** Implements district-level rehabilitation programmes, including education, vocational training, and mainstreaming of rescued child labourers.
- **PENCIL Portal:** A digital platform aimed at ensuring effective enforcement of child labour laws and monitoring the implementation of rehabilitation schemes.
- Together, these legal, administrative, and technological measures—when complemented by judicial sensitivity—seek to create a protective ecosystem that prevents exploitation, strengthens enforcement, and supports rehabilitation.

Conclusion:

The judgment underscores the urgent need for a victim-centric and sensitive judicial approach in cases of child trafficking and sexual exploitation. By recognising the structural complexities of organised crime and the deep vulnerabilities of child victims, the Court reinforces the principle that justice must balance legal rigour with social realities. Procedural technicalities, it affirms, should never obstruct the goals of protection, rehabilitation, and substantive social justice for minors.

CAG Flags Major Gaps in PMKVY Implementation

Context:

Recently, the Comptroller and Auditor General of India (CAG), in an audit report tabled in the Lok Sabha, highlighted multiple irregularities in the implementation of the Pradhan Mantri Kaushal Vikas Yojana (PMKVY), the flagship skill development programme of the Government of India.

About Pradhan Mantri Kaushal Vikas Yojana (PMKVY):

- Launched in 2015 by the Ministry of Skill Development and Entrepreneurship (MSDE), PMKVY aims to empower India's youth with industry-relevant skills, enhance employability, and promote entrepreneurship through free, outcome-based training and certification.
- The scheme has been implemented in three phases, PMKVY 1.0 (2015–16), PMKVY 2.0 (2016–20), and PMKVY 3.0 (2021–22) with a cumulative outlay of Rs.14,450 crore. It seeks to address youth unemployment, which stood at around 15% for the 15–29 age group in May 2025.

Key Highlights of the CAG Report:

- In its December 2025 audit, the CAG identified serious systemic and operational deficiencies across PMKVY 2.0 and 3.0:
 - » **Bank account irregularities:** Use of invalid or dummy account numbers (e.g., "1111111111"), repeated accounts, and nonsensical entries for thousands of beneficiaries.
 - » **Photographic discrepancies:** Identical photographs used for multiple candidates across states such as Bihar, Uttar Pradesh, Maharashtra, and Rajasthan.
 - » **Inactive training centres:** Several centres were found to be non-operational, despite portal data falsely indicating ongoing training.
 - » **Delayed payouts:** Over 34 lakh certified candidates had not received their Direct

Securities Markets Code Bill, 2025

- » Benefit Transfers (DBT).
- » **Quality concerns:** Certifications issued by employers not classified as “Best-in-Class”, raising questions over skill credibility.
- » **Weak communication mechanisms:** High email delivery failure rates (36.51%) and negligible response from candidates.

Major Implications:

- The CAG report exposes a significant disconnect between policy intent and ground-level execution:
 - » **Technology–Governance Gap:** Despite reliance on digital platforms such as the Skill India Portal (SIP), weak data validation and poor oversight undermined effectiveness.
 - » **Monitoring Failures:** Shuttered training centres and repeated certifications point to inadequate inspections and weak audit mechanisms.
 - » **Equity and Inclusion Concerns:** Delayed DBT payments and communication lapses disproportionately affected marginalised beneficiaries, diluting the scheme’s inclusive intent.
 - » **Reactive Accountability:** Measures such as Aadhaar-based e-KYC, geo-tagging, QR-coded certificates, and Kaushal Samiksha Kendra inspections were introduced only after systemic lapses became evident.

Conclusion:

The CAG audit highlights persistent weaknesses in design, data integrity, and monitoring within India’s flagship skill development programme, affecting millions of youth beneficiaries. While PMKVY remains central to India’s employment and human capital strategy, the findings underline the urgent need for stronger institutional oversight, seamless technological integration, and strict compliance enforcement to ensure that skill development translates into meaningful employability outcomes.

Context:

Recently, the Union Government introduced the Securities Markets Code Bill, 2025 in the Lok Sabha, proposing a comprehensive overhaul and consolidation of securities market regulation in India. It has been sent to the Standing Committee on Finance for a detailed review.

Background:

- India’s securities markets are currently governed by multiple laws enacted over different periods—namely, the Securities Contracts (Regulation) Act, 1956; the SEBI Act, 1992; and the Depositories Act, 1996.
- Over time, these statutes have developed overlapping provisions, outdated regulatory concepts, and procedural complexities, leading to regulatory ambiguity and compliance challenges.
- The proposed Bill seeks to repeal and replace these fragmented laws with a single, principle-based Securities Markets Code (SMC). The objective is to provide regulatory clarity, coherence, and flexibility in line with evolving market practices, technological innovation, and global standards.

Key Features:

- **Consolidation and Simplification**
 - » The Bill merges the three legacy laws governing securities markets into a unified legal Code. This consolidation eliminates redundant provisions and simplifies statutory language, thereby reducing interpretative conflicts and lowering compliance burdens for market participants.
- **Strengthening SEBI**
 - » The Securities and Exchange Board of India (SEBI) continues as the principal regulator under the Code.
 - » The SEBI Board is proposed to be

expanded from nine to a maximum of fifteen members, enabling broader expertise and enhanced decision-making capacity.

- » Robust conflict-of-interest norms are introduced, mandating disclosure of direct or indirect financial interests. The Code empowers the government to remove Board members where such interests compromise regulatory independence or fiduciary duties.

THE SECURITIES MARKETS CODE BILL, 2025

DECRIMINALIZATION OF SECURITIES LAWS

- **Strengthening Market Infrastructure Institutions (MIs), MIs can be notified by Central government**
- **Proposed Bill provides an enabling provision for the Board to establish a Regulatory Sandbox to facilitate innovation in financial products, contracts & services**
- **SEBI to specify an 'investor charter', for the protection of investors**
- **SMC empowers SEBI to designate one or more of its officers as Ombudsperson**

Regulatory Framework and Enforcement

- » Minor procedural and technical violations are proposed to be decriminalised and treated as civil defaults, reinforcing the objective of ease of doing business.
- » Serious offences—such as market abuse, non-compliance with regulatory directions, and obstruction of investigations—continue to attract stringent penalties.
- » A single, streamlined adjudication framework is established, with time-bound timelines for investigations and interim orders, improving predictability, consistency, and enforcement efficiency.

Investor Protection and Market Integrity

- » The Code provides statutory backing to an Investor Charter, a time-bound

grievance redressal mechanism, and the appointment of an Ombudsperson for unresolved complaints.

- » It authorises SEBI to establish a Regulatory Sandbox, allowing controlled experimentation with innovative financial products and services while safeguarding systemic stability and investor interests.

Inter-Regulatory Coordination

- » The Bill facilitates enhanced coordination among financial sector regulators and enables smoother listing and regulatory oversight of financial instruments that fall under multiple regulatory jurisdictions.

Conclusion:

The Securities Markets Code Bill, 2025 marks a significant legislative step towards modernising India's capital market framework. By introducing a coherent, principle-based regulatory architecture, the Bill aims to strengthen investor confidence, improve regulatory governance, and attract both domestic and foreign investment. Its emphasis on compliance facilitation, time-bound enforcement, innovation support, and market integrity aligns closely with India's broader financial sector reforms aimed at deepening capital markets and sustaining long-term economic growth.

Personality Rights and AI-Manipulated Content

Context:

Recently, the Bombay High Court granted interim relief to actor Shilpa Shetty, restraining social media platforms and AI-linked entities from posting manipulated or morphed images and videos. Similarly, the Delhi High Court barred the unauthorised commercial use of actor R. Madhavan's image, ordering the takedown of AI-generated material and prohibiting the sale of merchandise using his likeness.

These cases reflect a growing trend of

celebrities, including Aishwarya Rai Bachchan and Abhishek Bachchan, seeking judicial intervention against the misuse of their names, images, and likenesses on social media under the framework of personality rights.

About Personality Rights in India:

- **Definition**

» Personality rights enable individuals to control the use of personal attributes such as name, image, voice, likeness, and distinctive expressions or traits. These rights cover both commercial and non-commercial exploitation.

- **Legal Status in India:**

» Personality rights are not explicitly codified in Indian statutes.
 » They are protected indirectly through existing laws and constitutional provisions.

Key Components:

- **Right to Publicity:** Prevents unauthorised commercial exploitation of an individual's image or likeness. Partially governed by the Trademarks Act, 1999 and the Copyright Act, 1957.
- **Right to Privacy:** Protects individuals from public representation without consent. Anchored under Article 21 of the Constitution, as affirmed in the Justice K.S. Puttaswamy (Retd.) judgment (2017).

Posthumous Personality Rights:

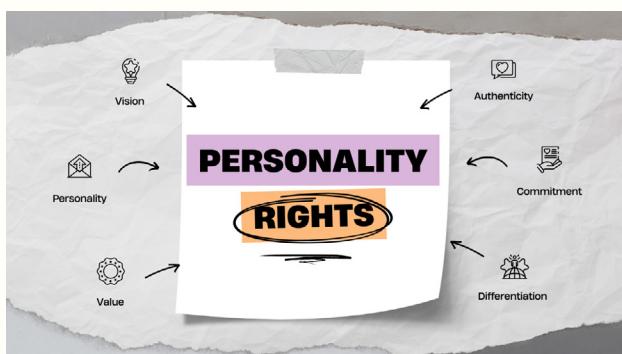
- India does not provide explicit statutory recognition for posthumous personality rights.
- The Emblems and Names (Prevention of Improper Use) Act, 1950 prohibits the commercial use of images of Mahatma Gandhi and the Prime Minister.
- In Deepa Jayakumar v. AL Vijay (2019), the Madras High Court held that personality rights generally cease upon a person's death.

Key Judicial Precedents:

- **ICC Development Ltd. v. Arvee Enterprises**

(2003), Delhi HC: Deprivation of publicity rights was held to violate Articles 19 and 21 of the Constitution.

- **Arun Jaitley v. Network Solutions (2011), Delhi HC:** The Court recognised that fame and reputation in the digital space carry the same legal weight as in the physical world.
- **Rajinikanth v. Varsha Productions (2015), Madras HC:** Unauthorised use of a celebrity's name or image was held to infringe personality rights.



Significance of the High Court Orders:

- **Digital Privacy Protection:** Reinforces the relevance of personality rights in the era of AI-generated content and deepfakes.
- **Preventive Judicial Intervention:** Courts are increasingly issuing anticipatory and real-time injunctions to prevent irreversible reputational harm.
- **Technology Accountability:** Emphasises that AI must be used responsibly and within constitutional and legal boundaries.

Conclusion:

The interim relief granted to Shilpa Shetty, along with similar orders by the Delhi High Court, reflects a strong judicial commitment to protecting digital personhood. These developments mark an important evolution in the enforcement of personality rights in India, particularly in response to the growing challenges posed by AI-driven manipulation and misuse.



International Relations

SOUTHERN OCEAN

SOUTHERN OCEAN

India–Russia Strategic Partnership in a Multipolar World Order: Significance and Implications

Introduction:

Russian President Vladimir Putin was recently on a two-day state visit to India on December 4–5. The visit concluded with the 23rd India–Russia Annual Summit, which reaffirmed the special and privileged strategic partnership between the two countries. The summit made it clear that the bilateral relationship, based on decades of strategic, economic, and cultural cooperation, remains resilient and robust despite rapid global geopolitical changes.

Historical Background of India–Russia Relations:

Foundations and Cold War:

- » Post-independence, India adopted a policy of non-alignment, seeking to avoid entanglement in Cold War blocs. However, in practice, India cultivated strong ties with the Soviet Union, largely due to strategic imperatives. The USSR became a crucial partner for India in defence supplies, particularly during conflicts with Pakistan (1965, 1971) when Western countries either imposed arms embargoes or were reluctant to provide support.
- » Beyond material assistance, the Soviet Union offered diplomatic backing in multilateral forums, including the United Nations, reinforcing India's international standing. Cultural and intellectual exchanges further cemented

this bond.

The Strategic Partnership:

- » The modern India–Russia partnership took formal shape during Putin's first visit to India as Russian President in October 2000, when the two countries institutionalized their Strategic Partnership. This framework created mechanisms for annual summits, inter-ministerial committees, and working groups, facilitating regular and structured engagement across multiple sectors. Over time, the partnership evolved into a "Special and Privileged Strategic Partnership", reflecting the depth and breadth of collaboration.
- » This elevated partnership encompassed defence cooperation, diplomatic consultation, energy collaboration, science and technology exchange, and people-to-people ties, making it one of India's most stable bilateral relationships. It has endured despite fluctuations in global geopolitics, including the post-Cold War shift and the Russia–Ukraine conflict.

Defence and Technological Collaboration:

- » Russia has been India's primary defence supplier for decades, providing fighter aircraft, tanks, submarines, and missile systems. Beyond procurement, the partnership has included technology transfers and co-production projects, enabling India to develop domestic

capabilities. For instance, the co-production of the T-90 tanks and the Su-30MKI fighter aircraft exemplifies a collaborative approach to defence modernisation.

» The relationship has also extended to space cooperation, including astronaut training, satellite launches, and joint rocket engine projects. These collaborations reflect deep strategic interdependence, reinforcing India's security and technological ambitions.

■ **Energy and Economic Links:**

» Energy has been another pillar of India-Russia relations. Russia has supplied crude oil, petroleum products, natural gas, and coal to India, with discounted oil deliveries increasing significantly after 2022 amid Western sanctions. Such energy partnerships have helped India ensure energy security while diversifying sources away from conventional suppliers.

» However, bilateral trade exhibits a persistent imbalance, with India's imports from Russia heavily skewed toward energy, while Indian exports remain limited. This imbalance has been a point of discussion in successive summits, with both sides acknowledging the need to broaden trade beyond traditional sectors.

Strategic significance of the 23rd India-Russia Annual Summit:

The 23rd India-Russia Annual Summit (December 4–5, 2025) is strategically significant as it:

- Marked 25 years of the Declaration on Strategic Partnership (2000), reaffirming the longevity and trust-based nature of bilateral ties.
- Reiterated the commitment to the “Special and Privileged Strategic Partnership”, underscoring mutual respect for core national interests and strategic convergence.
- Positioned India-Russia relations as an anchor of global peace and stability,

grounded in the principle of equal and indivisible security.

- The Joint Statement highlights that despite a complex and uncertain geopolitical environment, bilateral ties have shown resilience, adaptability and continuity. It emphasizes India-Russia relations as a shared foreign policy priority, aiming to unlock the full potential of cooperation across political, security, economic, technological and humanitarian domains.
- The opening of Indian Consulates in Kazan and Yekaterinburg reflects growing emphasis on inter-regional engagement, trade facilitation and people-to-people ties, moving beyond capital-centric diplomacy.

INDIA-RUSSIA RELATIONS

A Strategic Partnership Amid Global Realignments



EVOLUTION OF RELATIONS

- Cold War Solidarity (1950–1991)
 - Soviets support on Kahsmir and Goa's liberation
- Post-Soviet Adjustment 1991–2000
 - Recalibration following the Soviet Union's dissolution to sustain defense and strategic ties
- Strategic Partnerships (2000–present)
 - Major exports follow global institutionalizing cooperation across sectors



- Russia accounts for 35% of India's total crude imports
- European sanctions prove cheaper Russian oil cushioned from global price volatility
- Assistance in the Kudankulam Nuclear Power Plant

DEFENSE CO-DEVELOPMENT

- Transition from buyer to co-developer defense partnership enhancing India's indigenous capabilities and strategic autonomy
- Flagship programs: BrahMos missiles and S-300 production
- Despite diversification to other suppliers like France and Israel

STRATEGIC WAY FORWARD

- Diversify economic engagement beyond energy
- Strengthen Defense co-development
- Expand Arctic and energy collaboration



- Diversify economic

ENERGY COOPERATION

- Russia accounts for 35% of India's total crude imports
- European sanctions prove cheaper Russian oil cushioned from global price volatility

Key Outcomes of the 2025 Summit:

- **Economic Roadmap to 2030:** A major highlight of the summit was the

announcement of the Vision 2030 Economic Cooperation Programme, aimed at raising bilateral trade to US\$100 billion by 2030. This roadmap seeks to diversify trade beyond energy, reduce non-tariff barriers, facilitate smoother logistics, and enhance business interactions. The programme also emphasizes the use of national currencies (rupee and ruble) and the development of alternative payment mechanisms, insulating trade from potential external pressures and ensuring continuity even amidst global uncertainties.

■ **Energy and Supply Assurance:** Russia reaffirmed uninterrupted energy supplies to India, ensuring stability in fuel and petroleum products. This commitment is especially significant given global energy competition and the pressures on Russian energy exports due to sanctions. Reliable energy supplies help India meet its growing domestic demand and maintain industrial continuity.

■ **Defence and Technology Cooperation:** The summit also focused on modernizing defence and technological ties, including potential co-production of advanced systems such as Su-57 fighter aircraft and air defence systems. Discussions extended to space cooperation, technology transfers, and defence research, signaling a forward-looking approach to military-technical collaboration that goes beyond traditional procurement.

■ **Multilateralism & Global Governance:** The Joint Statement reflects strong convergence on:

- » UN-centric multilateralism and respect for international law.
- » UNSC reform, with Russia reiterating support for India's permanent membership.
- » Strengthening cooperation in G20, BRICS and SCO, especially:
 - Global South priorities
 - Reform of Multilateral Development Banks
 - Supply chain resilience and critical

minerals

- » Shared commitment to a multipolar world order, both globally and in Asia.

Counter-Terrorism

- Zero-tolerance approach to terrorism.
- Joint condemnation of attacks in Pahalgam (2025) and Moscow (2024).
- Support for:
 - » Early adoption of the Comprehensive Convention on International Terrorism (CCIT)
 - » Implementation of the Delhi Declaration on misuse of emerging technologies by terrorists.
 - » Emphasis on state responsibility and rejection of double standards.
- Overall, the Joint Statement reinforces India–Russia alignment on strategic autonomy, reformed multilateralism, counter-terrorism and global stability.

Strategic and Geopolitical Implications:

■ For India:

- » **Strategic Autonomy:** The visit reinforced India's ability to engage with Russia deeply while maintaining strong ties with Western nations. This balancing act exemplifies India's multipolar foreign policy.
- » **Economic Diversification:** Efforts to correct the trade imbalance and expand Indian exports to Russia indicate a shift toward more equitable economic engagement, ensuring that trade becomes a tool for strategic leverage as well as growth.

■ For Russia:

- » For Moscow, India remains an indispensable strategic partner in Asia, helping Russia mitigate the impact of Western sanctions.
- » The visit allowed Russia to reaffirm ties with a major Asian power, diversify its strategic engagements, and demonstrate that it retains influence in critical global partnerships despite geopolitical pressures.

■ Global Repercussions:

- » The summit signaled a broader commitment to multipolar cooperation, resisting attempts to polarize global alignments into binary blocs. The visit drew reactions from neighboring powers and global players alike, highlighting the importance of India–Russia engagement in Eurasian geopolitics.
- » China's measured response emphasized that regional strategic alignments are dynamic, and India continues to play a central role in shaping global South diplomacy.

Conclusion:

Vladimir Putin's 2025 state visit to India was far more than ceremonial. It reaffirmed a multi-dimensional partnership rooted in historical trust while evolving to address contemporary strategic, economic, and geopolitical challenges. The visit underscored India's nuanced

diplomacy, balancing strategic autonomy with engagement across global powers, while Russia leveraged the partnership to sustain relevance and resilience amid international isolation. Looking forward, the Vision 2030 roadmap, diversification of economic ties, expansion of defence and technological collaboration, and strengthened energy cooperation position India–Russia relations as a cornerstone of strategic stability in a rapidly changing world, demonstrating that enduring partnerships are not only a product of history but also of deliberate, forward-looking diplomacy. The 23rd India–Russia Annual Summit reaffirmed the partnership as a time-tested, trust-based and forward-looking relationship, combining strategic depth with economic pragmatism and a shared vision for a multipolar world.

Short Issues

23rd India–Russia Annual Summit

Context:

The 23rd India–Russia Annual Summit was held on 4–5 December 2025 in New Delhi, coinciding with the 25th anniversary of the Strategic Partnership established in 2000. Over the past quarter-century, the relationship has evolved into a “Special and Privileged Strategic Partnership”, spanning defence, energy, nuclear cooperation, science & technology, trade, and culture.

Key Outcomes of the Summit:

- A major highlight was the adoption of the Programme for Strategic Areas of India–Russia Economic Cooperation till 2030, aimed at expanding and diversifying the economic partnership.
- Both sides reaffirmed the goal of reaching

USD 100 billion in bilateral trade by 2030. Measures included reducing tariff and non-tariff barriers, enhancing logistics, and promoting national-currency payment systems.

- New cooperation areas cover fertilisers, agriculture, high-technology manufacturing, critical minerals, maritime transport, and labour mobility.
- In energy and nuclear cooperation, the Summit reinforced Russia's role as a long-term energy partner. Civil-nuclear collaboration was strengthened, particularly regarding fuel-cycle support, maintenance of the Kudankulam Nuclear Power Plant (KKNPP), and discussions on new nuclear projects involving VVER reactors and localized manufacturing.
- Cooperation in advanced technologies - rocket engines, satellite navigation, and peaceful uses of outer space - was also

emphasised. In defence, both sides committed to moving beyond the traditional buyer-seller dynamic towards joint research, co-development, and co-production of advanced systems.

- Plans include local manufacture of spares under Make in India, establishment of joint maintenance ventures, and potential export of localized Russian-origin platforms.

Strategic Significance:

- The Summit reinforced India's strategic autonomy, signaling its intent to maintain balanced ties amidst polarized global politics. The broadening of engagement into nuclear, technology, critical minerals, and innovation reflect a future-ready partnership.
- Enhanced energy and nuclear commitments support India's long-term power security, while Arctic and Northern Sea Route cooperation open new avenues for connectivity and trade.
- Defence co-production and technological collaboration strengthen India's self-reliance and strategic resilience.

Challenges:

- Key challenges include over-dependence on Russian defence and energy supplies, geopolitical pressure from Western partners, and implementation risks tied to ambitious targets.
- Additionally, global uncertainties — sanctions, supply-chain disruptions, commodity fluctuations — may impact outcomes.

About India–Russia Relations:

- India–Russia relations are long-standing, strategic, and multifaceted, covering defence, energy, trade, technology, and geopolitics.



- In 2010, the partnership was elevated to a Special and Privileged Strategic Partnership.

Key Areas of Cooperation:

- Defence:** Russia is India's largest defence supplier.
 - Key platforms:** S-400, BrahMos, Sukhoi-30 MKI, T-90 tanks. Includes joint production and technology transfer.
- Energy:** Russia supplies discounted crude oil, fertilizers, and collaborates in civil nuclear energy (Kudankulam).
- Trade & Connectivity:** Bilateral trade exceeds USD 65 billion; projects like Chennai–Vladivostok maritime corridor and INSTC enhance connectivity. Both countries aim to raise bilateral trade to USD 100 billion by 2030.
- Science & Technology:** Collaboration in nuclear, space, and emerging technologies.
- Geopolitics:** Cooperation on multipolar world order via BRICS, SCO, G20; strategic alignment on Eurasian and global issues.

Conclusion:

23rd Summit marks a structural upgrade of the India–Russia partnership, aligning it with emerging geopolitical realities. If effectively implemented, it can significantly advance India's goals of energy security, defence indigenisation, technological capability, and multipolar engagement over the coming decade.

India Re-elected to IMO Council 2026–27

Context:

Recently, India has elected to the IMO Council for the biennium 2026–27, reaffirming its growing clout in global maritime governance. In the elections during the 34th Session of the IMO Assembly held at London, India obtained 154 out of 169 valid votes, the highest tally among all contenders in its category.

About International Maritime Organisation (IMO) Council:

- The IMO is the United Nations–specialised agency responsible for regulating shipping, maritime safety and security, prevention of marine pollution, and facilitating international seaborne trade.
- The IMO Council serves as the executive organ of the Assembly. It is elected every two years and works between Assembly sessions, overseeing the organisation's work programme, budget and regulatory framework.
- The Council is composed of 40 elected members drawn from three categories. India's seat belongs to Category B — reserved for states with the largest interest in international seaborne trade. This category comprises 10 countries.
- The 2026–27 Council term was decided through a secret-ballot election conducted on 28 November 2025 during the 34th IMO Assembly.

Significance of India's Re-election:

- **Global Recognition:** Securing 154 of 169 votes—the highest in its category—reflects strong global confidence in India's maritime policies and its constructive role in international shipping governance.
- **Continuity in Maritime Engagement:** Re-election ensures India's continued influence in IMO decision-making on shipping regulations, maritime safety, environmental

- **standards, and sustainable ocean use.**
- **Boost to Maritime Diplomacy & Blue Economy:** The strong mandate supports India's maritime growth vision and complements national initiatives in ports, shipbuilding, and waterways under long-term strategies like Vision 2047.
- **Strategic Influence in Global Maritime Order:** Council membership enables India to shape norms on safety, decarbonisation, ship recycling, pollution control, and fair trade—benefiting national and Global South interests.



Implications for India:

- **Regulatory Influence:** Opportunity to advocate sustainable shipping, green ship recycling, marine environmental protection, and capacity building for developing nations.
- **Domestic Synergy:** IMO role supports alignment of India's expanding maritime infrastructure with global standards, aiding smoother integration with world trade.
- **Diplomatic Advantage:** Strengthens India's soft power, positioning it as a bridge between developed and developing maritime nations.
- **Sustainability Leadership:** Allows India to champion inclusive, climate-friendly maritime development at global forums.

Conclusion:

India's re-election to the IMO Council for 2026-27 with the highest vote tally is a significant diplomatic achievement. It reinforces India's emergence as a major maritime power and provides a platform to shape global shipping norms while advancing its national maritime and blue economy objectives.

Operation Sagar Bandhu

Context:

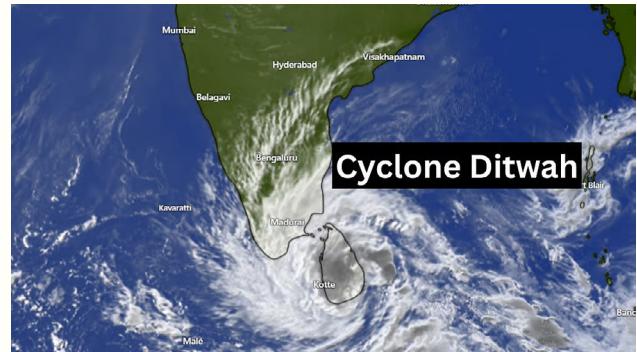
In response to the devastation caused by Cyclone Ditwah in Sri Lanka, India launched Operation Sagar Bandhu, a humanitarian assistance and disaster relief (HADR) mission. The operation aimed to provide critical aid and support to the affected population, reflecting India's commitment to its Neighbourhood First policy and Vision MAHASAGAR.

Background:

- Cyclone Ditwah, a tropical cyclone, struck Sri Lanka with violent winds, heavy rainfall, and storm surges, causing loss of life, property damage, and displacement.
- India's response aimed at rapid humanitarian aid, leveraging both military and civilian resources to mitigate human suffering.

Significance:

- **Humanitarian Assistance & Disaster Relief (HADR):** Demonstrated India's ability to provide rapid, coordinated disaster response to neighboring countries.
- **Strategic Diplomacy:** Reinforced India's Neighbourhood First Policy, enhancing bilateral ties with Sri Lanka.
- **Maritime & Air Power Utility:** Showcased versatility of Indian Navy and Air Force in humanitarian missions, beyond combat roles.
- **Regional Leadership:** Strengthened India's image as a responsible and capable regional actor in the Indian Ocean Region (IOR).



About Cyclones:

- **Rotation:**
 - » Northern Hemisphere → anticlockwise; Southern Hemisphere → clockwise
- **Origin of Term:**
 - » Greek "Cyclos" meaning "coils of a snake"; coined by Henry Piddington
- **Types**
 - » **Tropical Cyclones:** Between Tropics of Cancer & Capricorn; winds > 63 km/h
 - » **Extratropical Cyclones:** Mid-latitude (35°–65°), interaction of cold & warm air masses
- **Stages of Formation (Tropical Cyclones)**
 - » **Formation:** Warm Ocean heat & moisture, convection, cumulus clouds
 - » **Mature:** Strong convection, formation of Eye, concentric thunderstorm bands
 - » **Decay:** Post-landfall or over cold waters, moisture cut off
- **Naming (North Indian Ocean)**
 - » Assigned by 8 countries (India, Bangladesh, Maldives, Myanmar, Oman, Pakistan, Sri Lanka, Thailand); examples: Hudhud, Amphan, Fani, Vayu
- **Global Terminology**
 - » Hurricane (Atlantic/Caribbean), Typhoon (Western Pacific/China Sea), Willy-willies (Australia), Tornado (USA/West Africa)

Conclusion:

Operation Sagar Bandhu exemplifies India's strategic approach to HADR, combining military logistics, disaster management expertise, and

regional diplomacy. It also demonstrates the importance of preparedness for climate-induced disasters and the role of India as a humanitarian power in the Indian Ocean region.

Social Media Ban for Under-16s in Australia

Context:

Australia has become the first country to implement a blanket ban on social media for users under 16, effective December 9, 2025.

Rationale Behind Australia's Ban:

- Protection from algorithm-driven compulsive engagement, which can reinforce addictive behavior.
- Reducing exposure to harassment, cyberbullying, and online exploitation.
- Addressing gaps in voluntary age verification and parental controls, which are insufficient and inconsistent across platforms.
- Establishing a clear, enforceable legal framework, instead of relying solely on self-regulation by tech companies.

Global Trends in Age-Based Digital Regulation:

Europe:

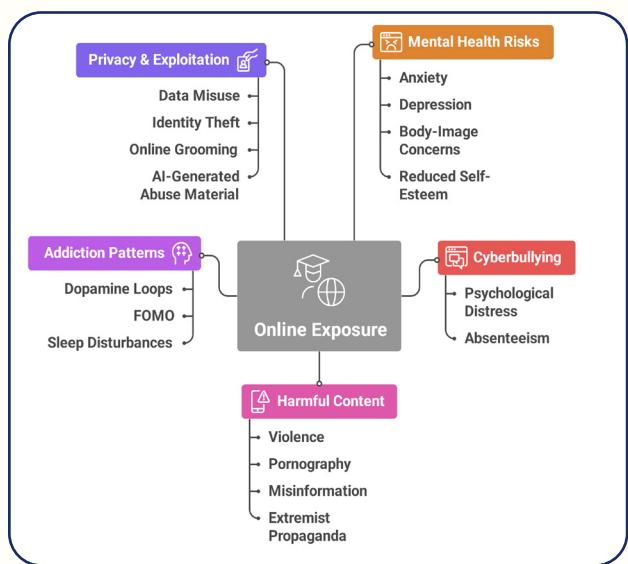
- » **United Kingdom:** The Online Safety Act mandates protection from harmful content but does not prescribe a minimum age.
- » **France:** Children under 15 require parental consent to access social media.
- » **Germany:** Teens aged 13–16 need guardian approval; younger children can sometimes bypass safeguards depending on platform design.

Asia:

- » **China:** A strict “minor mode” with device-level controls, mandatory screen-time limits, and restrictions on online activities; most international platforms are blocked.
- » **Malaysia:** Considering an under-16 ban

similar to Australia's.

- » **Afghanistan & Iran:** Highly restrictive environments with limited or filtered social media access.
- » **North Korea:** Citizens can access only a state-controlled intranet; the global internet is banned.
- **United States:**
- » **COPPA (Children's Online Privacy Protection Act):** Regulates data collection for users under 13 but does not restrict access to social media platforms.



Challenges with Age-Based Restrictions:

- **Enforcement limitations:** Platforms primarily rely on user-entered ages, leading to widespread evasions.
- **Technological challenges:** Robust age verification is difficult to implement without compromising privacy.
- **Complex behavioral concerns:** Legal measures alone cannot address deeper developmental, social, and mental health issues.

Significance for Policy and Society:

- Reflects a growing global concern around child digital safety, screen addiction, cyberbullying, and harmful content.
- Highlights the need for balanced approaches

combining legislation, digital literacy, parental involvement and technological safeguards.

- Offers context-specific lessons for India, which must protect children without restricting beneficial digital access.

Social Media Usage by Children in India:

- **High Penetration:** About 43% of Indian children (8-18 years) had active social media accounts in 2021.
- **Time Spent:** Many spend over 3 hours per day online; in Maharashtra, 17% spend more than 6 hours daily.
- **Platform Preferences:**
 - » 76% of 14-15-year-olds use smartphones for social media.
 - » Video and OTT platforms are also widely accessed.

Key Issues and Challenges:

- **Mental Health Risks:** Anxiety, depression, body-image concerns, and reduced self-esteem linked to online exposure.
- **Cyberbullying:** 1 in 3 Indian children has faced cyberbullying (UNICEF, 2019), leading to psychological distress and absenteeism.
- **Exposure to Harmful Content:** Includes violence, pornography, misinformation, and extremist propaganda.
- **Addiction Patterns:** AI-driven algorithms create dopamine loops, FOMO, and sleep disturbances, affecting academic and social life.
- **Privacy & Exploitation Risks:** Includes data misuse, identity theft, online grooming, and emerging threats such as AI-generated abuse material.

Regulatory and Policy Context in India:

- Digital Personal Data Protection (DPDP) Act 2023:
 - » Protects children's data,
 - » Requires parental consent,
 - » Prohibits targeted advertising to children.
- However, gaps remain, especially in

enforcement mechanisms and platform accountability.

Conclusion:

Australia's social media ban for children under 16 is a landmark step in digital governance. India does not have a law similar to the US's COPPA (Children's Online Privacy Protection Act), which specifically regulates children's online access, data management, and digital rights. This decision prompts governments worldwide to consider how they can strike a balance between algorithms, corporate interests, and the vulnerable minds of children.

Mexico Imposes Up to 50% Tariffs on India

Context:

Mexico has recently announced the imposition of import tariffs of up to 50% on goods imported from India, China and other Asian countries. These tariffs will be effective on countries, including India, with which Mexico does not have a free trade agreement (FTA). The decision will come into effect from 1 January 2026 and is expected to impact more than 1,400 products. This move reflects the growing trend of protectionism in the global trading system.

Key Reasons behind Mexico's Decision:

- **Protection of Domestic Industry:** In recent years, the increasing inflow of low-cost industrial goods from Asian countries, particularly India and China has put significant pressure on Mexico's domestic manufacturing base. As a result, sectors such as MSMEs, auto parts, textiles, steel, and plastics have been adversely affected. Higher tariffs are intended to shield domestic producers from intense price competition and safeguard local industries.
- **Employment Protection and Social Stability:** Manufacturing is a major source of employment in Mexico. When cheap imports undermine the competitiveness of local

industries, the consequences are often seen in the form of job losses and wage pressures. By raising tariffs, the Mexican government aims to encourage domestic production and protect local employment. This measure is not purely economic in nature; it is also linked to social stability and political considerations, as rising unemployment can fuel internal discontent.

Booming trade

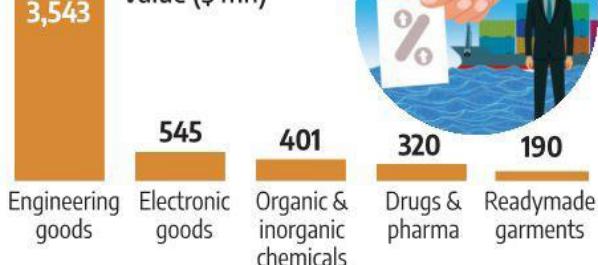
India's exports to Mexico

Year Value (\$ bn)

FY21	1.93
FY22	2.83
FY23	5.19
FY24	5.32
FY25	5.75

Top 5 export items to Mexico in FY25

Value (\$ mn)



Source: Department of Commerce

- Geo-economic Strategy:** Mexico's decision is also viewed as part of a broader geo-economic strategy. Under the United States–Mexico–Canada Agreement (USMCA), Mexico is a crucial component of the North American supply chain. By imposing higher tariffs on Asian imports, Mexico seeks to strengthen regional production networks and concentrate manufacturing activities within North America. This approach aligns with global trends such as supply chain fragmentation, re-shoring, and near-

shoring.

- Impact of Global Protectionist Trends:** Mexico's move is influenced by the broader global shift toward protectionism. The United States and Europe have already increased tariffs and non-tariff barriers in the name of national security, employment protection, and safeguarding strategic industries. This trend is now extending to Latin America as well. The declining effectiveness of the WTO-based multilateral trading system has encouraged countries to adopt more unilateral and interest-driven trade policies, and Mexico's decision is part of this global pattern.

India-Mexico trade (In \$ bn)



India's top exports (In \$ mn)



Source: Commerce dept

Possible Impact on India:

- Decline in Export Competitiveness:** Indian goods will become more expensive in the Mexican market, potentially reducing their demand. Sectors likely to be affected include auto components, steel and metal products, chemicals and plastics and textiles.
- Impact on India's Latin America Strategy:** Mexico is regarded as a gateway for India into Latin American markets. Higher tariffs could weaken India's export diversification strategy in the region.
- Setback to the "China + 1" Strategy:** Global companies have been seeking alternatives to China by viewing countries like India as potential manufacturing hubs. However, the imposition of high, uniform tariffs on Asian countries may reduce India's relative

cost advantage and market access, thereby limiting the competitive edge India aims to build as an alternative to China.

Broader Global and Policy Implications:

- Mexico's decision highlights the declining relevance of the WTO-based multilateral trading order.
- Unilateral tariff hikes undermine principles such as Most Favoured Nation (MFN) in practice. Moreover, the rise of trade barriers among developing countries themselves sends a negative signal for South-South cooperation. Overall, this trend underscores the growing regionalisation of global value chains.

Conclusion:

The imposition of high tariffs by Mexico on India and other Asian countries is a clear indicator of shifting global economic politics. It demonstrates that the ideal of free trade is increasingly being shaped by national interests and strategic priorities. For India, this development underscores the need for active trade diplomacy, improved export competitiveness and greater market diversification in order to safeguard its trade interests in an increasingly protectionist global environment.

Indian PM Visit to Ethiopia

Context:

Prime Minister Narendra Modi undertook his first bilateral visit to Ethiopia on 16–17 December 2025, marking a historic milestone in India–Africa relations. The visit culminated in the formal elevation of India–Ethiopia relations to a Strategic Partnership, signalling a shift from traditional cooperation to a long-term, structured, and multidimensional engagement.

Key Outcomes of PM Modi's 2025 Visit:

- **Strategic Partnership:**
 - » Cooperation was expanded across diplomacy, defence, economy, technology, and development.

Both sides emphasised regional peace, counter-terrorism, and shared Global South priorities.

Conferment of the Highest State Honour:

- » Prime Minister Modi was conferred the 'Great Honour Nishan of Ethiopia', the country's highest civilian award.
- » The honour symbolises Ethiopia's recognition of India as a trusted and long-standing development partner.

Eight MoUs and Agreements: Key agreements signed during the visit include:

- » Debt restructuring under the G20 Common Framework
- » Establishment of a Data Centre at Ethiopia's Ministry of Foreign Affairs
- » Cooperation in United Nations peacekeeping training
- » Customs cooperation to facilitate trade
- » Expansion of ICCR scholarships and AI courses under ITEC
- » Healthcare cooperation, including the upgradation of Mahatma Gandhi Hospital, Addis Ababa

List of Outcomes

Specialised short term courses to students & professionals of Ethiopia in the field of **Artificial Intelligence** under **ITEC*** programme

India to help **augment the capacity** of **Mahatma Gandhi Hospital** in Addis Ababa in the fields of **maternal healthcare & neonatal care**



Economic and Commercial Relations:

- Economic engagement remains a central pillar of bilateral ties:
 - » **Bilateral trade (FY 2024–25):** US\$ 550.19 million

- » **Indian exports:** US\$ 476.81 million
- » **Indian imports:** US\$ 73.38 million
- The trade relationship is strongly export-driven, highlighting Ethiopia's importance as a market for Indian goods.
- Ethiopia benefits from India's Duty-Free Tariff Preference (DFTP) Scheme for Least Developed Countries (LDCs).

Indian Investments in Ethiopia:

- Over 675 Indian companies are registered in Ethiopia.
- Total Indian investments exceed US\$ 6.5 billion, making India one of the largest investors in the country.

Defence, Security, and Multilateral Cooperation:

- Signing of a Defence Cooperation MoU and the holding of the first-ever Joint Defence Cooperation Meeting (2025).
- Continued collaboration in UN Peacekeeping Operations, reflecting a shared commitment to global peace and stability.
- Ethiopia expressed strong support for India's zero-tolerance approach to terrorism, including solidarity following the Pahalgam terror attack.
- Enhanced coordination at multilateral forums, including:
 - » United Nations
 - » BRICS
 - » African Union-India engagement mechanisms
 - » Global initiatives such as ISA, CDRI, IBCA, and GBA

Strategic Significance of Ethiopia:

- Ethiopia, as Africa's second-most populous country and the host of the African Union (AU) headquarters, occupies a pivotal position in India's Africa and Global South strategy.
- Ethiopia's importance for India stems from:
 - » Its role as the diplomatic capital of Africa
 - » Its strategic location in the Horn of Africa, a region vital for maritime security and

- regional stability
- » Active participation in UN peacekeeping missions
- » A large domestic market and growing economic potential
- The Strategic Partnership reflects shared interests in peace, development, and multipolar global governance.



Conclusion:

Prime Minister Modi's visit to Ethiopia and the elevation of bilateral relations to a Strategic Partnership mark a watershed moment in India-Africa relations. By deepening cooperation across security, development, digital infrastructure, healthcare, education, and economic resilience, the partnership reflects India's vision of inclusive growth, strategic autonomy, and a multipolar world order. Ethiopia, as Africa's diplomatic nerve centre, will remain a key pillar of India's long-term engagement with the continent.

India and Oman Sign Comprehensive Economic Partnership Agreement (CEPA)

Context:

Recently, India and Oman signed a Comprehensive Economic Partnership Agreement (CEPA), a landmark bilateral trade and investment pact aimed at strengthening economic cooperation, boosting trade, and enhancing labour mobility between the two countries.

Key Features of the CEPA:

- **Trade Liberalisation and Duty-Free Access**
 - » Oman will provide India duty-free access to 98.08% of its tariff lines, covering 99.38% of India's exports to Oman.
 - » India has offered liberalised tariffs on 77.79% of its tariff lines, covering 94.81% of imports from Oman.
 - » Full tariff elimination is possible for several labour-intensive and high-value sectors, including:
 - Gems and jewellery
 - Textiles and leather
 - Footwear and sports goods
 - Plastics and furniture
 - Agricultural products
 - Engineering goods
 - Pharmaceuticals and medical devices
 - Automobiles
- **Sectoral and Services Benefits**
 - » The CEPA includes significant concessions for India's services sector, with a strong emphasis on professional mobility.
 - » Certain sensitive products remain excluded from the agreement, including:
 - Dairy products
 - Tea and coffee
 - Rubber and tobacco
 - Gold and silver bullion
 - Jewellery
 - Select footwear and sports goods
- **Enhanced Labour Mobility**
 - » Oman has committed to Mode 4 mobility, facilitating greater access for Indian professionals to Omani markets.
 - » The quota for Intra-Corporate Transferees (ICTs) has been increased

from 20% to 50%.

- » Contractual Service Suppliers are permitted a stay of up to two years, extendable by an additional two years.
- » Entry and stay conditions for skilled professionals have been liberalised in key sectors such as IT, healthcare, engineering, and professional services.



INDIA-OMAN CEPA AGREEMENT

COMPREHENSIVE ECONOMIC PARTNERSHIP AGREEMENT (CEPA)

Purpose: To strengthen economic partnership



Goods, services, and investment included



Benefits: Relief and facilities for professionals

INDIA'S CEPA AGREEMENT WITH 4 COUNTRIES



South Korea



Japan



Mauritius



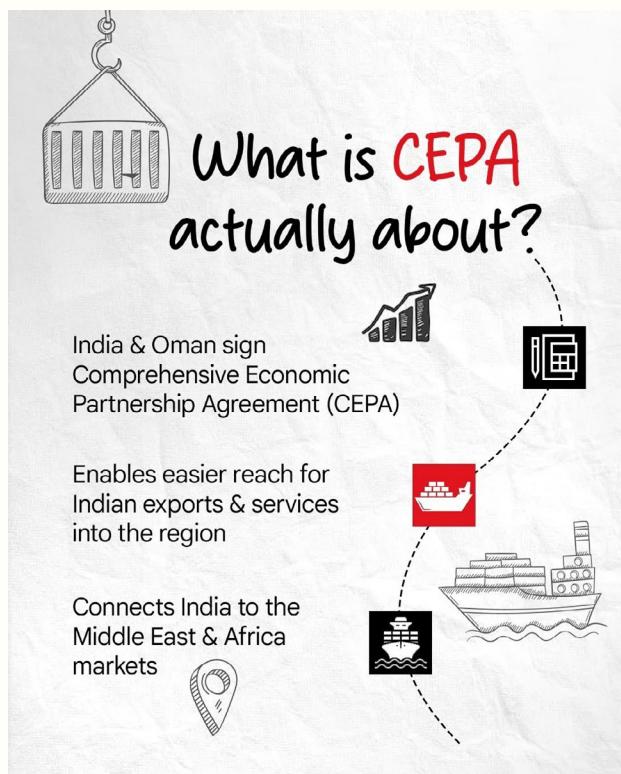
UAE

Economic and Strategic Significance:

- In 2024–25, India exported merchandise worth \$4.06 billion to Oman, while imports from Oman stood at \$6.5 billion.
- The CEPA provides India with a strategic gateway to the GCC region, as well as access to Eastern Europe, Central Asia, and Africa, thereby enhancing trade diversification.
- This agreement marks:
 - » Oman's first bilateral trade agreement

since its FTA with the United States in 2006, and

- » India's second CEPA with a GCC country, following the India-UAE CEPA signed in 2022.



Implications of the CEPA:

- Trade Growth:** Reduced tariffs and expanded market access are expected to significantly boost India's exports, particularly in labour-intensive and high-value manufacturing sectors, leading to higher bilateral trade volumes.
- Employment and Skills Development:** Enhanced labour mobility will generate new employment opportunities for Indian professionals and facilitate skill transfer in sectors such as IT, healthcare, engineering, and technical services.
- Strategic Partnership:** Deepening economic ties with Oman strengthens India's strategic footprint in West Asia, complements its Act West policy, and enhances regional connectivity and energy-security

- cooperation.
- Youth and Innovation:** The CEPA is expected to open new avenues for entrepreneurship, innovation, and start-up collaboration, particularly benefiting the youth in both countries, in alignment with India's demographic and economic aspirations.

Conclusion:

The India-Oman CEPA represents a historic step in bilateral economic cooperation by integrating trade liberalisation, services sector access, and labour mobility into a single comprehensive framework. By enabling duty-free market access, liberalised tariffs, and professional mobility, the agreement strengthens economic, strategic, and people-to-people ties. Its effective implementation is expected to boost trade, generate employment, and enhance India's regional influence, serving as a template for future comprehensive economic partnerships.

PM Modi Visit to Jordan

Context:

Recently, Indian PM Modi visited Jordan on 15–16 December 2025, where he held extensive discussions with King Abdullah II of Jordan. This marked his first full-fledged bilateral visit to Jordan and coincided with the 75th anniversary of diplomatic relations between the two nations.

Outcomes of PM Modi's Visit:

- Discussions focused on trade and investment, defence, renewable energy, information technology, agriculture, infrastructure, health, education, tourism, and culture.
- The two leaders set a target of US\$5 billion in bilateral trade within five years and explored the possibility of linking Jordan's digital payment system with India's Unified Payments Interface (UPI).
- Both sides reiterated their shared commitment to combating terrorism and

working towards regional stability in West Asia.

▪ **MoUs Signed:**

- » Technical Cooperation in New and Renewable Energy
- » Cooperation in Water Resources Management and Development
- » Twinning Agreement between Petra and Ellora
- » Renewal of the Cultural Exchange Programme (2025–2029)
- » Letter of Intent on sharing digital solutions for population-scale transformation

India–Jordan Relations:

- India and Jordan share warm and friendly diplomatic relations, anchored in decades of political goodwill, structured dialogues, and expanding economic cooperation.
- Established in 1950, bilateral relations have matured through regular high-level interactions, institutional mechanisms, and sector-specific collaboration.



High-Level Political Engagements:

- Past engagements include PM Modi's transit visit to Jordan in 2018 and King Abdullah II's state visit to India in 2018,

which resulted in the signing of 12 MoUs/Agreements, the establishment of a C-DAC Centre of Excellence, and a US\$5 million pharmaceutical assistance package to Jordan.

Trade and Economic Cooperation:

- India is Jordan's fourth-largest trading partner. In FY 2023–24, bilateral trade stood at US\$2.875 billion.
- India's exports include cereals, frozen meat, petroleum products, and animal fodder, while Jordan supplies fertilisers, phosphates, and potash.
- **Key Initiatives:**
 - » The Jordan India Fertiliser Company (JIFCO) produces phosphoric acid for India.
 - » Over 15 NRI-owned garment manufacturing units operate in Jordan's Qualified Industrial Zones (QIZs).
 - » In 2025, tourism promotion events, trade seminars, and Indian company participation in the 3rd International Food & Food Technology Expo strengthened commercial engagement.

Defence Cooperation:

- An MoU on defence cooperation, signed in 2018, forms the basis of bilateral defence ties.
- Cooperation includes exchange of military delegations, training interactions, and joint participation in exhibitions such as SOFEX.

Science, Technology, and Education:

- The Indian–Jordan Centre of Excellence in IT (IJCOEIT) at Al-Hussein Technical University trains Jordanian professionals in cybersecurity, artificial intelligence, and big data analytics.
- India provides ITEC training slots, ICCR scholarships, and higher education opportunities for Jordanian students. More than 2,500 Jordanians have graduated from Indian institutions.

Cultural and People-to-People Ties:

- Cultural engagement includes Bollywood films, Indian dance and music performances, and regular International Day of Yoga celebrations.
- Visa facilitation measures and direct air connectivity have enhanced mobility. The Indian diaspora in Jordan, numbering over 17,500, contributes significantly to sectors such as textiles, healthcare, information technology, and education.

Conclusion:

Prime Minister Modi's visit to Jordan underscores how sustained political engagement can strengthen economic, strategic, and cultural cooperation. India-Jordan relations exemplify mutual trust, expanding trade integration, and strategic alignment, reinforcing Jordan's role as a reliable West Asian partner in India's broader regional outreach.

Thailand-Cambodia Sign Ceasefire Agreement

Context:

Recently, Thailand and Cambodia signed a ceasefire agreement to halt intense fighting along their disputed shared border after weeks of hostilities that resulted in significant casualties and displacement. The truce marks an important step toward de-escalation and the possibility of long-term peace amid one of Southeast Asia's most enduring territorial disputes.

Key Terms of the Ceasefire Agreement:

- The agreement was signed by Thai Defence Minister Natthaphon Narkphanit and Cambodian Defence Minister Tea Seiha at a border-level meeting.
- The ceasefire calls for an immediate cessation of hostilities, with both sides agreeing to refrain from any new troop movements, reinforcements, or military actions along the frontier.
- Its implementation includes monitoring by

ASEAN observers and sustained bilateral coordination mechanisms to ensure compliance with the truce.

- As part of the agreement, Thailand has committed to releasing 18 Cambodian soldiers detained during earlier clashes, provided the ceasefire remains intact for a designated 72-hour period.

Centre of the Dispute:

- Thailand and Cambodia share an 817-kilometre-long land border, with longstanding disputes over territorial claims, particularly in poorly demarcated stretches of the frontier.
- The core of the confrontation revolves around two ancient Hindu temple complexes—Preah Vihear and Ta Muen Thom—constructed during the Khmer Empire (9th-15th centuries) and revered for their architectural, cultural, and religious significance.



History of the Dispute:

- The origins of the boundary dispute lie in

colonial-era cartography. Between 1904 and 1907, French surveyors under French Indochina prepared maps delineating the border between Cambodia and Thailand (then Siam).

- A 1907 French map placed the Preah Vihear temple within Cambodian territory, although the site is geographically closer to Thailand. Siam initially accepted the map, believing it conformed to natural watershed boundaries, but later challenged its validity, claiming it was inaccurate and misleading.
- In 1962, the International Court of Justice (ICJ) ruled that Preah Vihear fell under Cambodian sovereignty, citing Thailand's tacit acceptance of the 1907 map for several decades. The Court ordered Thai forces to withdraw and return removed artefacts.
- However, the ruling addressed only the ownership of the temple itself, leaving the surrounding areas disputed. Renewed tensions led Cambodia to seek further clarification, and in 2013, the ICJ reaffirmed Cambodia's sovereignty over the temple and its immediate vicinity, again directing Thai withdrawal.
- Despite these judicial decisions, ambiguity over adjacent territories has continued to fuel tensions, periodically erupting into armed skirmishes.

Regional and Diplomatic Dimensions:

- The ceasefire has received support from China, the United States, Malaysia, and ASEAN, all of whom have welcomed the agreement and urged sustained dialogue to consolidate peace.
- Further negotiations are planned, including trilateral meetings hosted by China, aimed at rebuilding mutual trust and ensuring the durability of the ceasefire.

Conclusion:

The ceasefire between Thailand and Cambodia represents a significant step toward de-escalation following weeks of violent clashes rooted in deep-seated territorial disputes. While

historical disagreements over temple sites such as Preah Vihear and Ta Muen Thom have long strained bilateral relations, the recent agreement provides a constructive pathway toward dialogue, confidence-building, and the peaceful resolution of border disputes through sustained diplomacy.

India's Diplomatic Response to Attacks on Minorities in Bangladesh

Context:

Recent allegations of escalating violence against religious minorities, particularly Hindus, Christians, and Buddhists in Bangladesh have triggered diplomatic concern in India. These developments have led to visible diplomatic friction between New Delhi and Dhaka. The Ministry of External Affairs (MEA) has responded firmly, underscoring India's emphasis on regional stability, human rights, and the long-term health of bilateral relations.

Key Elements of India's Diplomatic Response:

- **Strong Condemnation:** The MEA unequivocally condemned violence against minorities—Hindus, Christians, and Buddhists—describing such incidents as deeply concerning and unacceptable.
- **Rejection of Trivialisation:** India emphasised that repeated attacks on minority communities cannot be dismissed as isolated events or explained away as politically motivated disturbances.
- **Call for Accountability:** New Delhi urged Bangladeshi authorities to ensure justice, accountability, and effective protection of minorities, stressing that safeguarding the rights and security of all citizens is a sovereign responsibility of the state.
- **Avoiding Diplomatic Escalation:** While articulating its concerns firmly, India avoided coercive or confrontational

diplomacy, deliberately leaving space for dialogue and cooperation. This reflects an effort to balance human rights advocacy with regional stability.

Historical Context of India–Bangladesh Relations:

- India and Bangladesh share a unique relationship shaped by history, culture, and shared sacrifice. The 1947 Partition caused immense displacement and suffering on both sides of the border.
- India played a decisive role in Bangladesh's Liberation War in 1971 by providing military, diplomatic, and humanitarian support, and was the first country to recognise Bangladesh as a sovereign nation.
- The two countries share deep cultural and linguistic ties, particularly in Bengal, and commemorate their shared history every year on 16 December, celebrated as Victory Day.

Strategic Significance of Bangladesh for India:

- Bangladesh is vital to India's geopolitical and economic interests. It shares a 4,096-km land border with India and is critical for the security and connectivity of India's Northeast.
- Economically, Bangladesh is among India's largest trade partners, with bilateral trade exceeding USD 18 billion. It is central to India's Act East Policy, regional connectivity initiatives, and cooperation on shared river systems and ecosystems such as the Sundarbans.

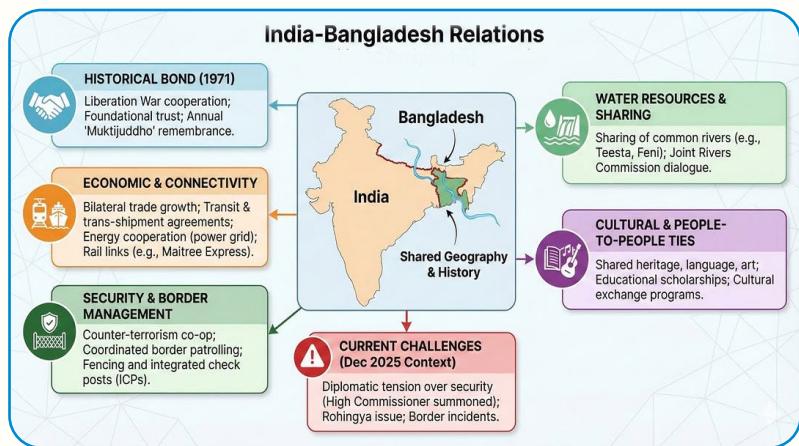
Challenges in the Relationship:

- Key challenges include illegal immigration, border management issues, unresolved water-sharing disputes such as the Teesta,

non-tariff trade barriers, and Bangladesh's growing engagement with China under the Belt and Road Initiative.

Conclusion:

India's response to attacks on minorities in Bangladesh reflects a principled yet pragmatic



diplomatic approach. While raising legitimate concerns regarding minority protection, India remains mindful of Bangladesh's strategic importance and shared historical bonds. Sustained dialogue, development cooperation, and mutual sensitivity are essential to preserve the positive trajectory of bilateral ties and ensure regional peace and stability.

Environment & Ecology

Aravalli Mountain Range Conservation: Environmental Security, Judicial Intervention and the Challenge of Sustainable Development

Context:

In India's geographical structure, certain natural elements are not merely landforms but shape the climate, ways of life, and civilisational continuity of entire regions. The Aravalli mountain range is one such element. Stretching from Gujarat through Rajasthan and Haryana to Delhi, this ancient mountain system is not only among the oldest geological formations in the world, but has also functioned as a natural protective shield for northern India.

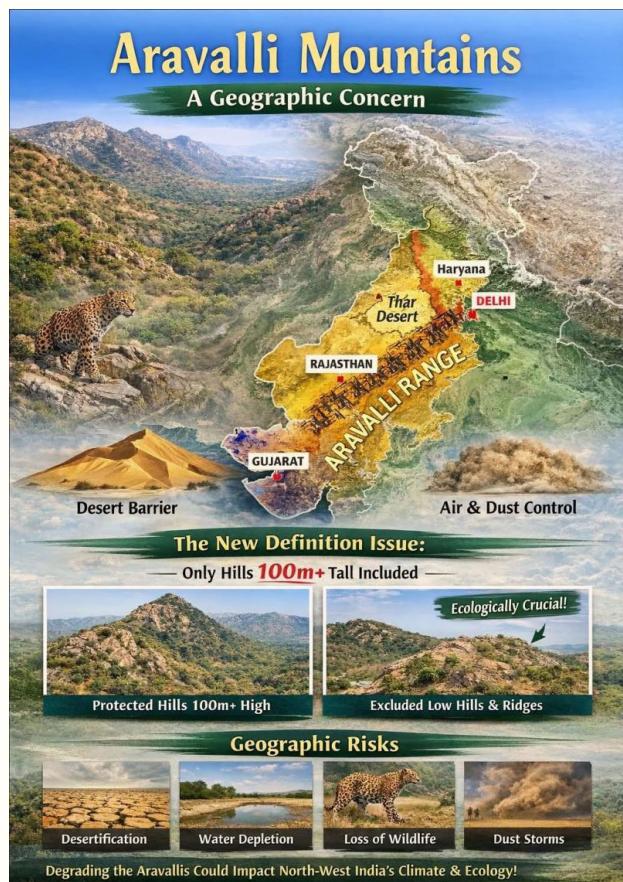
Recently, on December 29, the Supreme Court, taking suo motu cognizance, stayed its own order that had recognized the central government's new geographical definition of the Aravalli region, according to which only those areas with an elevation of 100 meters or more above the surrounding land would be considered part of the Aravalli range. The Supreme Court stated that this stay would remain in effect until the current proceedings reach a final conclusion, and that no irreversible administrative or ecological actions should be taken based on the existing framework until then. The next hearing on this matter is scheduled for January 21, 2026. Before the stay of the order, the decision had sparked the #SaveAravalli campaign and protests in several states, including Rajasthan.



Development versus Conservation:

- The Aravalli controversy highlights the persistent tendency in India to view development and environmental protection as opposing objectives. In reality, conservation of the Aravallis is not an obstacle to development but a prerequisite for it.

- » Urban development without water security is inherently unstable.
- » Economic productivity declines in the absence of clean air.
- » Ecological imbalance increases the risk of disasters.
- Thus, while degradation of the Aravallis may generate short-term economic gains, it is detrimental in the long run to the economy, public health, and social stability.



Ecological Significance of the Aravallis:

- **Natural Barrier Against Desertification:**
 - » The Aravalli range acts as a geographical barrier between the Thar Desert and the fertile plains of northern India. It prevents sand, dust, and hot winds originating in western Rajasthan from spreading eastward and northward.
 - » If the Aravallis weaken further, the

process of desertification could intensify in Haryana, Delhi, and western Uttar Pradesh, adversely affecting agriculture, public health, and food security.

■ Air Quality and Urban Climate

- » The Aravalli region functions as a green buffer for the Delhi-NCR. Vegetation cover and terrain together help arrest dust particles and regulate temperature.
- » Its degradation could worsen air pollution, intensify the urban heat island effect, and increase the frequency of extreme temperature events—challenges already confronting urban India.

■ Water Security and Groundwater Recharge

- » The rocky structure of the Aravallis allows rainwater to percolate slowly into the ground, replenishing aquifers.
- » In water-stressed regions such as Rajasthan, Haryana, and Delhi, this role is of strategic importance. Degradation of the Aravallis directly undermines India's water security.

■ Biodiversity and Local Livelihoods

- » The Aravalli region supports diverse vegetation, medicinal plants, and wildlife. Local livelihoods—such as pastoralism, grazing, and the collection of minor forest produce—are deeply dependent on this ecosystem.
- » Its degradation therefore causes not only environmental damage but also socio-economic imbalance.

Constitutional and Legal Dimensions:

- **Duties of the State:** Article 48A of the Indian Constitution mandates the State to protect and improve the environment and safeguard forests and wildlife. This provision makes environmental protection not a policy choice but a constitutional obligation.
- **Duties of Citizens:** Article 51A(g) casts a duty upon citizens to protect the natural environment, including forests, rivers, lakes, and wildlife. If the State itself retreats from conservation responsibilities, it weakens

the very spirit of citizens' duties.

- **Judicial Principles:** Indian environmental jurisprudence has evolved key principles such as sustainable development, the precautionary principle, the polluter-pays principle, and inter-generational equity. Excluding the Aravallis from protection through narrow definitions appears to run contrary to the spirit of these principles.

Challenges:

- **Federalism and Inter-State Coordination:** The Aravalli range spans multiple states. Effective conservation therefore requires strong inter-state coordination and a shared vision.
- **Climate Change and Adaptation:** In an era of rising temperatures and erratic rainfall, natural barriers such as the Aravallis play a critical role as climate adaptation infrastructure.
- **Failure of Urban Governance:** The pressure on the Aravallis reflects deeper shortcomings in India's urban planning, which remains insufficiently environment-centric.

Way Forward:

- Protecting the Aravalli mountain range requires a long-term, science-based, and participatory approach. First, the identification of the Aravallis should not be restricted to height-based criteria alone. Instead, it must be grounded in geological structure, ecological continuity, and historical evolution, so that its true ecological role is recognised.
- Second, legal protection must be strengthened. Large portions of the Aravalli region should be designated as Eco-Sensitive Zones, special conservation areas, or conservation-oriented land-use categories, ensuring clear and binding limits on development activities.
- Third, effective control over mining and land use is essential. Illegal mining, encroachment, and unregulated construction must be addressed through strict monitoring, deterrent penalties,

and robust technological surveillance mechanisms.

- Fourth, conservation efforts must ensure the participation of local communities. Co-management models can help balance traditional knowledge, livelihood security, and environmental protection.
- Finally, urban planning must treat the Aravallis not as vacant land but as green infrastructure, essential for ensuring water security, air quality, and climate resilience in the Delhi-NCR and surrounding regions.

Conclusion:

The policy and judicial debate surrounding the definition and protection of the Aravalli range has once again placed this mountain system at the centre of national discourse. This debate is not merely a technical discussion on land classification; it exposes deeper tensions related to environmental security, water stress, climate change, and the development-conservation dichotomy.

At its core, the Aravalli crisis is not only about mining or encroachment, but about a flawed approach to environmental governance. A height-based definition of 100 metres overlooks geological realities, as the Aravallis are an ancient, highly eroded, and relatively low mountain system. Their identity lies not in elevation, but in geological structure, ecological function, and geographical continuity. The Aravalli range constitutes the 'great natural wall' of northern India, protecting the region from desertification, water scarcity, pollution, and climatic instability.

Its conservation is therefore not merely an environmental option, but a matter of constitutional duty, developmental prudence, and inter-generational responsibility. If India is to move towards sustainable, inclusive, and resilient development, it must free Aravalli protection from policy ambiguities and adopt a firm, scientific, and forward-looking conservation vision.

Short Issues

Siliserh Lake & Kopra Jalashay Added to the Ramsar List

Context:

India has recently added Siliserh Lake in Rajasthan and Kopra Jalashay in Chhattisgarh to the List of Wetlands of International Importance under the Ramsar Convention, bringing the country's total number of Ramsar sites to 96.

About the Ramsar Convention:

- The Ramsar Convention on Wetlands is an international treaty signed in Ramsar, Iran, in 1971, aimed at the conservation and wise use of wetlands worldwide.
- Countries that join the Convention commit to maintaining the ecological character of their designated wetlands and promoting sustainable use.
- Wetlands designated under the treaty are known as Ramsar Sites, or Wetlands of International Importance.

Significance of Ramsar Designation:

- Recognition of global ecological importance
- Strengthened conservation and sustainable management frameworks
- Enhanced support for biodiversity, water security, climate resilience, and local livelihoods

About Siliserh Lake (Rajasthan):

- **Location & Background:**
 - » Located in Alwar district, Rajasthan
 - » A man-made lake, constructed in 1845 by Maharaja Vinay Singh through an embankment across a tributary of the Ruparel River
 - » Lies in the buffer zone of Sariska Tiger Reserve, integrating wetland and wildlife conservation
- **Ecological Importance:**
 - » Supports rich biodiversity, including over 149 species of resident and migratory birds and 17 mammal species

- » Notable species include the River tern (Vulnerable) and the Tiger (Endangered)
- » Plays a crucial role in water supply in a semi-arid region, groundwater recharge, eco-tourism, and local livelihoods

Threats:

- » Agricultural intensification
- » Expansion of human settlements
- » Increasing pressure on water resources and natural habitats

India's Ramsar Tally Rises to 96



Siliserh Lake
Alwar, Rajasthan



Kopra Jalashay
Bilaspur,
Chhattisgarh

2 more
wetlands get
Ramsar tag

About Kopra Jalashay (Chhattisgarh):

- **Location & Background:**
 - » Located near Bilaspur, in the upper catchments of the River Mahanadi, Chhattisgarh
 - » Originally constructed for irrigation, with growing ecological significance over time
- **Ecological Importance:**
 - » A reservoir-type wetland with extensive open water and nutrient-rich shallow backwaters
 - » Provides habitat for over 60 species of migratory birds, making it an important bird area

- » Notable species include the Greater spotted eagle (Vulnerable) and the Egyptian vulture (Endangered)
- » Supports hydrological connectivity, biodiversity conservation, local tourism, irrigation, and flood moderation

■ **Threats:**

- » Siltation
- » Invasive species
- » Intensive agricultural practices in surrounding areas

Member States.

Rationale Behind the Resolution:

- In recent years, wildfires have evolved from seasonal and localized events into large-scale, recurrent disasters affecting multiple continents. This shift is driven by climate change (rising temperatures and prolonged droughts), altered land-use patterns, and human activities.
- Citing the UNEP report “Spreading Like Wildfire”, India highlighted alarming projections indicating that global wildfire incidents could increase by 14% by 2030, 30% by 2050, and 50% by 2100 if current trends continue.

Implications for India:

- With 96 Ramsar Sites, India's expanding list reflects a strategic emphasis on wetland conservation. Wetlands play a critical role in:
 - » Biodiversity maintenance
 - » Climate change resilience
 - » Water security
 - » Sustainable livelihoods, including fisheries and eco-tourism
- Ramsar designation often facilitates improved legal protection, access to funding, scientific monitoring, and community participation.

Conclusion:

The inclusion of Siliserh Lake and Kopra Jalashay in the Ramsar List underscores India's progressive wetland conservation trajectory. Such international recognition not only safeguards vital ecosystems but also reinforces sustainable development linkages in the face of mounting environmental and climate challenges.

India's Resolution Adopted at UNEA

Context:

At the 7th session of the United Nations Environment Assembly (UNEA 7) held in Nairobi, Kenya, India's resolution titled “Strengthening the Global Management of Wildfires” was formally adopted with broad support from

Key Features of the Resolution:

Area	Key Provisions
International Cooperation	Sharing early-warning systems and wildfire risk assessment tools using science and technology
Proactive Prevention	Shift from reactive fire suppression to planning, risk reduction, preparedness, and ecosystem resilience through Integrated Fire Management
Community Action	Promotion of community-based alert systems; capacity building and training for policymakers, forest managers, and local communities
Knowledge Sharing	Exchange of best practices, scientific research, and traditional knowledge; enhanced institutional collaboration
National & Regional Planning	Support for integrated fire management strategies aligned with regional resilience goals

Finance & Technical Support	Improved access to climate and environmental finance, technology transfer, and capacity building for developing countries
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Global Implications:

- Wildfires are increasingly recognised as a global climate risk, exacerbated by climate change and unsustainable land practices.
- The resolution strengthens multilateral cooperation to manage cross-border wildfire threats and aligns wildfire governance with global commitments under frameworks such as the UNFCCC and the Convention on Biological Diversity (CBD).

Significance for India:

- Leadership in Environmental Governance:** Reinforces India's proactive role in shaping global environmental policy.
- Alignment with Domestic Priorities:** Supports national disaster management and climate adaptation strategies amid rising wildfire risks.
- South-South Cooperation:** Emphasises equity, technology transfer, capacity building, and accessible finance for developing countries.

Conclusion:

The adoption of India's resolution at UNEA 7 marks a significant step in global environmental cooperation. By promoting international collaboration, early-warning systems, knowledge sharing and integrated fire management, the resolution enhances global resilience to wildfire risks while supporting sustainable development, climate adaptation, and ecosystem protection.

Caribbean Coral Reefs Have Halved Since the 1980s

Context:

A recent assessment by the Global Coral Reef

Monitoring Network (GCRMN) has revealed that hard coral cover in the Caribbean has declined by nearly 48% between 1980 and 2024. The Caribbean region accounts for approximately 9.7% of the world's total coral reef area, making this decline a matter of global ecological significance. Coral reefs are among the most biodiverse ecosystems on Earth, supporting nearly one-third of all marine species, in addition to providing coastal protection, food security, and livelihoods for millions of people.

About Hard (Stony) Corals:

- Hard corals are marine animals composed of thousands of tiny polyps that secrete calcium carbonate, forming the limestone skeletons that build coral reef structures.
- Ecological Importance of Hard Corals:**
 - Create complex reef structures that support marine biodiversity
 - Act as natural barriers against storms and coastal erosion
 - Sustain fisheries, tourism, and coastal livelihoods
 - Unlike soft corals, hard corals are the primary architects of reef ecosystems. Their decline leads to loss of structural complexity, biodiversity collapse, and ecosystem instability.



Caribbean Reefs

Coral cover halves since 1980s due to heat, disease, and invasive species

Key Drivers of Coral Decline:

- **Ocean Warming & Mass Bleaching:**
 - » Rising sea surface temperatures triggered mass bleaching events in 1998, 2005, and 2023-24.
 - » Heat stress causes corals to expel symbiotic algae (zooxanthellae), resulting in energy loss and large-scale mortality.
- **Coral Diseases (SCTLD):**
 - » Stony Coral Tissue Loss Disease (SCTLD) was first detected in 2014 near Miami and has since spread to over 30 Caribbean countries.
 - » It affects more than 30 coral species, causes extremely high mortality (including coral recruits), and is considered the most destructive coral disease on record.
- **Collapse of Keystone Reef Builders:**
 - » Acropora corals declined from about 16% cover in the 1970s to around 1.8% since 1980.
 - » Orbicella corals declined sharply after the 1998 bleaching event and stabilised at around 5%. Stress-tolerant Porites corals have increased but cannot replace lost reef structure.
- **Herbivore Loss & Algal Dominance:**
 - » The collapse of Diadema sea urchins (1980s and again in 2022) and the decline of parrotfish reduced grazing pressure.
 - » As a result, macroalgal cover increased by nearly 85%, shifting reefs from coral-dominated to algae-dominated systems.
- **Human Pressure & Invasive Species:**
 - » Coastal population within 20 km of reefs grew by 27.6% (2000–2020), increasing pollution and nutrient runoff.
 - » Invasive species such as lionfish and invasive soft corals (Unomia, Xenia, Latissimia) displace hard corals and disrupt reef ecosystems.

Conclusion:

The halving of Caribbean coral reefs since the 1980s serves as a stark global warning of

the accelerating impacts of climate change on marine ecosystems. Rising ocean temperatures, disease outbreaks, ecological imbalances, and mounting human pressures are pushing coral reefs towards potentially irreversible collapse. Without urgent climate mitigation, effective disease control and ecosystem-based reef management, coral reefs, often described as the “rainforests of the sea” may become among the first major ecosystems lost to anthropogenic climate change.

Sub-Saharan Africa Loses 24% of Biodiversity Since Pre-Industrial Times

Context:

A recent study reveals that Sub-Saharan Africa has lost 24% of its biodiversity since pre-industrial times. Biodiversity is essential for ecosystem services, sustainable development, and human well-being. The study used Biodiversity Intactness Index (BII) and inputs from 200 African biodiversity experts to provide a detailed regional assessment.

Key Findings:

- **Overall Biodiversity Intactness:**
 - » Current estimated BII for Sub-Saharan Africa: 76%.
 - » Indigenous vertebrate and plant populations have declined to 76% of pre-industrial reference levels.
 - » Loss varies:
 - <20% for disturbance-adapted herbaceous plants
 - Up to 80% for certain large mammals
- **Country-Wise Variation:**
 - » **Least intact:** Rwanda and Nigeria (<55% intactness).
 - » **Most intact:** Namibia and Botswana (>85% intactness).
 - » Central African countries retain higher intactness due to persistent humid forests.

- » West Africa has low intactness due to forest and savanna degradation from agriculture and overharvesting.

- **Ecosystem-Specific Drivers:**

- » **Grasslands & Fynbos:** Biodiversity loss mainly due to land conversion for farming.
- » **Forests:** Non-agricultural degradation dominates.
- » **Savannas:** Both agricultural and non-agricultural pressures.
- » High-yield intensive croplands show lower intactness than low-intensity smallholder croplands, highlighting the environmental impact of intensive agriculture.

- **Human Dependence & Conservation Context:**

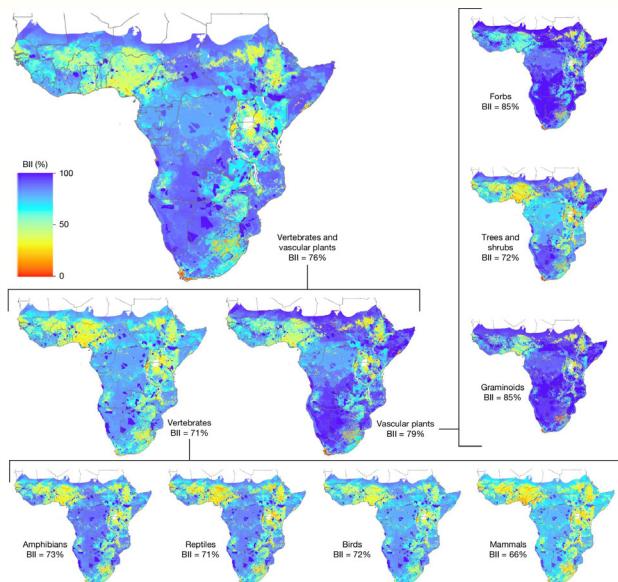
- » Over 80% of remaining biodiversity exists in unprotected natural forests and rangelands, where humans coexist with wildlife.
- » These areas support more than 500 million people, emphasizing the need for sustainable, community-inclusive conservation strategies.

- **Future Implications:**

- » Cropland is projected to double and cereal demand to triple by 2050.
- » Changes in agricultural practices could further impact biodiversity.
- » 75% of cropland is smallholder farming, which has low yields, posing challenges to food security and conservation simultaneously.

Significance of the Study:

- Provides contextually relevant, policy-focused data for decision-makers.
- Highlights the need for ecosystem-specific conservation strategies.
- Underlines the trade-off between agricultural expansion and biodiversity protection.
- Demonstrates that protecting working landscapes (forests, rangelands) is crucial for sustainable development.



About Sub-Saharan Africa:

- Sub-Saharan Africa refers to the region of Africa that lies south of the Sahara Desert. It is a vast and diverse region, comprising 48 or 49 countries, over 1,000 languages, and a population of over 1.1 billion people.

Conclusion:

Sub-Saharan Africa's biodiversity loss is uneven across countries and ecosystems, with human activity being the primary driver. Effective conservation requires integrated approaches that balance food security, community needs, and ecosystem preservation, especially in regions where biodiversity and human livelihoods are deeply intertwined.

New Report on Plastic Pollution

Context:

According to a new report prepared by the Pew Charitable Trusts, if ambitious global action is not taken, plastic pollution will double by 2040 to reach 280 million metric tons per year, which is equivalent to a garbage truck full of plastic waste being dumped every second.

Key Findings of the Report:

- 130 million metric tons of plastic pollute the environment in 2025, and this is projected to rise to 280 million metric tons by 2040 without urgent action.
- Plastic production, especially in packaging and textiles is growing far faster than waste management systems can handle.
- Microplastics already form 13% of total pollution, with major sources including tyre wear, paint, agriculture, and even recycling processes.
- Plastic-related greenhouse gas emissions are expected to increase 58%, reaching 4.2 GtCO₂e per year, comparable to emissions from one billion gasoline-powered cars.
- The health burden from plastic pollution and toxic chemicals is projected to rise, with global populations losing 5.6 million healthy years (2025) and 9.8 million healthy years (2040).
- By 2040, plastic production will rise 52%, while waste management capacity will increase only 26%, worsening environmental leakage and financial strain.
- Waste management costs will rise to US\$140 billion annually, while uncollected plastic waste will nearly double from 19% to 34%.

Recommended Measures:

If implemented effectively, global plastic pollution can be reduced by 83% by 2040.

- **Reduce Plastic Production**
 - » 44% reduction possible by 2040.
 - » Eliminate unnecessary single-use plastics (SUPs).
 - » Promote reuse and refill systems.
- **Redesign Chemicals & Products**
 - » Use fewer and safer chemicals.
 - » Adopt circular design for reuse and recycling.
- **Expand Waste Management**
 - » Improve segregation and collection.
 - » Integrate informal waste pickers.
 - » Invest in localized recycling infrastructure.

- **Improve Supply Chain Transparency**
 - » Mandate tracking of plastic flows, additives, and microplastics.

PLANET'S TOP 10 PLASTIC POLLUTERS

Global plastic waste emissions were at 52.1 million tonnes in 2020, of which India was the highest contributor

Plastic Waste Emissions
(Million tonnes per annum)



Source: Nature, Sept. 2024 (data for 2020)/Angeliki Savvantoglou of Bear Bones / phys.org

Causes and Extent of Plastic Pollution:

- **Massive Production and Consumption**
 - » Global plastic production continues to rise.
 - » Driven by cheap raw materials and high utility.
- **Single-Use Plastics (SUPs)**
 - » Bags, bottles, cutlery and packaging are major contributors to waste.
 - » Promote a throwaway culture.
- **Inadequate Waste Management**
 - » India generates ~9.3 million tonnes of plastic waste annually.
 - » A large share remains uncollected or openly dumped.
 - » Poor segregation and weak infrastructure → higher environmental leakage.
- **Non-biodegradability**
 - » Plastics persist for centuries.
 - » Break down into microplastics (<5 mm) and nanoplastics—extremely difficult to remove.

Impacts of Plastic Pollution:

- **Environmental Damage**
 - » Marine: ingestion, entanglement, habitat loss.
 - » Terrestrial: clogged drains → urban flooding.
 - » Plastics help spread invasive species.
 - » Contribute to climate change through GHG emissions.
- **Human Health**
 - » Toxic additives (BPA, phthalates) linked to endocrine disruption, cancers, reproductive issues.
 - » Microplastics detected in human blood, lungs, and placenta.
- **Economic Losses**
 - » Affects tourism, fisheries, and agriculture.
 - » High clean-up costs.
 - » Loss of valuable recyclable materials.

India's Policy and Regulatory Framework:

- **Plastic Waste Management (PWM) Rules 2016 & Amendments**
- Minimum carry bag thickness: 120 microns.
 - » Nationwide ban on certain SUP items (2022).
 - » Extended Producer Responsibility (EPR): Producers and importers must collect and recycle their plastic packaging.
- **Supporting Initiatives**
 - » Swachh Bharat Mission (SBM).
 - » India Plastics Pact (industry-led circular economy initiative).
 - » Use of plastic waste in road construction.
 - » Awareness and source segregation campaigns.

Conclusion:

Plastic pollution is escalating into a global environmental, health, and economic emergency. The Pew Report shows that without systemic change, plastic waste will more than double by 2040, overwhelming ecosystems and threatening human well-being. India and the world must adopt a multi-layered approach—cutting production, redesigning materials, strengthening waste systems, and building a

robust circular economy—to prevent plastics from undermining sustainable development goals.

India's Natural Areas Losing Ground to Invasive Species

Context:

A recent study published in *Nature Sustainability* warns that India's natural ecosystems are increasingly threatened by invasive alien plants, resulting in ecological, socio-economic, and livelihood impacts.

About Invasive Species:

- Invasive species are non-native organisms that spread rapidly, outcompeting native flora and fauna, altering ecosystem structure, and disrupting ecological balance.
- **Key Findings:**
 - » India loses approximately 15,500 sq km of natural areas every year to invasive alien plants.
 - » Nearly two-thirds of natural ecosystems in India now host 11 major invasive plant species, including *Lantana camara*, *Chromolaena odorata*, and *Prosopis juliflora*.

Drivers of Invasion:

- **Climate Change:** Rising temperatures, altered rainfall patterns, and more frequent fires facilitate invasive species expansion.
- **Land-Use Change:** Conversion of forests, grasslands, and wetlands for agriculture or development increases ecological vulnerability.
- **Biodiversity Loss:** Habitat fragmentation and loss of native species reduce ecosystem resistance to invasives.
- **Fire Regimes & Grazing Pressure:** Changes in fire frequency and livestock grazing influence the spread of wet- and dry-biome invasive species differently.

Name of invasive species	Total infested area (in Ha.)	Area removed upto October 2025 (in Ha.)	Remaining area to be removed (in Ha.)
Lantana camara	144034	26735	117299
Prosopis juliflora	23454	4685	18769
Senna spectabilis	2446	1963	483
Wattle	7429	1327	6102
Total	177363	34710	142653

Major Invasive Species in India:

- **Lantana camara:** Dominant across most states, affecting forests and grasslands.
- **Chromolaena odorata:** One of the fastest-spreading invasive plants in India, with widespread distribution that significantly alters native ecosystems.
- **Prosopis juliflora:** Introduced to prevent desertification; now dominates dry regions, displacing native shrubs essential for wildlife and pastoral communities.
- **Other notable species:** Ageratina adenophora, Mikania micrantha, Xanthium strumarium.

Vulnerable Ecosystems:

- Western Ghats, Himalayas, and North-East, Ecologically sensitive regions experiencing nearly double the invasion rates.
- Dry grasslands of Peninsular India, wet grasslands along the Ganga-Brahmaputra basin, Shola grasslands of the Western Ghats, and savannas. Particularly vulnerable to invasive expansion.
- Entire ecosystems risk shifting from native dominance to invasive dominance within a generation if left unchecked.

Socio-Economic Impacts:

- **Livelihoods at Risk:** Reduced fodder and fuelwood availability, declining soil fertility, and restricted access to water and grazing

areas.

- **Economic Losses:** India suffered losses worth Rs.8,30,000 crore (\$127.3 billion) due to invasive species between 1960 and 2020.
- **Health Impacts:** Respiratory ailments and nutritional insecurity associated with certain invasive species.
- **Displacement & Migration:** Rural and pastoral communities increasingly compelled to travel longer distances for essential resources.

Environmental & Ecological Consequences:

- **Biodiversity Loss:** Native plant and animal species are displaced, disrupting ecosystem functions.
- **Altered Ecosystem Dynamics:** Soil moisture, fire regimes, and grazing patterns change at different rates for wet- and dry-biome invaders.
- **Accelerated Spread:** Species once confined to arid zones are now expanding into Himalayan forests and wet evergreen ecosystems.

Conclusion:

Invasive alien plants are accelerating ecosystem transformation in India, posing severe threats to biodiversity, livelihoods, and ecological stability. Immediate, coordinated and science-driven interventions are essential to prevent a larger socio-ecological crisis. Establishing a National Invasive Species Mission is critical to safeguarding India's natural heritage and supporting rural livelihoods.

Great Nicobar Project

Context:

In the area designated for the proposed mega infrastructure project on Great Nicobar Island, several remarkable new species linked to the region's biodiversity have recently been discovered. Since 2021, about 40 new species have been identified here, nearly half of them reported in 2025 alone.

Key Discoveries:

- Among the most notable discoveries is a new wolf snake, *Lycodon irwini*, named after the famous Australian conservationist Steve Irwin. Only four records of this species exist so far. Given its highly restricted range and potential threats, researchers have recommended that it be classified as “Endangered” under the IUCN Red List.
- From the same region, a potentially new bird species, the Great Nicobar Crake (*Rallina* sp), has also been reported. It has been photographed only three times in the past decade. Researchers note that its distinctive morphological traits suggest it could be a new species.

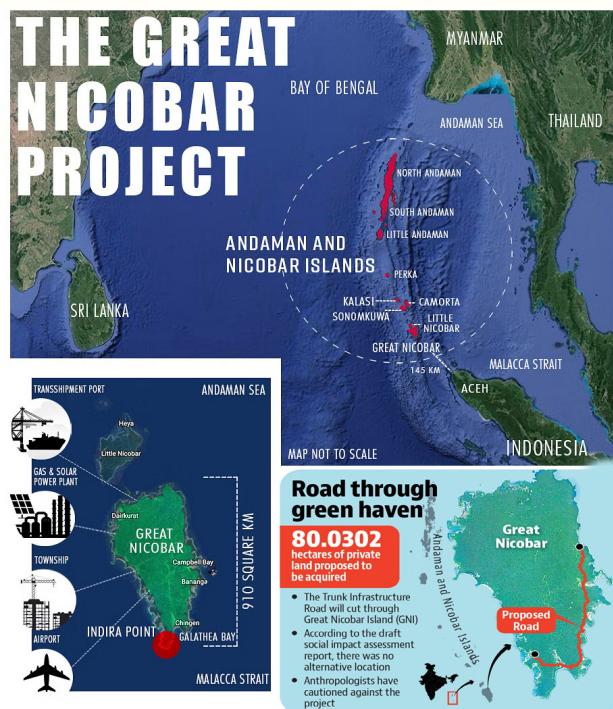
About the Project

- » The Great Nicobar Island Project, conceptualised by NITI Aayog and launched in 2021, aims to develop:
 - An International Container Transshipment Terminal (ICTT)
 - A greenfield international airport
 - A modern township
 - A gas-solar power plant
- » Implementing agency: Andaman and Nicobar Islands Integrated Development Corporation (ANIIDCO)
- » It aligns with Maritime Vision 2030 and is a core initiative under the Amrit Kaal Vision 2047.

Strategic Significance

- **Transshipment and Trade**
 - » ICTT will reduce India’s dependence on foreign hubs like Singapore and Colombo.
 - » Enhances India’s integration into global supply chains.
- **Dual-Use Greenfield Airport**
 - » Boosts civilian connectivity, tourism, and enhances defence preparedness.
- **Strategic Location Advantages**
 - » Great Nicobar lies near key global shipping arteries—the Malacca, Sunda, and Lombok Straits.
 - » Offers monitoring capability over crucial

- trade and energy routes.
- » Provides proximity to strategic locations such as:
 - Sabang (Indonesia)
 - Coco Island (Myanmar)
 - Proposed Kra Canal (Thailand)
- » Lies nearly equidistant from Colombo, Port Klang, and Singapore, positioning India at the heart of Indo-Pacific sea trade.
- **Maritime Security**
 - » Andaman & Nicobar Islands form India’s first line of maritime defence.
 - » Share maritime boundaries with Myanmar, Thailand, Indonesia, and Bangladesh.
 - » Enable India to exercise rights over a vast Exclusive Economic Zone (EEZ) under UNCLOS (1982).
- Strengthens naval reach against:
 - Piracy
 - Trafficking
 - Terrorism
 - Great-power competition (especially Chinese naval presence)



About Great Nicobar Island

- Part of the 836-island Andaman & Nicobar chain, separated by the Ten Degree Channel.
- Largest Nicobar island (910 sq km), dominated by dense rainforest.
- Contains Indira Point, India's southernmost point, 90 nautical miles from Sumatra.
- Home to:
 - Shompen and Nicobarese tribes
 - Two national parks
 - A designated biosphere reserve
 - The Great Nicobar Biosphere Reserve was added to the UNESCO Man and Biosphere (MAB) list in 2013.

Conclusion:

Great Nicobar hosts about 650 plant species and over 1,800 species of fauna, with nearly 24% endemism. These ongoing discoveries highlight the island's rich biodiversity and reinforce the need for its conservation.

Roadmap to Enable India's Net Zero Targets

Context:

India launched its first-of-its-kind R&D Roadmap for CCUS on 2 December 2025, prepared by the Department of Science and Technology (DST) and inaugurated by Prof. Ajay Kumar Sood, Principal Scientific Adviser to the Government of India. It aims to guide coordinated action, foster collaboration, and accelerate deployment of CCUS technologies.

- Supports India's goal of achieving net-zero emissions by 2070 and aligns with the vision of *Viksit Bharat@2047*.

Strategic Significance and Objectives:

- **Climate Mitigation:** Reduces India's carbon footprint, particularly in hard-to-abate sectors such as power, cement, and steel.
- **Technology Advancement:** Balances the commercial readiness of current technologies with next-generation, breakthrough scientific solutions.

- **Global Leadership:** Reinforces India's position as a responsible global partner in climate action.
- **Sustainable Development:** Integrates industrial growth with environmental responsibility.

Implementation Framework

- **Translational R&D:** DST has established CCUS test beds in industrial environments to validate technologies.
- **Public-Private Partnerships (PPPs):** Encourages innovative collaborations for faster deployment.
- **National Excellence Centres:** DST has set up three National Centers of Excellence in CCUS.
- **Supportive Frameworks:** Emphasizes skilled human capital, regulatory and safety standards, and shared infrastructure.
- **Funding and Strategic Guidance:** Linked with initiatives like the Rs. 1 Lakh Crore Research, Development & Innovation (RDI) Scheme, promoting private-sector-led innovation.

About India's Commitment to Net Zero Emissions target:

- India is committed to achieving net-zero greenhouse gas emissions by 2070.
- This commitment aligns with the broader Panchamrit declaration made at COP26 (Glasgow, 2021).

PM MAKES FIVE PLEDGES

- 1 India will increase its non-fossil energy capacity to 500GW by 2030
- 2 India will meet 50% of its energy requirements from renewable energy by 2030
- 3 India will reduce the total projected carbon emissions by one billion tonnes from now to 2030
- 4 By 2030, India will reduce the carbon intensity of its economy by 45% (from a previous target of 35%)
- 5 By 2070, India will achieve the target of net zero

WHAT IS NET ZERO?

Net zero refers to a balance where emissions of greenhouse gases are offset by the absorption of an equivalent amount from the atmosphere. Experts see net zero targets as a critical measure to successfully tackle climate change and its devastating consequences.

PLEDGES BY TOP THREE EMITTERS

 CHINA: Beijing announced no new pledges on Monday. It previously pledged net zero by 2060.
 UNITED STATES: The US touted domestic legislation to spend \$555bn to boost renewable power and electric vehicles. It has pledged net zero by 2050.
 INDIA: The country's economy will become carbon neutral by the year 2070

About short- and long-term climate targets:

- » Non-fossil fuel energy capacity of 500 GW by 2030.
- » Renewable energy to meet at least 50% of total energy requirements by 2030.

- » CO₂ emissions reduction by 1 billion tons by 2030.
- » Carbon intensity reduction to below 45% by 2030.
- These targets lay the foundation for achieving net-zero emissions by 2070.

Strategies that India adopted:

- Shift to clean energy alternatives including solar, wind, and hydropower.
- Hydrogen energy initiatives, including the National Hydrogen Energy Mission and production-linked incentives.
- Enhanced manufacturing capacities for renewable energy and energy efficiency.
- Emerging technologies: 2G ethanol pilot, hydrogen valleys, comfort climate box for tropical regions, heating and cooling virtual repository.
- **Bio-based economy:** Roadmap toward \$150 billion by 2025, supporting advanced biofuels and waste-to-energy technologies.

Conclusion:

The CCUS R&D Roadmap is a strategic instrument for India's climate action, providing guidance on technology development, funding, and collaboration. It positions India to meet its net-zero commitments by 2070, strengthen its sustainable development agenda, and enhance global climate leadership.

Great Indian Bustard Protection

Context:

Recently, the Supreme Court of India delivered a landmark judgment aimed at strengthening the legal and ecological safeguards for the Great Indian Bustard (GIB), while simultaneously restructuring the planning framework for the Green Energy Corridor (GEC) in the renewable-energy-rich states of Rajasthan and Gujarat.

Why the Case Matters?

- The Great Indian Bustard is among the

world's most endangered bird species, with only a few dozen individuals remaining in the wild, largely confined to Rajasthan and Gujarat.

- Its population has declined sharply due to collisions with overhead power lines, habitat fragmentation, and other anthropogenic pressures.
- The Green Energy Corridor (GEC) is a flagship national infrastructure project designed to establish dedicated transmission lines and substations for evacuating and integrating large-scale renewable energy—particularly solar and wind—into the national grid. It is central to India's clean energy ambitions, including the target of 500 GW of non-fossil fuel capacity by 2030.
- The GEC comprises both Intra-State (within states) and Inter-State (between states) transmission systems.
- A conflict arose because several proposed overhead transmission lines traversed critical GIB habitats, bringing biodiversity conservation into direct tension with renewable energy expansion.

Great Indian Bustard

Supreme Court constituted a seven-member committee to find a balance between conservation measures for the Great Indian Bustard (GIB) and efforts to generate renewable energy in the same regions.

Threats:

- ❖ Collision with power transmission lines
- ❖ Hunting
- ❖ Habitat loss

Generally Found in:



Key Directives of the Supreme Court:

- Conservation Zones and 'No-Go' Areas

- » The Court reaffirmed that protection of the GIB is non-negotiable and finalised Revised Priority Conservation Areas, covering:
 - 14,013 sq km in Rajasthan
 - 740 sq km in Gujarat
- » These zones are now legally binding and must be factored into all future infrastructure and energy-planning decisions.

▪ Restrictions on Renewable Infrastructure in Priority Areas

- » No new overhead power transmission lines are permitted within these zones, except through specially designated power corridors.
- » Wind and solar projects exceeding 2 MW capacity are prohibited within priority areas to minimise additional mortality risks to the species.

▪ Reorientation of the Green Energy Corridor

- » The GEC must now be routed through dedicated, narrow corridors, avoiding core GIB habitats.
- » For instance, corridors of up to 5 km width south of the Desert National Park in Rajasthan have been identified.
- » Several high-capacity transmission lines may require rerouting, undergrounding, or phased delays, posing operational and financial challenges.

▪ Deadlines and Compliance

- » Existing high-voltage transmission lines within priority conservation areas must be undergrounded or rerouted within two years.
- » Certain transmission assets in Gujarat have been granted extended compliance timelines, up to 2028.

▪ Technological and Regulatory Balancing

- » The Court declined to mandate universal undergrounding of all power lines, citing technical, geological, and financial constraints.
- » Limited exemptions have been allowed for small distribution lines near

settlements, where undergrounding may be impractical.

Significance:

- **New planning paradigm:** Integrates biodiversity conservation directly into energy and infrastructure planning.
- **Regulatory certainty:** Provides clarity to developers while imposing firm ecological limits in sensitive landscapes.
- **Conservation priority:** Reinforces the constitutional duty to protect endangered species.
- **Climate-biodiversity trade-off:** Highlights the complex challenge of pursuing climate mitigation without undermining wildlife conservation.

Conclusion:

The Supreme Court's 2025 judgment marks a decisive shift in India's renewable energy governance framework. While it avoids a complete derailment of the Green Energy Corridor, it firmly embeds ecological red lines into infrastructure planning. The ruling underscores a critical principle: India's energy transition must advance not at the expense of biodiversity, but through carefully negotiated coexistence between development and conservation.

Science & Technology



BlueBird Communications Satellite and India's Expanding Space Commercialization

Introduction:

India's space programme has long been admired for its scientific excellence and cost efficiency. The recent successful launch of the BlueBird Block-2 (BlueBird-6) communication satellite on 24 December 2025 marks a decisive shift in the nature of India's engagement with outer space. It reflects India's transition from a predominantly state-led scientific endeavour towards a commercially competitive and geopolitically consequential space economy. Executed by the Indian Space Research Organisation (ISRO) using the LVM3-M6 rocket from Sriharikota, the mission represents far more than a routine satellite launch.

It signals India's arrival on the global stage as a credible player in the domain of heavy commercial satellite launches and next-generation space-based connectivity. What distinguishes the BlueBird-6 mission is not merely its technical success, but the ecosystem it represents—one in which public capability, private enterprise, international cooperation, and strategic ambition are converging.

About BlueBird Block-2 Satellite:

- The BlueBird Block-2 satellite, developed by AST SpaceMobile Inc., is part of a next-generation constellation designed to revolutionize global communications. Weighing approximately 6,500 kilograms, BlueBird-6 stands among the heaviest commercial satellites ever launched by

ISRO, highlighting the maturity and robustness of India's launch systems. The satellite is engineered to provide space-based cellular broadband connectivity directly to standard smartphones, eliminating the need for specialized ground terminals or infrastructure.

- A key feature of the BlueBird-6 satellite is its massive phased-array antenna system, covering nearly 2,400 square feet. These advanced antennas enable continuous, high-speed connectivity across vast geographical areas, particularly in remote, rural, and underserved regions where terrestrial networks are weak or non-existent. By enabling direct-to-device communication from space, the BlueBird constellation aims to bridge the global digital divide, supporting essential services such as emergency communications, education, healthcare access, and disaster response.

About LVM3 Rocket: Backbone of India's Heavy-Lift Capability:

- The successful deployment of the BlueBird Block-2 satellite was made possible by ISRO's most powerful operational launch vehicle, the LVM3, formerly known as GSLV Mk-III. The LVM3 is a three-stage, all-weather rocket incorporating solid, liquid, and cryogenic propulsion systems. It is capable of carrying payloads of up to 8,000 kilograms to Low Earth Orbit (LEO)

and approximately 4,000 kilograms to Geosynchronous Transfer Orbit (GTO), making it central to India's heavy-lift launch requirements.

- The LVM3 has already proven its reliability through several high-profile missions, including Chandrayaan-2, Chandrayaan-3, and multiple batches of OneWeb satellites. It also serves as the designated launch vehicle for India's ambitious human spaceflight program, Gaganyaan. The successful launch of a complex and heavy commercial payload like BlueBird-6 further reinforces the LVM3's credibility as a globally competitive launch platform.

Commercial Arms of ISRO: Antrix & NSIL:

- India's expanding presence in the global space market is driven by two key commercial entities under ISRO. The first is Antrix Corporation Limited (ACL), established in 1992 as ISRO's original commercial and marketing arm. Antrix focuses on promoting ISRO's existing capabilities worldwide, including launch services, satellite transponders, remote sensing data, and technology transfers.
- The second and more recent entity is NewSpace India Limited (NSIL), established in 2019 as part of India's space sector reforms. NSIL plays a more comprehensive role by managing end-to-end commercial space activities. This includes satellite manufacturing through Indian industry, launch services, and execution of international commercial contracts. NSIL is central to enabling private sector

participation, expanding industrial capacity, and transforming India from a government-driven space program into a commercially competitive ecosystem.

The BlueBird-6 mission is a prime example of NSIL's evolving role, where India not only provides launch services but also integrates commercial, diplomatic, and industrial objectives into a single mission.



Strategic Implications of the BlueBird-6 Launch:

- Strategically, the successful launch of a sophisticated U.S. commercial satellite underscores the growing Indo-US collaboration in advanced space technologies. Space cooperation has emerged as a key pillar of bilateral relations, encompassing satellite launches, navigation systems, Earth observation, and deep-space exploration. By delivering a mission of such complexity, India enhances its credibility as a reliable and trusted launch partner for international clients.

- The mission also signals India's readiness to compete with established global launch providers by offering cost-effective, dependable, and technologically advanced launch solutions. This strengthens India's geopolitical standing and reinforces its role as a responsible spacefaring nation.

Economic and Commercial Significance:

- Economically, the BlueBird-6 mission represents a major boost to India's commercial space ambitions. Through NSIL, India can attract high-value international contracts, generate foreign revenue, and expand employment and industrial participation across the space supply chain. Indian companies benefit from opportunities in manufacturing, testing, integration, and support services associated with such missions.
- Furthermore, the mission positions India to capture a larger share of the rapidly growing global space economy, particularly in Low Earth Orbit broadband constellations. As demand for satellite-based internet connectivity increases worldwide, India's ability to launch large, advanced communication satellites places it in a strong competitive position.

India's Booming Space Commercialization Ecosystem:

- India's space sector is undergoing a profound transformation—from a government-dominated model led by ISRO to a vibrant, private sector-driven economy. India's space economy, valued at approximately \$8.4 billion in 2022, is projected to grow to nearly \$44 billion by 2033, aiming to capture 8–10% of the global space market. This rapid growth is driven by policy reforms, startup innovation, global investment, and expanding downstream applications.
- A key driver of this transformation is the Indian Space Policy 2023, which opened the space sector to private participation, permitted 100% Foreign Direct Investment (FDI) in several segments, and provided a clear regulatory framework for non-

government entities. These reforms have unlocked private capital and fostered innovation across the space value chain.

- As a result, over 400 space technology startups are now active in India, working across launch services, satellite manufacturing, Earth observation, data analytics, and space-based applications. Companies such as Pixxel, Skyroot Aerospace, and Agnikul Cosmos exemplify India's growing private launch and satellite capabilities. Government support institutions like IN-SPACe (Indian National Space Promotion and Authorisation Centre) and NSIL facilitate authorization, infrastructure access, and industry collaboration, while new venture capital funds and global investors are accelerating growth.

Key Sectors and Activities:

- India's commercial space growth spans multiple sectors. In manufacturing, private firms are increasingly building satellites, subsystems, and launch vehicle components, with emerging manufacturing clusters in southern India. In launch services, startups are developing cost-effective solutions, including small satellite launch vehicles (SSLV), which reduce barriers to space access.
- Space-based applications form another major growth area. Satellite data supports agriculture, water resource management (such as Jal Shakti initiatives), disaster relief, urban planning, climate monitoring, and national security. India is also advancing high-end capabilities, demonstrated by missions like SpaDeX (space docking experiment) and long-term plans for a national space station, reflecting growing technological ambition.

Conclusion:

The LVM3-M6 launch of the BlueBird Block-2 (BlueBird-6) communication satellite stands as a defining achievement in India's evolving space ecosystem. It showcases ISRO's heavy-lift launch capabilities, NSIL's growing commercial

role, and India's expanding international partnerships. More broadly, it reflects the success of India's space sector reforms, the rise of private enterprise, and the country's ambition to lead in next-generation satellite communications and space applications. As India's space commercialization accelerates,

missions like BlueBird-6 symbolize a future where scientific excellence, economic growth, and global collaboration converge, cementing India's place as a key driver of the global space economy.

Short Issues

Trace of Solar Magnetic Activity

Context:

Astronomers from the Indian Institute of Astrophysics (IIA) recently used 11 years of Calcium-Potassium (Ca-K) line spectroscopic data (2015–2025) from the Kodaikanal Solar Observatory to map solar magnetic activity across latitudes.

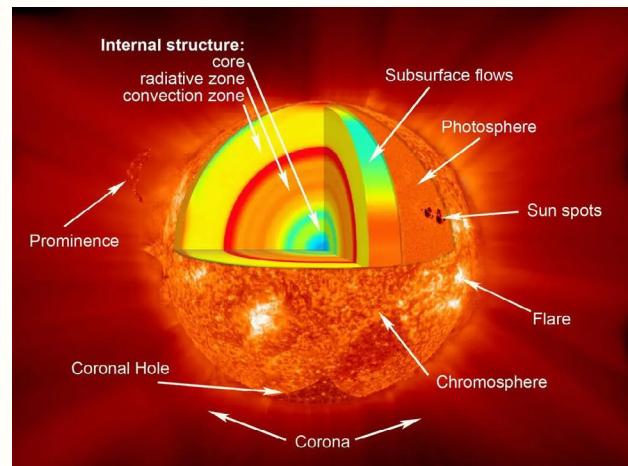
Importance of Studying Solar Magnetic Activity:

- The Sun undergoes 11-year solar cycles, with variations in magnetic activity.
- Solar disturbances affect Earth by:
 - » Disrupting satellite communication
 - » Affecting GPS and navigation
 - » Damaging power grids
 - » Influencing climate and atmospheric patterns
- Mapping magnetic activity helps predict space weather, crucial for India's increasing space-based infrastructure.

Key Findings of the Study:

- Most solar activity is concentrated between 40° north and south latitudes, with strongest activity around $15\text{--}20^{\circ}$ in both hemispheres.
- Hemispheric differences:
 - » The southern hemisphere shows steeper increases in activity at higher latitudes.
 - » Clear north-south asymmetries in magnetic activity were observed.

- Spectral response profiles correlated with magnetic filling factor and sunspot activity, confirming large-scale patterns in solar magnetic evolution.
- The study tracked changes from the peak of solar cycle 24 to the peak of solar cycle 25, showing predictable patterns in the 11-year solar cycle.



Significance for Science and Technology:

- **Better Understanding of the Solar Dynamo:** Patterns observed help decode:
 - » Temperature variations
 - » Magnetic field strength variations
 - » Evolution of magnetic features across the chromosphere
- **Improved Space Weather Prediction:** Helps forecast:
 - » Solar storms
 - » Coronal mass ejections (CMEs)
 - » Radio blackouts

- » Crucial for ISRO satellites, communication networks, aviation, and defence systems.

▪ Potential Applications

- » Planning satellite launches during quiet solar periods
- » Protecting power grids with early warning
- » Designing radiation-hardened space electronics

Relevance for India:

- India's growing satellite fleet, digital communication reliance, and power grid vulnerability make solar weather monitoring essential. Strengthens India's capabilities in:
 - » Space situational awareness
 - » Solar physics research
 - » Indigenous scientific instrumentation

Conclusion:

The Kodaikanal Solar Observatory's long-term Ca-K line data and innovative latitude-band technique have provided deeper insights into how solar magnetic activity evolves across latitudes. These findings are vital for enhancing India's space weather forecasting capability, protecting satellites and communication infrastructure, and strengthening scientific understanding of the Sun's magnetic dynamo.

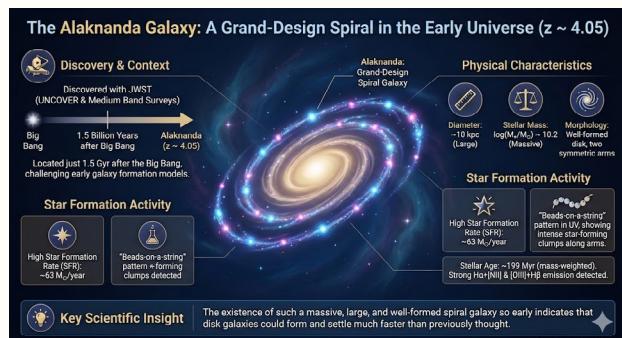
Pune Researchers Discover Spiral Galaxy from Early Universe

Context:

Indian researchers at National Centre for Radio Astrophysics (NCRA-TIFR), Pune have recently discovered a massive spiral galaxy named Alaknanda. The galaxy existed when the universe was just 1.5 billion years old ($\sim 10\%$ of its current age). The findings are published in *Astronomy and Astrophysics*, a leading European astronomy journal.

Significance of the Discovery:

- Challenges existing theories: Early galaxies were thought to be chaotic, clumpy, turbulent, and unstable.
- Alaknanda is well-structured, with a textbook spiral form resembling the Milky Way.
- Suggests that complex galactic structures were forming much earlier than previously believed.



Key Features of Alaknanda:

- **Spiral structure:** Two prominent spiral arms wrapping around a bright central bulge.
- **Size:** Diameter of approximately 30,000 light-years.
- **Distance:** Roughly 12 billion light-years away, representing the early universe.
- Named after the Himalayan river Alaknanda, as a "sister" to the Milky Way (Mandakini).

Observation Techniques:

- Discovered using NASA's James Webb Space Telescope (JWST).
- JWST allows observation of early universe galaxies formed just a few hundred million years after the Big Bang.
- Future studies will involve JWST and ALMA telescope (Chile) to study kinematics of gas and stars, and understand formation mechanisms of spiral arms.

Implications for Cosmology:

- Indicates the early universe was more mature than previously thought.
- Could point to alternative evolutionary

pathways for galaxy formation in the first few billion years.

- Studying Alaknanda's disk temperature (cold or hot) will help determine how spiral arms formed.

GPS Spoofing Incidents at Indian Airports

Context:

In a written reply to Parliament, the Government confirmed that several major Indian airports - including Chennai International Airport and Kempegowda International Airport (Bengaluru) - have reported incidents of GPS spoofing or GNSS interference.

About GPS Spoofing:

- GPS spoofing involves transmitting fake satellite signals to deceive GPS receivers into miscalculating position, speed, or timing.
- Unlike jamming, which blocks signals entirely, spoofing manipulates data without alerting the receiver.
- In aviation, spoofed signals can mislead pilots or autopilot systems during navigation, approaches, and landings.
- GPS is not only essential for aircraft navigation but also supports air traffic control, logistics, and surveillance systems, making spoofing a multi-layered threat.

Incidents and Impact:

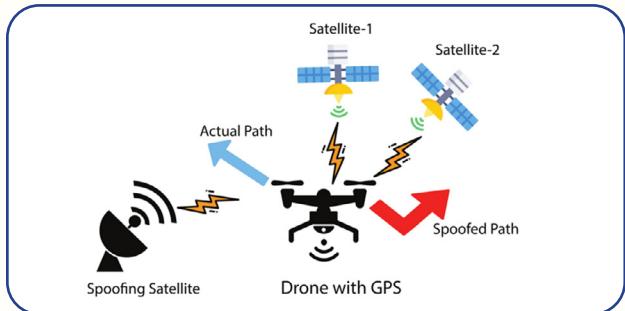
- Flights at Chennai, Bengaluru, Delhi, Mumbai, Kolkata, Hyderabad, and Amritsar experienced temporary GPS anomalies.
- Pilots had to revert to ground-based navigation aids for safe approaches and landings.
- No accidents or flight disruptions beyond minor rerouting were reported, indicating existing redundancies were effective.

Risks and Vulnerabilities:

- Spoofing poses a direct threat to flight safety by misleading aircraft on altitude, position,

or trajectory.

- It can affect multiple systems simultaneously, including cargo tracking, air traffic control, and digital communication.
- Repeated incidents hint at potential malicious attempts to compromise civil aviation or conduct cyber-intimidation.



Government Response:

- The Wireless Monitoring Organisation (WMO) and DGCA have been directed to identify sources of interference.
- Standard Operating Procedures (SOPs) for reporting GNSS anomalies have been issued.
- Redundant ground-based navigation systems are actively used as fail-safes.
- Coordination with cybersecurity agencies like CERT-In and NCIIPC has been intensified to strengthen aviation infrastructure against cyber threats.

Implications for Policy and Security:

- There is an urgent need for a robust GNSS security architecture and real-time spoofing detection systems.
- Regulatory oversight must be enhanced through audits, contingency planning, and inter-agency coordination.
- These events underscore the link between civil aviation safety and national security, especially in India's strategic Indo-Pacific airspace.

Conclusion:

The GPS spoofing incidents at Chennai and Bengaluru airports underscore the vulnerability of India's aviation infrastructure.

to cyber threats. While redundancies prevented immediate disasters, these events highlight the need for a multi-layered defence: secure GNSS systems, real-time monitoring, regulatory enforcement, and cyber-resilience planning. Balancing technological modernization with national security will be essential to maintain safe, reliable, and globally trusted air travel in India.

Genetic Factors Behind Early Oral Cancer in Indian Tobacco Chewers

Context:

A major new study by the Advanced Centre for Treatment, Research and Education in Cancer (ACTREC), part of Tata Memorial Centre (TMC), Mumbai, recently uncovered why some Indian tobacco chewers develop oral cancer much earlier than others. The study provides the first clear genetic explanation for inter-individual variation - why two persons with similar tobacco habit may have very different disease outcomes.

About Oral Cancer:

- Oral cancer is a type of cancer that starts in the mouth and can develop on the lips, tongue, gums, cheeks, floor of the mouth, or roof of the mouth.
- It occurs when cells in the mouth develop mutations in their DNA, causing them to grow and multiply out of control, forming a tumour.
- While often presenting as a painless, persistent lump, red or white patch, or ulcer, it is a serious condition that can spread and become fatal if not detected and treated early.
- Oral cancer remains a serious public health problem in India: annually about 1,41,342 cases are recorded.

Key Genetic Findings:

- **Identification of Key Genetic Markers**
 - » The study identified specific genetic loci

on chromosomes 5 and 6 associated with a significantly higher risk of oral cavity cancer. These loci are located near genes such as:

- CLPTM1L-TERT (linked to telomere length and cell aging)
- HLA-DRB1 and HLA-DQB1 (important for immune function)
- CEP43 (involved in cellular structural functions)

High Genetic Susceptibility Leads to Earlier Onset

- » Researchers calculated a Polygenic Risk Score (PRS) for participants.
- » Tobacco chewers with high PRS developed Buccal Mucosa cancer 10 years earlier than those with low PRS.

UNDERSTANDING ORAL CANCER



SYMPTOMS

- Sore in the mouth
- Pain or difficulty swallowing
- Lumps or thickening in the cheek

RISK FACTORS

- Tobacco use
- Heavy alcohol consumption
- HPV infection
- Excessive sun exposure
- Avoid tobacco
- Limit alcohol
- Maintain good oral hygiene

PREVENTION

Increased Cancer Risk Among Tobacco Chewers

- » Tobacco chewing alone increases oral cancer risk 26-fold.
- » Among tobacco chewers, individuals with high-risk genetic markers have double the risk of developing oral cancer compared to those with low genetic risk.

Implications for Public Health and Policy:

Aspect	Implication
Screening & Early Detection	Genetic risk profiling and PRS-based screening can help identify high-risk individuals for frequent monitoring, even before symptoms manifest.
Targeted Preventive Strategies	Focused anti-tobacco campaigns and tailored counselling for individuals with high genetic risk — especially in rural and high-prevalence areas.
Precision Medicine & Treatment	Knowledge of genetic mutations enables personalised therapy, targeted drugs, and more effective treatment regimes.
Policy Reinforcement	Reinforces the urgency of tobacco control measures, especially on smokeless tobacco and betel quid — primary contributors to oral cancer in India.

WHO Issues Guidelines for GLP-1 Weight-Loss Drugs & Obesity Treatment

Context:

The World Health Organization (WHO) has released its first-ever guidelines for the use of GLP-1 (Glucagon-Like Peptide-1) medicines to combat the global obesity crisis.

About Obesity:

- The World Health Organization (WHO) defines obesity as an abnormal or excessive accumulation of fat that presents a health risk. For adults, this is defined by a Body Mass Index (BMI) of 30 or greater.
- For children and adolescents, the definition is based on BMI-for-age percentiles compared to WHO growth standards.

About Obesity and Global Burden:

- Current Statistics:** Approximately 1 billion people worldwide are living with obesity.
 - Among them, 188 million are school-

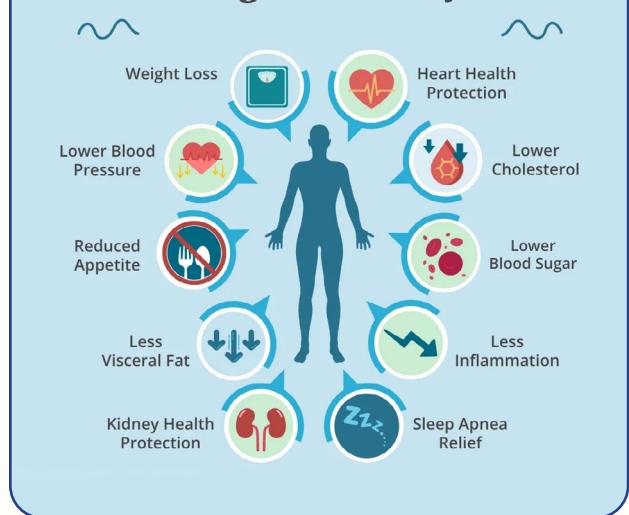
aged children and adolescents.

- Future Projections:** Without effective interventions, the global obesity numbers are expected to double by 2030.
- Health Implications:** Obesity is a significant risk factor for chronic conditions such as diabetes, cardiovascular diseases, and other metabolic disorders.

About GLP-1 Medicines:

- GLP-1 Therapies:** Currently, 12 GLP-1 therapies are approved for obesity or Type-2 diabetes treatment.
- Pipeline:** Over 40 more agents targeting GLP-1 or multiple receptors are under development.
- Function:** These drugs aid in effective weight loss, complementing lifestyle interventions.
- Target Group:** WHO recommends their use in adults (excluding pregnant women), alongside intensive behavioural therapy.

The Benefits of GLP-1 Drugs for Obesity



Key Recommendations of WHO Guidelines:

- Comprehensive Obesity Care**
 - Include screening, early diagnosis, and management of obesity-related complications.
 - Combine pharmaceuticals, surgery, and lifestyle interventions for holistic care.

Ozempic Launched in India

▪ Long-Term Use of GLP-1 Drugs

- » Recommended for chronic care, but limited evidence on long-term safety, dose titration, and maintenance therapy.
- » Continuous monitoring and further research are essential.

▪ Equitable Access to Medicines

- » GLP-1 drugs included in WHO's Essential Medicines List to promote wider availability.
- » Encourages generic drug production and pre-qualification for international procurement.

▪ Healthcare System Strengthening

- » Train healthcare providers for obesity management.
- » Establish patient registries and referral pathways for chronic care.
- » Strengthen procurement and cold-chain systems to ensure drug efficacy.
- » Implement robust monitoring frameworks to track treatment outcomes.

About World Health Organization (WHO):

- The World Health Organization (WHO) is a specialized agency of the United Nations responsible for international public health.
- Established on April 7, 1948, and headquartered in Geneva, Switzerland, WHO's primary objective is to ensure the highest possible level of health for all people worldwide.
- It defines health as "a state of complete physical, mental and social well-being, not merely the absence of disease or infirmity."

Conclusion:

WHO's guidelines emphasize a multi-pronged approach to obesity, combining lifestyle intervention, behavioural therapy, and GLP-1 drugs. The guidelines also highlight the need for long-term research, equitable access, and health system strengthening to manage obesity as a chronic disease.

Context:

Recently, Danish pharmaceutical company Novo Nordisk launched Ozempic (injectable semaglutide) in India. Ozempic is a once-weekly injectable medication designed to help manage Type 2 Diabetes Mellitus (T2DM). Type 2 Diabetes Mellitus is a chronic metabolic disorder in which the body either does not produce sufficient insulin or fails to use insulin effectively (insulin resistance), leading to elevated blood glucose levels.

About Ozempic:

- **Class:** GLP-1 receptor agonist (GLP-1 RA)
- **Mechanism of Action:**
 - » Stimulates the pancreas to release insulin in a glucose-dependent manner when blood sugar levels are high.
 - » Suppresses excessive glucose production by the liver.
 - » Regulates appetite and food intake by acting on hunger-control centres in the brain.
- **Indications:**
 - » Adults with inadequately controlled Type 2 diabetes.
 - » Used as an adjunct to diet modification and physical exercise.
- **Additional Benefits:**
 - » Supports weight loss in patients with Type 2 diabetes.
 - » Reduces the risk of cardiovascular and kidney-related complications associated with diabetes.

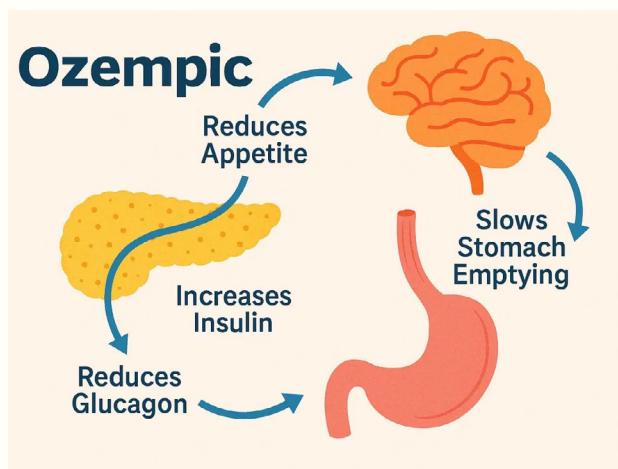
About GLP-1 Drugs:

- GLP-1 drugs, such as semaglutide (Ozempic / Wegovy) and tirzepatide (Mounjaro / Zepbound), mimic the action of the natural glucagon-like peptide-1 (GLP-1) hormone.
- They help regulate blood glucose levels, enhance insulin response, slow gastric emptying, and suppress appetite.
- These drugs have demonstrated significant benefits in obesity management and overall

metabolic health.

Benefits of GLP-1 Drugs:

- Improved Insulin Secretion:** GLP-1 drugs enhance glucose-dependent insulin secretion from the pancreas and reduce hepatic glucose production.
- Cardiovascular and Renal Benefits:** Clinical studies show that these medications can reduce cardiovascular risk and offer renal protection in patients with Type 2 diabetes.
- Weight Loss Support:** By suppressing appetite and slowing digestion, GLP-1 drugs contribute to sustained and clinically meaningful weight loss.



Efficacy of Ozempic:

- Clinically proven to significantly reduce HbA1c levels while providing weight-loss benefits.
- Demonstrates cardiovascular and kidney protection in patients with Type 2 diabetes.
- The once-weekly injectable formulation improves treatment adherence compared to daily oral medications.

Implications for Public Health:

- India has a high and rising prevalence of Type 2 diabetes and obesity, underscoring the need for effective long-term therapies.
- Ozempic and other GLP-1 drugs may improve the management of chronic metabolic diseases, thereby reducing long-

term complications and healthcare costs.

- Wider adoption could support India's preventive healthcare goals, particularly in urban populations affected by lifestyle-related disorders.

Conclusion:

The launch of Ozempic in India represents a significant advancement in the management of Type 2 diabetes and obesity, especially for patients requiring integrated metabolic care. While the drug offers multiple clinical benefits, its use must be carefully monitored to ensure safety, affordability, and appropriate prescription. With expanding therapeutic options, personalized treatment approaches, and potential cost reductions in the future, Ozempic could emerge as a key tool in India's fight against diabetes and obesity, aligning with broader public health objectives.

Project Suncatcher

Context:

Recently, Google CEO Sundar Pichai announced that the company has begun work on a long-term research initiative, Project Suncatcher, aimed at deploying solar-powered data centres in space by 2027.

About Google's Project Suncatcher:

- Project Suncatcher is a long-term research initiative announced by Google, which seeks to gradually shift computational workloads to space-based, solar-powered satellite constellations.
- Key Features:**
 - Deployment of small-scale data centre racks aboard satellites as early-stage prototypes
 - Use of Tensor Processing Units (TPUs), Google's custom AI chips optimised for large-scale machine learning workloads
 - Optical (laser) inter-satellite links to enable data-centre-level computation across satellite constellations

- » Reliance on solar energy, ensuring continuous, clean, and uninterrupted power supply
- » Use of chips tested for radiation tolerance to withstand harsh space conditions
- Google plans to launch two prototype satellites by early 2027, in partnership with Planet Labs, as part of a learning and validation mission.

Reasons Behind Space-Based Data Centres:

- **Environmental limits on Earth:** AI-driven data centres consume vast amounts of electricity and water. Global electricity demand from data centres is projected to rise sharply by 2030, exacerbating climate stress.
- **Advantages of space:** Near-unlimited solar energy availability, zero freshwater consumption, and minimal land-use constraints.
- **Energy and infrastructure security:** Terrestrial data centres face risks from natural disasters, cable disruptions, and grid failures, whereas space offers more predictable solar exposure.
- **Data sovereignty considerations:** The Outer Space Treaty (1967) creates a legal grey zone that could enable multi-country data hosting beyond traditional national jurisdictions.
- **Lower space access costs:** Reusable launch vehicles and growing private-sector participation have significantly reduced the cost of accessing space.

Challenges and Concerns:

- **High costs:** Launch, maintenance, upgrades, and in-orbit repairs remain expensive and technically complex.
- **Latency issues:** Long communication distances introduce delays, limiting suitability for real-time applications.
- **Cybersecurity risks:** Securing space-based data infrastructure lacks clear global standards and enforcement mechanisms.
- **Regulatory gaps:** Legal ambiguity may allow

concentration of space infrastructure in the hands of large technology corporations.

Other Companies Exploring Space-Based Data Centres:

Company	Initiative
OpenAI (Sam Altman)	Conceptualised Dyson sphere-like, solar-powered AI data centre ideas
Nvidia	Launched the Starcloud satellite carrying H100 GPU technology
Lonestar Data Holdings	Deployed a mini data centre to the Moon with 8 TB storage capacity
Amazon (Jeff Bezos)	Through Blue Origin, advocates moving polluting industries, including data centres, off Earth
Eric Schmidt	Proposed orbital data centres in collaboration with Relativity Space

Implications for India and Global Governance

- **For India:**
 - » Opportunities for ISRO-private sector collaboration in space-based computing and cloud infrastructure
 - » Relevance for the expansion of Digital Public Infrastructure (DPI)
 - » Need to develop indigenous capabilities in space-based AI, cloud computing, and data storage
- **For Global Governance:**
 - » International norms governing commercial computing activities in space
 - » Cybersecurity frameworks for protecting space-based digital assets
 - » Principles ensuring equitable access and preventing monopolisation of space infrastructure

Conclusion:

Google's Project Suncatcher signals a potential

shift toward space-based computing to address Earth's resource constraints and the rapid growth of AI workloads. While it offers promise in terms of energy sustainability, climate mitigation, and data resilience, it also raises significant cost, regulatory, and equity challenges. Ensuring that outer space remains a shared, secure, and sustainable global commons will be critical as this frontier evolves.

Microprocessor DHRUV64

Context:

On 15 December 2025, the Ministry of Electronics and Information Technology (MeitY) announced the launch of DHRUV64, India's first entirely indigenous 1.0 GHz, 64-bit dual-core microprocessor. It has been developed under the Microprocessor Development Programme (MDP) by the Centre for Development of Advanced Computing (C-DAC).

Key Features of DHRUV64:

- **Architecture:** DHRUV64 is a 64-bit, dual-core processor operating at 1.0 GHz, designed with modern architectural features such as superscalar design and out-of-order execution, enabling improved multitasking and higher performance.
- **Open-Source RISC-V ISA:** The processor is based on the RISC-V open instruction set architecture, which is royalty-free and reduces dependence on proprietary foreign technologies.
- **Design and Fabrication Ecosystem:** DHRUV64 is part of India's Digital India RISC-V (DIR-V) Programme. It has been designed by C-DAC and supported by national initiatives promoting indigenous chip design, verification, and prototyping.



Big tech move as India launches 1.0 GHz, 64-bit domestically designed microprocessor DHRUV64

Indigenous chip boosts defence, telecom semiconductor self-reliance

Applications and Use Cases:

- DHRUV64 is intended for deployment across a wide range of sectors:
 - » **Telecommunications:** 5G infrastructure and networking equipment requiring reliable and secure processing capabilities.
 - » **Industrial Automation:** Manufacturing systems, robotics, and control units that demand efficient processors for real-time operations.
 - » **Automotive Systems:** Embedded computing applications in vehicles, including safety systems, infotainment, and vehicle control units.
 - » **Consumer Electronics and IoT:** Smart devices, sensors, and connected appliances that benefit from an indigenous and trusted compute platform.
 - » **Strategic and Defence Applications:** Potential use in defence systems where supply-chain security, reliability, and hardware trustworthiness are critical.

Strategic and National Importance:

- **Reducing Import Dependence:** DHRUV64 lowers India's reliance on imported

microprocessors, thereby enhancing national security and digital sovereignty.

- **Strengthening the Domestic Ecosystem:** It builds upon earlier indigenous processor initiatives such as SHAKTI, AJIT, VIKRAM, and THEJAS64, reinforcing India's capabilities in chip design and prototyping.
- **Supporting Innovation:** The royalty-free RISC-V architecture enables startups, academia, and industry to develop and scale indigenous hardware and software solutions.
- **Skill Development and R&D:** The project converts India's theoretical and design expertise into deployable products, strengthening research pipelines and paving the way for next-generation processors such as Dhanush.

Policy and Programmatic Support:

- The development of DHRUV64 is backed by a coordinated government-led policy framework:
 - » The Digital India RISC-V (DIR-V) Programme promotes open-architecture chip design and prototyping.
 - » The Microprocessor Development Programme (MDP) provides funding and strategic direction for indigenous processor development.
 - » Complementary initiatives such as Chips to Startup (C2S), the Design-Linked Incentive (DLI) Scheme, and the India Semiconductor Mission (ISM) support the broader semiconductor design and manufacturing ecosystem.
- Together, these initiatives align with the national vision of Aatmanirbhar Bharat (self-reliant India) in advanced technologies and critical digital infrastructure.

Conclusion:

The launch of DHRUV64 represents a significant milestone in India's journey towards technological self-reliance in semiconductors. By reducing import dependence and strengthening the indigenous chip ecosystem,

DHRUV64 provides a trusted, homegrown computing platform for diverse applications and positions India as an emerging player in global semiconductor design and innovation.

ICMR Report 2025 on Malaria

Context:

India has witnessed a significant reduction in its malaria burden, according to the technical report India's Progress towards Malaria Elimination—Technical Report 2025, jointly released by the Indian Council of Medical Research—National Institute of Malaria Research (ICMR—NIMR) and the National Centre for Vector Borne Diseases Control (NCVBDC).

About Malaria:

- Malaria is a vector-borne infectious disease caused by Plasmodium parasites and transmitted through the bite of infected female Anopheles mosquitoes.
 - » **Symptoms:** Fever, chills, headache, fatigue, and in severe cases, organ failure and death.
 - » **Types of Plasmodium:** P. falciparum, P. vivax, P. malariae, P. ovale, and P. knowlesi.
 - » **Global Burden:** A major public health concern in tropical and subtropical regions.

Key Findings:

▪ Decline in Cases and Deaths

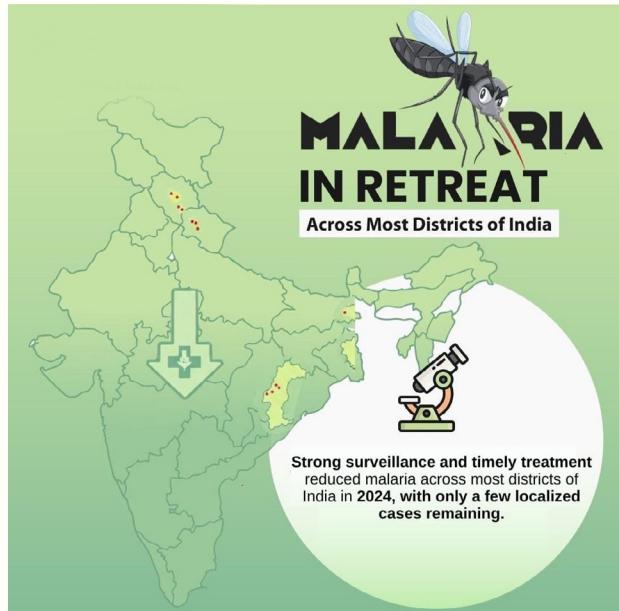
- » **Cases:** Reduced from 1.17 million in 2015 to approximately 227,000 in 2024, representing an 80–85% decline.
- » **Deaths:** Declined from 384 to around 83, a reduction of nearly 78%.
- » **Pre-Elimination Phase:** About 92% of districts report an Annual Parasite Incidence (API) of less than 1, indicating that India is largely in the pre-elimination stage.

▪ Drivers of Progress

» Strengthened disease surveillance

systems.

- » Expanded access to timely diagnosis and effective treatment.
- » Targeted vector control interventions.
- » Sustained political and programmatic commitment at both national and state levels.



Emerging Challenges in the Elimination Phase:

- **Heterogeneous and focal transmission:** Remaining cases are increasingly localised, sporadic, or imported.
- **Operational complexity:** Case detection, investigation, and rapid response become more demanding as transmission declines.
- **Urban transmission challenges:** Container breeding, construction sites, informal settlements, high population density, and fragmented healthcare delivery.
- **Health-system gaps:** Inconsistent private-sector reporting, limited entomological capacity, drug and insecticide resistance, operational difficulties in remote and tribal areas, and occasional shortages of diagnostics and treatment.
- **Cross-border transmission:** Influx of cases from Myanmar and Bangladesh, affecting

northeastern border districts.

Policy Implications:

- **Strengthened Surveillance:** Early detection and rapid response are critical, particularly in low-transmission and urban pockets.
- **Data-Driven Interventions:** Adoption of micro-strategies tailored to local ecological, demographic, and occupational contexts.
- **Multisectoral Coordination:** Enhanced collaboration across health, urban development, water and sanitation, and border management sectors.
- **Supply Chain Reliability:** Ensuring uninterrupted availability of diagnostics, drugs, and vector-control commodities.
- **Private Sector Engagement:** Mandatory reporting and capacity-building among private healthcare providers.

Way Forward:

- India is well positioned to achieve zero indigenous malaria by 2030, provided there is:
 - » Sustained political and financial commitment.
 - » Stronger multisectoral coordination.
 - » Enhanced vector surveillance and entomological capacity.
 - » Localised strategies for urban, tribal, and border regions.

Conclusion:

India's declining malaria burden reflects the success of public health governance, surveillance, treatment protocols, and vector control strategies. However, the transition from malaria control to elimination presents complex operational challenges. Addressing these through targeted, data-driven, and multisectoral approaches will be critical to realising the national vision of a malaria-free India by 2030.

Currency Devaluation in India: Causes, Consequences and Implications for Economic Stability

Introduction:

The Indian rupee slipping past the Rs.90-per-dollar mark for the first time has become one of the most critical economic developments of the year. This is not just a market headline; it reflects deeper pressures building within the global and domestic economy. A currency breaching such a psychologically important level affects import costs, inflation, savings, household budgets, business decisions, and overall economic sentiment. It also raises difficult questions about India's external fundamentals at a time when global uncertainties are already high.

Although India remains among the world's fastest-growing major economies, currency performance often responds more sharply to external balances and capital flows than to domestic growth alone. The rupee's continued weakness, therefore, needs to be understood in a wider context of geopolitical tensions, trade challenges, and market expectations.

Why This Level Matters:

- Crossing Rs.90 per dollar has symbolic and practical implications. Financial markets often place automated stop-loss and hedging orders around major round numbers. Once breached, these levels trigger additional demand for dollars, worsening the fall.
- More importantly, a weaker rupee affects households directly. For families sending students abroad, a tuition fee of \$100,000 rises by Rs.5 lakh when the exchange rate moves from 85 to 90, a jump equivalent to more than twice India's nominal per capita

income. Overseas travel, remittances, and even everyday products with imported components suddenly feel more expensive.

Global Forces Behind the Rupee's Weakness:

- **Strong US Dollar:** The US Federal Reserve's tight monetary policy and global investor preference for safe-haven assets have kept the dollar strong. Even modest global shocks push funds toward dollar-denominated assets, hurting emerging market currencies.
- **Geopolitical Uncertainty:** Conflicts, supply-chain disruptions, and rising commodity prices have made global investors risk-averse. Tensions in West Asia and Europe are particularly relevant for India because they often raise the crude oil import bill.
- **Global Commodity Price Movements:** Even when crude prices are not at peak levels, India's 85% dependence on oil imports means any rise directly pressures the currency. Higher prices of metals, fertilizers, and food commodities also add to dollar demand.

Domestic Drivers of Depreciation

- **High Import Dependence:** Energy, electronics, edible oils, fertilizers, and industrial inputs form a large part of India's import basket. When global prices rise or domestic demand expands, dollar outflows increase.
- **Current Account Pressures:** A widened current account deficit (CAD), driven by costly imports and stagnant exports, reduces the supply of dollars in the economy.
- **Capital Outflows:** Foreign portfolio investors

have been withdrawing funds from Indian markets in 2025, shifting money to developed markets offering higher yields. Each withdrawal requires converting rupees into dollars, weakening the currency further.

- **Limited RBI Intervention:** The central bank has allowed the rupee to find its own level, intervening only to control disorderly movement. This approach preserves foreign exchange reserves but also signals to the market that the currency may slide further.

Why the Rupee's Weakness Appears India-Specific:

- Interestingly, the US Dollar Index has not surged dramatically in recent months. This suggests that domestic factors—especially high dollar demand within India—are playing a bigger role.
- Corporates have been hedging more aggressively, importers have been front-loading payments, and foreign debt repayments have risen. Together, these add persistent pressure on the currency.
- Foreign investors, meanwhile, have reduced their exposure to emerging markets due to uncertain global monetary conditions. This combination of high dollar demand and low inflows has accelerated the rupee's slide.

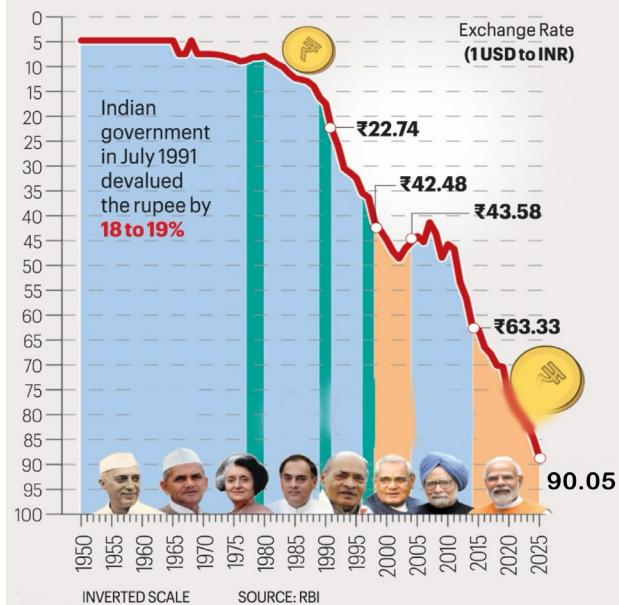
Impact on Commodity Prices:

- The immediate fallout of a weaker rupee is seen in imported inflation. Even if global prices remain unchanged, Indian consumers pay more in rupee terms. Key sectors affected include:
 - » **Crude Oil and Fuel:** Higher landed costs raise fuel prices, pushing transport and logistics costs upward. This has a cascading impact on food, freight, manufacturing, and retail prices.
 - » **Edible Oils:** India is one of the world's largest importers of palm and soybean oil. A weaker currency directly increases kitchen expenses and food inflation.
 - » **Gold and Silver:** Jewellery purchases become costlier during festive and wedding seasons. India's gold imports

also widen the trade deficit, adding to currency pressure.

- » **Industrial Metals:** Copper, aluminium, and other metals become more expensive, increasing input costs for infrastructure, construction, and manufacturing industries.

INDIAN RUPEE HITS RECORD LOW AGAINST DOLLAR



Impact on Households and Students

- A falling rupee affects families in visible and invisible ways:
 - » Foreign education gets significantly more expensive, especially when tuition, accommodation, and insurance are paid in dollars.
 - » Overseas travel costs rise, from visas and airfares to hotel stays and daily expenses.
 - » Imported goods and gadgets cost more, as many electronic items have high import components.
 - » Inflation may rise, as the RBI estimates a 5% rupee depreciation can add around 35 basis points to inflation.

What Happens If the Rupee Weakens

Further?

- » **Imported Inflation Intensifies:** Rising costs for fuel, food, and raw materials can strain household budgets.
- » **Wider Current Account Deficit:** Higher import bills stretch India's external finances and may prompt more aggressive RBI intervention.
- » **Higher Borrowing Costs:** India's external borrowing becomes costlier, affecting both government and corporate debt.
- » **Investor Sentiment Weakens:** Persistent currency pressure can deter FDI and portfolio inflows.
- Despite these concerns, India's strong domestic fundamentals—robust consumption, steady GDP growth, and healthy forex reserves—provide some cushioning.

Policy Measures Available:

- **Monetary Policy Tools**
 - » Interest rate adjustments
 - » Liquidity management operations
 - » These can influence capital flows and inflation expectations.
- **RBI's Forex Management**
 - » Selling dollars to smooth volatility
 - » Allowing the currency to adjust gradually
 - » Using forward market operations to manage liquidity
- **Government Measures**
 - » Incentives to attract FDI

- » Boosting export-oriented manufacturing
- » Reducing import dependence through energy transition, semiconductor manufacturing, and electronics production
- » Long-term reforms in logistics, supply chains, and trade competitiveness will also reduce pressure on the rupee.

Conclusion:

The rupee crossing Rs.90 per dollar marks an important moment for India's economy. Though depreciation is not unusual for an emerging market, the pace and timing of this fall highlight deeper structural challenges. Global geopolitical tensions, capital flow volatility, and trade imbalances have all contributed to the decline, while high import dependence magnifies the impact. A weaker rupee affects every layer of the economy—from fuel prices and industrial costs to the dreams of students planning to study abroad. Managing this volatility requires a careful balance of central bank intervention, trade policy reforms, and long-term efforts to strengthen India's external sector. The episode is a reminder that currency stability depends not only on domestic growth but also on the country's position in an unpredictable global financial system. Strengthening India's export competitiveness, attracting stable capital inflows, and reducing critical import dependence will be crucial as policymakers navigate this challenging period.

Short Issues

MGNREGA Resumption in Bengal

Context:

The Centre has resumed the implementation of MGNREGA in West Bengal after a gap of three years. This follows the Calcutta High Court directive asking the Union government to restart

the scheme prospectively from August 1, 2025, while allowing it to impose "special conditions".

Background of Suspension:

- Implementation of MGNREGA in West Bengal was suspended on March 9, 2022.
- The suspension was invoked under Section 27 of the MGNREGA Act, 2005, citing "non-compliance of directives of the Central Government".

Key Points of Resumption:

▪ Immediate Effect

- » The Ministry of Rural Development issued an order on December 6, 2025, resuming prospective implementation of MGNREGA in the state.

▪ Special Conditions and Regulatory Measures

- » The resumption is conditional, with measures aimed at ensuring transparency, integrity, and accountability.
- » These conditions relate to job cards, biometric attendance, financial management, labour budgeting, monitoring of works, accountability mechanisms, recovery processes, and penal action.

▪ Mandatory e-KYC for Workers

- » 100% e-KYC completion is required before any muster rolls are issued.

▪ Quarterly Labour Budget

- » Instead of annual approval, labour budgets for West Bengal will now be approved quarterly, based on performance and compliance with the special conditions.

▪ Cost Ceiling for Works

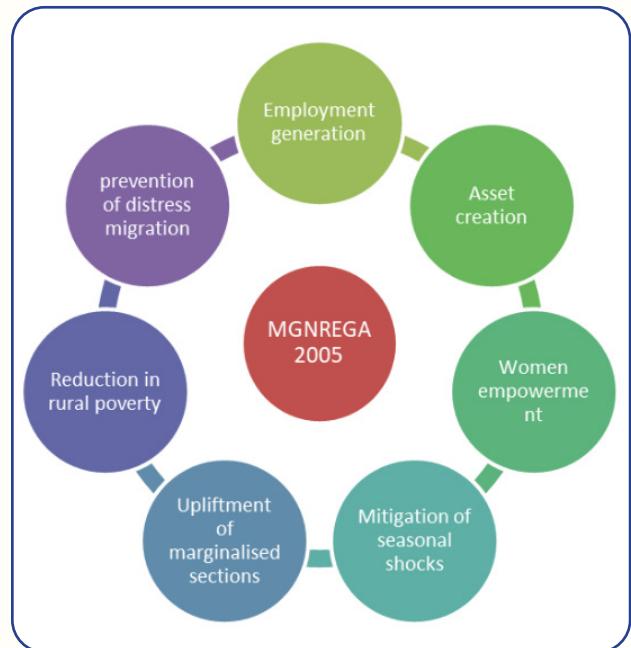
- » No work costing more than Rs.20 lakh is permitted under MGNREGA.
- » A Detailed Project Report (DPR) is mandatory for all community works and must be approved by the District Magistrate (DM) and District Programme Coordinator (DPC) for projects up to Rs.20 lakh.
- » All estimates must be generated using the SECURE software platform.

Significance of the Resumption:

- **Relief for Beneficiaries:** Millions of rural households dependent on MGNREGA wages stand to benefit from the revival of the scheme after three years.
- **Political Implications:** With West Bengal Assembly elections due next year, the resumption may ease economic distress for

rural voters and carry political implications for both the state and the Centre.

- **Administrative Reform:** Mandatory e-KYC, quarterly labour budgets, and DPR-based approvals are expected to enhance accountability, reduce leakages, and improve transparency in implementation.



About MGNREGS:

- Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) is implemented under the Mahatma Gandhi National Rural Employment Guarantee Act, 2005 (MGNREGA).
- It is one of the world's largest rights-based social security programmes.
- It provides a legal guarantee of at least 100 days of wage employment in a financial year to every rural household whose adult members volunteer to perform unskilled manual work.

Objectives of MGNREGS:

- Enhance livelihood security of rural households.
- Create durable assets such as water conservation structures, land development

works, and rural infrastructure.

- Strengthen natural resource management.
- Promote inclusive development and reduce distress-driven rural-to-urban migration.
- Empower marginalized groups including SCs, STs, women, and small or marginal farmers.

Key Features of MGNREGS:

- **Rights-Based Framework:** Provides a legal guarantee of wage employment—unique globally.
- **Demand-Driven Approach:** Employment is provided upon request; workers are entitled to unemployment allowance if work is not provided within 15 days.
- **Universal Rural Coverage:** Open to all rural households without income criteria.
- **Minimum 100 Days of Work:** States may offer additional days using their own funds.
- **Social Audits:** Conducted by Gram Sabhas to ensure transparency and accountability.
- **Time-Bound Wage Payments:** Wages must be paid within 15 days; delays require compensation.
- **Women's Participation:** At least one-third of workers must be women; many states exceed 50%.
- **Decentralized Planning:** Gram Sabhas and Panchayats play a central role in planning, prioritizing, and monitoring works.

Monetary Policy Committee (MPC) Meeting

Context:

The Reserve Bank of India (RBI), in its final Monetary Policy Committee (MPC) meeting of 2025, unanimously decided to reduce the repo rate by 25 basis points, bringing it down to 5.25%. This marks the fourth rate cut in 2025, following previous reductions of 25 bps in February and April, and 50 bps in June, while the rate remained unchanged in August and October.

Objectives and Rationale:

- The repo rate cut is aimed at:
 - » Boosting liquidity in the market.
 - » Encouraging spending in rate-sensitive sectors such as banking, real estate, and consumer durables.
 - » Supporting economic growth while keeping inflation within the RBI's target range.
- According to experts, the move signals the RBI's pro-growth stance, demonstrating readiness to support credit flow and demand-led recovery in the economy.

Impact on Home Loan Borrowers:

- The repo rate cut has direct implications for floating-rate home loans, as most are linked to the repo rate. Analysts estimate significant relief for borrowers:
 - » For a Rs.50 lakh home loan over 20 years at 8% interest, monthly EMI reduces from Rs.41,822 to Rs.41,047 (~Rs.775 relief).
 - » For a 15-year loan, EMI decreases from Rs.47,783 to Rs.47,064 (~Rs.719 relief).
 - » Considering cumulative rate cuts of 125 bps in 2025, the total net relief could be approximately Rs.3,939 per month for a 20-year loan and Rs.7,649 for a 15-year loan.
- Existing borrowers also benefit. They can either reduce their EMIs or shorten their loan tenure while maintaining the same EMI. For instance, a Rs.50 lakh 20-year loan taken at 9% at the beginning of 2025 could now finish 43 months earlier, and a 15-year loan could finish 22 months earlier.

Impact on Real Estate and Other Sectors:

- The repo rate cut is expected to positively impact real estate developers, enabling easier access to working capital, financing of large projects, and faster construction of townships and integrated developments.
- Consumer sectors are also expected to benefit due to increased disposable income from lower EMIs, boosting spending on

durables and other goods.

About monetary policy:

- Monetary policy refers to the use of monetary instruments by the central bank to regulate interest rates, money supply, and availability of credit in order to achieve the broader objectives of economic policy. Its primary aim is to maintain price stability while supporting economic growth.
- The Reserve Bank of India (RBI) is vested with the responsibility of conducting monetary policy, as mandated under the Reserve Bank of India Act, 1934.

Conclusion:

The RBI repo rate cut of December 2025 reflects a balanced policy approach — fostering growth, supporting credit flow, and offering relief to home loan borrowers, while maintaining price stability. The move is expected to stimulate investment, consumption, and real estate activity, reinforcing economic resilience as India heads into 2026.

C-Grade' for India's GDP Statistics

Context:

In its 2025 annual review of India under Article IV consultations, the IMF assigned a 'C' grade to India's national accounts data (which includes GDP / GVA statistics) — the second lowest on its four tier scale (A to D). A "C" signals that while data are provided, methodological and structural weaknesses remain. Notably, other statistical categories (prices, fiscal, external sector, financial statistics) received a "B" — indicating they are "broadly adequate."

Reason for C grade:

- The IMF cited several long standing issues with India's national accounts and GDP estimation methodology. Major concerns include:
 - Outdated Base Year (2011–12):** India

still uses 2011–12 as the base year for GDP, GVA, and related indices. Over one decade, the structure of the economy — sectoral composition, price dynamics, emergence of new sectors (digital services, platform economy) — has changed significantly. The outdated base distorts real value-added and growth estimates.

- Deflation Method Issues:** India often uses the Wholesale Price Index (WPI) to deflate nominal output to real GDP — instead of a comprehensive Producer Price Index (PPI) or sector wise deflators. This can introduce distortions, particularly with divergent inflation across sectors.
- Weak Informal Sector Coverage & Data Gaps:** The informal/unorganized sector remains large but is difficult to capture — data on small enterprises, unregistered services, household enterprises, etc., remain patchy. This undermines expenditure-side estimates, leading to potential underestimation or misreporting of value added and consumption.

INDIA'S NATIONAL ACCOUNTS STATISTICS: IMF 'C'

IMF ASSIGNS 'C' GRADE CITING METHODOLOGICAL WEAKNESSES



KEY ISSUES IDENTIFIED

- OUTDATED BASE YEAR:** GDP & CPI still use 2011–12 base (doesn't reflect current economy).
- LACK OF PPI:** WPI used as deflator due absence of Producer Price Index.
- DATA DISCREPANCIES:** Between production & expenditure data (informal sector undercoverage).
- SEASONAL ADJUSTMENT:** Quarterly GDP data lacks sufficient adjustment.

IMPACT & CONTEXT

- AFFECTS INTERPRETATION:** Challenges in understanding growth trends & economic health.

- COMPILED:** MoSPI uses UN-SNA 2008 framework

URGENT REFORMS NEEDED FOR ACCURATE DATA REFLECTION

Significance of IMF's Assessment:

- Policy Formulation & Macroeconomic Management:** Reliable GDP, GVA, inflation, and fiscal data underpin monetary policy, fiscal planning, social welfare schemes,

and macroeconomic forecasting. Data gaps hinder effective decision-making.

- **Investor Confidence & Global Perception:** Institutional investors, multilateral agencies, and rating agencies rely on credible data. Persistent methodological issues may weaken confidence, affecting foreign investment and India's global economic standing.
- **Transparency, Accountability & Public Trust:** Credible data supports democratic accountability, evidence-based policy debates, and informed public discourse.
- **IMF C-Grade Significance:** Acts as both a warning and opportunity — highlighting need for deep statistical reforms and signaling India's recognition of these gaps to global stakeholders.

Way Forward:

Reform Area	Planned Actions
New GDP Series (Base Year 2022–23)	Launch in February 2026; incorporate structural changes, updated sector weights, and new data sources.
Revision of CPI & Other Indices	Update consumption basket and base year to improve inflation measurement accuracy.
Improved Data Coverage & Methods	Integrate informal sector estimates, leverage corporate/GST/tax data, enhance enterprise & household surveys, and use producer/sector-wise price indices instead of WPI.
Institutional Strengthening & Transparency	Ensure methodological transparency, data integrity, and alignment with international best practices for global comparability.

Conclusion:

While India's GDP data currently exhibit certain limitations, ongoing reforms promise a

modernised, internationally aligned statistical framework. The release of the new GDP series in 2026 is likely to enhance data credibility and strengthen India's macroeconomic monitoring.

Shyok Tunnel

Context:

Recently, Defence Minister Rajnath Singh inaugurated the Shyok Tunnel as part of a larger push for border infrastructure projects by the Border Roads Organisation (BRO).

About Shyok Tunnel:

- The Shyok Tunnel is a crucial infrastructure project in Ladakh, connecting Durbuk and Daulat Beg Oldi (DBO) via the Shyok River valley.
- It is part of India's efforts to enhance connectivity and strategic logistics along the Line of Actual Control (LAC) with China.
- The tunnel project is undertaken by the Border Roads Organisation (BRO) under the Ministry of Defence.



Key Details of the tunnel:

- **Location:**
 - » The tunnel is situated at an altitude of approximately 12,000 feet on the Darbuk-Shyok-Daulat Beg Oldie (DS-DBO) road, a strategic lifeline running close to the Galwan Valley.
- **Purpose:**
 - » The primary objective is to ensure year-round connectivity for the Indian Army, enabling rapid movement of troops, equipment, and supplies to northernmost military posts like Daulat Beg Oldie (DBO).
 - » It bypasses a vulnerable stretch of road that was frequently blocked by landslides, snow, and river flooding during winters and monsoons.

Strategic Importance:

- The Shyok Tunnel strengthens India's operational preparedness along the disputed India-China border by:
 - » **Ensuring year-round mobility:** Eliminates seasonal roadblocks caused by heavy snow, avalanches, and natural disasters, ensuring continuous access to forward posts.
 - » **Reducing response time:** Cuts down travel time between Leh and DBO from approximately two days to just six hours, allowing faster troop deployment and logistical support.
 - » **Enhancing security:** Provides a reliable land link, reducing dependence on expensive and weather-dependent air supply, and ensuring continuous flow of essentials to remote border posts.
 - » **Supporting infrastructure and development:** Part of broader strategic border infrastructure development in Ladakh, enabling enhanced monitoring, surveillance, and rapid mobilization in critical areas.

Conclusion:

The Shyok Tunnel is not just a transportation

project but a key strategic asset that ensures all-weather connectivity, operational readiness, and logistical resilience for India's armed forces along the LAC with China. Its successful completion reinforces India's defence preparedness while also contributing to regional development and integration of remote border areas.

Special Economic Zones (SEZs)

Context:

India's Special Economic Zones (SEZs), once envisioned as engines of export-led growth, are currently under significant stress. According to recent data shared by the Ministry of Commerce and Industry in the Lok Sabha, 466 units have shut down across seven major SEZs between FY21 and FY25. This decline comes amid global economic uncertainties, pandemic-related disruptions, and growing competition from emerging manufacturing hubs such as Vietnam and Malaysia.

Key Statistics (FY21–FY25):

- 466 SEZ units shut down in the last five years.
- 100 units closed in FY25 alone, with the post-COVID period seeing the highest number of exits.
- Employment declined marginally to 31.77 lakh in FY25, from 31.94 lakh in FY24.
- Exports doubled, rising from Rs.7.59 lakh crore (FY21) to Rs.14.63 lakh crore (FY25).
- Investments increased from Rs.6.17 lakh crore to Rs.7.82 lakh crore over the same period.

Challenges Facing India's SEZs:

- **Weak R&D and Technological Upgradation:** SEZs continue to lag in high-value manufacturing due to limited investments in innovation, automation, and R&D infrastructure.
- **Rising Global Competition:** Countries such as Vietnam are attracting FDI through:

- » Stronger investment - protection agreements
- » More attractive fiscal incentives
- » Efficient logistics and trade-facilitation systems
- » These advantages are diverting global manufacturing away from India's SEZs.
- **Negative Perceptions and Limited Branding:** A survey conducted by ICRIER indicates that many global investors view Indian SEZs as:
 - » Bureaucratically rigid
 - » Policy-uncertain
 - » Less cost-competitive
- **Productivity Challenges:** Labour-intensive sectors, especially gems and jewellery have faced:
 - » A sharp reduction in operating units
 - » Declining export share (15.7% in FY21)
 - » This is due to both withdrawal of incentives and global demand shifts.

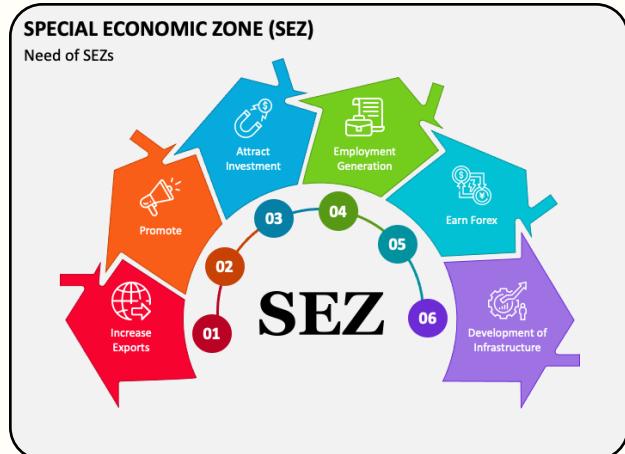
Government Initiatives:

- The Ministry of Commerce and Industry has been working on comprehensive SEZ reforms over the last three years.
- Key measures include:
 - » Allowing reverse job work to enhance manufacturing flexibility.
 - » Regulatory changes aimed at simplifying compliance.
 - » Digitised customs processes to reduce delays.

Transformation under the DESH Framework:

- Broader sectoral and regulatory reforms are underway as part of the Development of Enterprise and Services Hub (DESH) initiative, intended to reorient SEZs into globally competitive hubs.
- **Recent Amendments (2025)**
 - » Reduced land-requirement norms for semiconductor/electronics SEZs from 50 hectares to 10 hectares.
 - » Permission for domestic sales with applicable duties for electronics units.

- » Greater flexibility regarding encumbrance-free land requirements.



About Special Economic Zones (SEZs):

- Special Economic Zones are duty-free enclaves considered outside India's customs territory for the purpose of trade operations, manufacturing, and services.
- They aim to:
 - » Promote exports
 - » Attract foreign investment
 - » Generate employment
 - » Create globally competitive industrial clusters
- **Evolution of SEZs in India:**
 - » **1965:** India established Asia's first Export Processing Zone (EPZ) at Kandla, Gujarat. EPZs later came up in Surat, Mumbai, Cochin, Chennai, Visakhapatnam, Falta, and Noida.
 - » **2000:** The Government introduced the SEZ Policy, converting all eight EPZs into SEZs with world-class infrastructure and competitive incentives.
 - » **2005:** Parliament enacted the SEZ Act, 2005, effective from 10 February 2006, supported by SEZ Rules, creating a comprehensive legislative and administrative framework.

Conclusion:

India's SEZs stand at a critical juncture. While widespread closures reflect deeper structural

issues, the rise in exports and investment demonstrates strong underlying potential. With sustained reforms, improved ease of doing business, enhanced technological capabilities, and strategic sectoral focus, SEZs can continue to evolve into powerful engines of employment, investment, and export growth, contributing significantly to India's ambition of becoming a global manufacturing and supply-chain hub.

NCAER Report on Employment

Context:

Recently, a study titled "India's Employment Prospects: Pathways to Jobs", released by the National Council of Applied Economic Research (NCAER), highlighted that skilling and productivity enhancement of small enterprises are central to addressing India's employment challenge.

Key Findings of the Report:

- **Nature of Employment Growth in India:**
 - » Recent employment growth has been driven primarily by self-employment, rather than by the expansion of wage employment.
 - » Self-employment in India is largely a result of economic necessity, not entrepreneurial innovation.
 - » Most unincorporated household enterprises operate at subsistence levels, characterised by:
 - Low capital intensity
 - Low productivity
 - Limited adoption of technology
- **Role of Skills and Workforce Quality:**
 - » The transition to a skilled workforce has been slow, despite India's demographic advantage.
 - » Medium-skilled jobs account for much of the employment growth, particularly in services, while manufacturing remains largely low-skill intensive.
 - » The report estimates that:

- Increasing the share of skilled workers by 12 percentage points could raise employment in labour-intensive sectors by over 13% by 2030.
- A 9 percentage point increase in skilled workers could generate approximately 9.3 million jobs by 2030.

▪ Small Enterprises, Credit, and Technology:

- » The productivity of small enterprises is identified as the core determinant of India's employment trajectory.
- » Adoption of digital technologies significantly improves hiring capacity:
 - Enterprises using digital tools hire 78% more workers than non-users.
- » Access to institutional credit has a strong employment multiplier effect:
 - Even a 1% increase in access to credit raises the expected number of hired workers by 45%.

▪ Sectoral Employment Potential

- » Strengthening employment in labour-intensive manufacturing and services can sustain GDP growth of around 8%, in line with the vision of Viksit Bharat.
- » Key employment-generating sectors include:
 - **Manufacturing:** textiles, garments, footwear, food processing
 - **Services:** trade, hotels, tourism, education, and health

▪ Inter-Sectoral Multipliers:

- » Moderate growth in gross output of labour-intensive sub-sectors can lead to multi-fold job creation by 2030, including:
 - A 53% increase in employment in textiles, garments, and allied manufacturing
 - A 79% increase in employment in trade, hotels, and related services

Policy Recommendations:

- Reorient Production-Linked Incentive (PLI) schemes towards labour-intensive

industries.

- Expand formal skilling and upskilling, particularly in emerging technologies and artificial intelligence.
- Improve access to credit for micro and small enterprises.
- Promote digital adoption among small firms.
- Strengthen policy support for tourism, education, and health services to generate inclusive employment.

Significance for India:

- India is projected to become the world's third-largest economy, yet its low per capita GDP rank (128) underscores the urgency of employment-led growth.
- The report places India in a global comparative context, identifying priority areas for structural reform and productivity enhancement.

Conclusion:

The NCAER report underscores that India's employment challenge is fundamentally a productivity challenge. Enhancing skills, improving access to credit and boosting the productivity of small enterprises, particularly in labour intensive manufacturing and services can unlock large-scale job creation while sustaining high economic growth.

SEBI Announces Major Overhaul of Mutual Fund Regulations

Context:

The Securities and Exchange Board of India (SEBI) has approved a comprehensive overhaul of mutual fund regulations aimed at enhancing transparency, reducing costs for investors, and simplifying compliance. The new framework, to be titled the SEBI (Mutual Funds) Regulations, 2026, will replace the nearly three-decade-old 1996 regulations and introduce wide-ranging reforms covering expense structures, fund operations, and governance standards.

Key Changes in Mutual Fund Regulations:

- **Expense Ratio Framework:**
 - » SEBI has redefined the Total Expense Ratio (TER) by introducing a Base Expense Ratio (BER).
 - » Statutory and regulatory levies such as GST, STT, stamp duty, and other statutory charges will be excluded from the BER and charged separately on an actuals basis.
 - » This reform provides investors with a clearer breakdown of fund costs and significantly enhances cost transparency.



- **Reduced Expense Caps**
 - » The BER limits have been lowered across multiple categories of mutual fund schemes.
 - » For index funds and Exchange Traded Funds (ETFs), the expense cap has been reduced from 1.0% to 0.9% (excluding statutory levies).
 - » Similar reductions across other fund categories are expected to lower management costs and improve investor returns over the long term.
- **Lower Brokerage Limits**
 - » SEBI has significantly reduced the maximum brokerage fees payable by mutual funds:
 - » Equity cash market transactions: Cap reduced from 12 basis points (bps) to 6 bps.
 - » Derivative transactions: Cap reduced from 5 bps to 2 bps.

» These measures aim to curb hidden transaction costs and align fund operations more closely with investor interests.

▪ “Skin in the Game” Rule

» Senior employees of Asset Management Companies (AMCs) are now mandated to invest a portion of their compensation in the mutual fund schemes they manage.

» This provision ensures better alignment of interests between fund managers and investors, strengthening accountability and governance.

▪ Mandatory Stress Testing

» Mutual fund schemes are required to conduct stress tests under adverse market conditions and publicly disclose the results.

» This enhances transparency regarding portfolio risks and supports informed investor decision-making.

▪ NFO Fund Deployment Norms

» Funds raised during a New Fund Offer (NFO) must be deployed within 30 business days.

» In cases of delayed deployment, investors must be provided an exit option without any exit load, thereby safeguarding investor interests.

Investor Impact and Benefits:

- **Enhanced Transparency:** The clear separation of management expenses and statutory levies enables investors to better assess the true cost of investing in mutual fund schemes.
- **Potentially Lower Costs:** Reduced expense ratios and brokerage caps ensure that a larger portion of investor capital remains invested, potentially improving long-term net returns.
- **Improved Governance:** Measures such as mandatory employee investment and public stress-test disclosures strengthen investor confidence and promote responsible fund management practices.
- **Simpler Investment Decisions:** Clearer

scheme naming norms and the reduction of duplicate strategies within AMCs make it easier for investors to choose products aligned with their financial goals.

Conclusion:

SEBI's regulatory overhaul represents a significant step towards modernising India's mutual fund framework by balancing investor protection, transparency, and market efficiency. By lowering costs, clarifying expense structures, and strengthening governance standards, the reforms aim to foster trust in the mutual fund ecosystem, encourage greater retail participation, and ensure that investor interests remain central to fund management practices.

China Requests WTO Consultations with India on ICT Tariffs and Solar Subsidies

Context:

Recently, China requested consultations with India at the World Trade Organization (WTO) under the Dispute Settlement Understanding (DSU). The complaint challenges India's tariffs on information and communications technology (ICT) products and subsidies in the solar sector, alleging violations of core WTO rules, including the national treatment principle and the prohibition on import-substitution subsidies. This marks China's second WTO dispute against India in 2025, following an earlier case concerning electric vehicle (EV) and battery subsidies, indicating rising bilateral trade frictions.

Key Issues at Stake:

China's complaint centres on two major policy instruments employed by India:

- **ICT Tariffs:** India has maintained relatively high tariffs on imported ICT products as part of its strategy to promote domestic manufacturing and value addition under initiatives such as Make in India and various

production-linked incentive (PLI) schemes. China argues that these tariffs:

- » Exceed India's WTO-bound tariff commitments, and
- » Violate the national treatment principle, which requires imported goods to be treated no less favourably than like domestic products after entry into the market.

▪ **Solar Sector Subsidies:**

- » India has extended subsidies and incentives for photovoltaic (solar) manufacturing and deployment to build a resilient domestic solar ecosystem and reduce import dependence.
- » China contends that certain incentives amount to import-substitution subsidies, which WTO rules restrict because they confer benefits on the use of domestic over imported goods and confer an unfair competitive advantage on domestic producers at the expense of foreign suppliers.

WTO and Its Dispute Settlement Mechanism:

- The WTO, established in 1995 as the successor to the General Agreement on Tariffs and Trade (GATT), is the principal global institution governing international trade rules.
- It facilitates trade negotiations, administers trade agreements, monitors national trade policies, and provides technical assistance to developing countries. Its overarching objective is to ensure that trade flows smoothly, predictably, and on a non-discriminatory basis.
- A cornerstone of the WTO is its binding dispute settlement system, administered by the Dispute Settlement Body (DSB). The process typically involves:
 - » Consultations (up to 60 days) to seek a mutually agreed solution
 - » Panel proceedings, where independent experts examine the dispute
 - » Appellate review on points of law

- » Implementation and compliance monitoring
- » Retaliatory measures, if rulings are not implemented

- However, since 2019, the WTO's Appellate Body has been effectively paralysed due to the United States blocking judicial appointments, weakening the enforceability of dispute rulings.
- In response, some members—including China and the European Union—have adopted the Multi-Party Interim Appeal Arbitration Arrangement (MPIA) as a temporary alternative.

Conclusion:

China's request for WTO consultations with India over ICT tariffs and solar subsidies reflects escalating trade frictions amid a challenging global economic environment. For India, the dispute highlights the delicate balance between pursuing strategic industrial policy and self-reliance objectives and adhering to multilateral trade commitments. The outcome of the consultations will not only influence India-China economic engagement but also contribute to broader debates on how WTO disciplines interact with evolving development priorities, particularly for emerging economies seeking to build domestic manufacturing capacity in strategic sectors.

Reserve Bank of India's Handbook of Statistics on Indian States 2024–25

Context:

The Handbook of Statistics on Indian States 2024–25, published recently by the Reserve Bank of India, clearly shows that southern States continue to dominate India's per capita income rankings. They occupy most of the top positions nationally and remain far ahead of the large northern States, reaffirming the persistence of a pronounced north-south

economic divide.

Key Findings:

- Five southern States feature among the national top ten in per capita income. Telangana ranks second after Delhi, with a per capita Net State Domestic Product (NSDP) of Rs.3,87,623 at current prices. Karnataka follows closely at Rs.3,80,906, Tamil Nadu at Rs.3,61,619, Kerala at Rs.3,08,338, and Andhra Pradesh at Rs.2,66,240.
- In contrast, Maharashtra ranks sixth with a per capita NSDP of Rs.3,09,340, while Madhya Pradesh (Rs.1,52,615), Uttar Pradesh (Rs.1,08,572) and Bihar (Rs. 69,321) remain at the lower end of the spectrum. Notably, the gap between the highest-ranking southern State and Bihar exceeds fivefold, highlighting stark regional income disparities.

Economic Output and the Southern Advantage:

- Aggregate economic output figures reinforce this pattern of southern prosperity. Tamil Nadu and Karnataka form the economic core of the South, with NSDPs of Rs.27.92 lakh crore and Rs.26.03 lakh crore, respectively. Telangana (Rs.14.87 lakh crore) and Andhra Pradesh (Rs.14.22 lakh crore) follow, while Kerala records an NSDP of Rs.11.11 lakh crore.
- Although Maharashtra remains India's largest State economy at Rs.39.57 lakh crore, its per capita income places it only marginally above Kerala. Uttar Pradesh, with an NSDP of around Rs.26 lakh crore, comparable to Tamil Nadu and Karnataka, continues to record one of the lowest per capita income levels, underscoring how large population size dilutes income gains.

Fiscal Health and Revenue Capacity:

- The handbook also brings out significant differences in fiscal capacity across States. Tamil Nadu and Karnataka reported strong own tax revenues of Rs.1.95 lakh crore and

Rs.1.89 lakh crore, respectively, followed by Telangana, Andhra Pradesh, and Kerala.

- Fiscal deficits remain sizable across most States. Tamil Nadu reported the largest fiscal deficit among the southern States, while Maharashtra stands out nationally with the highest own tax revenue of Rs.3.42 lakh crore but also a substantial fiscal deficit. Bihar, despite its relatively low revenue base, continues to run deficits, pointing to a structural dependence on borrowings and central transfers.

Inflation, Poverty, and Social Outcomes:

- Social indicators further expose the regional divide. Inflation remained relatively moderate across most southern States, whereas Bihar and Uttar Pradesh recorded comparatively higher rates. Poverty levels reveal the sharpest contrast: Kerala's multidimensional poverty rate stands at just 0.55 percent—the lowest in the country—while Bihar's rate is as high as 33.76 percent.
- Health expenditure shows less regional variation, reflecting population size and demographic needs rather than income levels alone.

Conclusion:

Overall, the handbook underscores the persistence of a north-south divide in India's development trajectory and highlights the urgent need for balanced regional development to ensure more inclusive and equitable economic growth across the country.

Defence and Internal Security

Bioterrorism and Biosecurity: Relevance of the Biological Weapons Convention (BWC) from India's Internal Security Perspective

Context:

The Biological Weapons Convention (BWC) is regarded as a significant achievement in the global effort to prohibit biological weapons. The year 2025 marks the 50th anniversary of the Biological Weapons Convention (BWC), which comes at a time when rapid advances in science and technology are accompanied by increasingly complex security challenges. It is a historic international treaty aimed at the complete elimination of biological weapons. To mark this occasion, a recent high-level event held in New Delhi witnessed India's External Affairs Minister highlighting a serious concern that the world remains inadequately prepared to address bioterrorism, and that the threat posed by non-state actors continues to grow.

Rapid progress in modern biotechnology, synthetic biology, and dual-use research has transformed the nature of biological weapons threats, thereby necessitating stronger, coordinated global biosecurity frameworks and proactive international cooperation.

Bioterrorism: The Emerging Threat:

■ INTERPOL defines bioterrorism as the deliberate release of biological agents or toxins to cause disease, fear, or political pressure. It poses unique challenges:

- » **High Casualty Potential:** Rapid transmission can overwhelm public health systems.
- » **Detection and Attribution Difficulties:** Biological attacks often resemble

natural outbreaks.

- » **Dual-Use Research Risks:** Advances in gene editing and synthetic biology heighten misuse potential.
- » **Low-Cost, High-Impact Nature:** Biological weapons are cheaper than nuclear or chemical alternatives.
- » **Psychological and Economic Disruption:** Panic and misinformation can destabilise societies and economies.
- The COVID-19 pandemic exposed global vulnerabilities in outbreak detection, response, and coordination, underscoring the challenges of managing highly contagious pathogens.

About the Biological Weapons Convention (BWC):

- The BWC, formally titled “The Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction”, is a comprehensive international treaty that prohibits the development, production, acquisition, transfer, stockpiling, and use of biological and toxin weapons.
- A defining feature of the Convention is the General Purpose Criterion under Article I, which bans all biological agents, toxins, and related materials that lack legitimate peaceful, protective, or prophylactic purposes, rather than listing specific agents or technologies. This flexible and

technology-neutral approach ensures the treaty's continued relevance amid rapid scientific advancement.

- The BWC was opened for signature in 1972 and entered into force in 1975, with India ratifying it in 1974. Review Conferences are held every five years to align the treaty with evolving scientific, technological, and security developments. Importantly, the BWC supplements the 1925 Geneva Protocol, which prohibited only the use of biological weapons but did not address their development or stockpiling.
- By establishing a comprehensive prohibition regime, the BWC became the first multilateral treaty to eliminate an entire category of weapons of mass destruction.

BIOTERRORISM RISK	
	
	Low-cost gene editing
About BWC	Key Weaknesses
 Global disarmament treaty Bans biological weapons Bans 1975	 No verification  No reporting norms  No technical body
India's Measures	Way Forward
 Biosecurity law  SCOMET export controls  Training programs	 Inspection system  Assistance database  Global data-sharing  Global network
 Biosecurity law SCOMET export controls	

Key Features of the BWC:

- **Definition of Biological and Toxin**

Weapons: Biological weapons are defined as microorganisms (including viruses, bacteria, and fungi) or toxins deliberately used to cause disease or death in humans, animals, or plants.

- **Comprehensive Weapons of mass destruction (WMD) Prohibition:** The BWC is the first treaty to ban an entire category of weapons of mass destruction, setting a precedent for future arms control regimes. Weapons of mass destruction (WMD) are weapons that have the capacity to cause mass casualties and destruction, and include nuclear, chemical, and biological weapons.
- **Prohibition of Activities:** It prohibits the development, production, acquisition, stockpiling, transfer, and use of biological weapons.
- **Promotion of Peaceful Cooperation:** The Convention encourages international cooperation in medicine, agriculture, public health, and scientific research, reinforcing the principle that biology must be used for life, not destruction.
- Through these provisions, the BWC establishes a strong normative framework against the misuse of biological science.

India and the BWC:

- India has taken proactive steps to implement the BWC domestically, demonstrating its commitment to global biosecurity. Key elements of India's regulatory framework include:
 - » Manufacture, Use, Import, Export and Storage of Hazardous Micro-organisms, Genetically Engineered Organisms or Cells Rules, 1989
 - » Weapons of Mass Destruction and their Delivery Systems (Prohibition of Unlawful Activities) Act, 2005
 - » Export controls under the Special Chemicals, Organisms, Materials, Equipment and Technologies (SCOMET) list
- These measures ensure treaty compliance, regulate dual-use research, and strengthen national biosecurity preparedness. India

has also been an active participant in BWC forums, consistently advocating modernisation of treaty mechanisms to address challenges arising from synthetic biology and emerging biotechnologies.

Gaps and Limitations in the BWC:

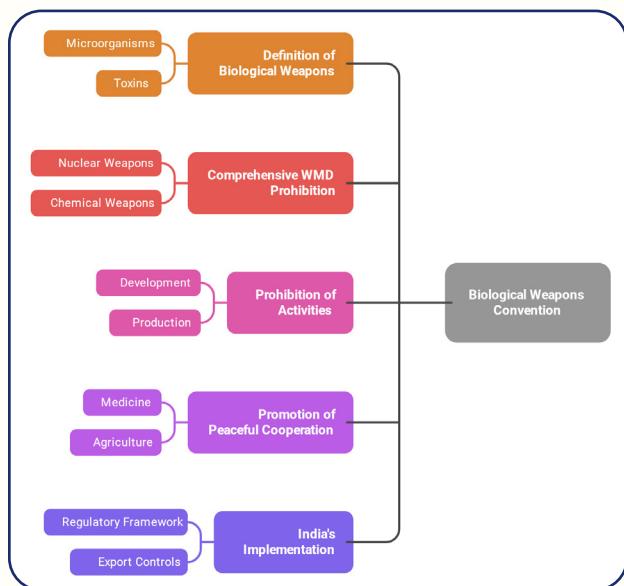
- Despite its pioneering role, the BWC suffers from several structural limitations:
 - » **Absence of a Verification Mechanism:** Unlike the Chemical Weapons Convention (CWC), enforced through the Organisation for the Prohibition of Chemical Weapons (OPCW), the BWC lacks an independent verification and inspection regime.
 - » **Limited Mandate of the ISU:** The Implementation Support Unit (ISU) performs primarily administrative functions and has no enforcement authority.
 - » **Inadequate Oversight of Emerging Science:** Rapid advances in biotechnology, genetic engineering, and synthetic biology are not systematically monitored under the treaty.
 - » **Vulnerability to Non-State Actors:** The relative accessibility, low cost, and high impact of biological weapons increase the risk of exploitation by terrorist groups.

Measures to Strengthen Global Biosecurity:

- A multi-dimensional approach is required to reinforce the BWC and global biosecurity:
 - » **Robust National Implementation:** Oversight of dual-use research, mandatory pathogen reporting, and structured incident response systems.
 - » **Bio-Forensics and Attribution:** Scientific capabilities to trace outbreaks and support investigations.
 - » **Focus on the Global South:** Equitable access to vaccines, medicines, and technologies to strengthen global resilience.
 - » **Dual-Use Research Governance:** Ethical

review and regulatory frameworks to prevent misuse.

- » **Article VII Assistance Mechanism:** The India-France proposal for a global support database to assist states facing biological threats.
- » **Enhanced International Cooperation:** Collaboration in surveillance, information sharing, and capacity building.
- » **Confidence-Building Measures (CBMs):** Data sharing, facility declarations, and legislative transparency.
- » **Supporting Agreements:** Instruments such as the Cartagena Protocol on Biosafety (2000) promote safe handling of genetically modified organisms.
- Effective implementation of these measures would ensure the BWC remains relevant in an era of rapid technological change.



India's Perspective:

- While the BWC has been instrumental in establishing a global norm against biological weapons, the contemporary threat landscape demands a more adaptive and proactive approach. The dual-use nature of biotechnology implies that traditional verification mechanisms alone may be insufficient. Moreover, the nature of threats

has evolved, with non-state actors now possessing access to tools and information that were unimaginable at the time the treaty was negotiated.

- India's advocacy for stronger compliance mechanisms, ethical oversight, and greater inclusion of Global South nations is not merely normative but also strategic.
- Vulnerable countries are likely to face disproportionate impacts from biological threats, making their integration into global biosecurity planning essential. In this context, enhanced international cooperation, scientific capacity-building, and rapid response mechanisms are critical for mitigating both natural outbreaks and deliberate biological misuse.

Conclusion:

The 50th anniversary of the Biological Weapons Convention is an opportunity to acknowledge its achievements while confronting persistent and emerging vulnerabilities. Although the BWC has played a crucial role in delegitimising biological weapons, the growing risks of bioterrorism, dual-use biotechnology, and non-state actor threats highlight the need for reform. Strengthening verification mechanisms, oversight of emerging science, rapid response capacity, and international cooperation, particularly with an emphasis on the Global South is essential to building a resilient, equitable, and effective global biosecurity architecture.

Short Issues

Indian Navy formally receives INS Taragiri

Context:

On 28 November 2025, the Indian Navy formally received INS Taragiri (Yard 12653) from Mazagon Dock Shipbuilders Ltd (MDL), Mumbai — marking a major milestone in India's indigenous warship-building drive. Taragiri is the fourth P-17A frigate delivered, and the third built by MDL under Project 17A.

About Project 17A / Nilgiri-Class:

- Project 17A is an advanced stealth-frigate programme following the earlier P-17 (Shivalik-class). It entails building seven stealth frigates - four by MDL (Mumbai) and three by Garden Reach Shipbuilders & Engineers (GRSE, Kolkata).
- These ships are designed as versatile multi-mission platforms for the Indian Navy - capable of surface, sub-surface, and air-defence operations — thus ensuring flexibility across conventional and emerging maritime challenges.

About INS Taragiri – Key Features, Systems & Capabilities:

Aspect	Details
Legacy / Name	Honours the earlier INS Taragiri (F33), a Leander-class frigate (1980–2013)
Displacement & Design	~6,670 tonnes; stealth-optimized hull and superstructure to reduce radar/IR signature
Construction Methodology	Integrated Construction; build time 81 months (down from ~93 months for first-of-class)
Indigenisation	~75% indigenous content; involvement of 200+ MSMEs; ~4,000 direct & 10,000+ indirect jobs
Propulsion	CODOG (Combined Diesel or Gas) system; diesel engines for cruising, gas turbines for high-speed; controllable pitch propellers

Platform Systems	Integrated Platform Management System (IPMS) for power management, damage control, automation; improves survivability & operational readiness	Maritime security	Enhances Indian Navy's multi-dimensional defence in Indian Ocean & Indo-Pacific
Surface Strike Capability	Supersonic cruise missiles (BrahMos) for long-range precision strikes	Self-reliance	Strengthens Make in India / Atmanirbhar Bharat goals; boosts indigenous shipbuilding ecosystem
Air Defence	Multi-function radar (MF-STAR); medium-range SAM system (MRSAM)	Multi-mission capability	Surface, sub-surface, air defence, HADR, anti-piracy, maritime surveillance
Gunnery & CIWS	76 mm Super Rapid Gun Mount (SRGM); 30 mm and 12.7 mm CIWS for short-range defence	Economic impact	~4,000 direct jobs, 10,000+ indirect jobs; technology transfer to MSMEs
Anti-Submarine Warfare (ASW)	Torpedo tubes, rocket launchers, sonar for submarine detection and engagement	Deterrence	Modern frigates improve India's naval deterrence and operational flexibility
Operational Role	Multi-role stealth frigate: blue-water operations, littoral warfare, network-centric maritime security		

Conclusion:

INS Taragiri marks a major milestone in India's indigenous naval capabilities, contributing to national security, maritime dominance and defence self-reliance.

DRDO's New Rocket-Sled Ejection Test



Strategic Significance:

Aspect	Importance
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Context:

Recently, the Defence Research and Development Organisation (DRDO) successfully conducted a high-speed rocket-sled test of a fighter aircraft escape system at the Rail Track Rocket Sled (RTRS) facility of the Terminal Ballistics Research Laboratory (TBRL), Chandigarh.

About rocket-sled ejection test:

- The rocket sled is a ground-based testing system, which is propelled by rockets to climb to high speeds while moving on rail tracks, simulating the aerodynamic conditions of an aircraft in flight.
- Developed in collaboration with the Aeronautical Development Agency (ADA) and Hindustan Aeronautics Limited (HAL), the test involved propelling the forebody of an indigenous Light Combat Aircraft (LCA)

to 800 km/h using phased firing of multiple solid-propellant rocket motors.

- Until now, India relied on foreign testing ecosystems to evaluate ejection mechanisms - a dependency that was costly and time-consuming.
- The new facility places India among a select group of nations capable of conducting advanced in-house dynamic ejection tests, a critical milestone for indigenous aerospace safety and self-reliance.



About Rocket-Sled Test and Its Technical Significance:

- The rocket sled is a ground-based high-speed testing system that simulates real aerodynamic conditions of aircraft in flight.
- Unlike static tests at zero speed, dynamic ejection tests recreate high-altitude, supersonic, inverted, or spin conditions, providing a true measure of pilot escape systems.
- Modern ejection seats combine explosive cartridges and rocket motors to propel pilots safely out of aircraft. The test sequence includes canopy severance, seat ejection, stabilization and parachute deployment, all coordinated within milliseconds.
- Human-like dummies fitted with sensors record physical stresses, accelerations, and rotational forces, providing crucial insights into pilot safety.
- The entire sequence is captured via onboard and ground-based imaging systems, ensuring comprehensive evaluation.

Strategic Importance for India:

- The indigenous rocket-sled test strengthens India's fighter aircraft safety framework by:
 - » **Enhancing pilot survivability:** Reliable ejection systems reduce risks during emergencies at high speed or unusual flight conditions.
 - » **Reducing foreign dependence:** In-house testing lowers costs to one-fourth or one-fifth of foreign tests and shortens development cycles.
 - » **Enabling iterative design and upgrades:** Engineers can refine ejection seats and canopy systems for current and future fighter platforms.
 - » **Boosting self-reliance:** The facility aligns with Atmanirbhar Bharat objectives, enhancing India's strategic aerospace and defence capabilities.
- Additionally, the RTRS facility has previously supported tests like Gaganyaan drogue parachutes, reflecting its versatile role in crewed and uncrewed aerospace safety systems.

Conclusion:

The DRDO rocket-sled test represents a quantum leap in India's fighter aircraft safety infrastructure, ensuring pilots can safely escape emergencies while reinforcing indigenous technological capability. It underlines India's progression towards self-reliant defence innovation and strengthens the operational readiness of its air force in a rapidly evolving global aerospace environment.

First Indigenous Diving Support Craft 'DSC A20'

Context:

The Indian Navy has commissioned DSC A20, on 16 December 2025 at Kochi. It is the first indigenously designed and built Diving Support Craft (DSC) in India.

About Diving Support Craft (DSC):

- Diving Support Craft (DSC) are a series of 5

small-category diving support vessels being built for the Indian Navy by Titagarh Rail Systems Limited.

- The ships are designed and equipped with state-of-the-art apparatus to support diving operations in coastal under water environment. The vessels are designed to meet the mission needs of Command Clearance Diving Teams (CCDTs).

General Characteristics:

Parameter	Details
Type	Diving Support Craft
	380 t (370 long tons; 420 short tons)
Length	30 m (98 ft)
Beam	12 m (39 ft)
Draught	<2.5 m (8 ft 2 in)
Speed	12 kn (22 km/h; 14 mph)
Complement	Diving team
Armament	1 × 12.7 mm SRCG

Features of DSC A20 (the first vessel):

- DSC A20 is the lead ship in a series of five Diving Support Crafts being built by M/s Titagarh Rail Systems Limited (TRSL), Kolkata.
- Purpose-built for diving and underwater operations in coastal waters, the vessel is equipped with advanced state-of-the-art diving systems that meet the highest safety and operational standards.
- Featuring a catamaran hull form, the ship offers superior stability, enhanced deck area, and improved seakeeping characteristics. Its displacement is approximately 390 tons.
- Designed and built in accordance with Naval Rules and Regulations of the Indian Register of Shipping (IRS), DSC A20 underwent extensive hydrodynamic analysis and model testing at the Naval Science and Technological Laboratory (NSTL), Visakhapatnam to ensure optimal performance and reliability.

Strategic Importance:

- The commissioning of DSC A20 is a milestone in India's pursuit of self-reliance (Aatmanirbharta) and showcases the success of the 'Make in India' initiative in the maritime domain.
- The platform represents seamless collaboration between the Indian Navy, indigenous shipbuilding industry, and national research organisations, delivering technologically advanced, specialised vessels.
- With its induction, the Indian Navy's capability in diving support, underwater inspection, salvage assistance, and coastal operational deployment will be substantially enhanced.
- DSC A20 will be based at Kochi and operate under the Southern Naval Command.

Conclusion:

The commissioning of DSC A20 strengthens the technical and operational horizon of the Indian Navy while reinforcing the nation's self-reliance in indigenous naval construction and research.

INAS 335 'Ospreys'

Context:

The Indian Navy formally commissioned its second MH-60R Seahawk helicopter squadron, INAS 335 (Osprey), at INS Hansa in Goa on 17 December 2025. The ceremony was presided over by Chief of the Naval Staff Admiral Dinesh K. Tripathi. This commissioning marks a significant milestone in the Indian Navy's ongoing modernization of its naval aviation, substantially enhancing the effectiveness and operational capabilities of its maritime operations.

Background:

- The MH-60R Seahawk is a multi-role maritime helicopter developed by the U.S. company Sikorsky (now part of Lockheed Martin). India procured these helicopters under a Foreign Military Sales (FMS)

agreement with the United States.

- The first squadron (INAS 334) was commissioned earlier as part of the Indian Navy's ongoing drive to modernise and expand its aviation strength.
- The MH-60R is a versatile platform capable of undertaking a wide spectrum of missions, including:
 - » Anti-Submarine Warfare (ASW)
 - » Anti-Surface Warfare (ASuW)
 - » Surveillance and reconnaissance
 - » Search and Rescue (SAR)
 - » Medical evacuation (MEDEVAC) and Vertical Replenishment (VERTREP)

Strategic Significance of INAS 335 'Ospreys':

- **Enhanced Maritime Security:** Expands the Indian Navy's airborne anti-submarine and multi-role warfare capabilities, providing a robust deterrent against undersea threats and enhancing maritime domain awareness across extended operational zones. This is particularly crucial given the growing extra-regional naval presence in the Indian Ocean Region (IOR).
- **Force Modernisation:** Reflects the Indian Navy's ongoing modernisation by integrating advanced foreign platforms. Equipped with modern sensors, avionics, and weapons suites, the MH-60R improves interoperability with partners such as the United States and acts as a potent force multiplier.
- **Blue-Water Capability:** Advanced helicopters capable of both independent and ship-borne operations significantly enhance India's blue-water naval reach and sustain long-duration operations across diverse threat environments.
- **Strategic Posture in the IOR:** Expansion of ASW and multi-role aviation assets supports India's objective of maintaining a secure and stable maritime order in the Indian Ocean Region, which is critical for global trade routes and regional security architecture.

About INS Hansa:

- INS Hansa, the naval air station at Goa, is one of the Indian Navy's premier aviation bases. It has hosted various air squadrons over the years and plays a pivotal role in projecting naval air power along India's western seaboard.
- The choice of Goa for the commissioning of INAS 335 underscores the strategic importance of India's west coast in maritime operations and naval diplomacy.

India-US Defence Linkages:

- India's acquisition and induction of MH-60R Seahawk helicopters reflect the deepening defence cooperation between India and the United States.
- These helicopters form part of a broader framework of military engagements, technology transfer, and equipment cooperation, enhancing interoperability and operational synergy between the two navies.

Conclusion:

The commissioning of the second MH-60R Seahawk helicopter squadron, INAS 335 'Ospreys' at Goa represents a significant leap in strengthening the Indian Navy's aviation and maritime warfare capabilities. It reinforces India's role as a responsible maritime power committed to safeguarding its strategic interests across the Indian Ocean, while simultaneously deepening defence cooperation with key global partners.

INS Anjadip

Context:

The Indian Navy has inducted INS Anjadip, an indigenously designed and built Anti-Submarine Warfare Shallow Water Craft (ASW-SWC). The induction marks a significant step in strengthening India's coastal and littoral maritime security, while advancing the objective of Atmanirbhar Bharat in defence manufacturing.

About INS Anjadip:

- **Type:** Anti-Submarine Warfare Shallow Water Craft (ASW-SWC)
- **Shipyard:** Built by Garden Reach Shipbuilders & Engineers (GRSE), Kolkata
- **Design:** Developed by the Indian Navy's in-house design organisation
- **Class:** Arnala-class (GRSE-built variant)
- **Series:** Part of a planned fleet of 16 ASW-SWC vessels for the Indian Navy
- **Operational Role:** Detection, tracking, and neutralisation of submarines in shallow and coastal waters

About ASW-SWC:

The Anti-Submarine Warfare Shallow Water Craft (ASW-SWC) class represents a new generation of shallow-water corvettes specifically designed for near-shore and littoral anti-submarine operations.

- **Shipbuilding Programme:**
 - » Constructed by two Indian shipyards:
 - Garden Reach Shipbuilders & Engineers (GRSE) – 8 vessels (Arnala-class)
 - Cochin Shipyard Limited (CSL) – 8 vessels (Mahe-class)
 - » **Total planned vessels:** 16
- **Design and Technical Features**
 - » **Length:** Approximately 77–78 metres
 - » **Beam (width):** Approximately 10.5 metres
 - » **Propulsion:**
 - Diesel engines combined with water-jet propulsion
 - Enables high manoeuvrability and efficient operations in shallow waters
 - **Speed:** Around 25 knots in littoral and near-shore environments
- **Combat Capabilities**
 - » Advanced sonar systems for underwater surveillance and target detection
 - » **Weapons suite:**
 - Lightweight torpedoes
 - Indigenous anti-submarine rockets
 - » **Multi-role functions:**

- Anti-submarine warfare
- Mine-laying operations
- Limited surface and air defence
- Search and Rescue (SAR) missions in coastal zones

Strategic Significance:

- **Strengthening Littoral ASW Capability:** Enhances India's ability to counter growing submarine activity in the Indian Ocean Region (IOR), particularly in shallow and coastal waters where larger warships face operational constraints.
- **Modernisation of Naval Fleet:** Replaces ageing Abhay-class corvettes with modern, agile, and technologically advanced platforms.
- **Boost to Indigenisation:** Features a high level of indigenous content, reinforcing self-reliance in defence manufacturing and supporting the domestic shipbuilding ecosystem.
- **Layered Maritime Defence:** Complements submarines, maritime patrol aircraft, and larger surface combatants, contributing to a robust layered coastal defence architecture.
- **Protection of Critical Maritime Assets:** Enhances the security of ports, harbours, offshore installations, and island territories.

Conclusion:

The induction of INS Anjadip underscores India's growing emphasis on coastal security, indigenous defence production, and maritime domain awareness. The ASW-SWC programme significantly strengthens the Indian Navy's capacity to address emerging underwater threats in near-shore environments, thereby reinforcing national maritime security.

National Intelligence Grid (NATGRID)

Context:

In recent times, National Intelligence Grid (NATGRID) is reportedly handling around 45,000 data requests per month, as both

Central agencies and State police increasingly rely on the platform for real-time intelligence access.

What is NATGRID?

- NATGRID is a centralised intelligence platform designed to link databases of various agencies to enable real-time access to information for security and investigative purposes.
- It was conceptualized after the 26/11 Mumbai terror attacks (2008), highlighting the need for integrated intelligence.
- The system aims to connect data across 21 government agencies, including banks, telecoms, immigration, taxation, and securities, to improve counter-terrorism and national security.
- Operates under the Ministry of Home Affairs and is primarily accessible to intelligence and law enforcement agencies.

Key Features of NATGRID:

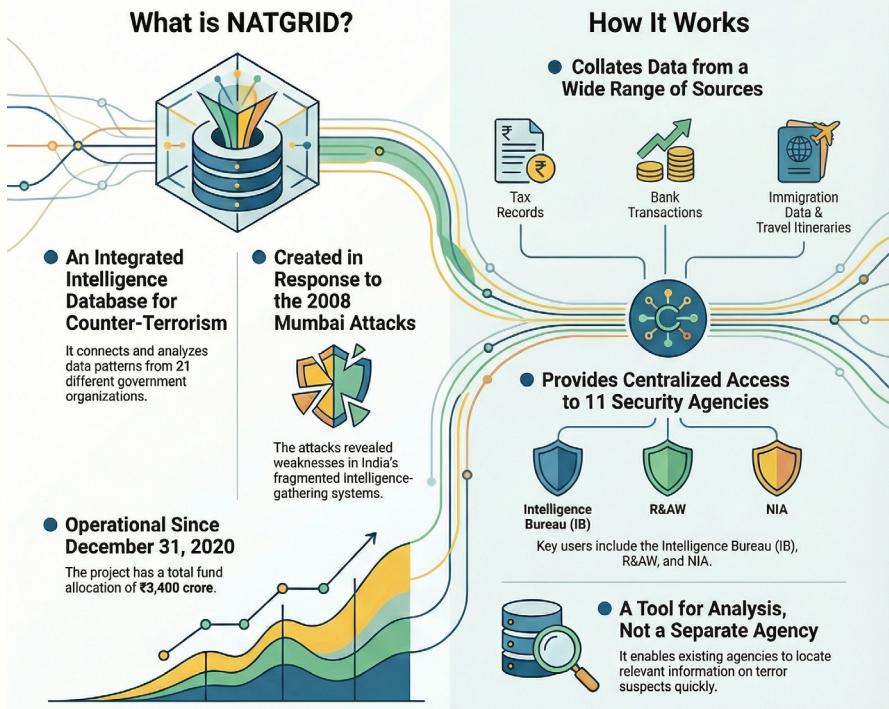
- **Data Integration:** Links financial, telecom, travel, and property records across multiple government agencies.
- **Real-time Access:** Provides instantaneous access to critical intelligence, improving decision-making speed.
- **Query-based System:** Agencies can raise queries, and the system provides relevant information without manual verification.
- **Secure Infrastructure:** Equipped with high-end cybersecurity measures to prevent misuse or data leaks. Agencies accessing

NATGRID include:

- » Intelligence Bureau (IB)
- » Central Bureau of Investigation (CBI)
- » Enforcement Directorate (ED)
- » State police intelligence wings

- Some states are yet to fully integrate their intelligence data, which limits its nationwide effectiveness.

Understanding NATGRID: India's Master Intelligence Database



Significance of NATGRID:

- **Counter-terrorism:** Provides comprehensive profiles of suspects and helps track terror financing, travel, and communications.
- **Criminal Investigation:** Assists agencies in solving complex financial, cyber, and organized crime cases.
- **Border Security:** Supports surveillance and identification of potential threats along borders.
- **Policy Planning:** Aggregated intelligence helps the government in risk assessment

and resource allocation.

Challenges:

- **Data Privacy Concerns:** Critics argue that extensive integration may violate citizens' privacy if not strictly monitored.
- **Inter-agency Coordination:** Full potential depends on smooth cooperation between central and state agencies.
- **Operational Limitations:** Some databases are incomplete or not digitized, limiting the system's reach.
- **Training Needs:** Personnel require specialized training to effectively extract and analyse data.

Way Forward:

- Expand state-level integration for more comprehensive coverage.
- Strengthen cybersecurity and privacy safeguards to address civil liberty concerns.
- Regular capacity building and awareness programs for law enforcement agencies.
- Periodic review of effectiveness to ensure timely and relevant intelligence output.

Conclusion:

The NATGRID represents a significant step in modernizing India's intelligence infrastructure. While the system is slowly gathering pace, its operationalization demonstrates India's commitment to strengthening internal security and counter-terrorism mechanisms. Efficient utilization, coupled with robust safeguards, can make NATGRID a critical tool for national security in the years to come.

Akash NG Missile

Context:

Recently, the Defence Research and Development Organisation (DRDO) successfully completed the User Evaluation Trials (UETs) of the Akash New Generation (Akash NG) missile system. This marks a critical milestone in strengthening India's indigenous air defence capabilities and paves the way for its induction

into operational service.

About the Akash NG Missile:

- Developed by Bharat Dynamics Limited and Bharat Electronics Limited for the Indian Air Force, Akash NG is a medium-range, mobile surface-to-air missile system designed to counter modern aerial threats and enhance operational readiness.
- Akash NG, the successor to the Akash Mark I and Akash Prime variants, was approved for development in September 2016 with a funding allocation of Rs.470 crore. The missile employs a dual-pulse solid rocket motor, which is lighter and more efficient than the earlier air-breathing propulsion system.



- The system features an Active Electronically Scanned Array (AESA) multi-function radar (MFR), an electro-optical targeting system (EOTS), and an optical proximity fuze, significantly improving accuracy and resistance to electronic countermeasures.
- It can engage up to ten targets simultaneously, with interception ranges of 70–80 km and rapid firing capability, including the launch of three missiles within twenty seconds.
- Akash NG is fully transportable by road, rail, and air, and can transition from transport to ready-to-fire mode in under 20 minutes.
- Its Ku-band active radar seeker, indigenously supplied by Bharat Dynamics Limited in 2023 combined with advanced electronic counter-countermeasure (ECCM) features, ensures effectiveness against low

radar cross-section targets in all-weather conditions. These capabilities make Akash NG a vital component of India's layered air defence architecture.

Significance:

- **Enhanced Air Defence:** With extended range, rapid reaction time, and multi-target engagement capability, Akash NG significantly strengthens India's layered air defence against aircraft, drones, and missile threats.
- **Indigenous Capability:** Entirely developed and produced domestically with public and private sector participation, the system exemplifies India's growing self-reliance in advanced missile technologies.
- **Strategic Deterrence:** High mobility and operational flexibility enhance border security, airspace control, and deterrence against evolving regional aerial threats.
- **Technological Edge:** Integration of AESA radar, Ku-band seekers, and electro-optical targeting ensures precision, survivability, and readiness for future network-centric warfare environments.

Conclusion:

The successful completion of UETs and the impending induction of Akash NG reinforce India's Atmanirbhar Bharat initiative by strengthening domestic defence manufacturing and reducing dependence on foreign imports. With enhanced mobility, extended engagement range, and rapid response capability, Akash NG significantly boosts India's strategic deterrence against contemporary aerial threats such as drones, cruise missiles, and high-speed aircraft. Overall, the system reflects India's growing technological maturity and commitment to self-reliant defence preparedness.

Bureau of Port Security (BoPS)

Context:

Recently, the Union government constituted the

Bureau of Port Security (BoPS) as a statutory body under the Merchant Shipping Act, 2025, marking a significant institutional reform in India's maritime security governance.

Need for a Dedicated Port Security Authority:

- Earlier, port and coastal security responsibilities were fragmented among multiple agencies:
 - » Indian Navy
 - » Indian Coast Guard
 - » Central Industrial Security Force (CISF)
 - » State maritime police
 - » Port authorities
- While this multi-agency framework was operationally robust, it lacked a single statutory regulator, resulting in:
 - » Coordination gaps
 - » Overlapping jurisdictions
 - » Uneven implementation of security standards
- Recognising these challenges, the government established the BoPS as a nodal regulatory authority, analogous to the Bureau of Civil Aviation Security (BCAS) in the aviation sector.

About the Bureau of Port Security:

- **Constituted under:** Section 13 of the Merchant Shipping Act, 2025
- **Administrative control:** Ministry of Ports, Shipping and Waterways
- **Nature:** Regulatory and supervisory (non-operational)
- **Coverage:** Major ports, non-major ports, ships, and maritime infrastructure
- The BoPS focuses on policy formulation, standard-setting, compliance, coordination and oversight, while operational agencies continue to discharge field-level security responsibilities.

Key Functions of the Bureau of Port Security:

- The BoPS addresses both traditional and emerging maritime threats, including:

- » Maritime terrorism
- » Arms, drug and human trafficking
- » Illegal migration
- » Piracy and poaching
- » Port-related organised crime
- » Cybersecurity Focus:
- Modern ports increasingly rely on digital platforms for cargo handling, navigation and logistics.
- The BoPS is mandated to secure port information technology (IT) and operational technology (OT) systems, in coordination with national cybersecurity agencies.

International Obligations:

- The BoPS ensures compliance with the International Ship and Port Facility Security (ISPS) Code, which prescribes minimum global security standards for ports and vessels engaged in international maritime trade.

Role of CISF in Port Security:

- Under the BoPS framework, the Central Industrial Security Force (CISF) is designated as a recognised security organisation.
- **Key CISF responsibilities include:**
 - » Preparation of standardised port security plans
 - » Conducting security assessments
 - » Training private security agencies deployed at ports

Strategic Significance:

- The establishment of the BoPS aligns with:
 - » Maritime India Vision 2030
 - » India's ambitions for:
 - World-class port infrastructure
 - Green and efficient shipping
 - Secure maritime trade routes
 - » Strengthening India's role in the Indo-Pacific maritime security architecture

India's Maritime and Coastal Landscape:

- India has a coastline exceeding 11,000 km, making maritime security strategically vital.
- **As of 2025:**
 - » 12 major ports (under Union control)

- » 217 non-major ports, of which 66 handle cargo
- Major ports handle more than 50% of India's maritime cargo traffic.

Conclusion:

The establishment of the Bureau of Port Security represents a decisive shift towards institutionalised, coordinated and future-ready maritime security governance. By acting as a central regulatory authority, the BoPS strengthens India's capacity to safeguard its expanding maritime infrastructure against both conventional and emerging threats. Its effectiveness, however, will depend on cooperative federalism, technological integration, and seamless coordination with operational security agencies.

Govt. Links Intelligence Grid to National Population Register

Context:

Recently, the Government of India integrated the National Intelligence Grid (NATGRID) with the National Population Register (NPR), significantly expanding the data accessible to law enforcement and investigative agencies. This move enables authorised agencies to access demographic and family-wise details of approximately 119 crore residents through a secure intelligence platform.

About NATGRID:

- NATGRID (National Intelligence Grid) is a secure, centralised data-sharing platform designed to facilitate real-time access to information from multiple government and select private databases for counter-terrorism and criminal investigation purposes.
- It was conceived in the aftermath of the 26/11 Mumbai terror attacks to improve inter-agency intelligence coordination and reduce delays in information retrieval.

Prior to NATGRID, agencies were required to submit formal requests to individual departments to obtain relevant data.

About the National Population Register (NPR):

- The National Population Register (NPR) is a database maintained by the Registrar General of India that contains personal and family details of India's residents.
- It was first compiled during the 2011 Census and was last updated in 2015, covering approximately 119 crore residents. The NPR serves as a foundational dataset supporting identity validation and public planning processes.

Key Features of the Integration:

- Expanded Data Access Police and investigative agencies can now access NPR records through NATGRID in real time. This includes household-level and demographic details that can aid investigations and intelligence gathering.
- Broader Agency Reach:** Earlier, NATGRID access was largely limited to select central agencies. Following the integration, State police forces, particularly officers of Superintendent of Police (SP) rank and above, have also been authorised to use the system.
- Advanced Analytical Tools:** NATGRID employs analytical tools such as Gandiva, which support advanced data analytics, entity resolution, and potentially features such as facial recognition to securely and efficiently connect disparate data points.

Significance for Law Enforcement and Security:

- Improved Investigations:** The integration enables law enforcement agencies to trace individuals and family linkages, correlate identity information with other intelligence datasets, and accelerate investigations related to criminal activity, terrorism, and cross-border offences.

- Enhanced Internal Security:** By linking demographic information with transactional and behavioural datasets, such as travel, telecommunications, and financial records, NATGRID aims to strengthen India's internal security architecture.

Concerns and Safeguards:

- Privacy and Data Security:** Access to sensitive personal information raises concerns related to privacy, data protection, and governance. Clearly defined access protocols, audit trails, and safeguards against misuse will be essential to maintaining public trust.
- Legal and Institutional Framework:** At present, NATGRID operates through executive orders rather than a dedicated parliamentary statute. This raises issues related to transparency, accountability, and legislative oversight.

Conclusion:

The integration of NATGRID with the National Population Register marks a significant evolution in India's internal security ecosystem. While it promises faster, data-driven intelligence and enhanced investigative capacity, it also underscores the urgent need for robust data protection laws, strong oversight mechanisms, and transparency to ensure the responsible and lawful use of personal data.

National Organised Crime Network Database (OCND)

Context:

Recently, Union Home Minister Amit Shah launched the country's first Organised Crime Network Database (OCND) at the two-day Anti-Terror Conference-2025, organised by the National Investigation Agency (NIA). This landmark initiative marks a paradigm shift in the way organised criminal networks operating across states are investigated and dismantled.

About the Organised Crime Network

Database (OCND):

- The OCND is an AI-powered analytical platform designed to instantly connect, integrate, and analyse organised crime-related data from multiple agencies and states.
 - » **Developed by:** National Investigation Agency (NIA)
 - » **In collaboration with:** State police forces and the National Intelligence Grid (NATGRID)
- **Key Features:**
 - » **Unified National Repository:** Integrates FIRs, charge sheets, dossiers, and other criminal records from across states into a single, searchable system.
 - » **Real-Time Intelligence Sharing:** Enables investigators and enforcement agencies to retrieve nationwide information instantly.
 - » **AI-Driven Query Interface:** Supports conversational queries, officials describe it as working “like ChatGPT” allowing intuitive access to complex criminal profiles.
 - » **Biometric and Forensic Tools:** Incorporates voice-matching and fingerprint databases, enhancing accuracy in suspect identification.
 - » **Central Coordination Mechanism:** The NIA functions as the central facilitator, ensuring verified and action-ready intelligence dissemination.

Why OCND Matters?

- Prior to the OCND, intelligence related to organised crime was largely fragmented across state and agency silos. Criminal syndicates frequently exploited these jurisdictional gaps by operating across state boundaries.
- The unified database closes these gaps by enabling seamless, nationwide access to actionable intelligence, thereby strengthening coordinated operations against inter-state criminal networks.

- By consolidating records through NATGRID, the government's integrated intelligence platform the OCND brings previously siloed datasets onto a single analytical framework, improving both responsiveness and investigative depth.

Significance and Impact:

- The launch of the OCND represents a decisive shift from traditional, fragmented policing methods to a technology-enabled, intelligence-led model of crime investigation. It is expected to:
 - » Reduce investigative delays and information asymmetries.
 - » Strengthen inter-agency coordination and real-time threat assessment.
 - » Enhance the ability to map, monitor, and disrupt organised crime-terror financing linkages.

About Organised Crime:

- Organised crime refers to structured and continuous criminal activities undertaken by groups for financial or material gain, often involving violence, intimidation, coercion, corruption, or other unlawful means. Such activities frequently transcend geographic and jurisdictional boundaries and are executed through systematic planning and coordination.
- Under Section 111 of the Bharatiya Nyaya Sanhita (BNS), 2023, organised crime is defined as any continuing unlawful activity, including kidnapping, robbery, cybercrime, trafficking in persons, drugs, weapons, or illicit goods, undertaken by a group acting in concert to obtain direct or indirect material benefit, including financial gain.

Power Packed News

Parvati–Arga Bird Sanctuary Declared an Eco-Sensitive Zone

- The Government of India has declared the Parvati–Arga Bird Sanctuary in Uttar Pradesh as an Eco-Sensitive Zone (ESZ). Union Minister of State for Environment, Forest and Climate Change Kirti Vardhan Singh shared this information through social media.
- The sanctuary spans approximately 1,084 hectares and is located about 40 kilometres from Gonda district. It comprises two significant wetlands, Parvati and Arga covering nearly 11 square kilometres. The area serves as a major wintering ground for migratory birds arriving from Central Asia and Tibet.
- Every winter, more than 40,000 migratory water birds visit the sanctuary. Resident species such as the Purple Moorhen, Common Moorhen, and the Sarus Crane (the state bird) are also found here. The initiative aims to promote biodiversity conservation along with responsible eco-tourism.

P. V. Sindhu Appointed as Chairperson of BWF Athletes' Commission

- Indian badminton star P. V. Sindhu has been elected Chairperson of the Athletes' Commission of the Badminton World Federation (BWF) for the 2026–2029 term. In this role, she will also serve as a member of the BWF Council, ensuring direct athlete representation in global decision-making. Sindhu was elected by fellow athletes, reflecting confidence in her leadership and international experience. She acknowledged the contributions of the outgoing Chairperson, Indonesia's Olympic gold medallist Greysia Polii (2021–2025).
- Sindhu has been associated with the BWF Athletes' Commission since 2017 and has served as an Integrity Ambassador since 2020. A silver medallist at Rio 2016 and bronze medallist at Tokyo 2020, she is among India's most successful badminton players. This appointment is also considered significant for India's sports diplomacy.

Launch of Industrial Hemp Cultivation in Himachal Pradesh

- Himachal Pradesh has officially launched the legal cultivation of industrial hemp. Chief Minister Sukhvinder Singh Sukhu announced this initiative under the "Green to Gold" programme, aligned with the goal of achieving a self-reliant Himachal Pradesh by 2027.
- The initiative seeks to shift away from illegal narcotics trade and integrate hemp into the bio-economy. Industrial hemp will be used in textiles, paper, packaging, cosmetics, biofuels, and pharmaceutical industries. Permitted cultivation will maintain THC levels below 0.3%, making it unsuitable for narcotic use.
- The crop is climate-resilient and requires around 50% less water than cotton. Research support is being provided by CSK Himachal Pradesh Krishi Vishvavidyalaya (Palampur) and Dr. Y. S. Parmar University of Horticulture and Forestry (Nauni). The envisioned "Hemp Hub" aims to position the state as a centre for green construction materials such as hempcrete.

Zero Tariffs on All Indian Exports to Australia

- From 1 January 2026, import duties on all tariff lines for Indian exports to Australia will be

reduced to zero. Union Commerce Minister Piyush Goyal linked this development to the third anniversary of the India–Australia Economic Cooperation and Trade Agreement (ECTA).

- The agreement is expected to benefit labour-intensive sectors, MSMEs, farmers, and workers. In 2024–25, Indian exports to Australia grew by 8%, while gems and jewellery exports recorded a 16% increase during April–November 2025.
- ECTA was signed on 2 April 2022 and has boosted sectors such as manufacturing, chemicals, textiles, pharmaceuticals, and petroleum products. India–Australia relations date back to 1941 and were elevated to a Comprehensive Strategic Partnership in 2020. This decision strengthens India's trade diversification strategy.

Former Bangladesh PM Begum Khaleda Zia Passes Away

- Former Prime Minister of Bangladesh and Chairperson of the Bangladesh Nationalist Party (BNP), Begum Khaleda Zia, passed away on 30 December at the age of 80, following a prolonged illness. She had been hospitalised on 23 November due to severe heart and lung complications.
- Khaleda Zia was Bangladesh's first woman Prime Minister, serving two terms (1991–1996 and 2001–2006). She was the second woman Prime Minister in the Muslim world after Benazir Bhutto (Pakistan). She was the wife of former President Ziaur Rahman.
- Prime Minister Narendra Modi expressed deep condolences, stating that her contributions to Bangladesh's development and India–Bangladesh relations would be remembered. Her passing marks the end of a significant chapter in Bangladesh's political history.

Smriti Mandhana Completes 10,000 Runs in Women's International Cricket

- Indian cricketer Smriti Mandhana achieved a historic milestone by completing 10,000 runs in women's international cricket. She became the second Indian and the fourth woman globally to reach this landmark.
- She achieved this feat during the fourth T20 International match against Sri Lanka at the Greenfield International Stadium. With this, she joined an elite list featuring Mithali Raj, Suzie Bates, and Charlotte Edwards.
- Mandhana has scored 629 runs in Tests at an average of 57.18, 5,322 runs in ODIs and 4,102 runs in T20 Internationals. In terms of international centuries, she has equalled Australia's Meg Lanning with 17 centuries. This achievement underscores not only her personal excellence but also the growing global stature of Indian women's cricket.

India's First 'Generation Z Post Office' Launched in Jammu & Kashmir

- The Government of India has established the country's first 'Generation Z Post Office' in Jammu and Kashmir. The post office was inaugurated by the India Post on 17 December 2025 at the AIIMS Vijaypur campus. This initiative marks an important step toward modernising postal services and aligning them with the evolving needs of the younger generation.
- The Generation Z Post Office has been specially designed for youth, with an emphasis on digital payments, rapid service delivery, and a customer-friendly environment. Postal, banking, and insurance services will be provided in an integrated manner under one roof.

- The objective of this initiative is to transform post offices from traditional service centres into technology-enabled, modern, and youth-oriented public service institutions. It aligns with the vision of Digital India and citizen-centric governance, and is expected to enhance both the reach and relevance of postal services.

Israel Recognises Somaliland

- On 26 December 2025, Israel formally recognised Somaliland as an independent and sovereign nation, becoming the first country to do so. Prime Minister Benjamin Netanyahu announced that cooperation between the two sides would be expanded in the fields of agriculture, health, technology, and the economy.
- While congratulating Somaliland's President Abdirahman Mohamed Abdullahi, Netanyahu described the decision as being in line with the spirit of the Abraham Accords. A joint declaration on mutual recognition was signed on the occasion.
- Somaliland is a self-declared but internationally unrecognised entity located in the Horn of Africa, with its capital at Hargeisa. The move signals a significant shift in regional geopolitics, Red Sea strategic security, and Middle East–Africa relations.

New BIS Standard for Incense Sticks

- Union Minister for Consumer Affairs, Food and Public Distribution Pralhad Joshi has released a new Indian Standard for incense sticks titled IS 19412:2025 – Agarbatti (Specification). The standard has been developed by the Bureau of Indian Standards (BIS) to enhance consumer safety, indoor air quality and product quality.
- Under the new standard, the use of pesticides such as allethrin, permethrin, cypermethrin, deltamethrin, and fipronil, as well as synthetic fragrance chemicals like benzyl cyanide and ethyl acrylate, has been prohibited.
- The standard classifies incense sticks into machine-made, hand-rolled, and traditional masala agarbattis. Products compliant with IS 19412:2025 will carry the BIS Standard Mark. India is the world's largest producer and exporter of incense sticks, with an annual industry value of approximately Rs.8,000 crore.

Prime Minister's National Children's Award

- On 26 December, observed as Veer Bal Diwas, President Droupadi Murmu presented the Prime Minister's National Children's Awards in New Delhi. In 2025, the awards were conferred on 20 children from 18 States and Union Territories.
- Nine-year-old Ajay Raj from Agra was honoured for saving his father from a crocodile attack, while Arnav Anupriya Maharshi from Maharashtra received the award for health-related innovations. Young cricketer Vaibhav Suryavanshi was honoured for achievements in Under-19 cricket.
- The awards recognise exceptional accomplishments in bravery, social service, environment, sports, art and culture, and science and technology. Veer Bal Diwas commemorates the martyrdom of Sahibzada Zorawar Singh and Sahibzada Fateh Singh.
- The award was instituted in 1996 by the Ministry of Women and Child Development. Each awardee receives a medal, Rs.1 lakh cash prize, and a certificate.

Oman's First Polymer Rial Banknote

- The Central Bank of Oman has issued the country's first polymer-based one-rial banknote. The note will enter circulation on 11 January 2026 and will remain legal tender alongside existing paper notes.
- Polymer currency has been introduced to ensure greater durability, cleanliness, and enhanced protection against counterfeiting. The note measures 145 × 76 mm and incorporates advanced security features. The obverse depicts the Oman Botanic Garden, symbolising biodiversity and environmental conservation.
- The reverse features the Sayyid Tariq bin Taimur Cultural Complex, Duqm Port and the Duqm Refinery. Security elements include a transparent window, colour-shifting foil, and iridescent ink. A limited collector's edition will also be made available through Oman Post.

First Khelo India Tribal Games

- The logo, theme song, and mascot of the first Khelo India Tribal Games (KITG) were unveiled in Bilaspur, Chhattisgarh. The Games will commence on 14 February 2026 and are specifically focused on tribal athletes.
- The official mascot 'Morveer' is inspired by Chhattisgarhi culture 'Mor' meaning "our" and 'Veer' symbolising courage. It represents the pride and identity of India's tribal communities.
- Several senior leaders, including the Chief Minister and Deputy Chief Minister, were present at the event. The objective of the Games is to identify sporting talent from tribal regions and strengthen India's national sports talent base.
- The Games will feature seven competitive sports, archery, athletics, football, hockey, wrestling, swimming, and weightlifting along with two traditional indigenous games. The initiative promotes social inclusion through sports.

Release of the Indian Constitution in the Santhali Language

- President Droupadi Murmu released the Indian Constitution in the Santhali language at a ceremony held at Rashtrapati Bhavan. This edition has been published in the Ol Chiki script, which is completing 100 years this year.
- The President described the initiative as a historic step towards linguistic inclusion and the empowerment of tribal identity and appreciated the efforts of the Ministry of Law and Justice. The Vice President also recalled President Murmu's role, during her tenure as Governor of Jharkhand, in promoting tribal welfare and indigenous languages.
- The Santhali language was included in the Eighth Schedule of the Constitution through the 92nd Constitutional Amendment Act, 2003. It is widely spoken in Jharkhand, Odisha, West Bengal, and Bihar. The publication of the Constitution in Santhali strengthens India's commitment to multilingual democracy and the preservation of cultural diversity.

Financial Fraud Risk Indicator (FRI)

- The Government has successfully prevented potential cyber fraud losses worth nearly Rs.660 crore within just six months through the use of the Financial Fraud Risk Indicator (FRI).
- FRI is a risk-based mechanism that classifies suspicious mobile numbers and financial transactions into medium, high, and very high-risk categories, enabling banks and financial

institutions to take timely preventive action.

- So far, over 1,000 banks, third-party application providers, and payment system operators have been onboarded onto the Digital Intelligence Platform. The initiative has received active support from the Reserve Bank of India and the National Payments Corporation of India.
- The Digital Intelligence Platform has been developed by the Department of Telecommunications, and has emerged as a key mechanism for sharing information related to the misuse of telecom resources.

Inauguration of the 'Jyoti-Bishnu International Art Centre' in Assam

- On 29 December 2025, the Jyoti-Bishnu International Art Centre was inaugurated in Assam by Union Home Minister Amit Shah. The modern cultural complex has been developed to provide a national and international platform for the art, culture, and creative heritage of Assam and the Northeastern region of India.
- On the occasion, Assam Chief Minister Himanta Biswa Sarma and Union Minister Sarbananda Sonowal were also present. The centre is named in honour of two iconic cultural figures of Assam, Jyotiprasad Agarwala and Bishnuprasad Rabha.
 - » Jyotiprasad Agarwala was the father of Assamese cinema, a poet, playwright, and freedom fighter who shaped Assam's modern cultural consciousness.
 - » Bishnuprasad Rabha was a multifaceted artist, poet, musician, and mass leader, regarded as a symbol of Assam's folk culture and social awareness.
- With a seating capacity of around 5,000, the complex is equipped to host music, dance, theatre, film screenings, conferences, and cultural festivals. The initiative is seen as a major step towards developing the Northeast as a hub of the cultural and creative economy, offering local artists global exposure.

India Announces a \$450 Million Reconstruction Package for Sri Lanka

- India has announced a \$450 million assistance package for the reconstruction of cyclone-affected regions in Sri Lanka. The announcement was made by External Affairs Minister S. Jaishankar during his visit to Colombo on 23 December.
- The package includes a \$350 million concessional line of credit and a \$10 million grant. The assistance will be utilised for the reconstruction of roads, railways, and bridges damaged by Cyclone Dithwa, as well as for rebuilding fully or partially damaged houses.
- This initiative aligns with India's 'Neighbourhood First' policy and the 'SAGAR (Security and Growth for All in the Region)' vision, which emphasise regional cooperation and humanitarian assistance. Under Operation Sagar Bandhu, India had also dispatched relief material and medical supplies. India further assured continued support to Sri Lanka in promoting tourism and foreign investment.

National Science Awards 2025

- President Droupadi Murmu presented the National Science Awards 2025 in New Delhi. These awards are regarded as India's highest honours for exceptional contributions in science, technology, and innovation.
- The 2025 edition, the second edition of these awards, featured four categories: Vigyan Ratna, Vigyan Shri, Vigyan Yuva-Shanti Swarup Bhatnagar, and Vigyan Team.

- The Vigyan Ratna Award was conferred posthumously on renowned astrophysicist Jayant Vishnu Narlikar, known for developing the Hoyle–Narlikar Theory.
- Eight scientists received the Vigyan Shri Award, while 14 young scientists were honoured with the Vigyan Yuva–Shanti Swarup Bhatnagar Award. The Vigyan Team Award was presented to the CSIR Aroma Mission team. These awards serve as an important instrument for promoting a strong research and innovation culture in the country.

Eminent Writer Vinod Kumar Shukla Passes Away

- Renowned Hindi writer and Jnanpith Award recipient Vinod Kumar Shukla passed away on 23 December 2025 in Raipur. He was 88 years old and had been actively engaged in literary writing for over five decades.
- He received the Sahitya Akademi Award for his novel 'Deewar Mein Ek Khidki Rahti Thi'. His novel 'Naukar Ki Kameez' and poetry collection Lagbhag Jai Hind brought him wide recognition. His works are known for their deep portrayal of ordinary life, human sensitivity, and subtle satire.
- In 2023, he became the first Indian writer to receive the PEN/Nabokov Award for Achievement in International Literature. In 2024, he was honoured with the 59th Jnanpith Award, becoming the first writer from Chhattisgarh to receive this distinction and the 12th Hindi writer to be so honoured.
- Vinod Kumar Shukla's literary contributions gave international recognition to Indian literature and inspired a renewed intellectual consciousness among readers. His demise is considered an irreparable loss to the Hindi literary world.

ISRO's LVM3-M6 Mission: Successful Launch of BlueBird Block-2

- The Indian Space Research Organisation (ISRO) successfully launched the BlueBird Block-2 communication satellite from Sriharikota using the LVM3-M6 rocket. The satellite was accurately placed into its designated Low Earth Orbit (LEO).
- This mission marked the sixth operational launch of India's Launch Vehicle Mark-3 (LVM3), earlier known as GSLV Mk-III. With a mass of approximately 6,100 kg, BlueBird Block-2 became the heaviest payload ever carried by LVM3.
- The satellite has been developed by the US-based company AST SpaceMobile and is part of a next-generation satellite constellation designed to provide space-based cellular broadband services. This achievement significantly strengthens India's global commercial space launch capabilities.

Terror Attack at Bondi Beach, Sydney

- The Australia declared 21 December 2025 as a 'Day of Reflection' to pay tribute to the victims of the terrorist attack at Bondi Beach, Sydney, which occurred on 14 December 2025.
- The attack targeted the Jewish community during the Hanukkah festival, resulting in the death of 15 innocent civilians and injuries to more than 40 people.
- As a mark of solidarity, government buildings were illuminated in yellow, and national flags were flown at half-mast.
- Australian Prime Minister Anthony Albanese described the Day of Reflection as an effort to unite against hatred and help heal community wounds.

- The Bondi area had earlier witnessed a mass stabbing incident in April 2024, which has reignited debates on Australia's internal security policies.

Uttar Pradesh's First Forest University in Gorakhpur

- The Uttar Pradesh government has approved the establishment of the state's first Forest University, marking a significant step in environmental education and research. The university will be set up on 125 acres of land in Gorakhpur district at an estimated cost of Rs.500 crore.
- The Detailed Project Report (DPR) has been finalised, while the draft University Act is under final review before cabinet approval.
- Chief Minister Yogi Adityanath described the initiative as crucial for developing human resources for environmental conservation and sustainable development.
- The university will offer degree and diploma programmes in forestry, wildlife conservation, agro-forestry, horticulture, and environmental science. It is also expected to promote research in biotechnology, climate change, and conservation science, strengthening the state's long-term environmental capacity.

Eminent Indian Sculptor Ram Sutar Passes Away

- Renowned Indian sculptor Ram Sutar passed away on 17 December 2025 at his residence in Noida. He was 100 years old and had been suffering from age-related health issues. He was born on 19 February 1925 in Gondur village of Dhule district, Maharashtra.
- Ram Sutar was a gold medallist from the J. J. School of Art and Architecture, Mumbai. He gained international fame for designing the Statue of Unity, the world's tallest statue, dedicated to Sardar Vallabhbhai Patel.
- Statues of Mahatma Gandhi and Chhatrapati Shivaji installed in the Parliament complex are also among his notable works. For his exceptional contribution to art, he was awarded the Padma Shri (1999), Padma Bhushan (2016), and recently the Maharashtra Bhushan Award.

José Antonio Kast Elected President-Elect of Chile

- In the run-off election held on 14 December 2025, right-wing Republican Party leader José Antonio Kast won a decisive victory with 58.16% of the votes. He defeated left-wing candidate and former Labour Minister Jeannette Jara, who secured 41.84%.
- Kast will assume office on 11 March 2026, succeeding the current President Gabriel Boric.
- His campaign focused primarily on internal security, crime control, and the deportation of illegal migrants, along with promises of strengthening border security and reducing taxes.
- This is considered Chile's largest right-wing political shift since the restoration of democracy in 1990, and is viewed as part of a broader resurgence of right-wing ideology in Latin America.

Emperor Perumbidugu Mutharaiyar II

- Vice President C. P. Radhakrishnan released a commemorative postage stamp in honour of Emperor Perumbidugu Mutharaiyar II Suvaran Maran at a programme held in New Delhi. On the occasion, he appreciated the government's efforts to preserve Tamil culture, language, and heritage, and referred to initiatives such as Kashi Tamil Sangamam.
- The Vice President stated that the stamp is part of a broader effort to accord national recognition

to great kings and leaders of Tamil history. Historically, Perumbidugu Mutharaiyar is counted among the prominent rulers of ancient Tamil Nadu. He belonged to the Mutharaiyar dynasty, a Pallava feudatory that ruled the central regions of Tamil Nadu between the 7th and 9th centuries CE.

- Suvaran Maran bore the title 'Shatrubhayankara' (terrifying to enemies). According to historical accounts, the decline of the Mutharaiyars occurred later with Vijayalaya Chola's conquest of Thanjavur. The initiative strengthens India's pluralistic historical consciousness.

Indian Film Homebound Shortlisted for Oscars 2026

- The Indian film Homebound has been shortlisted for the Best International Feature Film category at the 98th Academy Awards. The film is among 15 films that have qualified for the final nominations for Oscars 2026. It has been directed by Neeraj Ghaywan.
- The shortlist released by the Academy of Motion Picture Arts and Sciences includes select films from around the world and is considered a crucial stage in the nomination process. The final nominations will be announced on 22 January 2026, while the 98th Academy Awards ceremony will be held on 15 March 2026.
- The inclusion of Homebound is a significant achievement for Indian cinema, highlighting India's creative and narrative strength on the global stage. It also underscores the growing international acceptance of Indian parallel and social-realist cinema.

Raj Kumar Goyal Takes Oath as Chief Information Commissioner

- Raj Kumar Goyal has recently taken oath as the Chief Information Commissioner (CIC). At a ceremony held at Rashtrapati Bhavan, the President administered him the oath of office and secrecy for the Central Information Commission.
- Raj Kumar Goyal is a retired IAS officer of the 1990 batch. He superannuated on 31 August from the post of Secretary, Department of Justice, under the Ministry of Law and Justice. Earlier, he also served as Secretary (Border Management) in the Ministry of Home Affairs.
- Under the Right to Information Act, 2005, the Central Information Commission has been established at the central level. The Commission consists of one Chief Information Commissioner and up to ten Information Commissioners. The CIC is appointed by the President of India on the recommendation of a committee, and the tenure is three years.

India Wins Gold at the Squash World Cup

- India won its first-ever gold medal at the Squash World Cup by defeating Hong Kong 3–0 on 14 December. This was the first time in the tournament's history that the final was contested between two Asian countries, and it also marked India's best performance in the Squash World Cup.
- In the final, Joshna Chinappa gave India a strong start by defeating Ka Yi Lee in a hard-fought four-game match. This was followed by Abhay Singh, who defeated reigning Asian champion Alex Lau in straight games. In the decisive match, young player Anahat Singh clinched the title for India by defeating Tomato Ho in just 16 minutes.
- Coach Harinder Singh described the victory as a result of the team's maturity under pressure. The tournament was held for the third consecutive time at the SDAT Stadium.

'CoalSETU' Policy

- To ensure equitable availability and optimal utilisation of coal resources, the Central Government has approved the 'Coal Setu' policy. The policy was cleared by the Cabinet Committee on Economic Affairs on 12 December 2025. It introduces a new dedicated window under the Non-Regulated Sector (NRS) Coal Linkage Auction Policy of 2016.
- Under Coal Setu, any domestic buyer requiring coal, irrespective of the end-use, can participate in the linkage auction. Coal obtained through this window may be used for captive consumption, exports, or coal washing, but resale within the domestic market is not permitted.
- According to the policy, linkage holders may export up to 50% of their allocated coal. This is expected to enhance industrial flexibility, improve transparency in coal allocation, and make India's energy supply chain more efficient.

Microsoft's Historic Investment in India's Cloud-AI Future

- Microsoft has announced an investment of over \$17.5 billion in India to expand cloud and Artificial Intelligence (AI) infrastructure, marking the largest investment by Google in Asia to date. The investment will be made over four years and will focus on hyperscale data centres, AI computing capacity, and integration with national digital platforms. The announcement was made following a meeting between Satya Nadella and Indian Prime Minister Narendra Modi.
- A key pillar of this investment is workforce readiness. Microsoft aims to train 20 million Indians in AI skills by 2030. In addition, Azure AI will be integrated with digital public platforms such as the Ministry of Labour and Employment and the National Career Service. This initiative is expected to help position India as a global AI hub, strengthen the start-up ecosystem, and accelerate the digital economy.

Italian Cuisine Granted UNESCO Intangible Cultural Heritage Status

- UNESCO has officially inscribed Italian national cuisine on the Intangible Cultural Heritage (ICH) List. The decision was taken during the 20th ICH session held at the historic Red Fort in Delhi. Italy had submitted the nomination in 2023, describing its culinary tradition as a social practice that connects families and communities.
- In support of its claim, Italy showcased the diversity of its regional cuisines, such as Ossobuco from Lombardy and Orecchiette con Cime di Rapa from Puglia. During the same session, India's Diwali and Iceland's swimming pool social culture were also inscribed. The recognition highlights that food is not merely about taste, but also a carrier of tradition, identity, and collective memory.

Supriya Sahu Receives UNEP 'Champions of the Earth' Award

- Supriya Sahu, Additional Chief Secretary of Tamil Nadu, has been awarded the 2025 Champions of the Earth Award by the United Nations Environment Programme (UNEP) for climate leadership.
- During her tenure, Tamil Nadu gained global recognition for its initiatives in climate mitigation, adaptation and heat-action strategies. UNEP particularly appreciated her integrated governance model and nature-based solutions, which balanced low-tech and high-tech approaches. These initiatives enhanced the protection of vulnerable communities and reduced greenhouse gas

emissions.

- While accepting the award, she emphasised the need to transform climate action into a people's movement. The honour demonstrates that effective governance combined with community participation can deliver tangible climate outcomes.

Sujalam Bharat App

- On 10 December, Union Minister for Jal Shakti C. R. Patil launched the Sujalam Bharat App, aimed at strengthening transparency and real-time monitoring in rural drinking water management. The app has been developed under the Jal Jeevan Mission in collaboration with BISAG-N.
- The app provides an integrated digital view of water sources, assets, water quality, supply reliability, and operations & maintenance. Each scheme and its service area will be assigned a Sujalam Bharat-Sujal Gram ID, ensuring clear scheme-to-household mapping.
- Integration with PM Gati Shakti GIS will enable precise mapping of rural water networks. The initiative promotes long-term sustainability, improved planning, and community participation.

Veteran Leader Shivraj Patil Passes Away

- Senior Congress leader and former Union Home Minister Shivraj Patil passed away on 12 December 2025 at the age of 91. He was elected seven times as a Lok Sabha MP from Latur, served as Speaker of the 10th Lok Sabha (1991–1996), and was Union Home Minister from 2004 to 2008. He later served as Governor of Punjab and Administrator of Chandigarh (2010–2015).
- During the tenures of Indira Gandhi and Rajiv Gandhi, he handled several key Union ministries, including Defence. He will be remembered for his commitment to parliamentary propriety, administrative experience, and public service. His passing marks the end of a seasoned chapter in Indian politics.

Dr. Babasaheb Pandurang Adhav

- Renowned Indian social activist and revolutionary leader Babasaheb Pandurang Adhav, popularly known as Baba Adhav, passed away in Pune on 8 December 2025 at the age of 95. He devoted his entire life to the rights and dignity of the most marginalised sections of society, particularly workers in the unorganised sector.
- Baba Adhav is best known as the founder of the Hamal Panchayat, through which he organised hamals (porters) and secured social security and respect for them. One of his most significant contributions was the “One Village, One Water Source” (Ek Gaon, Ek Panghat) movement, aimed at eliminating caste-based discrimination in rural areas and ensuring equal access to shared water sources for all.
- Inspired by the Satyashodhak ideas of Mahatma Phule, he consistently worked for the rights of waste pickers, rickshaw pullers, and agricultural labourers. He was honoured with prestigious awards such as the Punyabhushan Award and the Maharashtra Foundation Lifetime Achievement Award. His demise marks the end of an era in Maharashtra's social movements.

Andrej Babiš Reappointed as PM of the Czech Republic

- A major political shift has taken place in the Czech Republic. Billionaire businessman Andrej Babiš was sworn in again as Prime Minister on 9 December 2025. President Petr Pavel administered the oath of office and secrecy at Prague Castle.
- His party, Action of Dissatisfied Citizens (ANO), emerged as the largest party in the October 2025 general elections, after which Babiš secured a parliamentary majority of 108 seats with the support of right-wing parties.
- Babiš had earlier served as Prime Minister from 2017 to 2021. The focus of his new government is on economic policy, curbing inflation, a tough stance on immigration, and a review of the European Union's Green Deal policies. This development highlights the growing influence of nationalist and populist politics in Central Europe, particularly in the Czech Republic.

RBI Revises GDP Growth Forecast for FY 2025–26

- The Reserve Bank of India (RBI) has raised India's GDP growth forecast for the financial year 2025–26 from 6.8% to 7.3%, signalling confidence in the country's economic outlook. The upward revision is primarily based on strong agricultural prospects, declining inflation, rationalisation of GST rates, lower crude oil prices, and robust corporate and banking balance sheets. According to RBI Governor Sanjay Malhotra, a Q2 growth rate of 8.2% and an inflation rate of 1.7% have placed the economy in a rare "Goldilocks phase", characterised by strong growth without overheating or recessionary pressures.
- While services exports are expected to remain resilient, merchandise exports may continue to face global headwinds. High-frequency indicators suggest that festive demand and stable rural–urban consumption will continue to support growth in the third quarter as well.

Passport Verification Records Now Available on DigiLocker

- In a major step towards enhancing citizen convenience, the National e-Governance Division (NeGD), in collaboration with the Ministry of External Affairs, has enabled Passport Verification Records (PVR) on the DigiLocker platform.
- DigiLocker is a cloud-based platform developed under the Digital India initiative, allowing citizens to securely store, share, and digitally verify documents. Verified PVRs will now be available in the "Issued Documents" section of users' DigiLocker accounts.
- Citizens can share these records with authorised institutions for purposes such as travel, employment, or regulatory compliance, through a consent-based mechanism. The initiative promotes paperless governance, reduces reliance on physical records, and saves time and resources. Digitally issued PVRs will be tamper-proof, secure, and authentic, strengthening transparency and trust in government services.

Veteran Actor Kalyan Chattopadhyay Passes Away

- Renowned veteran actor Kalyan Chattopadhyay passed away on 7 December at the age of 82 due to age-related illness. He was born in 1942 in Berhampore, in Murshidabad district of West Bengal. He received formal training in acting from the Film and Television Institute of India (FTII), Pune.
- He made his film debut in 1968 with the film Apanjan, directed by Tapan Sinha. Over the years, he appeared in several notable films, including Pratidwandi, Sagina Mahato, Dhanni Meye, Safed Haathi, Paar, and Kahaani.

- During his long and diverse career, he worked in over 400 films across multiple languages, and also appeared in several television serials and a web series. His demise is regarded as an irreparable loss to Indian cinema, particularly the Bengali film industry.

Rohit Sharma Completes 20,000 International Runs

- Indian cricketer Rohit Sharma achieved a historic milestone by completing 20,000 international runs. He reached this landmark on 6 December during the third One Day International (ODI) against South Africa. This achievement reflects his consistent performances across Tests, ODIs, and T20 Internationals. For over a decade, Rohit Sharma has been a regular opening batter for India, playing a decisive role particularly in limited-overs cricket. In the same series, he also became the highest six-hitter in ODI cricket.
- With 20,000 international runs, Rohit Sharma has joined an elite list featuring Sachin Tendulkar, Virat Kohli, and Rahul Dravid. However, the record for the fastest to reach 20,000 international runs continues to be held by Virat Kohli.

India-Malaysia Joint Military Exercise Harimau Shakti 2025

- The India-Malaysia joint military exercise 'Harimau Shakti 2025' was conducted from 5 to 18 December 2025. This annual exercise was held at the Mahajan Field Firing Range in Bikaner, Rajasthan.
- The exercise saw participation from a battalion of the Dogra Regiment of the Indian Army and the 25th Battalion of the Royal Malaysian Army. The 14-day exercise aimed to enhance operational coordination and interoperability between the two armies for counter-terrorism operations in semi-desert and semi-urban environments.
- Key training activities included joint patrols, cordon-and-search operations, and heliborne operations. The exercise strengthens India's Act East Policy and promotes security cooperation in the Indo-Pacific region. Military cooperation between India and Malaysia began in 2012 and has played a significant role in deepening bilateral relations.

Women, Peace and Security Index 2025/26

- The Women, Peace and Security (WPS) Index 2025/26 global rankings have been released. The index is jointly prepared by the Georgetown Institute for Women, Peace and Security and the Peace Research Institute Oslo. It assesses 181 countries across three key dimensions: inclusion, justice, and security.
- According to the report, around 676 million women experienced conditions of conflict last year, marking a 74% increase compared to 2010. India ranked 131st with a score of 0.607, indicating gradual but uneven progress in the status of women.
- Denmark topped the index, followed by Iceland and Norway. Afghanistan remained at the bottom of the ranking. The United States recorded an improvement in its position, largely due to better maternal mortality outcomes.

14th India-Maldives Joint Military Exercise Ekuverin

- The 14th edition of the India-Maldives joint military exercise 'Ekuverin' was conducted from 2 to 15 December 2025 in Thiruvananthapuram, Kerala.

- The exercise involved 45 soldiers each from a battalion of the Garhwal Rifles of the Indian Army and the Maldives National Defence Force (MNDF). The 14-day drill focused on enhancing interoperability and operational coordination for counter-terrorism and counter-insurgency operations in jungle, semi-urban, and coastal terrains.
- The term 'Ekuverin' means 'Friend' in the Dhivehi language. The exercise has been conducted alternately in both countries since 2009. The current edition strengthens cooperation for peace and security in the Indian Ocean Region and reinforces India's Neighbourhood First Policy and defence partnership with Maldives.

India Qualifies for the 2026 AFC Under-17 Asian Cup

- The Indian men's Under-17 football team achieved a significant milestone by qualifying for the 2026 AFC Under-17 Asian Cup. In a qualifier match held at the EKA Arena, India defeated Iran 2–1. With this win, India finished with seven points, equal to Iran, but topped Group D due to a superior head-to-head record. The tournament will be held in Saudi Arabia from 7 to 24 May 2026, and this will be its 21st edition. Union Sports Minister Mansukh Mandaviya congratulated the team on the achievement.
- The Indian men's team became the fourth national football team from India to qualify for the Asian Cup in 2026. Earlier, the senior women's, Under-20 women's, and Under-17 women's teams had also qualified, reflecting the growing strength of grassroots football development in India.

India Finishes Runners-up at the Sultan Azlan Shah Cup 2025

- The Indian men's hockey team finished as runners-up at the prestigious Sultan Azlan Shah Cup, held in Ipoh, Malaysia. In the final, India lost 0–1 to Belgium, with the lone goal scored by Thibaut Stockbroekx. This victory marked Belgium's first Sultan Azlan Shah Cup title.
- India fielded a relatively young squad in the tournament, with several senior players, including captain Harmanpreet Singh, absent. Despite this, reaching the final was a commendable performance. This was India's second consecutive runners-up finish at the tournament; earlier, India had also lost the final in 2019. A five-time champion, India is the second most successful team in the tournament's history after Australia. India last won the title in 2010.

Prime Minister's Office Renamed as "Seva Teerth"

- Prime Minister Narendra Modi has renamed the Prime Minister's Office (PMO) as "Seva Teerth", reflecting a service-oriented and people-centric approach to governance. Along with this, "Raj Bhavan" and "Raj Niwas" have been renamed "Lok Bhavan" and "Lok Niwas", respectively. Union Home Minister Amit Shah described these changes as a symbolic step towards service-driven governance and a 'Viksit Bharat' vision.
- The Prime Minister's Office will now function from a state-of-the-art complex named 'Seva Teerth-1', located in Executive Enclave-I, after relocating from South Block. In the future, Seva Teerth-2 and Seva Teerth-3 in the same complex will house the Cabinet Secretariat and the National Security Adviser's office.
- Earlier, Rajpath was renamed Kartavya Path, and the Central Secretariat was renamed Kartavya Bhavan. Until 1977, the Prime Minister's Office was known as the Prime Minister's Secretariat, which provided secretarial assistance to the Prime Minister.

MCQs Based on Current Affairs

1. Which of the following statements about INS Taragiri is/are correct?

1. INS Taragiri is the fourth P-17A frigate delivered under Project 17A.
2. It uses a CODOG propulsion system with controllable pitch propellers.
3. It has 100% indigenous content in construction and systems.
4. It is named after a previous Leander-class frigate of the Indian Navy.

Options:

A: 1 and 2 only
B: 1,2 and 4 only
C: 1, 2 and 3 only
D: 1, 2, 3 and 4

2. Which of the following weapons/systems is part of INS Taragiri's armament and sensor suite?

1. BrahMos supersonic cruise missiles
2. Multi-function radar (MF-STAR)
3. Medium-range SAM system (MRSAM)
4. Ballistic missile defence system

Options:

A: 1 and 2 only
B: 1,3 and 4 only
C: 1, 2 and 3 only
D: 1, 2, 3 and 4

3. Consider the following statements about Operation Sagar Bandhu:

1. It was launched by India in response to Cyclone Ditwah in Sri Lanka.
2. Indian Navy deployed INS Vikrant and INS Udaygiri for the operation.
3. The operation involved the deployment of over 80 personnel from the National Disaster Response Force (NDRF).
4. Cyclone Ditwah was an extratropical cyclone originating in the Mediterranean region.

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

4. Which of the following statements about tropical cyclones is/are correct?

1. Tropical cyclones develop over warm oceans with sea-surface temperature above 27°C.
2. They rotate clockwise in the Northern Hemisphere and anticlockwise in the Southern Hemisphere.
3. Cyclone names in the North Indian Ocean are assigned by a group of eight countries under the WMO.
4. Hurricanes, typhoons, and willy-willies are regional names for tropical cyclones.

Options:

A: 1 and 2 only
B: 1,3 and 4 only
C: 2 ,3 and 4 only
D: 1, 2, 3 and 4

5. Regarding the biodiversity of Great Nicobar Island, which of the following statements is/are correct?

1. The Great Nicobar Biosphere Reserve is included in UNESCO's Man and Biosphere (MAB) Program.
2. The island has over 1,800 species of fauna with about 24% endemism.
3. Development projects on Great Nicobar do not require consultation with the Shompen or Nicobarese tribal communities.

Select the correct answer:

A: 1 and 2 only
B: 1 and 3 only
C: 2 and 3 only
D: 1, 2, and 3

6. Consider the following statements about the membership of the World Health Organization (WHO):

1. Only sovereign states are eligible to become members of WHO.
2. WHO is the largest intergovernmental health organization in the world.
3. WHO membership is automatically granted to all members of the United Nations.

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

7. In the context of “Digital Arrest Scams” recently highlighted by the Supreme Court, consider the following statements:

1. Digital arrest scams typically involve impersonation of officials from central agencies and conducting fake interrogations over video calls.
2. The Supreme Court has empowered the CBI to investigate these scams even in states where general consent under the DSPE Act is withdrawn.
3. RBI has been asked to develop AI/ML systems to detect suspicious patterns such as mule accounts and money laundering.
4. The Indian Cyber Crime Coordination Centre (I4C) operates under the Ministry of Electronics and IT.

How many of the above statements are correct?

- A: Only one
- B: Only two
- C: Only three
- D: All four

8. With reference to deepfake technology, consider the following statements:

1. Deepfakes are generated primarily using machine learning techniques such as Generative Adversarial Networks (GANs).
2. Deepfakes can be used only for visual manipulation (images and videos) and cannot be applied to audio content.

Which of the statements given above is/are correct?

- A: 1 only
- B: 2 only
- C: Both 1 and 2
- D: None

9. In the context of challenges posed by deepfake technology, which of the following are potential

risks for democratic and social processes?

1. Manipulation of political speeches to spread misinformation during elections.
2. Financial fraud through impersonation of individuals using synthetic voice technology.

Select the correct answer using the code below:

- A: 1 only
- B: 2 only
- C: Both 1 and 2
- D: None

10. Consider the following environmental initiatives and policies of India:

1. National Hydrogen Energy Mission — aims to scale up green hydrogen production and promote hydrogen valleys.
2. 2G Ethanol Programme — supports advanced biofuels by converting agricultural waste into ethanol.
3. National Clean Air Programme (NCAP) — targets a 40% reduction in particulate pollution by 2035.

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. With reference to emerging technologies, consider the following statements:

1. Quantum computing relies on qubits, which can exist in multiple states simultaneously due to superposition.
2. Blockchain technology eliminates the need for any consensus mechanism due to its decentralized nature.
3. Edge computing reduces latency by processing data closer to the source rather than relying on centralized cloud servers.

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

12. With reference to Personality Rights in India, consider the following statements:

1. Personality rights are explicitly codified under the Indian Constitution.
2. They include control over an individual's name, image, voice, and likeness.
3. Both commercial and non-commercial misuse can attract protection under personality rights.

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 National Organised Crime Network Database (OCND), consider the following statements:

1. It is an AI-powered analytical platform for tracking organised crime networks.
2. It has been developed by the National Investigation Agency in collaboration with State Police and NATGRID.
3. It is India's first national-level database exclusively for organised crime.

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

14. With reference to the K-4 missile recently tested by India, consider the following statements:

1. It is a submarine-launched ballistic missile developed by DRDO.
2. It uses a two-stage solid-fuel propulsion system.
3. It has a range of approximately 1,500 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

15. With reference to INS Arighaat, consider the following statements:

1. It is a nuclear-powered ballistic missile submarine.
2. It is the first SSBN commissioned by India.
3. It is capable of deploying longer-range SLBMs compared to INS Arihant.

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

16. With reference to malaria, consider the following statements:

1. Malaria is caused by protozoan parasites belonging to the genus Plasmodium.
2. It is transmitted by male Anopheles mosquitoes.
3. Plasmodium falciparum and Plasmodium vivax are the most common species in India.

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

17. With reference to the National Intelligence Grid (NATGRID), consider the following statements:

1. NATGRID is a secure platform for real-time sharing of data among authorised agencies.
2. NATGRID was established after the 26/11 Mumbai terror attacks.
3. NATGRID directly collects data from citizens.

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. Consider the following statements regarding the National Population Register (NPR):

1. It is maintained by the Registrar General of

India.

2. It was first compiled during the 2011 Census.

3. It contains biometric data of residents.

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

19. With reference to the BlueBird Block-2 (BlueBird-6) satellite, consider the following statements:

1. It is developed by an Indian private company under ISRO's supervision.

2. It is designed to provide direct cellular broadband connectivity to standard smartphones.

3. It uses large phased-array antennas to enable continuous high-speed coverage.

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

20. The Indian Space Policy 2023 is significant because it:

1. Allows 100% FDI in selected space sector segments

2. Clearly defines the role of private entities in space activities

3. Limits ISRO's role exclusively to commercial missions

Select the correct answer using the code below:

A: 1 and 2 only

B: 2 only

C: 2 and 3 only

D: 1, 2, and 3

21. With reference to PESA Mahotsav 2025, consider the following statements:

1. It was held at Visakhapatnam over two days.

2. Tribal communities from all ten PESA States participated.

3. Jharkhand notified its PESA Rules during the Mahotsav.

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

22. The Panchayats (Extension to Scheduled Areas) Act, 1996 is based on the recommendations of:

A: Sarkaria Commission

B: Bhuria Committee

C: Punchhi Commission

D: Kothari Commission

23. With reference to the Bureau of Port Security (BoPS), consider the following statements:

1. It functions under the Ministry of Defence.

2. It is a regulatory and supervisory body, not an operational force.

3. Its jurisdiction extends to both major and non-major ports.

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

24. With reference to the India-New Zealand Free Trade Agreement (FTA), consider the following statements:

1. New Zealand will provide zero-duty access to all Indian export tariff lines under the agreement.

2. India has agreed to fully liberalize tariffs on all New Zealand exports.

3. Labour-intensive sectors in India are expected to gain significantly from the agreement.

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

25. With reference to INS Anjadip, consider the following statements:

1. It is an indigenously designed and built Anti-Submarine Warfare Shallow Water Craft.
2. It has been constructed by Garden Reach Shipbuilders & Engineers (GRSE), Kolkata.
3. It belongs to the Mahe-class of ASW-SWC vessels.

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. With reference to the Aravalli Mountain Range, consider the following statements:

1. It is one of the oldest fold mountain systems in the world, dating back nearly two billion years.
2. It acts as a natural barrier preventing the eastward expansion of the Thar Desert.
3. Rivers such as the Chambal, Sabarmati, and Luni originate from the Aravalli Range.
4. Excessive quarrying in the Aravallis has contributed to groundwater depletion and air pollution in the NCR.

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

27. Consider the following statements regarding the Supreme Court-approved definition of Aravalli formations:

1. An Aravalli Hill is defined as a landform rising at least 100 metres above the surrounding local relief.
2. An Aravalli Range consists of two or more hills located within 500 metres of each other.
3. The definition replaces earlier slope-based and buffer-based criteria used by different states.
4. The definition mandates a complete and

permanent ban on all mining activities across the Aravalli region.

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

28. With reference to the national treatment principle under the WTO, consider the following statements:

1. It requires member countries to treat imported goods no less favourably than domestically produced goods after they have entered the market.
2. It applies only to trade in goods and not to services or intellectual property.
3. It is aimed at preventing protectionism through internal taxes and regulations.

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

29. With reference to the Pradhan Mantri Kaushal Vikas Yojana (PMKVY), consider the following statements:

1. It is implemented by the Ministry of Skill Development and Entrepreneurship.
2. It provides free, outcome-based skill training to youth.
3. It is a centrally sponsored scheme implemented jointly with State Governments.

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

30. With reference to the LVM3 (Launch Vehicle Mark-3), consider the following statements:

1. It is a three-stage launch vehicle using solid, liquid, and cryogenic propulsion.

2. It can place heavier payloads into Low Earth Orbit than Polar Satellite Launch Vehicle (PSLV).

3. It was developed primarily for India's human spaceflight programme.

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 the Viksit Bharat-Guarantee for Rozgar and Ajeevika Mission (Gramin) Bill, 2025(VB G RAM G bill) consider the following statements:

1. The Bill replaces the Mahatma Gandhi National Rural Employment Guarantee Act, 2005.

2. It increases the statutory guarantee of unskilled wage employment per rural household.

3. It retains the same open-ended, demand-driven funding structure as MGNREGA.

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. Consider the following statements regarding the funding pattern under the VB G RAM G Bill, 2025:

1. The scheme is a centrally sponsored programme.

2. The Centre-State funding ratio is 60:40 for most states.

3. Any expenditure beyond the normative allocation must be borne by the Centre.

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

33. With reference to the DHRUV64 microprocessor, consider the following statements:

1. It is India's first entirely indigenous 64-bit dual-core microprocessor.

2. It operates at a clock speed of 1.0 GHz.

3. It has been developed by the Indian Space Research Organisation (ISRO).

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. With reference to the World Anti-Doping Agency (WADA), consider the following statements:

1. WADA was established in 1999.

2. It is an independent organization created by the International Olympic Committee alone.

3. Its headquarters are located in Montreal, Canada.

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

35. With reference to the Biological Weapons Convention (BWC), consider the following statements:

1. It is the first multilateral treaty to ban an entire category of weapons of mass destruction.

2. It includes a legally binding verification and inspection mechanism.

3. It supplements the 1925 Geneva Protocol.

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

36. Consider the following statements regarding

National Energy Conservation Day:

1. It is observed annually on 14 December.
2. It has been observed in India since 1991.
3. It is coordinated by the Ministry of New and Renewable Energy.

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

37. Consider the following statements regarding India's power sector:

1. India's total installed electricity generation capacity stood at about 505 GW in 2025.
2. More than half of the installed capacity comes from non-fossil fuel sources.
3. Nuclear energy accounts for the largest share of non-fossil capacity.

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

38. With reference to the National Commission for Backward Classes (NCBC), consider the following statements:

1. NCBC is a constitutional body established under Article 338B of the Constitution.
2. NCBC has the final authority to include or exclude communities from the Central OBC list.
3. The Central Government is bound to accept all recommendations made by the NCBC.

Which of the statements given above is/are correct?

A: 1 and 2 only
 B: 2 only
 C: 1 only
 D: 1, 2, and 3

39. With reference to Google's Project Suncatcher, consider the following statements:

1. It aims to deploy solar-powered data centres in space using satellite constellations.

2. It proposes the use of Google's Tensor Processing Units (TPUs) for space-based computation.

3. It plans to rely primarily on nuclear energy to overcome power limitations in space.

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

40. With reference to the SHANTI Bill, 2025, consider the following statements:

1. It allows private sector participation in nuclear power generation in India.
2. It permits State Governments to operate nuclear power plants independently.
3. It aims to consolidate existing atomic energy laws into a single legal framework.

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

41. The SHANTI Bill's nuclear expansion strategy is closely linked to which of the following national targets?

1. Achieving 100 GW of nuclear power capacity by 2047
2. Net-zero carbon emissions by 2070
3. Reducing dependence on renewable energy sources

Select the correct answer using the code below:

A: 1 and 2 only
 B: 1 and 3 only
 C: 2 and 3 only
 D: 1, 2, and 3

42. Consider the following statements regarding the Poshan Tracker:

1. It is a digital monitoring tool launched by the Government of India in 2021.
2. It tracks nutrition indicators for children aged 0–6 years enrolled in Anganwadi Centres.
3. According to the Poshan Tracker (2025), over one-third of measured children under 5 are stunted.

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

43. Under the Indian legal framework, which of the following statements regarding Geographical Indications (GI) is/are correct?

1. GI registration in India is valid for 10 years and can be renewed indefinitely.
2. GI protection in India is provided under the Geographical Indications of Goods (Registration and Protection) Act, 1999.
3. The GI Registry is located in Chennai.

Select the correct answer:

A: 1 and 2 only
 B: 2 only
 C: 2 and 3 only
 D: 1, 2, and 3

44. With reference to the Bombay Natural History Society (BNHS), consider the following statements:

1. BNHS was established in 1883 and is India's oldest wildlife research and conservation organization.
2. BNHS is designated as a Scientific and Industrial Research Organization (SIRO) by the Government of India.
3. BNHS focuses exclusively on ornithology and does not conduct research on other species or habitats.
4. BNHS is a partner of BirdLife International and organizes the Salim Ali Bird Count to monitor bird populations.

Which of the statements given above is/are

correct?
 A: 1 and 2 only
 B: 1,2 and 4 only
 C: 2 ,3 and 4 only
 D: 1, 2, 3 and 4

45. With reference to the 23rd India–Russia Annual Summit held in December 2025, consider the following statements:

1. The Summit coincided with the 25th anniversary of the Strategic Partnership established in 2000.
2. The partnership between the two countries was elevated to a “Special and Privileged Strategic Partnership” in 2010.
3. The Summit was hosted in Moscow.

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. Consider the following statements about India–Russia defence relations:

1. India is the second largest market for the Russian defence industry.
2. In 2017, over two-thirds of India's military hardware imports came from Russia.
3. Russia became India's primary defence supplier only after 2010.

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 India's position in international refugee law:

1. India is not a signatory to the 1951 UN Refugee Convention or the 1967 Protocol.
2. India is legally bound by the principle of Non-Refoulement as it is part of customary international law.
3. India has a comprehensive domestic refugee

law that distinguishes refugees from other foreigners.

Which of the above statements is/are correct?

A: 1 only
 B: 1 and 3 only
 C: 2 and 3 only
 D: 1, 2, and 3

48. Which of the following are grounds for disqualification under the Tenth Schedule?

1. Voluntarily giving up party membership
2. Voting against party direction without permission
3. Defection of 2/3rd members in a party
4. Independent member joining a party after election
5. Nominated member joining a party within 6 months

Choose the correct answer:

A: 1 and 2 only
 B: 1,2, 3 and 4 only
 C: 1 ,2,4 and 5 only
 D: 1, 2, 3,4 and 5

49. With reference to Private Member's Bills (PMBs) in India, consider the following statements:

1. A Private Member's Bill can only be introduced in Lok Sabha.

2. PMBs require a one-month notice before introduction.

3. The first Private Member's Bill ever passed in India was related to Muslim Wakfs.

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

50. Consider the following statements regarding the Shyok Tunnel:

1. It is located on the Darbuk-Shyok-Daulat Beg Oldie (DS-DBO) road.
2. It connects Durbuk and Daulat Beg Oldi by bypassing a landslide-prone section.
3. It lies at an altitude of nearly 12,000 feet.

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

ANSWER

1	B
2	C
3	C
4	B
5	A
6	A
7	C
8	A
9	C
10	A

11	B
12	C
13	D
14	A
15	B
16	B
17	A
18	A
19	C
20	A

21	A
22	B
23	C
24	B
25	A
26	D
27	C
28	B
29	A
30	D

31	A
32	A
33	A
34	B
35	C
36	A
37	A
38	C
39	A
40	B

41	A
42	D
43	D
44	B
45	A
46	A
47	A
48	C
49	C
50	D

UPPCS

PRELIMS TEST SERIES 2026



11th JAN 2026



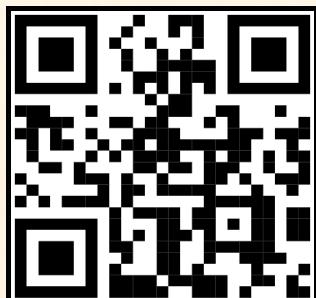
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TOTAL TEST-23

Sectional : 06

Full Length : 14

Csat : 03



For Online Admission



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