ABHYAS

COMPLETE COVERAGE OF MONTHLY CURRENT AFFAIRS



AUG 2025

ABHYAS

Art and Culture		rechnocratic shirt in india's welfare state	26
Kalaburagi Fort & Jama Masjid	4	Domicile-Based Recruitment in Bihar	26
Thiruvathirai Festival	4	Google's Android Antitrust Case	26
Sohrai, Pattachitra, and Patua Paintings	4	Governance Lapses in the Ladki Bahin Welfare Scheme	27
Piprahwa Relics	5	India's Consumer Dispute Redressal System	27
Wallacean Hominid Artefacts	5	SC's Directions on Stray Dog Management	27
Goswami Tulsidas	5	Six Years After Abrogation of Article 370	28
The Centenary of the Kakori Conspiracy Case	6	SOFI Report and India's Nutritional Crisis	28
The centeriary of the Rakoff Conspiracy Case	U	Digital Search and Seizure	28
Indian Society		Reforming Policing in India	29
Honour Killings in India	8	Prison Reform in India	29
Indian Youth as Strategic Diplomatic Capital	8	Universal Artificial Intelligence Access	29
Reproductive Agency and India's Fertility Challenges	8	Policies & Schemes	
		CATCH Grant Program	30
Geography		National Cooperative Policy 2025	30
IMD Predicts Above-Normal Rainfall	9	Matri Van initiative	30
Cascadia Subduction Tsunami Risk	9	Pradhan Mantri Viksit Bharat Rozgar Yojana	30
Puga Hot Spring	9	E20 Ethanol Blending in India	31
Fortronment		PM E-DRIVE Scheme	31
Environment			
International Court of Justice (ICJ) Advisory Opinion on Climate Action	10	Economy	
E-Mobility	10	Prod <mark>uct Nation</mark>	32
Awaza Programme of Action (2024-2034) (APOA)	11	Regional Imbalances in India	33
UNDP Equator Initiative Award	11	Inter <mark>na</mark> tionalization of Rupee	34
Global Outlook Council on Water Investments	12	De-Dollarization	35
India's Resolution on Wise-use of Wetlands	12	Fiscal Responsibil <mark>ity a</mark> nd Budget Management (FRBM) Act	36
India's Draft Climate Finance Taxonomy	12	Blue Economy	37
Redrawing Boundaries of Nahargarh Sanctuary	13	RBI Tightens Co-lending Norms	38
India Targets 100 GW Nuclear Power	13	Mines and Minerals (Development and Regulation) Amendment	
Forest Cover Loss in India	13	Act, 2025	39
Water Hyacinth's Invasion	14	GIG Workers	39
Microplastic Pollution	14	Income Tax Act 2025	40
India's Growing Battery Waste Challenge	14	Environmental, Social, And Governance (ESG)	41
		Sovereign Credit Ratings	42
Polity		Gift City-like Financial Centers	43
Bihar Becomes 1st State to Adopt E-Voting System	16	India's Retail Inflation	43
Election to the Office of the Vice-President of India	16	RBI's Free-Al Vision for Financial Sector	44
The Constitution (One Hundred and Thirtieth Amendment) Bill,		Indian Ports Act, 2025	44
2025	16	100th Birth Anniversary of Ms Swaminathan	45
Strengthening Legal Aid Capacity in India	18 18	Agriculture	
The Promotion And Regulation of Online Gaming Act, 2025 National Sports Governance Act, 2025	20	Biofortified Potatoes	
Electoral Rolls in Machine-Readable Format	21	GM Maize Field Trials	
Green Election	21	Soybean in India	
Extension of President's Rule in Manipur	21	Brown Revolution 2.0	
Governors as Chancellors Fuel Friction	22	Space Technology in Indian Agriculture	
Commercial, Prohibited Speeches Not Part of	22		
Fundamental Rights: SC	22	International Relations	
Parliamentary Proceedings for Removal of Judge	22	Fair and Representative Global Order	49
Extending the Creamy Layer to SC/STs	23	Armenia-Azerbaijan Peace Agreement Brokered by the United	
National Cooperative Development Corporation (NCDC)	23	States	49
Centre to Ban Money-Based Online Games	23	India's Strategy In Indian Ocean	50
Commence		Association of Southeast Asian Nations (ASEAN) Centrality	51
Governance		India-philippines Strategic Partnership	52 52
Civic Engagement in Health Governance	24	UN-India Global Capacity-building Initiative Intermediate-range Nuclear Forces (INF) Treaty	53
India's Path to Technological Sovereignty	24		53
MERITE Scheme	24	Alaska Summit	53
Organ Transplantation in India	25	Asia-Pacific Institute for Broadcasting Development (AIBD)	54
PM Modi's Independence Day 2025 Speech	25	Eurasian Economic Union Africa's Objection to the Moreator Map	54 54
SabhaSaar	25	Africa's Objection to the Mercator Map	34

AUG 2025

HPNPV Eco-Friendly Biocontrol for Teak Defoliator

ABHYAS

India-Nigeria Defence Meeting	54	Disaster Management	
Thailand-Cambodia Border Disputes	55	5	
India-Maldives Relations	55	Cloudburst	61
India-UK Free Trade Agreement	55	Flash Floods in India	61
Labour Mobility as a Diplomatic Tool	55	India's Response to GLOF Risks	61
ASEAN Centrality within the Indo-Pacific Region	56	Kamchatka Earthquake & Tsunami	62
Russia-India-China (RIC) Troika	56	Ethics	
India's Tibet Policy	56	Ethics	
India-U.S. Trade Tensions	56	Trust in Public Institutions	63
Import Diversification of Crude Oil	57	Dilemma of Balancing Public Safety and Animal Welfare in	
Iran's GPS Exit and the Tech Cold War	57	Controlling Stray Dogs	63
Israel's Plan to Control Gaza	57	Prelims Specific Topics	
Russian Territorial Control in Ukraine	57	Miscellaneous Events	65
Science & Technology		Key Initiatives & Terms	65
<u> </u>	58	Brain-Computer Interface (BCI)	66
India's First Hydrogen-Powered Train Coach	58 58	Kerala Bbecomes India's First 100% Digitally Literate State	66
Lunar Module Launch Vehicle (LMLV)	7.7	Multidisciplinary Education and Research Improvement in	
India's Need for a National Space Law	58	Technical Education (MERITE) Scheme	66
Bharat NCX 2025	59	Adi Karmayogi <mark>Ab</mark> hiyan	67
CRIB Rare Blood Group Found in India	59	Shresth Initiative	67
India's Unique Genetic Legacy	59		
Universal Health Coverage in India	59		
E. coli Turned into Mercury Sensor	60		

60



Art and Culture

Kalaburagi Fort (Bahmani Fort):

· Built by Sultan Alauddin Hasan Bahman Shah, the founder of the Bahmani Sultanate, in Karnataka. It features double-layered fortification walls and a moat. It houses the Bara Gazi Toph, one of the world's longest cannons, made of Panchdhatu (a five-metal alloy).

Jama Masjid

- Located inside the fort, it is considered Asia's second-largest mosque and was built by Muhammad Shah I. Its architecture is a blend of Persian, Moorish, and Indian styles, inspired by the Cordoba Mosque in Spain.
- Bahmani Kingdom: The first independent Muslim kingdom in the Deccan, founded in 1347.



Thiruvathirai Festival

Context

The Ministry of Culture is celebrating the Aadi Thiruvathirai Festival to mark 1,000 years since Rajendra Chola I's Southeast Asian expedition and to honour the 63 Nayanmars.

Kudavolai System

A Chola-era electoral method where palm-leaf ballots were used to select representatives. Prime Minister Modi cited this system as proof of India's early democratic traditions.

Rajendra Chola I:

Son of Rajaraja I, he expanded the Chola Empire to its greatest extent (1012-1044 CE). He launched India's first overseas expedition, conquering the Srivijaya Empire in Southeast Asia. He also built the Gangaikondacholapuram temple, a UNESCO World Heritage Site.

Navanmars

Sixty-three saints who popularised the Tamil Shaiva Bhakti tradition from the 6th century. Their hymns are collected in the

Tevaram

It is a part of the 12-volume Tirumurai canon. They challenged Brahmanical hierarchy by including individuals from diverse social backgrounds, including Dalits, hunters, and women.

Sohrai, Pattachitra, and Patua Paintings

Art and Culture

Sohrai Painting:

• A tribal mural art form practised by women in Jharkhand. It is linked to prehistoric cave art in the Karanpura Valley. It is associated with the Sohrai harvest festival. The painting received a GI tag in 2020.

Pattachitra:

A traditional cloth-based scroll painting from Odisha and West Bengal. It originated between the 5th and 12th centuries CE and is closely associated with Jagannath worship. Odisha Pattachitra was registered with a GI tag in 2008, and Bengal Patachitra in 2018.

Patua Art:

A traditional scroll painting where stories are narrated through Patua Sangeet as the scrolls are unrolled. Practised in West Bengal, Bihar, Jharkhand, and Odisha, many Patua artists are Muslims who depict Hindu epics. This tradition is also covered by the Bengal Patachitra GI tag.



















Art and Culture Piprahwa Relics

Context

Relics associated with Lord Buddha's remains have been returned to India.

Historical Background

In 1898, British engineer William Claxton Peppé excavated a stupa in Piprahwa, Uttar Pradesh, which is believed to be one of the original eight stupas built to enshrine the Buddha's mortal remains. A Brahmi inscription on a casket confirmed the relics belonged to the Shakya clan of Lord Buddha.



Dispersal: A portion of the bone relics was gifted to King Rama V of Siam (Thailand) in 1899, while another part was kept by William Peppé.

Wallacean Hominid Artefacts

Context

Archaeologists discovered potential artefacts of the oldest known Wallacean hominids (around 1.48 million years old) on Sulawesi Island in Indonesia.

Key Findings

The artefacts are small, chipped stone tools likely made by Homo erectus or a similar archaic hominin.

Significance

This discovery pushes back the timeline of human presence in the region between Asia and Australia by almost half a million years, suggesting that early hominids were capable of deep-sea crossings.

Art and Culture

Wallacea

A biogeographical region in eastern Indonesia located between the Sunda Shelf (Asia) and the Sahul Shelf (Australia).

Goswami Tulsidas

Context:

Recently, the 500th birth anniversary of Goswami Tulsidas was celebrated in Chitrakoot.

About Goswami Tulsidas:

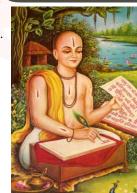
- Birth: Believed to be born in Rajapur Village, Banda District, Uttar Pradesh.
- Real Name: Rambola Dubev
- Father: Aatmaram., Mother: Hulasi.
- Teacher: Shri Narharidas Ji.

Key Contributions:

Literary Contribution:

- · He wrote the Ramcharitmanas on the banks of the Ganga at Assi, Varanasi, in the Awadhi dialect of Hindi.
 - Ramcharitmanas is included in UNESCO's Memory of the World Asia-Pacific Regional Register.
- He composed Vinay Patrika and Kavitavali in the Braj dialect of Hindi.
- Other major works include Gitavali, Dohavali, Janaki Mangal, Parvati Mangal, Barvai, Hanuman Chalisa, and others.





Art and Culture















Bhakti Movement:

- Tulsidas was a reformer and philosopher from the Ramanandi Sampradaya in the lineage of Jagadguru Ramanandacharya.
 - He was a Vaishnava Hindu saint and poet of the Saguna Bhakti tradition, renowned for his devotion to the Lord Rama.
 - Saguna bhakti tradition: Worship of deities like Shiva, Vishnu (and his avatars), and the Goddess, often in anthropomorphic forms.
 - He also believed that Nirguna (devotion to a formless, attribute-less, and abstract God) and saguna are not opposed to each other; in fact, they complement each other.
- · Promotion of Regional dialects: The use of Awadhi and Braj languages in his major work helped in the promotion of these dialects.
- Temple building: Established the famous Sankatmochan Temple dedicated to Lord Hanuman in Varanasi.
- Ramlila: It is the traditional theatrical performance of the Ramayana, based on Tulsidas' Ramcharitmanas. It was started by the disciples of Tulsidas after his death.
 - One sect of historians believes that the first person to have started the tradition of Ramlila was Megha Bhagat, a student of Tulsidas in 1625.
 - While other sects hold a view that it was started in Ramnagar (Banaras) around 1200-1500 CE.
 - Ramlila is on the UNESCO Representative List of the Intangible Cultural Heritage of Humanity.

Teachings of Tulsidas:

- Navavidha Bhakti (Nine kinds of devotion): It includes principles like keeping the company of saints and devotees, taking deep interest in the Lord's life (lila), serving the Guru, etc.
- **Social Concerns:**
 - He propounded two principles that promoted social integration and the general acceptability of his works:
 - Social Equality: Devotion, not birth, makes one dear to Lord Rama. He attacked the caste system, saying: "None will question your caste or creed; if you devote yourself to God, you belong to Him." Unity of Shaivism and Vaishnavism: He saw Shiva and Rama as one.
- Formless Rama (Adwaita idea): He adopted Monoism (Adwaita), which says the Supreme reality is formless and propertyless. He also adopted the concept of Rama, without a body, as per the principle of Monoism.
- On taxation: Believes that as the sun draws water from the earth, which then turns into clouds and returns as rain on the earth, bringing prosperity. The tax system should be similar in nature.
- Tulsidas's life and works reflect the essence of devotion, humility, and social harmony. His message of equality, unity, and unwavering faith continues to inspire generations. By stressing love for God above all divisions, he transformed spiritual practice into a force of moral guidance and collective upliftment.

The Centenary of the Kakori Conspiracy Case

Art and Culture

Context:

2025 marks the centenary year of the Kakori Train action.

About Kakori Train Action:

- The train action was executed on August 9, 1925, at Kakori, a village near Lucknow, Uttar Pradesh.
- It was orchestrated by ten revolutionaries of the Hindustan Republican Association (HRA) to seize collection money from the British Indian railways.
- They stopped the 8-down train travelling from Shahjahanpur to Lucknow near Kakori station, which was transporting treasury funds intended for the British government in Lucknow.



- Key leaders: Ram Prasad Bismil. Ashfagullah Khan, Chandrashekhar Azad, Thakur Roshan Singh, Rajendra Lahiri, among others.
 - Chandrashekhar Azad continued revolutionary activities across India until he died in a police encounter in 1931 at Alfred Park, Allahabad.













Aftermath of the Incident:

- British Reaction: A massive manhunt began, with over two dozen arrests within a month and 40+ accused, including sympathisers.
- Kakori Conspiracy case trial: The British authorities charged the involving 28 active members of the HRA with robbery, conspiracy, manslaughter, and waging war against the Crown, intensifying the severity of the case.
- Death Sentences: Ram Prasad Bismil, Ashfaqullah Khan, Rajendra Lahiri, and Thakur Roshan Singh were sentenced to death by hanging.
- Prisoner Protests: Revolutionaries sent to different jails undertook hunger strikes to protest against jail conditions and demand political prisoner status.

Impact on India's Independence Movement:

- Inspiration for future revolutionaries: The courage, defiance, and ultimate sacrifice of the Kakori martyrs inspired a new generation of revolutionaries, including Bhagat Singh, Sukhdev, and Rajguru.
- National unity: The incident underscored the unity among revolutionaries from diverse religious and regional backgrounds, with leaders like Ashfaqullah Khan and Ram Prasad Bismil symbolising the secular nature of the freedom struggle.
- Public awareness: The high-profile trial and subsequent executions garnered widespread national attention, exposing the harshness of British rule and galvanising public support for the revolutionary cause.
- Shift towards Direct Action: It marked a critical shift in the Indian independence movement, advocating that the struggle was not limited to non-violent protests but also required direct action against British exploitation.
- Revolutionary Spirit and Legacy: The event demonstrated the bravery and ingenuity of Indian revolutionaries; it is remembered as a bold assertion of India's right to freedom and self-determination, embodying the spirit of sacrifice and resilience.
- Reorganisation HRA: In 1928, after the executions of its founders, HRA was reorganised into the Hindustan Socialist Republican Association (HSRA).
- The Kakori Train Action occupies a significant place in the trajectory of India's freedom movement as it not only challenged the economic foundations of colonial exploitation but also highlighted the ideological and organisational shift towards revolutionary methods of resistance. It also inspired subsequent revolutionary organisations such as the HSRA and influenced figures like Bhagat Singh, thereby ensuring the continuity of armed struggle as a parallel strand to nonviolent resistance.













· Caste-based honour killings persist in India, particularly in regions where caste hierarchies are being challenged.

Kev Trends

Inter-caste marriages, especially between Dalit men and women from dominant castes, challenge entrenched social norms. A low percentage of marriages are inter-caste (~5%), but violence increases where these norms are

Role of Family

- Families are key in perpetuating caste through customs, rituals, and marriage norms. However, urban youth who prioritise individual autonomy are gradually weakening this system.
- Way Forward: The combination of democratic resistance, legal safeguards, and changing social values suggests a gradual shift towards a more egalitarian society.

Indian Youth as Strategic Diplomatic Capital

Indian Society

Context

- India's large youth population gives it a significant advantage in an aging world, providing leverage against protectionism and geopolitical challenges.
- Demographic Advantage: The youth population constitutes about 27% of the total population, giving India a median age of 28. This provides a strong base for human capital, with over 40 million students in higher
- Diplomatic Influence: India can leverage its youth through soft power, diaspora networks, research diplomacy, and digital expertise to project its global influence.
- Constraints: The potential is diluted by skill deficits, economic and gender divides, visa barriers, and a lack of formal youth representation in foreign policy institutions.
- Recommendations: The way forward includes strengthening vocational and STEM education, promoting inclusive growth, and creating youth advisory roles within the Ministry of External Affairs (MEA).

Reproductive Agency and India's Fertility Challenges

Indian Society

Context

India's Total Fertility Rate (TFR) has fallen below the replacement level, raising concerns about long-term demographic sustainability.

Fertility Trends

The national TFR is 2.0, with a significant gap between urban (1.6) and rural (2.1) rates. The population continues to grow due to the "momentum effect" from its youthful age structure.

Determinants

Declining family sizes, high costs of urban living, rising parenting expectations, and patriarchal norms affect fertility choices.

Policy Challenges

India's family planning programs focus on control rather than reproductive rights, and there are deficits in childcare, female labor force participation, and access to fertility treatments.

Way Forward

Policies should shift towards a rights-based framework, with tailored interventions for different states, and strengthen support systems like childcare and parental leave.















- The IMD has forecasted above-normal rainfall for the second half of the monsoon season in 2025.
- Definition of Above-Normal Rainfall: When rainfall equals or exceeds 106% of the long-period average (LPA), which is currently 870 mm based on the 1971-2020 baseline.
- Reasons for Above-Normal Rainfall: Favourable Madden-Julian Oscillation (MJO) and six low-pressure systems, ENSO neutrality, La Niña-like conditions, and below-normal Eurasian snow cover.
- Impacts: Positive impacts on agriculture (kharif sowing), hydropower, and groundwater recharge. However, it also increases the risk of floods and landslides.

Cascadia Subduction Tsunami Risk

Geography

Context

- A study warns of a potential mega-tsunami from a large earthquake in the Cascadia Subduction Zone (CSZ) off the U.S. Pacific Coast.
- Cascadia Subduction Zone (CSZ): A 600-mile fault line stretching from Northern California to Vancouver Island. It's a convergent plate boundary where the Juan de Fuca Plate subducts beneath the North American Plate.
- Risk: The zone accumulates tectonic stress, and its sudden release can trigger massive earthquakes and tsunamis. A potential mega-tsunami could unleash waves up to 1,000 feet high.

Geography **Puga Hot Spring**

Context

- Puga Hot Spring in Ladakh has been identified as a potential site for studying the origin of life and aiding lifedetection missions to Mars due to its extreme geothermal conditions.
- **Location:** Located on the Changthang Plateau in southeastern Ladakh.
- Key Features: Part of the Himalayan geothermal belt, it has not springs, mud pools, and is rich in borax, sulphur, and lithium.
- Significance: Its travertine deposits preserve organic molecules, acting as a natural prebiotic reactor that offers insights into the origin of life on Earth. It also serves as a Mars analogue for testing life-detection tools for ISRO's missions.















The International Court of Justice (ICI) delivered an advisory opinion on states' legal obligations to mitigate climate change. This was a result of a student-led campaign from the Pacific Island nation of Vanuatu.

The Ruling

The ICJ ruled that climate protection is a binding legal obligation, not a policy choice. It stated that states must prevent "serious climate harm" and are responsible for regulating emissions from corporations within their jurisdiction. The opinion also recognised that reparation claims for climate damage are valid.

Advisory Opinions

They are legally non-binding but highly authoritative. They clarify international law and can be requested by the UN General Assembly or the Security Council.

E-Mobility Environment

Context

• NITI Aayog released its report "Unlocking a 200 billion Dollar Opportunity: Electric Vehicles (EVs) in India" along with the first India Electric Mobility Index.

About India Electric Mobility Index (IEMI)

- India Electric Mobility Index (IEMI), a first-of-its-kind tool to benchmark states' progress in e-mobility, was launched by NITI Aayog, in partnership with World Resources Institute India.
- It tracks 16 performance indicators under 3 thematic categories: Transport Electrification Progress. Tracks EV adoption on the demand side.
 - Charging Infrastructure Readiness: Assesses charging network development.
 - EV Research & Innovation: Evaluates supply-side R&D efforts.
 - The index groups states into four categories: Achievers (100), Front Runners (65–99), Performers (50–64), and Aspirants (0-49).
- For the year 2024, Delhi led the rankings with a score of 77, followed by Maharashtra (68), Chandigarh, and Karnataka.

About Electric Vehicles (EVs)

- **Types:**
 - Battery EVs (entirely battery-powered);
 - Hybrid EVs (have both engine and electric motor);
 - Fuel Cell EVs (utilise 'fuel cell technology' to generate electricity for propulsion);
 - Plug-in Hybrid EV (uses both an engine and a rechargeable battery), etc.
- Status of E-mobility in India (Unlocking a 200 billion Dollar Opportunity:
 - Electric Vehicles in India)
 - 2.08 million EV sales in 2024, up from 50,000 in 2016.
 - 7.6% EV penetration in 2024, far below the 30% target for 2030.

Way Forward: Recommendations highlighted in the report

- Moving from Incentives to Mandates: Set targets for production of Zero Emission Vehicles (ZEVs); impose Higher registration fees/taxes for ICE, etc.
- Saturation Approach: 100% electric mobility adoption across 5 designated Indian cities within 5 years, leveraging infrastructure development, fleet electrification mandates, and targeted financing mechanisms.
- Financing e-Buses and e-Trucks: Create a pooled fund from public and multilateral sources to provide lowinterest loans for procurement.
- Battery Research: Build academia-industry-government partnerships to accelerate work on new chemistries.
- Strategic Charging Infrastructure: Develop 20 key corridors, set up nodal agencies, map hub locations, and use Time-of-Day pricing to boost efficiency.













- Unified National EV App: Provide services for locating charging stations, booking slots, payments, and exploring dedicated EV power lines.
- · Lowering Upfront Costs: Promote leasing models for buses and trucks to aid small operators and battery as a service (BaaS); Introduce a battery passport for health tracking, etc.
- Batteries constitute almost 40 % of the capital cost of an EV.
- Awareness and Information: Launch a national EV awareness program, assess stakeholder data needs, and develop a comprehensive information system to guide decision-making.

Best Practices for EV Adoption

- China: "10 Cities, 1000 Vehicles" program was a flagship initiative for 10 pilot cities, each tasked with deploying at least 1,000 New Energy Vehicles (NEVs) in public fleets.
- Singapore: Established EVElectric Charging Pte Ltd (EVe), a wholly owned subsidiary of their Land Transport Authority to facilitate the establishment of charging stations, by coordinating with all the relevant agencies.
- Europe: ChargeMap app provides real-time charging station data, user reviews, and is integrated with navigation systems.
- UK: Advanced Propulsion Centre (APC) explicitly funds projects to bridge the gap between working prototype and commercialisation; Faraday Battery Challenge (funded by public and sector sector) created the UK Battery Industrialisation Centre (UKBIC)- a facility that enables companies to scale lab prototypes to production.

Awaza Programme of Action (2024-2034) (APOA)

Environment

Context

- The Third United Nations Conference on Landlocked Developing Countries (LLDC3) opened in Awaza, Turkmenistan.
- The conference serves as a crucial platform to implement the newly adopted APoA.

About APoA

- Adopted by consensus at the UN General Assembly in December 2024.
- Offers a comprehensive framework to tackle persistent development challenges faced by LLDCs.
- Key deliverables include
 - Establishment of Regional Agricultural Research Hubs to strengthen food security;
 - Launch of an Infrastructure Investment Finance Facility to mobilise critical funding;
 - Development of a UNFCCC Negotiating Body to advance trade and climate resilience, etc.

UNDP Equator Initiative Award

Environment

Context

Bibi Fatima Women's Self-Help Group (SHG) from a small village in Dharwad district was one of the winners of the 'Equator Initiative Award'.

About UNDP Equator Initiative Award

- Presented biennially under the Equator Initiative of the United Nations Development Programme (UNDP).
- The Equator Initiative provides opportunities for Indigenous Peoples and local communities to address land degradation, biodiversity conservation and livelihood improvement.
- It is also referred to as the Nobel Prize for Biodiversity Conservation.

About Bibi Fatima SHG

The group introduced millet-based mixed cropping on rainfed farms, promoted climate-resilient farming systems, practised livestock rearing and horticulture and popularised millets.









· The President of South Africa announced the launch of the Global Outlook Council on Water Investments (GOCWI).

About GOCWI:

- Launched as a G20 Presidential Legacy Initiative, it forms a core pillar of the Global Water Partnership's (GWP) Global Transformation Agenda on Water Investments.
- GWP is a multi-stakeholder action network and intergovernmental organisation dedicated to equitable, sustainable, and efficient management of water resources.
- GWP's Transformation Agenda aims to mobilise 15 billion for water security by 2030.
- · It will serve as a high-level platform to sustain political and financial momentum for water investments worldwide

India's Resolution on Wise-use of Wetlands

Environment

Context

India's resolution titled 'Promoting Sustainable Lifestyles for Wetlands' has been adopted at the Ramsar 15th Conference of the Parties (CoP) in Zimbabwe, with 172 countries supporting it.

More on the News

- The resolution aligns with the principles of Mission LiFE (Lifestyle for Environment).
- Mission LiFE is an India-led global movement introduced at the UN Climate Change Conference in Glasgow (COP26) in 2021.
- It aims to nudge individuals and communities to practice a lifestyle that is synchronous with nature and does not harm it.

About Wise Use of Wetland

- It is the core principle of wetland conservation under the Ramsar Convention.
- The Convention defines wise use as maintaining the ecological character of wetlands using ecosystem-based approaches within the context of sustainable development.
- Contracting parties are mandated to promote wise use through national plans, legislation, management actions and public education.
- India's Approach to Wise Use of Wetlands
 - The National Plan for Conservation of Aquatic Ecosystems (NPCA).
 - Integrated Management Plans (IMPs) outline strategies for sustainable use.
 - India released a 2024 framework titled "Wetland Wise Use An Implementation Framework".
 - 'Mission Sahbhagita' and 'Save Wetlands' Campaign have witnessed over 2 million citizens as volunteers, enabling the mapping of more than 170,000 wetlands.

India's Draft Climate Finance Taxonomy

Environment

Context

The Ministry of Finance released a draft Climate Finance Taxonomy to guide investors toward sustainable projects and combat "greenwashing".

What it is

· A classification framework that labels economic activities as sustainable investments. It is intended to be a "living document" that evolves with India's climate commitments and priorities.

Need for the Taxonomy

The lack of a uniform framework has hindered consistent climate finance flows to India. The taxonomy is crucial to help India achieve its Net Zero by 2070 target.















Review Mechanism: The success of the taxonomy depends on a structured review system that includes annual public reviews and comprehensive five-year revisions aligned with UNFCCC global stocktakes.

Redrawing Boundaries of Nahargarh Sanctuary

Environment

Context

The Rajasthan Forest Department redrew the boundaries of the Nahargarh Wildlife Sanctuary (NWS) near Jaipur, allegedly to benefit hotels in the Eco-Sensitive Zone (ESZ).

Legal & Procedural Gaps

This move violated Section 26A of the Wildlife Protection Act, 1972, which mandates prior approval from the National Board for Wildlife (NBWL) for any boundary changes. The revised map also excluded areas previously classified as "Described Areas," leaving them vulnerable to encroachment and real estate expansion.

Nahargarh Wildlife Sanctuary

· Located in the Aravalli hills, it is part of the Nahargarh Biological Park and is home to leopards, hyenas, and various bird species.

Way Forward

There is a need to restore due process by mandating compliance with the Wildlife Protection Act, conducting independent environmental assessments, and auditing all clearances granted in ESZs over the past decade.

India Targets 100 GW Nuclear Power

Environment

Context

• The Union Budget 2025-26 has set a target of achieving 100 GW of nuclear power capacity by 2047, a significant jump from the current 8.18 GW.

Importance

Nuclear energy is a reliable, low-carbon source that can meet India's projected 5-fold increase in electricity demand by 2047. It is crucial for meeting India's COP26 targets of 500 GW of non-fossil energy by 2030 and netzero by 2070.

Challenges

The Atomic Energy Act, 1962 limits nuclear power development to state-owned entities, discouraging private investment. Nuclear energy is also not classified as "renewable," restricting access to green finance. The Atomic Energy Regulatory Board (AERB) lacks legal autonomy, and there are operational issues with land acquisition and slow licensing.

Way Forward

The government has outlined a three-stage reform agenda that includes amending the Atomic Energy Act to allow private participation, creating an independent statutory nuclear regulator, and reclassifying nuclear energy as "green energy" to attract finance.

Forest Cover Loss in India

Environment

Context

A study by IIT Bombay and SASTRA Deemed University revealed a net loss in forest cover in India between 2015 and 2019, with a significant decline in forest connectivity.

Key Findings

· Overall forest cover declined from 24.13% to 24.10%. Tamil Nadu and West Bengal accounted for nearly half of the total loss. The study found that most of the forest gains were small, isolated patches called "islets," indicating decreased connectivity and resilience, while core forest areas suffered the highest losses.















Significance: The study is important because it uses a different methodology (Morphological Spatial Pattern Analysis) than the Forest Survey of India (FSI) reports, focusing on the fragmentation and connectivity of forests, which is a more accurate measure of ecological health.

Water Hyacinth's Invasion

Environment

Context

The unchecked spread of water hyacinth during monsoons is threatening India's waterways, particularly in Kerala's Kuttanad and Vembanad Lake.

Water Hyacinth

An invasive floating plant native to South America, known as the "Terror of Bengal". It multiplies rapidly, forming dense mats that block sunlight and oxygen, suffocating aquatic life.

Impacts

It harms paddy cultivation, reduces fish catches, blocks navigation channels, and worsens urban flooding. The decaying plant also releases methane, a potent greenhouse gas.

Microplastic Pollution

Environment

Context

Surveys by the Ministry of Earth Sciences (MoES) have found alarming levels of microplastic pollution on India's coastlines.

Microplastics

Plastic particles between 1 μ m and 5 mm in size. They are either manufactured small (primary microplastics) or result from the breakdown of larger plastics (secondary microplastics).

Sources

Major sources are riverine inputs and abandoned fishing gear. Microplastics have also been found in salt and sugar samples in India.

Health Concerns

A global UN treaty is being negotiated to address plastic pollution, but there are disagreements over whether to include health concerns in addition to waste management. Studies link chemicals in plastics to various health issues, including thyroid disruption and cancer.

India's Growing Battery Waste Challenge

Environment

Context

India's push for electrification and its Net Zero 2070 goal are accelerating the growth of battery waste from electric vehicles (EVs) and battery energy storage systems (BESS).

The Problem

Lithium battery demand is projected to rise dramatically, leading to a surge in battery waste, which contains heavy metals like cobalt and lithium that can contaminate soil and water. Informal recycling practices expose workers to carcinogens, and the economic cost of ineffective recycling could reach \$1 billion by 2030.

Challenges

The Battery Waste Management Rules, 2022, introduced Extended Producer Responsibility (EPR), but it's hampered by a low-price floor for recycling, weak certification audits, and a lack of recycling capacity.

Way Forward

· India needs to adopt EPR pricing models similar to the UK's, integrate informal recyclers into the formal system, and establish a national battery registry to track compliance.















- Sundarbans Tiger Reserve is now India's second largest after the expansion of its area. National Board of Wildlife (NBWL), led by the Union minister of Environment, Forest and Climate Change, approved the West Bengal government's proposal to increase the area of Sundarbans Tiger Reserve (STR).
- Now STR is just behind Andhra Pradesh's Nagarjunasagar-Srisailam Tiger Reserve in size and elevates it from the seventh to the second-largest tiger reserve within India's 58 tiger reserves.

Procedure to declare or alter the Tiger reserve

- Tiger Reserves are notified by State Governments as per provisions of Section 38V of the Wildlife (Protection) Act, 1972, on advice of the National Tiger Conservation Authority.
- The following steps are involved in the notification:
 - The proposal is obtained from the State.
 - In-principal approval is communicated from the National Tiger Conservation Authority, soliciting detailed proposals under section 38V of the Wildlife (Protection) Act, 1972.
 - The National Tiger Conservation Authority recommends the proposal to the State after due diligence.
 - The State Government notifies the area as a Tiger Reserve.
 - Process for alteration: As per section 38 W (1) of the Wildlife (Protection) Act, 1972, no alteration in the boundaries of a tiger reserve shall be made except on a recommendation of the Tiger Conservation Authority and the approval of the National Board for Wildlife.
 - Such proposals are also obtained from the State.

'Matri Van' Initiative **Environment**

- Matri Van Initiative is launched in Gurugram to develop a 750-acre urban forest in the Aravalli hills.
- The initiative is part of the 'Ek Ped Maa Ke Naam' programme.
- It aims to enhance ecological preservation and foster community participation, marking a significant step towards urban sustainability.
- Ecological Restoration Components include removal of invasive species, plantation of native trees and restoration of Aravalli-specific biodiversity.

Etalin Hydroelectric Project

Environment

Context

Context

An expert panel of the Union Environment Ministry has recommended environmental clearance for the Etalin hydroelectric project.

About the Etalin hydroelectric project

- Location: in Arunachal Pradesh's Dibang valley, part of the Eastern Himalaya Global Biodiversity Hotspot.
- **Rivers:** Concrete gravity dams on the Dri and Tangon rivers.
- The Dri River joins the Tangon near Etalin village to form the Dibang River downstream.











Bihar Becomes 1st State to Adopt E-Voting System

Context

• The Ministry of Home Affairs has amended the rules for cancelling the Overseas Citizen of India (OCI) card, introducing new grounds for cancellation.

Key Changes

- An OCI card can now be cancelled if the holder is sentenced to imprisonment for two or more years, or if they are charged with an offense punishable with seven or more years of imprisonment. These rules apply to convictions in both India and abroad.
- Existing Grounds: Other grounds for cancellation include obtaining the card through fraud, showing disaffection towards the Constitution, and engaging in unlawful trade during wartime.
- OCI Scheme: Launched in 2005, it offers lifelong, visa-free travel to foreign nationals of Indian origin, but it excludes former citizens of Pakistan or Bangladesh.

Election to the Office of the Vice-President of India

Polity

Context

• The Election Commission of India (ECI) has announced the election date for the 17th Vice-Presidential Election.

Constitutional Provisions related to Vice President

- Term & Vacancy: As per Article 67, the Vice President serves for five years. Article 68(2) mandates a prompt election in case of vacancy.
- Electoral College: Comprises members of both Lok Sabha and Rajya Sabha (elected + nominated).
- Present strength: 782 MPs.
- Voting System: Proportional Representation by Single Transferable Vote and secret ballot (Article 66(1)).
- Authority: Election Commission of India (ECI) under Article 324 and through powers under Presidential and Vice-Presidential Elections Act. 1952.

Election Procedure of Vice President

- Nomination: Requires 20 proposers and 20 seconders; ₹15,000 deposit is mandatory.
- Voting: Conducted in Parliament House using special ECI-supplied pens. First preference vote is compulsory.
- Supervision: ECI appoints the Returning Officer (Secretary General, Rajva Sabha) and observers.

Key Safeguards Followed in Elections

- No party whip allowed.
- Violation of secrecy or use of unauthorized pen invalidates the vote.
- Bribery or undue influence is grounds for election challenge under the Presidential and Vice-Presidential Elections Act, 1952.

The Constitution (One Hundred and Thirtieth Amendment) Bill, 2025

Polity

Context

The union home minister introduced the Constitution (One Hundred and Thirtieth Amendment) Bill, 2025 in the Lok Sabha.

Additional Information

- Bill seeks to provide for removal of the Prime Minister, Chief Minister or any other Minister in central and state governments, and the Union Territory (UT) of Delhi who is held in custody for 30 consecutive days for a serious criminal offense. The Bills propose significant amendments to Articles 75, 164, and 239AA of the Indian Constitution.
- The same provisions are extended to UT of Puducherry through the Government of Union Territories (Amendment) Bill, 2025 empowering the president to act similarly.















- The Jammu and Kashmir Reorganization (Amendment) Bill, 2025 also applies the same provisions to Jammu & Kashmir, allowing the LG to remove the CM/Ministers.
- All three bills have been referred to the Joint Parliamentary Committee (JPC) for detailed examination and discussion.

Key provisions of Constitution Amendment Bill, 2025:

- **Grounds for Removal**
 - A Union Minister, Chief Minister (CM), or State Minister will be removed from office if they are arrested and detained in custody for 30 consecutive days for an offense punishable with five or more years of imprisonment.
 - This also applies to the Prime Minister.

Procedure for Removal:

- For Union Ministers (excluding PM): The President must remove the Minister on the Prime Minister's advice, to be tendered by the 31st day of detention. If no advice is given, the Minister will automatically cease to hold office from the 31st day.
- For State Ministers (excluding CM): A similar provision applies, with the Governor acting on the advice of the Chief Minister. If the CM does not advise by the 31st day, the Minister automatically loses office.
- For Delhi Ministers (excluding CM): The President removes the Minister on the advice of Delhi's Chief Minister.
- If no advice is tendered, the Minister automatically ceases to hold office.
- For Prime Minister or Chief Ministers (Union/State/Delhi): The Prime Minister or Chief Minister must tender their resignation by the 31st consecutive day of custody. If they fail to resign, they will automatically cease to hold office from the day thereafter.
- No bar on Reappointment: Reappointment of a Minister, Prime Minister, or Chief Minister is allowed after their release from custody.

Arguments in favour of Bills:

- Constitutional Morality and Ethical Governance: SC in Manoj Narula v. Union of India (2014) had indicated that morality is intrinsic to constitutional framework, urging against appointing persons with serious criminal
- Protecting Public Trust: This measure is seen as a strong stance against corruption and the criminalization of politics, potentially enhancing public trust in institutions.
- Good Governance: It seeks to eliminate anomaly of "governance from jail," aligning executive functions with accountability and addressing constitutional gaps in accountability.
- Bridging Legal Gap: The existing Representation of People Act (RP Act) disqualifies elected representatives only after conviction. This Bill addresses the interim period of arrest and detention, bridging a crucial legal gap.
- Fairness with Other Employees: Ordinary government employees face suspension after 48 hours in custody; similar standards should apply to Ministers.
- Other: Uniform party application, advances political decriminalization, Balancing Frivolous Arrests and Judicial Scrutiny etc.

Arguments against the Bills:

- Political Weaponization and Threat to Federalism: Central agencies like the ED and CBI could be misused to arrest leaders on flimsy charges, providing a "legal shortcut" to destabilize governments without electoral contest.
- Presumption of Innocence at Stake: The Bill is against the principle of "innocent until proven guilty" and natural justice by triggering removal based on detention alone, without conviction or even the framing of charges.
- The SC in Lily Thomas v. Union of India held that disqualification begins only upon conviction, not arrest or detention.
- **Inconsistency in Treatment:** There is an inconsistency between legislators and Ministers.
- While Members of Parliament (MPs) and State Legislatures (MLAs) are disqualified only upon conviction under the RP Act, 1951 Ministers under this Bill could be forced to resign on mere detention.
- This creates a paradox where a convicted legislator might continue as a Minister longer than an arrested Minister.
- "Revolving Door" Problem: The provision allowing reappointment after release from custody could lead to cycles of resignation and reinstatement, causing political instability and potentially incentivizing tactical legal maneuvers.













- Executive Discretion and Politicization: The dual mechanism of removal (PM/CM's advice or automatic cessation) could politicize the process, allowing a Prime Minister to protect allies or remove a hostile Chief Minister to target rivals.
- Lack of Safeguards: No provision for compensation if the arrest is found to be malicious.
- It can encourage misuse of preventive detention and laws like Unlawful Activities Prevention Act, 1967 (UAPA) and Prevention of Money Laundering Act, 2002 (PMLA).
 - E.g. of the 5,000 cases registered by ED in past five years, there were fewer than 10% convictions.

Existing legal framework and Judgments for disqualification after crimes

- Representation of the People Act, 1951 (RPA): Under Section 8(3) of the RPA, legislators are disqualified from contesting elections or continuing in office upon conviction for certain criminal offenses with imprisonment of two years or more.
- Lily Thomas (2013) judgment: SC struck down Section 8(4) of the RPA, which had allowed sitting members to avoid disqualification if an appeal was filed against their conviction.
- Manoj Narula v. Union of India (2014): Court noted no legal bar against appointing Ministers with criminal backgrounds, but stated that PM should consider avoiding individuals with criminal antecedents, especially for serious offenses.
- PIL of Public Interest Foundation (2018): Courts cannot add new disqualification grounds beyond laws.
- Recommended Parliament should enact laws requiring political parties to revoke membership and deny tickets to serious criminals.
- Election Commission of India: In 2016, it recommended amending the RPA to bar persons against whom charges are framed by court for an offence punishable with at least five years' imprisonment from contesting elections.

Strengthening Legal Aid Capacity in India

Polity

Context:

• India's legal aid system, mandated by Article 39A of the Constitution, remains underfunded, limiting equitable access to justice.

Legal Architecture

The system is governed by the Legal Services Authorities Act, 1987. It is a hierarchical structure, with NALSA at the national level and State and District Legal Services Authorities (SLSAs and DLSAs) at the lower levels.

Issues

The system receives less than 1% of the total justice system's expenditure. Furthermore, SLSAs have low autonomy and often underutilise the funds allocated to them. There is also a significant drop in the number of paralegal volunteers, and the coverage of legal aid clinics is sparse.

Way Forward

The budget for legal aid should be increased to at least 2% of the justice budget, and SLSAs should be given more operational flexibility. The government should also focus on strengthening the volunteer network, expanding digital outreach, and standardising pay.

The Promotion And Regulation of Online Gaming Act, 2025

Polity

Context

The Parliament has passed the Promotion and Regulation of Online Gaming Act, 2025, effectively banning online money games while promoting and regulating other kinds of online games.

Additional Information

- Act aims to establish a robust legal framework and regulate, promote and encourage the online gaming sector for innovation and economic growth and ensure a developed, safe and responsible digital environment for all citizens.
- It was introduced in the House as a Finance bill under Article 117(1) and 117(3) of the Constitution of India with the due recommendation of the President.













Why was the Act needed

- · Addiction and financial ruin: Online money games encourage compulsive playing and create an illusion of quick profits. This leads to addiction, pushing families into debt and distress.
- According to Union Minister for Electronics and Information Technology, online money gaming has negatively affected 45 crore people who faced a loss of more than ₹20,000 crores.
- Mental Health: World Health Organization classifies gaming disorder as a health condition in its International Classification of Diseases.
- Gaming disorder is a pattern of play marked by loss of control, neglect of other daily activities, and persistence despite harmful consequences.
- Closing Legal Loopholes: Gambling and betting are already restricted under laws such as the Bharatiya Nyaya Sanhita, 2023, and by various state legislations. But the online domain remained largely unregulated.
- Many gaming platforms operate from offshore jurisdictions presented challenges in terms of extra-territorial jurisdiction and inter-state inconsistencies.
- Threat to National Security: Investigations have shown that some gaming platforms were being used for terror financing, illegal messaging, and money laundering effectively compromising the country's security.
- Encouraging e-sports: The Act promotes positive digital engagement and boosts creative economy and innovation in the e-sports sector.

Key Provisions of the Act

- **Kev Definitions:**
- Online Games: Any game, which is played on an electronic or a digital device and is managed and operated as a software through the internet or any other kind of technology facilitating electronic communication.

Other Notable Initiatives to Counter the Risks of Online Gaming:

- Section 69A of Information Technology Act, 2000: Empowers the Government to block access to illegal websites or links. E.g., 1,524 betting and gambling websites and mobile apps were blocked during 2022-25.
- IT (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021: Provide norms for online gaming platforms. E.g., Registration of Intermediaries with Self-regulatory bodies (SRBs).
- Bharativa Nyaya Sanhita, 2023: Section 111 and 112 penalise unlawful economic activities and cybercrimes and unauthorised betting and gambling respectively.
- Integrated Goods and Services Tax Act, 2017 (IGST Act): Illegal and offshore gaming platforms are regulated under the IGST Act.
- Consumer Protection Act, 2019: Prohibits misleading and surrogate advertisements. The Central
- Protection Authority (CCPA) has issued advisories to prevent celebrities and influencers from endorsing betting platforms.

• Categorization of the Online Games:

- E-Sport: Competitive digital sports where teams or individuals participate in organised tournaments, requiring strategy, coordination, and advanced decision-making skills.
 - E.g., Ved "Beelzeboy" Bamb became the first Indian player to win the Pokémon GO World Championship 2025.
- Online Social Games: Games that form part of everyday recreation, primarily skill-based and designed for entertainment, learning, or social interaction. E.g., Wordle online word game, Kahoot!, etc.
- Online Money Games: Online games, whether based on chance, skill, or both, where financial stakes are involved. Financial stakes include paying fees or depositing money for playing in expectation of winning linked to monetary or other gains. E.g. Dream11, Rummy, Poker, WinZO, etc.
- Applicability: It will apply to the whole of India and to online money gaming service offered within the territory of India or operated from outside the territory of India.
- Absolute prohibition of online money games: Online money games, also called real money games and related services to be prohibited.
- Further, advertisements and financial transactions by banks or financial institutions towards payment for any online money gaming service are also prohibited.
- Authorities have also been empowered to block access to unlawful platforms under the Information Technology Act, 2000.













- Promotion of E-Sports: Recognized as a "legitimate competitive sport." The Ministry of Youth Affairs and Sports will develop guidelines, and infrastructure like training academies and research centers will be established.
- Promotion of Social and Educational Games: Union Government empowered to recognise and register social games that are safe and age-appropriate with dedicated platforms for content distribution.
- Online Gaming Authority: Establishment of a national-level regulatory authority to categorize and register games, determine if a game is a "money game," and address grievances.
- Offences and Penalties: Offences under key provisions are cognisable and non-bailable.
- Imprisonment of up to 3 years and a fine of up to 1 crore rupees for offering online money games. Advertising such games shall attract imprisonment up to 2 years and a fine of up to 50 lakh rupees.
- Corporate and Institutional Liability: Companies and their officers can be held accountable, with specific safeguards for independent and non-executive directors who act with due diligence.
- Investigation and Enforcement Powers: Central Government can authorize officers for investigation, search, and seizure, including arrests without a warrant in certain cases.

National Sports Governance Act, 2025

Polity

Context

• Recently, the National Sports Governance Bill, 2025, was given assent by the President.

Sports governance in India

- Sports regulation falls within the jurisdiction of the states, as per Entry 33 of the State List of the Seventh Schedule.
- Existing policies include the National Sports Policy (NSP) (1984, revised 2001) and the Sports Broadcasting Signals (Mandatory Sharing with Prasar Bharati) Act, 2007.
- Recently, the Cabinet approved the NSP 2025, superseding the 2001 policy.
- It is structured around five core pillars, focusing on global excellence, economic and social development through sports, making sports a people movement, and integrating sports with education.

Key highlights of the Act

- National sports bodies: provide for establishing the National Olympic Committee, National Paralympic Committee, and National and Regional Sports Federations for each designated sport.
- These bodies will be affiliated with respective international bodies and will have affiliated units at the state and district levels.
- These bodies will be governed by international charters and statutes.
- National sports board (NSB): It will grant recognition to sports bodies and register their affiliate unit. Only recognised bodies will receive funds from the central government.
- National Sports Body must formulate a Code of Ethics for its stakeholders, setting minimum standards for ethical and appropriate conduct.
- A recognised organisation shall be considered a public authority under the RTI Act, 2005
- The central government will decide its composition and appoint members on the recommendations of searchcum-selection committee.
- To be appointed to NSB, a person must have special knowledge or experience in public administration, sports governance, sports law, and other related fields.
- National Sports Tribunal: To adjudicate "sports-related disputes".
- It will not have jurisdiction over specified disputes such as those in relation to games organised by international bodies and internal disputes of national sports bodies.
- Oversight of elections: The central government will establish a national panel of electoral officers to oversee elections of national sports bodies.
- Every national sports body must also constitute an electoral panel to oversee elections of its affiliates.
- Powers of the central government: The Central government may exempt a national body or its affiliates from any provision of Act, if necessary, in the public interest for promotion of that sport.

Need for a comprehensive sports Law in India:

- Absence of a comprehensive and uniform sports law: leading to inconsistent and often outdated regulations
- The National Sports Development Bill, 2013, was not enacted.















- Politician Domination in NSFs: Politicians with minimal sports expertise often occupy key positions in NSFs.
- Earlier, FIFA suspended All India Football Federation (AIFF) due to undue influence from third parties.
- Overlapping roles and responsibilities of key organizations: like the SAI, the IOA, and NSFs create confusion and delays.
- Inadequate Funding and Utilisation: Less than 40% of the allocated budget for 2022-2023 was utilised for athlete development.
- Ineffective Policy Implementation: The National Sports Policy (1984, revised 2001) has not been successfully put into practice.
- Olympics 2036 Preparation: The legislation supports India's bid for the 2036 Olympics by ensuring compliance with the Olympic Charter and global best practices.

Electoral Rolls in Machine-Readable Format

Polity

· Amidst allegations of vote theft, the opposition has urged the Election Commission (EC) to provide electoral rolls in a machine-readable format.

Current Limitations

Electoral rolls are currently provided as image PDFs or printouts, making it difficult and time-consuming to digitally process the data and manually check for errors or duplicates.

Machine-Readable Rolls

This format allows for easy computer processing, enabling the use of Optical Character Recognition (OCR) to detect errors, duplicates, and data patterns more quickly. The ECINet portal and app already use phone-based verification of Aadhaar numbers for voter registration and corrections. This new feature aims to improve the integrity of the electoral process, especially in light of fraudulent deletions and additions.

Polity Green Election

Context

A successful "green election" model has prompted calls for a nationwide replication by the Election Commission of India.

Definition

A green election is an environmentally sustainable electoral process that minimizes ecological impact by reducing plastic use, promoting biodegradable materials, and encouraging eco-friendly practices.

Kev Pillars

- The framework for a green election includes using biodegradable materials for booths and banners, ensuring waste segregation at polling centers, constructing "green booths" with recyclable materials, and promoting digital outreach over printed materials.
- **Examples:** Kerala has already banned single-use plastics in elections, while Goa has used biodegradable booths. Globally, Sri Lanka conducted a carbon-audited election, and Estonia uses e-voting to reduce emissions.

Extension of President's Rule in Manipur

Polity

Parliament has approved the second extension of President's Rule in Manipur until February 2026.

Constitutional Framework

Article 356 allows the imposition of President's Rule when a state's constitutional machinery fails. An extension beyond one year requires a national emergency or certification by the Election Commission that holding elections is not possible.













Governance Issues

The prolonged use of Article 356 raises concerns about the erosion of cooperative federalism and the creation of a "democratic deficit" by undermining a state's autonomy and legitimacy.

Governors as Chancellors Fuel Friction

Polity

Recent controversies in states like Tamil Nadu and Kerala highlight the friction caused by governors' interference in university affairs in their role as chancellors.

Role of Governor

The Governor's position as chancellor is a statutory role defined by State University Acts, not the Constitution. They are meant to ensure political neutrality, academic oversight, and adherence to standards.

Recent Controversies

The Supreme Court has had to intervene in cases where governors have delayed assent to university bills or issued directives on ideological matters. This interference is seen as an erosion of federalism and a politicization of academic institutions.

Way Forward

The solution lies in creating independent panels for Vice-Chancellor appointments, explicitly defining the governor's role in university acts, and strengthening university governing bodies to ensure genuine autonomy.

Commercial, Prohibited Speeches Not Part of Fundamental Rights: SC

Polity

Context

The court was hearing a case against social media comedians for "abusing freedom of speech and expression" by making insensitive jokes about persons with disabilities.

Key Judicial Observations

- Commercial & Prohibited Speech Not Protected: Freedom of speech (Art. 19(1)(a)) does not cover commercial speech or prohibited speech.
- Hate speech/Prohibited speech: Expressions that promote or incite enmity, hatred, or violence against a group based on inherent characteristics such as religion, race, caste, or ethnicity.
- Commercial speech: Advertising and related forms of speech with economic intent.
- Accountability of Influencers: Influencers with a large following must act responsibly.
- Penal Action & Compensation: Suggested proportionate punitive measures under IT Rules and Cinematograph
- Social Media Guidelines: Court asked government to draft comprehensive guidelines for regulating online content.

SC Judgement related to free speech

- Amish Devgan v. Union of India (2020): It differentiated between free speech and hate/prohibited speech and emphasised the responsibility of influencers with wide reach.
- Shreya Singhal v. Union of India (2015): SC held that legitimate online expression cannot be curtailed in the absence of imminent harm.

Parliamentary Proceedings for Removal of Judge

Polity

Context

- The Lok Sabha Speaker admitted a motion for the removal of a High Court judge over corruption allegations, triggering an investigation by an inquiry committee.
- Removal Process: The process is governed by the Judges (Inquiry) Act, 1968. A motion signed by at least 100 MPs in the Lok Sabha or 50 in the Rajya Sabha can be submitted. If admitted, a three-member committee investigates the charges, and the motion must be passed by a two-thirds majority in both houses before the President can issue the removal order.















• The Supreme Court is hearing a plea to extend the "creamy layer" rule to Scheduled Castes and Scheduled Tribes (SC/STs) to ensure that reservation benefits are distributed equitably among subgroups.

Creamy Layer

This principle excludes socially and economically advanced members from reservation benefits to prevent dominant subgroups from monopolizing them. Currently, it only applies to Other Backward Classes (OBCs).

Need for Extension

Extending the rule would prevent affluent families from cornering quotas, promote genuine upliftment of the poorest, and build public trust in reservation policies.

Challenges

The move is controversial because critics argue that caste-based discrimination persists regardless of economic mobility. Designing uniform criteria for a nationwide application is also challenging, and it could lead to political backlash and social divisions within communities.

Judicial Landmarks

The Indra Sawhney case (1992) first introduced the creamy layer principle for OBCs. The Jarnail Singh case (2018) later extended this principle to SC/ST promotions.

National Cooperative Development Corporation (NCDC)

Polity

Context

The Union Cabinet has approved the Central Sector Scheme "Grant in aid to National Cooperative Development Corporation (NCDC)".

About the Grant in Aid to NCDC

- The scheme has an outlay of Rs.2000 crore for a period of four years (2025-2029) with an allocation of Rs.500 crore each year.
- The NCDC will serve as the executive agency for the scheme, handling fund disbursement, project monitoring, and loan recovery.
- Grant-in-aid are payments in the nature of assistance, donations or contributions made by one government to another government.
- They are guided by Article 275 (Statutory Grants) and Article 282 (Discretionary Grants) of the Constitution.
- This scheme funds modernization and new projects, benefiting millions of farmers by improving their economic conditions, creating widespread employment, and strengthening India's vital cooperative sector.

Centre to Ban Money-Based Online Games

Polity

The Union Cabinet has approved the Promotion & Regulation of Online Gaming Bill 2025 to regulate moneybased online games and address issues like psychological addiction and financial harm.

Kev Provisions

The bill defines a "money game" as one involving stakes for monetary stakes. It bans the promotion and transfer of funds for such games. The punishment for violations is up to three years of imprisonment or a fine of up to Rs 1 crore. Importantly, it exempts players and focuses penalties on promoters and enablers.

Significance

The bill creates India's first national framework for online gaming, promoting a safe and regulated environment while encouraging e-sports and skill-based gaming.













- There's a growing need to integrate community participation into health governance to make healthcare systems more accountable and effective.
- Mechanisms for Participation: This includes Village Health Sanitation and Nutrition Committees (VHSNCS), public forums like Jan Sunwai for grievances, and Hospital Management Committees (Rogi Kalyan Samitis). Digital platforms like e-Sanjeevani also gather patient feedback.
- Benefits: Civic engagement builds trust, enhances accountability, improves service access, and ensures that policies reflect local health priorities.
- Barriers: The main barriers are a mindset that views communities as passive recipients, a focus on metrics over quality of engagement, and insufficient funding and awareness.
- Way Forward: The solution lies in empowering citizens through health rights education, involving marginalized groups, providing proper training to health staff, and ensuring statutory backing for community roles.

India's Path to Technological Sovereignty

Governance

Context

PM Modi's Independence Day speech emphasized technological sovereignty as essential for India's self-reliance and economic independence.

Significance

It reduces dependence on foreign technology, secures national infrastructure, and drives economic growth towards a projected \$1 trillion digital economy by 2028.

Bottlenecks

India faces a "brain drain crisis" with many of its top tech talent leading U.S. firms. There is also an R&D deficit, with India investing only 0.7% of its GDP in research, and a lack of indigenous equivalents to global tech giants.

Way Forward

The government needs to increase R&D spending to 1.5% of GDP by 2030, incentivize intellectual propertydriven startups, accelerate the India Semiconductor Mission, and create IIT-industry clusters based on the DARPA model.

MERITE Scheme Governance

Context

The Union Cabinet approved the MERITE scheme to improve the quality of technical education in line with the National Education Policy (NEP) 2020.

Key Features

It's a Central Sector program with an outlay of Rs 4,200 crore, including a World Bank loan of Rs 2,100 crore. The scheme aims to enhance quality, equity, and research in technical education, and promote women's leadership.

Implementation

· It involves collaboration with institutions like IITs, IIMs, and AICTE. It will provide internships, update curricula, and establish research hubs with incubation centers.

Significance

It is expected to improve the employability of over 7.5 lakh students and reduce graduate unemployment in technical fields.













• India ranks third globally in organ transplants, but there are significant gaps in its donation system.

Legal Framework

The Transplantation of Human Organs and Tissues Act (THOTA), 1994, regulates transplants and bans commercial trade. Recent guidelines have removed the upper age limit and state domicile requirement for deceased donor registration.

Gaps

India's deceased donation rate is less than 1 per million, far below the global average of 10 per million. Other issues include low public awareness, a rural-urban and geographic skew, a shortage of trained professionals, and ethical concerns like coercion and trafficking.

Initiatives

Initiatives like One Nation One Policy, a digital portal for Aadhaar-linked donor pledges, and the Angdaan Jan Jagrukta Abhiyan aim to standardize policies, increase public awareness, and promote organ donation.

PM Modi's Independence Day 2025 Speech

Governance

Context

• Theme: "Naya Bharat," reflecting the vision of Viksit Bharat by 2047.

Key Announcements

- **National Security**
 - Withdrawal from the Indus Treaty to secure irrigation resources. Aim to have an indigenous missile shield,
- Sudarshan Chakra, by 2035.
- **Economy:** Income up to Rs 12 lakh exempted from tax. Promised next-generation GST reforms.
- Energy & Technology: Sanctioned ten new nuclear reactors to raise national capacity tenfold by 2047. A 'Made in India' semiconductor chip is scheduled for launch by December 2025.
- Employment: Announced the Pradhan Mantri Viksit Bharat Rozgar Yojana (PM-VBRY) with a ₹1 lakh crore outlay to generate 3.5 crore jobs.

Governance SabhaSaar

Context

The Ministry of Panchayati Raj will launch SabhaSaar, an AI tool for meeting summarization.

Features

- The tool uses AI and Natural Language Processing (NLP) to generate structured minutes of meetings from audio and video recordings of Gram Sabha and Panchayat meetings.
- Languages and Rollout
 - It supports 13 Indian languages and is linked with the Bhashini platform. Tripura will be the first state to adopt it.
- Significance:
 - It aims to improve transparency and efficiency in local governance by creating standardized meeting records.











India's welfare state is shifting towards a digital, data-driven model, which improves efficiency but raises concerns about democratic accountability and a reduction in rights-based entitlements.

The Shift

The focus has moved from social justice to metrics like speed and coverage, which aligns with the concept of "Technocratic Consciousness" by Habermas. This reduces citizens to "auditable beneficiaries" rather than active participants, a concept echoing Foucault's idea of "Governmentality".

Challenges

Social sector spending has dropped from a 10-year average of 21% to 17%. Institutions for transparency, like the RTI, are in crisis with over 4 lakh pending cases.

Way Forward

India's welfare state needs to adopt "democratic antifragility" to withstand stress while preserving human dignity. It should empower states to design context-sensitive systems and embed a "right to explanation and appeal" in algorithmic governance.

Domicile-Based Recruitment in Bihar

Governance

Context

The Bihar CM announced a policy to prioritize domicile candidates in teacher recruitment exams. This follows a previous move to reserve 35% of state government jobs for Bihar-native women.

Implications

- The move aims to boost local employment and reduce out-migration. However, it raises constitutional challenges, as Article 16(2) prohibits discrimination in public employment based on residence.
- Article 16(3) states that only Parliament, not states, can make exceptions for residence-based conditions in specific public employment.

Judicial View

The Supreme Court has consistently held that blanket domicile-based job reservations violate the Constitution. The Court also clarified that there is only one domicile, "Domicile of India," not state-specific domiciles.

Google's Android Antitrust Case

Governance

Context

The Supreme Court admitted appeals against the NCLAT judgment, which partially upheld the Competition Commission of India's (CCI) claims that Google abused its dominant position in the Android ecosystem.

Kev Findings of CCI

· CCI found that Google's mandatory Play Billing for in-app purchases was anti-competitive. It also noted that Google exempted YouTube from billing, giving it a cost advantage, and required pre-installation of its apps for Play Store access.

NCLAT Ruling

The tribunal upheld the abuse of dominance findings but reduced the penalty. It ordered Google to be transparent in its billing data policies and barred it from using billing data to its advantage.













The Mukhyamantri Majhi Ladki Bahin Yojana was found to have over 26 lakh ineligible beneficiaries, including 14,000 men, highlighting administrative failures and ethical breaches.

This shows a breach of public trust, weaknesses in digital governance (poor Aadhaar-seeding), and a failure of administrative vigilance. The scheme was also seen as a populist move, raising concerns about politicization of welfare and fiscal irresponsibility.

Way Forward

Recommendations include integrating Aadhaar and other databases with AI-based eligibility validation models. using gender authentication filters, and establishing quarterly audit bodies with citizen oversight.

India's Consumer Dispute Redressal System

Governance

Context

A large backlog of consumer cases is undermining the effectiveness of the consumer dispute redressal mechanism under the Consumer Protection Act, 2019.

Challenges

The system faces a pendency crisis with over 5.8 lakh unresolved cases. The average resolution time is about two years, much longer than the mandated 3-5 months. There are also severe vacancies in leadership positions across state and district commissions, and low public trust due to delays and costs.

Way Forward

The system needs to strengthen its leadership by appointing eminent advocates, enable faster resolution of simple cases, and launch public awareness campaigns about consumer rights and the redressal process.

SC's Directions on Stray Dog Management

Governance

Context

The Supreme Court has issued new directions for stray dog management, linking humane population control with public safety. The court's order focuses on sterilization, regulated feeding, and municipal accountability.

Revised Judicial Mandates

Stray dogs must be returned to their original areas after sterilization and vaccination. Rabid or aggressive dogs must be confined to shelters permanently. Municipalities are now required to designate feeding zones and penalize unsafe street feeding.

Legal Framework

- The Prevention of Cruelty to Animals (PCA) Act, 1960, prohibits cruelty and mandates humane treatment of animals. The Animal Birth Control (ABC) Rules, 2023, mandate sterilization and vaccination.
- Article 51A(g) of the Constitution recognizes compassion for living beings as a fundamental duty.

Indore Case Study

Indore, India's cleanest city, saw a rise in dog aggression and bites due to reduced street waste, which created food scarcity. This highlights the need for integrated sanitation and stray animal control policies.











Governance

Context

On August 5, 2019, Article 370 was abrogated, leading to the bifurcation of the state of Jammu & Kashmir into two Union Territories.

Progress Report (2019-2025)

The region has seen restored democratic processes with an elected government. Militant activity has significantly reduced, with local recruitment dropping from 129 in 2019 to just 1 in 2025. Tourism has grown, and the GDP has doubled from ₹1.17 lakh crore to ₹2.63 lakh crore. Infrastructure and the financial sector have also seen a revival.

SOFI Report and India's Nutritional Crisis

Governance

Context

The UN's SOFI (State of Food Security and Nutrition in the World) 2025 report highlights India's persistent nutritional challenges, including high rates of child wasting, stunting, and anemia, despite a reduction in undernourishment.

Key Findings

India has the highest wasting rate at 18.7%, affecting 21 million children, and is a global hotspot for stunting with 37.4 million stunted children. Over 53.7% of Indian women aged 15-49 are anemic.

Reasons for Malnutrition

Contributing factors include maternal undernutrition, poor feeding practices, a high burden of infections, sanitation gaps, and dietary deficiencies.

Government Initiatives

Programs like POSHAN Abhiyaan, the Integrated Child Development Services (ICDS) scheme, and Anaemia Mukt Bharat are aimed at tackling these issues through various interventions, including food-based schemes and fortification drives.

Digital Search and Seizure

Governance

Context

The Parliamentary Select Committee report on the Income Tax Bill 2025 has retained a clause that formally authorizes the digital search and seizure of devices storing incriminating digital data.

Key Clauses

- Clause 247 permits searching any premises or device suspected of concealing income.
- Clause 261 defines computer systems to include cloud, mobile, and networked devices.

Safeguards

Officers must document their reasons before a search, and prior approval from a senior authority is mandatory. Searches are also subject to judicial review under the Wednesbury Test, which ensures they are reasonable and fair.

Current Framework

The Income Tax Act, 1961, already allows digital searches, but the 2025 Bill makes these powers explicit.













 A recent custodial death in Tamil Nadu has brought renewed attention to custodial torture and the need for police reform in India.

Legal and Institutional Gaps

- Despite landmark judgments like the D.K. Basu case (1996) and the K.S. Puttaswamy case (2017) reaffirming bodily autonomy, custodial torture remains widespread. Key issues include an undertrained police force, poor infrastructure, and weak oversight mechanisms.
- Ethical Perspective: From an ethical standpoint, torture violates core public service values and is deemed unjustifiable, regardless of its perceived utility.
- Way Forward: The need is for India to ratify the UN Convention Against Torture and pass a standalone antitorture law as recommended by the Law Commission. The PEACE model (Planning, Engagement, Account, Closure, and Evaluation) should also be institutionalized in police training.

Prison Reform in India

Governance

Context

 A Supreme Court directive to release prisoners detained beyond the completion of their sentences has exposed systemic failures in prison governance.

Current Framework

Prisons fall under the State List of the Seventh Schedule. The Prisons Act, 1894, and state manuals regulate administration, and bodies like the NHRC provide oversight. The E-Prisons Project aims to digitize inmate records to prevent prolonged detention.

Deficiencies

Indian prisons suffer from overcrowding (130% occupancy), with undertrials making up 77% of inmates. There's a significant deficit in infrastructure, healthcare, and gender-sensitive provisions.

Global Models

India can learn from the Scandinavian model of open cells and inmate autonomy, Japan's halfway houses for exprisoners, and South Korea's use of digital monitoring for low-risk offenders. The Mandela Rules of the UN also provide a framework for humane treatment.

Universal Artificial Intelligence Access

Governance

• Universal, free access to AI was discussed in the Rajya Sabha as a national priority to bridge the digital divide and enhance India's competitiveness.

Significance

Free AI access can bridge digital divides, enhance social empowerment and learning equity, and strengthen India's position in emerging technologies.

Challenges

The main challenges are the fiscal burden of subsidizing access, a significant rural connectivity gap, and the cyber risks associated with free platforms, which could become conduits for data theft and surveillance.

Way Forward

The government should focus on creating publicly funded national AI tools, using targeted subsidies for lowincome households, and fostering public-private partnerships. It's also crucial to enforce strong regulations on privacy and ethics to build public trust.















The IndiaAI Independent Business Division and the National Cancer Grid launched the CATCH Grant Program to promote AI-driven innovations in cancer care.

Key Features

The program provides up to Rs 50 lakh in funding per project, with an additional ₹1 crore available for successful scale-ups. It is open to startups, health-tech companies, and academic institutions. The initiative focuses on responsible AI development and clinical validation for deployment in India's healthcare settings.

National Cooperative Policy 2025

Policies & Schemes

Context

The Ministry of Cooperation launched the National Cooperative Policy 2025 based on the recommendations of the Suresh Prabhu Committee.

Objectives

The policy aims to establish at least one cooperative in every village, increase the number of cooperatives by 30% by 2030, and triple the sector's share of GDP by 2034.

Pillars and Sectors

The policy is built on six pillars: formalization, modernization, competitiveness, ease of doing business, good governance, and social inclusion. It also proposes new cooperative models for green energy, microinsurance, and community-based tourism.

Matri Van initiative **Policies & Schemes**

Context

The Ministry of Environment, Forest & Climate Change (MoEFCC) launched the Matri Van initiative in Gurugram, Haryana, as part of the 'Ek Ped Maa Ke Naam' program.

Features

Matri Van is an urban afforestation project to develop a 750-acre theme-based urban forest in the Aravalli Hill

Objective

Its main goal is to restore the Aravalli ecology, increase green cover, and promote biodiversity in the Delhi-NCR region. The project is a collaboration between various entities, including government bodies, NGOs, and corporate firms.

Pradhan Mantri Viksit Bharat Rozgar Yojana

Policies & Schemes

Context

PM Modi announced this scheme in his Independence Day 2025 speech, with an outlay of Rs 1 lakh crore to create 3.5 crore jobs.

Key Features

It's a Central Sector Scheme under the Ministry of Labour and Employment. The scheme provides wage incentives of up to Rs 15,000 to first-time employees and a monthly incentive of up to Rs 3,000 to employers for each new hire. The benefits are disbursed through EPFO and PAN-linked accounts.











E20 Ethanol Blending in India

Context

· India has achieved its target of 20% ethanol blending in 2025, five years ahead of schedule, and now aims for 27% by 2030.

Challenges

E20 blends can reduce fuel efficiency by up to 7% and cause corrosion in older cars. There's also a lack of blend information at pumps and no financial incentive for consumers, as E20 costs the same as petrol.

Brazilian Model

Brazil's success in ethanol transition came from introducing flex-fuel technology, offering a retail choice of blends, and ensuring ethanol was cheaper than petrol.

India's Measures

To mitigate the "food-fuel conflict," India is utilizing diverse feedstocks like B-heavy molasses and surplus grains. The government is also promoting E20-compatible vehicles and hybrid flex-fuel models.

PM E-DRIVE Scheme

Policies & Schemes

Context

The PM Electric Drive scheme has been extended by two years, until 2027-28, to promote EV adoption through incentives and charging infrastructure.

Key Features

It is a Central Sector Scheme under the Ministry of Heavy Industries. It provides incentives for electric two- and three-wheelers, though these will end after the 2025-26 fiscal year.













Product Nation Economy

Context

• In its recent report, the Standing Committee on Finance suggested ways for India to navigate rising global trade uncertainties and growing protectionism.

Additional Information:

- Conflicts like the Russia-Ukraine war and the West Asia crisis have disturbed energy markets and supply chains, making India's trade more vulnerable.
- Recently, the United States' move to impose a 50 per cent tariff on Indian products has also underlined the same.
- Experts believe that this is India's opportunity to evolve from a service-oriented economy into a true product nation.
- This has also been signalled in the recent reforms announced by the government, like GST rationalisation.

What is a Product Nation:

- **Definition:** A product nation is a country that produces and exports a substantial volume of high-value goods, becoming a net producer rather than a net importer.
- Purpose: At its core, a product nation shifts from being only a consumer or assembler to becoming a creator of globally competitive goods, boosting both its economic strength and its strategic standing in the world
- Smile Curve Insight—Stan Shih's Smile Curve shows that higher value lies in R&D, design, branding, and distribution rather than pure manufacturing, E.g.: Apple (\$3T market cap) vs. Foxconn (\$85B).
 - This curve makes the case for investing in the entire life cycle of a product, rather than just assembly. E.g., Apple (\$3T market cap) vs. Foxconn that assembles for Apple (\$85B).
- South Korea, Japan, and several Southeast Asian nations have risen as manufacturing hubs over the last three decades.

Challenges in Becoming a Product Nation:

- Innovation & R&D Gaps: Lack of innovation in manufacturing and high-tech lags. For instance, India spends 0.65% of its GDP on R&D.
- Import Dependence: Heavy reliance on energy, fertilisers, metals, Active Pharmaceutical Ingredients, and technology imports makes India vulnerable to supply disruptions.
- India imports 65-70% of its semiconductor needs.
- Low Private Investment: Despite reforms, private sector capital formation remains subdued.
- Regulatory and Policy Bottleneck: Delays in approvals, complex compliance, and a lack of ease in doing business affect growth.
- Structural Constraints: Weak infrastructure and a shortage of skilled labour limit India's capacity to scale manufacturing rapidly.
- Make in India risks being reduced to assembly work rather than genuine value addition.
- Employment Generation: Mismatch between job creation and the growing young workforce, especially in manufacturing.
- Climate & Sustainability Risks: Exposure to climate change impacts, energy transition challenges, and lack of green finance readiness.
- Coal generates more than 70 per cent of India's total electricity.

Way Forward:

- Strengthen Manufacturing: Scale up Production Linked Incentive (PLI) and incentivise indigenous innovation in electronics, semiconductors, and EVs.
- Infrastructure & Connectivity Push: Invest in logistics parks, multimodal transport, and digital connectivity, and integrate MSMEs into global value chains through cluster-based development, e.g., National Logistics Policy
- Invest in Human Capital: Reform education and skill development to align with product-driven economy needs (AI, robotics, advanced manufacturing).
 - For example, Skill India & Gati Shakti initiatives as building blocks.
- Foster Product Development Platforms: Create intelligent product platforms that startups and companies can use to accelerate development, like Atal Incubation Centres.













• The Standing Committee on Finance recommended Centre come up with an action plan to evenly distribute industries across States to reduce regional imbalances in India.

Additional Information

- The Standing Committee on Finance, in its 26th Report, 'Roadmap for Indian Economic Growth in Light of Global Economic and Geopolitical Circumstances', noted that industry is a State subject.
- · However, it emphasised that the Central Government's initiatives are vital for industrial development.
- Economic Survey 2024-25 also highlighted significant disparities in industrial development across states.
- Regional imbalances refer to the differences in economic development and uneven economic growth in different geographical regions.

Reasons for Regional Imbalances in India

- Historical Factors: Regional imbalances started during the British regime, concentrating development in areas like West Bengal and Maharashtra.
- Geographical Factors: Difficult terrain (e.g., Himalayan and North-Eastern states) raises administration and project costs.
- Political factors: E.g. Relocation of the Tata Nano project from West Bengal to Gujarat due to protests.
- Policy Disparities: The Green Revolution benefited a few states like Punjab and Haryana, exacerbating imbalances.
- Lack of Growth of Ancillary Industries: Despite developing public sector industrial enterprises in backwards areas like Rourkela, Barauni, Bhilai, etc.
- Location Specific: E.g. Development of commercial hubs, residential complexes in the National Capital region (Gurugram, Noida) due to proximity to the capital Delhi.
- Infrastructure Deficit: Poor transportation, banking services, etc. limits growth. E.g. Industrial growth is low in northeastern states due to poor road/rail connectivity, weak banking penetration, and power shortages.

Consequences of Regional Imbalances in India

- Security: E.g., Insurgency in North-east and left-wing extremism in large parts of central and eastern states.
- Political fragmentation: E.g., Creation of Telangana State and demand for a separate Vidharbha State in Maharashtra, Bodoland in Assam, etc.

Economic

- National growth: Regional imbalance slows the growth of the entire national economy.
- Economic Gap: Difference in Per Capita Income, e.g. Rs 2,04,605 in Karnataka and Rs 70,434 in Madhya Pradesh.
- Reinforcing Imbalances: Prosperous areas attract more investments. For example, cities like Chennai and Bangalore grow faster than others.
- Environmental: Concentrated industrial development causes air, water, and noise pollution. For example, pollution in Delhi.
- **Social:** Frustration among youth and vulnerable sections like SC, ST, OBCs, women, etc.
- Disparity in Human Development: According to the UNDP, in the Human Development Index, Goa occupies the top spot, with Bihar scoring the lowest.
- Health Inadequacy: One doctor serves a population of 28,391 in Bihar, whereas in Delhi, one doctor serves 2,203, both greater than the WHO standard of 1:1000.
- Other: Housing & Water Problem in Metropolitan cities like Mumbai, New Delhi, Chennai and Hyderabad.

Way Forward

- Promoting New Financial Institutions in Backward Regions: The Government can see that these Institutions function well for the all-around development of the backward areas.
- New Regional Boards: Regional Boards with necessary legal powers, funds can be instituted to remove regional imbalances.













Economy

- Growth Corridors: Comprising education zones, agricultural zones, and industrial zones, should be operationalised for the rapid development of backward areas in the states.
- Performance-Based Funding: A system may be introduced to reward States, including developed ones, that significantly reduce inequalities within their borders.
- · Additional funds for Infrastructure: Additional funds need to be provided to build core infrastructure at the inter district level in less developed States and backward regions.
- Strengthening of Good and Local Governance in backward states: Effective administration helps states raise revenues, attract investment, and improve resource use, especially in backward regions.
- Other: Deregulation, R&D and innovation, and improving skill levels of the workforce.

Internationalization of Rupee

Economy

Context

RBI removes prior approval requirements for banks to open Special Rupee Vostro Accounts (SRVAs), speeding up rupee-based trade settlements and supporting the internationalisation of the Indian Rupee.

Additional Information

- Special Rupee Vostro Account (SRVA) mechanism was introduced in July 2022 to enable exporters and importers to invoice and settle trade in Indian Rupees (i.e. Internationalisation of Indian Rupee).
- Vostro Account: Refers to a foreign bank's account held in a domestic bank in the local currency.
 - E.g. if a US bank holds an account in an Indian bank in rupees, it is SBI's Vostro account.

How it Works

- For Importers: When an Indian importer pays a foreign trader in rupees, the amount is credited to the Vostro
- For Exporters: When an Indian exporter receives payment, money is deducted from the Vostro account and credited to the exporter's regular account.

What is Internationalisation of Rupee

- Internationalisation of the Rupee refers to a process that involves increasing use of the rupee in cross-border transactions.
- It involves promoting the rupee for import and export trade and then other current account transactions, followed by its use in capital account transactions.

What is an international currency?

- An international currency is a currency, like the US dollar or the Euro, used for transactions between countries and beyond the borders of the issuing nation.
- Just like domestic currency, it performs the three functions of money (As a medium of exchange, a unit of account, and a store of value).
- It does so at two distinct levels, for private and public transactions and resultantly plays six roles in total.

Benefits of Internationalisation of Rupee

- Lower Currency Risk & FX Reserve Needs: Settling trade in rupees reduces forex losses, transaction costs, and dependence on large foreign reserves.
- Global Standing & Bargaining Power: Wider INR usage strengthens India's role in trade negotiations and boosts its economic influence.
- Trade & Policy Flexibility: Trading in rupees can soften the impact of sanctions, diversify partners, and ease fiscal management through potential rupee-denominated debt.
- Financial Market Development: Greater global demand for INR deepens Indian bond and equity markets, attracts investment, and ensures faster, more transparent transactions.

Challenges in Internationalisation of Rupee:

Increased Exchange Rate Volatility: Greater global rupee trading increases vulnerability to international market fluctuations, raising transaction costs and complicating financial planning for businesses and investors.















- Reduced Monetary Policy Autonomy: Widespread rupee trading would limit the RBI's control over currency value, making inflation and macroeconomic management more challenging.
- The Triffin Dilemma, where a country struggles to balance global currency demand with domestic monetary
- Higher Capital Flight Risk: Increased foreign rupee holdings raise the risk of sudden capital outflows, potentially causing a financial crisis and currency depreciation.
- Greater External Shock Vulnerability: Deeper integration with global financial markets increases the rupee's susceptibility to external shocks like interest rate changes and commodity price fluctuations, destabilising the Indian economy.
- Competition: The global reserve currency landscape is dominated by the US dollar, the Euro, Japanese yen, and pound sterling.
- Ensuring Liquidity and Convertibility: The rupee is currently not fully convertible and cannot be freely bought or sold on international markets; lesser capital account convertibility hinders internationalisation of the rupee.
- In India, full current account convertibility is allowed, whereas on capital accounts, only partial convertibility is allowed.

Way Forward:

- Recommendations of the Inter-Departmental Group of RBI
- Short-Term Measures: Promoting Rupee Accounts for Non-Residents, Integration of Payment Systems, and Internationalisation of Indian Payment Systems, etc.
- Medium-Term Measures: Masala bonds framework liberalisation, Expanding the Real Time Gross Settlement (RTGS) system for settling international transactions, etc.
- Long-term Measures: Inclusion of INR in Special Drawing Rights (SDR) basket
- SDR is an international reserve asset created by the IMF in 1969 to supplement its member countries' official
- Value of the SDR is calculated from a weighted basket of 5 major currencies U.S. dollar, Euro, Japanese ven, Chinese Renminbi, & British pound.
- Specific Reforms: India can pursue specific reforms like increasing the rupee's convertibility, developing a more robust bond market, enticing exporters and importers to conduct business in rupees etc.
- Addressing Macroeconomic Fundamentals: India needs to concentrate on strengthening its macroeconomic foundations to overcome inflation, non-performing assets, etc.
- Harmonisation of KYC norms: RBI and SEBI can ease access of foreign investors to INR assets.

De-Dollarization Economy

Context

RBI's push for internationalisation of INR through SRVAs, UPI linkages, currency swap agreements, etc., aims to reduce dependence on foreign currencies and contributes to global de-dollarisation.

Additional Information:

It aims to reverse dollarisation (historical domination of the US dollar in the global market), causing a significant reduction of its use in world trade, reserves and financial transactions.

Key reasons for De-dollarisation:

- Asymmetry of shrinking US economic weight and growing dominant role of the dollar: While the US share of world GDP has decreased from around 45% post-World War II to approximately 25% currently, the dollar still carries a disproportionate share.
- Weakening credibility of the Dollar: The US government's high debt burden and instances like the 2023 debt ceiling standoff have weakened its credibility.
- Spillover effects of US monetary policy: Actions by the Federal Reserve, such as hiking interest rates (2023), have led to currency depreciation, significant increases in debt service costs, and inflation in many countries.
- Weaponization of US dollar and payment clearance systems: Currently, approximately 40 countries are under US sanctions, which have become more systemic, impacting central governments and policy making.
- Aspiration for a new and more democratic international economic order: De-dollarisation efforts are also a













- reflection of a desire to shift away from a unipolar world towards a multipolar New International Economic Order (NIEO).
- Positive developments outside the U.S.: Enhanced credibility of alternative currencies, like economic and political reforms in China.

Challenges with De-dollarisation:

- Transition Costs: Moving away from the U.S. dollar requires heavy spending on updating financial systems, adjusting contracts, and renegotiating trade agreements.
- Market Volatility: The shift to new currencies can trigger uncertainty and market instability, affecting global trade and investment flows.
- Geopolitical Tensions: Reducing reliance on the U.S. dollar may spark political frictions and be seen as a challenge to American economic influence.
- Reserve Diversification Challenges: Holding reserves in alternative currencies or assets like gold brings new risks, including currency depreciation or commodity price swings.

Fiscal Responsibility and Budget Management (FRBM) Act

Economy

Context

Recently, the Comptroller and Auditor General of India (CAG) report has highlighted several fiscal inconsistencies and transparency issues in the government's compliance with the FRBM Act.

About the FRBM Act. 2003

- Purpose: The FRBM Act, 2003, was enacted to foster inter-generational equity in fiscal management and ensure long-term macroeconomic stability.
- The Act aims to guide the central government's fiscal policy towards a sustainable path, thereby promoting economic stability and responsible financial governance.
- · A key mandate of the Act is that the CAG must conduct an annual compliance review of its provisions.
- The FRBM Act mandates the following statements to be laid before the Parliament along with the Budget:
- Macro-economic Framework Statement.
- Medium Term Fiscal Policy Statement.
- Fiscal Policy Strategy Statement.

Key Findings of the CAG Report:

- Central Government Debt Trends:
- Debt-to-GDP Ratio: The central government debt as a ratio of GDP peaked significantly during the pandemic, reaching 61.38% in FY 2020-21.
 - However, it has since shown a moderating trend, declining to 57% as of March 2024.
 - A high debt-to-GDP ratio is undesirable, as a higher ratio indicates a higher risk of default.
- Debt Sustainability: A positive signal was acknowledged regarding debt sustainability, with the debt sustainability analysis indicator being positive in 2022-23 and FY24, indicating stability.
- Interest Payments to Revenue Receipts: This ratio, considered an important indicator of the government's fiscal health and fiscal strain, rose marginally to 35.35% in 2022-23 after declining from a peak of 38.66% in 2020-21.
- Compliance with Guarantee Limits: This remained within the legal ceiling of 0.5% of GDP in 2022-23, indicating compliance.
- Unrealised Tax Revenues: The report revealed a significant amount of tax revenue raised but not realised, which surged to Rs 21.30 trillion by the end of 2022-23.
- · A large portion of this unrealised amount was not under dispute, suggesting potential issues in tax enforcement or recovery processes.
- Discrepancies in Deficit Figures: Variations have been seen in estimates for fiscal deficit, revenue deficit (currently 2.54%), primary deficit (1.66% currently), and especially in non-tax revenue estimates.
- The fiscal deficit figure in the Union Government Finance Accounts (UGFA) for 2022-23 differed from the figure cited in the Budget at a Glance (BAG) for 2024-25.
 - Such discrepancies raise questions about the consistency of key fiscal indicators.











The need of the hour is to enhance transparency, tax recovery, and improve fiscal management practices. By working on this, the government can bolster its fiscal credibility, ensure greater accountability, and reinforce the objectives of the FRBM Act to maintain sound fiscal health and macroeconomic stability.

Economy Blue Economy

Context

The Ministry of Earth Sciences released a white paper titled "Transforming India's Blue Economy: Innovation and Sustainable Growth," outlining a roadmap to 2035.

Blue Economy in India

- Definition: According to The Energy and Resources Institute, the Blue economy refers to exploring and optimising the potential of the oceans and seas, which are under India's legal jurisdiction for socio-economic development, environmental sustainability, and national security.
- The concept of Blue Economy was first articulated in 1994 by Prof. Gunter Pauli at the United Nations University (UNU).
- Potential: India's extensive coastline (11098 km) and large Exclusive Economic Zone (EEZ) of 2.4 million sq. km, with its strategic location on vital global shipping lanes, provides significant potential for developing this sector.

Current Status:

- India's blue economy contributes 4% of its GDP
- · Handles 95% of its trade by volume
- 12 major (Vadhavan Port in Maharashtra will be the 13th major port) and 200 minor ports along its coastline.
- By 2035, India's coastal shipping modal share is expected to grow from 6% to 33%, reflecting robust potential for economic expansion.

Challenges related to the Blue Economy in India:

Environmental:

- Climate change impacts: Warming waters, stronger cyclones, sea-level rise, and erosion of coasts and heritage sites.
- Overfishing and depletion of fish stocks.
- Marine and port pollution is damaging ecosystems (coral reefs, mangroves, marine habitats).
 - Over-tourism and unplanned development are degrading sensitive coastal ecosystems.
 - Limited and incomplete Environmental Impact Assessments (EIAs).
 - Example: CAG, in a report in 2022, stated that there are large-scale violations of coastal zone regulations and EIA norms by several projects in the country.

Policy and Governance

- Insufficient enforcement of international commitments and IMO regulations.
- Slow adoption of modern regulatory frameworks for emerging sectors (deep-sea mining, marine biotechnology, renewables).
- Need for strong inter-ministerial and inter-agency coordination, and more harmonised policy frameworks (energy, heritage, tourism).
 - Example: Multiple government ministries and agencies are involved in various aspects of the blue economy (e.g., fisheries, shipping, environment, earth sciences), but a unified and coordinated approach is lacking.

Technological and Infrastructure:

- Limited cold chain, storage, and post-harvest facilities in fisheries.
- Heavy dependence on imported specialised equipment (renewables, deep-sea mining, biotech).
- Limited shipbuilding and ship repair capacity.
- Poor transmission and grid readiness for offshore energy.
- Low commercialisation of research outputs in biotechnology.
- Limited access to advanced deep-sea exploration technology.
 - Example: India has used France's IFREMER's submersible, Nautile, for test expeditions in the Atlantic Ocean.













Financial and Investment:

- Low levels of private sector investment across fisheries, ports, renewables, and biotech.
- Limited financing for small-scale fishers, start-ups, and coastal tourism cooperatives.
- Insurance gaps for small ventures and capital-intensive activities.
- The majority of funding for marine biotechnology research in India comes from government bodies like the Department of Biotechnology rather than private venture capital firms.

- **Skill shortages:** Trained technicians, high-skill jobs in ports, biotech, deep-sea ops.
- Weak representation of marginalised groups (tribal, women, small-scale fishers) with economic benefits often bypassing them, along with the persistent threat of displacement.
- Example: women constitute up to 72 per cent of India's coastal fisheries workforce, and they are largely confined to informal, low-paying jobs.

Successful Case Studies related to the Blue Economy of India

- Kochi's Smart Port Transformation through Digital Twin Integration (Virtual Port)
- The integration has shown tangible benefits in operational efficiency, enhanced planning accuracy and resilience while also supporting environmental monitoring.
- Alang, Gujarat: Transforming Shipbreaking into a Circular Economy Model
- Alang achieved compliance with the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, indicating a shift towards environmentally sustainable resource recovery and value addition in a traditionally heavy industry.
- Andaman and Nicobar Islands (ANI): A Model for Sustainable Coastal and Marine Tourism
- Community-led programs, investing in eco-friendly infrastructure, leading to around 5,000 jobs and reduced tourist-zone waste by 40%.
- Blue Flag certification for beaches and Marine Spatial Planning (MSP) helped regulate tourism in Marine Protected Areas (MPAs).
- Community-led Seaweed Cultivation in Odisha: A Model for Sustainable Coastal Livelihoods
- Odisha's annual seaweed output has reached approximately 5,000 tons, providing crucial supplementary income for over 10,000 coastal households.
- Environmentally, seaweed farming absorbs dissolved carbon dioxide, contributes to climate change mitigation, improves water quality, and reduces pressure on stressed fish stocks.
- Targeted investments in green technologies, resilient infrastructure, and skill development are crucial for India's blue economy. Sustainable resource management and inclusive participation, along with innovative financing models like blue bonds, carbon credit markets, and public-private partnerships, will mobilise capital, fostering long-term competitiveness and resilience while balancing economic growth with environmental health.

RBI Tightens Co-lending Norms

Economy

Context

Recently, RBI issued revised directions for Co-lending Arrangements (CLA) between banks and Non-bank Financial Companies (NBFCs) under various provisions of the Banking Regulation Act (1949), Reserve Bank of India Act (1934), and National Housing Bank Act (1987).

What is co-lending?

Under CLAs, Regulated entities (Res) can enter into a lending arrangement with other Res for extension of credit to the borrowers, subject to compliance with the extant prudential regulations.

Key highlights of the revised Directions:

- Minimum share: Each RE to retain a minimum 10% share of the loans.
- Priority Sector Lending (PSL) status: Each lender can claim PSL status for its share under co-lending, if the loan qualifies as a priority sector.
- Uniform asset classification system: If one lender tags a loan as Non-Performing Asset (NPA), other co-lenders must do the same.
- Blended interest rate: Interest rate charged to borrowers will be calculated based on the weighted average of each RE's internal rate, proportionate to their funding contribution.













Context

- Recently, the Mines and Minerals (Development and Regulation) Amendment Act, 2025, was passed by Parliament.
- Additional Information: The act amends the Mines and Minerals (Development and Regulation) Act, 1957.

The Act was last amended in 2023 with key provisions like:

- Introduction of a new list of 24 critical and strategic minerals for increasing exploration and production.
- Empowering the central government to auction mineral concessions in respect of such minerals &
- Introduction of an exploration licence for critical and deep-seated minerals.
- The Act will enhance the availability of critical and strategic minerals in India.

Why Critical/Strategic minerals are increasingly becoming important for India:

- Chinese control on Supply chain: China currently controls ~60-70% of rare earth production and 80-90% of global processing capacity.
- Clean Energy Transition and Climate Goals: E.g. Silicon, Tellurium, Indium, and Gallium are used in photovoltaic (PV) cells and rare earth elements such as Dysprosium and Neodymium are used in permanent magnets for wind turbines.
- Electric Mobility: E.g. Lithium, Nickel & Cobalt are key materials used in lithium-ion batteries and advanced energy storage systems and are also crucial for the success of the National Electric Mobility Mission Plan (NEMMP).
- National Security and Defence Capabilities: Critical minerals support a wide range of military capabilities, from communications and surveillance systems to weaponry and protective gear.
- Securing Digital Sovereignty: Ensuring a resilient supply chain is crucial for furthering the Digital Economy and technological self-reliance.
 - E.g. Silicon forms the basis of microchips, whereas cobalt is used to enhance memory and logic devices.
- Accelerating SDG gains: It has the potential to attract foreign and domestic investment, create jobs, and boost fiscal revenues, exports, and growth.
 - E.g. Chile has used copper revenues to support poverty reduction (SDG 1) & improved health services (SDG 3) (UNDESA).

GIG Workers Economy

Context

Recently, Karnataka's State Legislative Assembly passed the Karnataka Platform-Based Gig Workers (Social Security and Welfare) Bill, 2025, to protect the rights of workers.

More about the bill

- Establishment of Welfare Board: It will oversee registration of workers and aggregators, create social security schemes, monitor the schemes, etc.
- Establishment of Social Security and Welfare Fund: Consists of welfare fee (Levied on transactions b/w the worker & aggregator or on the overall turnover of the company) & contributions from the Union and State governments.

Others: Aggregators will register gig workers, share work terms, and explain how automated systems affect their conditions.

Rajasthan and Bihar have passed laws in this regard in 2023 and 2025, respectively.

About Gig workers:

Definition: The Code on Social Security, 2020, defines a gig worker as a person who works outside a traditional employeremployee relationship.















- Types: platform and non-platform-based workers.
- Platform workers are those whose work is based on online apps or digital platforms. E.g., Ola, Uber, Zomato, Swiggy, Urban Company, etc.
- · Non-platform gig workers are generally casual wage workers and own-account workers in the conventional sectors, working part-time or full-time.
- Reasons for growth: Demographic dividend (65 % of Indians are in the age group of 15-64 years), Rapid urbanisation, boost to the remote work during COVID-19, Adoption of smartphones and internet (In India, 85.5 % of households possess at least one smartphone), etc.

Significance of the gig economy

- For government
 - To utilise demographic dividend: By ensuring employability, business that serves the gig economy account for 56 % of all new jobs created in India.
 - Economic growth: By 2030, India's gig economy might see \$250 billion in transactions or 1.25 % of GDP (NITI Aayog).
- For society
 - Empowering the vulnerable section: According to the ILO, digital platforms' flexible employment benefits women, youth, and the physically disabled.
 - Micro-Entrepreneurship: Platforms like Airbnb and Urban Company let people monetise their skills, assets, and time while lowering entry barriers such as high startup costs.
- · For workers
 - Flexible Employment: Remote work, on-demand and task-based arrangements, flexible work hours, etc.
 - Skill development: The gig economy imparts a range of skills, such as digital literacy, self-management, communication, problem-solving, etc.
- For consumers
 - Access to the Global Market: e.g. Airbnb and Amazon.
 - Greater convenience: Via personalised and cheaper products.

Challenges for Gig Workers

- Lack of social security: More than 82.5 % of gig workers are informal employees (NITI Aayog).
- Health and Safety Concerns: Due to the nature of the job, e.g., a tight delivery schedule can occur.
- High Working hours: 60 % of platform workers work 7 days a week, while 47% of the workers work for more than 12 hours a day (Tata Institute of Social Science).
- · Income uncertainty: According to Fair work India, around half of the gig workers did not receive the statutory minimum wage
- · Algorithmic Asymmetry: Platforms use algorithms to manage work. However, reliance on this leads to various imbalances such as
- Information Access: Platform aggregators have access to workers' personal information, raising privacy concerns.
- Transparency: Rating Systems, task distribution and wage based on data, etc are often guided by algorithms which are opaque, increasing the possibility of unfair calculations.

Economy Income Tax Act 2025

Context

• The President has given her assent to the Income Tax Act 2025, which replaces the Income Tax Act 1961.

Key highlights of the Act

- **Commencement:** The Act would come into force on the 1st April 2026.
- Shorter and Simpler: The New Act has simpler language and is shorter than the previous bill.
- The provisions of Minimum Alternate Tax (MAT) and Alternate Minimum Tax (AMT) have been separated into two sub-sections.
- Stability in Core Tax Elements
- Tax rates and regimes for individuals and corporations remain unchanged.













- There are no changes in offences and penalties.
- Most definitions have also been retained.
- Faceless collection of information and assessment of tax cases.
- Power to Frame Schemes: The Act empowers the central government to frame new schemes for greater efficiency, transparency, and accountability.
- Undisclosed Income: The definition of undisclosed income for assessing search cases, which previously included money, bullion, jewellery, or other valuable articles, is expanded to include virtual digital assets.
- Virtual Digital Space Access: Income tax authorities are now allowed to gain access to a virtual digital space during search and seizure proceedings.
- The authorities will have the power to gain access by overriding any required access code.
- A "virtual digital space" is defined broadly to include email servers, social media accounts, online investment and trading accounts, and websites for storing details of asset ownership.
- Dispute resolution panel: The Act allows certain eligible assessees to refer draft orders passed by assessing officers to a dispute resolution panel.
- These assesses include persons engaged in transfer pricing cases, non-residents, or foreign companies.
- Transfer pricing refers to the price charged in a transaction between related entities of a multinational enterprise.
- Pending Proceedings: Any proceedings pending before any income-tax authority, Appellate Tribunal, or court on the commencement of the new Act will continue and be disposed of as if the new Act had not been enacted.
- Interpretation of tax treaties: The Act allows the central government to enter into agreements with other countries to provide relief in cases of double taxation.

Minimum Alternate Tax (MAT):

- It aims to bring into the tax net "zero tax companies" which in spite of having earned substantial book profits and having paid handsome dividends, do not pay any tax due to various tax concessions and incentives provided under the Income-tax Law.
- The provisions of MAT are applicable to a **corporate taxpayer only**.
- Alternate Minimum Tax (AMT): It has similar provisions as MAT which is applicable to non-corporate tax payers.

Environmental, Social, And Governance (ESG)

Economy

Context

The Parliamentary Standing Committee on finance submitted a report in the Lok Sabha and gave recommendations to improve the ESG framework in India.

Additional Information

The ESG (environmental, social, and governance) is a framework for evaluating a company's sustainability and ethical practices across three key areas: environmental impact, social responsibility, and corporate governance.

Significance of ESG Framework

- Global Alignment: Supports national and international sustainable development goals including SDGs and Paris Agreement.
- Financial Access: Attracts ESG-conscious investors, customers, and employees while enabling access to green financing
- Operational Efficiency: Reduces costs through sustainable practices like renewable energy adoption.
- Competitive Advantage: Drives innovation and resilience through best practices that minimize environmental/
- - Brand Value: Creates positive societal impact by addressing community needs and stakeholder concerns.

Challenges of ESG Reporting in India (Highlighted by the Parliamentary Standing Committee):

- Persistent Risk of Greenwashing: False or misleading claims about their ESG performance may lead to a loss of brand image.
- **Inconsistent Implementation across sectors:** Due to lack of ecognized regulations and fragmented approach of reporting.















Difficulties faced by small businesses in adopting ESG practices: ESG adoption needs high upfront costs in terms of data collection, reporting, certification etc., posing burdens for small and mid-sized firms lacking resources and expertise.

Other Challenges:

- Lack of Awareness and Education: Many Indian businesses lack ESG awareness, expertise, and professionals; education on sustainability and ESG remains limited and underdeveloped.
- Integration with Business Strategy: Companies struggle to align ESG with core strategies, leading to costly, unproductive efforts that fail to create value or sustainability.
- Data Quality and Availability: Many Indian companies lack proper systems and standards, making ESG data unreliable and hard to measure or report consistently.
- $\textbf{Regulatory Fragmentation:} \ SEBI\ mandates\ ESG\ disclosure\ for\ top\ 1000\ listed\ firms.$
 - **India lacks uniform regulations:** Clear, harmonized reporting frameworks.

Way Forward to make ESG effective:

- Recommendation of Parliamentary standing committee:
 - Dedicated ESG Oversight Body: To be set up under Ministry of Corporate Affairs to combat greenwashing.
 - Amendment to Companies Act, 2013: To include ESG objectives as part of fiduciary duties of the directors.
 - **Independent ESG Committees:** For ensuring effective implementation and monitoring of ESG strategies.
- Other Recommendations:
 - Set clear ESG goals: Businesses should start by setting clear ESG goals that are aligned with their business strategy.
- These goals should be specific, measurable, achievable, relevant, and time-bound.
 - Invest in ESG Training and Capacity Building: For effective implementation of ESG strategies.
 - Partner with ESG experts: Businesses can partner with ESG consulting firms to help them with ESG adoption. These experts can provide guidance and support on ESG best practices.

Sovereign Credit Ratings

Economy

Context:

- S&P upgraded India's long-term Sovereign Credit Rating to 'BBB' from 'BBB-' and its short-term rating to 'A-2' from 'A-3', with a Stable Outlook.
- This marks the India's first sovereign upgrade by S&P after 2007 when India was elevated to investment grade at
- The upgrade reflects India's commitment to fiscal consolidation, improved quality of public spending, and strong corporate, financial and external balance sheets.

About Sovereign Credit Ratings (SCR):

- It refers to an independent evaluation of a country's creditworthiness, and seeks to quantify issuers' ability to meet debt obligations.
- **Major SCR agencies:** S&P, Fitch and Moody's.
- Rating Grades: SCR broadly rate countries as either investment grade or speculative grade, with the latter projected to have a higher likelihood of default on borrowings.
- The Investment grade rating ranges from BBB- to AAA for S&P and Fitch and Baa3 to Aaa for Moody's.
- Significance: When favourable, these can facilitate countries access to global capital markets and foreign investment, and reduce borrowing cost.
- Issues: There are concerns over bias in rating processes, conflicts of interest, and rating ceiling.
- Rating ceiling relates to the notion that a corporate issuer is not rated higher than the country that it resides within, constraining growth of a country's domestic marketplace.











Context

- Parliamentary Standing Committee on Finance has recommended for development of more GIFT City-like Financial Centers in major metro cities.
- India's first and only International Financial Services Centre (IFSC) was established within Gujarat International Financial Tec City (GIFT City).

About GIFT City IFSC (Gandhinagar, Gujarat):

- It was established as a Special Economic Zone (SEZ) in 2015. Designated as a non-resident zone under Foreign Exchange Management Act (FEMA).
- IFSC is a jurisdiction that provides onshore and offshore financial services to non-residents and residents (institutions), in a foreign currency.
- **Functions:**
 - Favourable tax structure: Offers cross-border financial products and services within a competitive tax environment.
 - Trusted regulatory environment: Provides onshore talent with an offshore technological and regulatory framework.
 - Ease of doing business: Facilitates movement of international financial services based on global standards, promotes inbound and outbound investment to India.
 - Regulatory body: International Financial Services Centres Authority (IFSCA) regulates financial products, financial services and financial institutions in IFSCs in India.
- Established in 2020 under the IFSCA Act. 2019.
- Current Status: GIFT-IFSC ranked 46th in the Global Financial Centres Index (a 5-rank improvement); ranked 45th in the FinTech rankings (a 4-rank improvement).

India's Retail Inflation **Economy**

- India's retail inflation moderated to 8 years low of 1.55% in July, 2025. Measured by the All-India Consumer Price Index (CPI), it shows the lowest year-on-year inflation rate after June, 2017.
- Further, Year-on-Year inflation rate based on All India Consumer Food Price Index (CFPI) or Food Inflation stood at -1.76% in July 2025, lowest after January 2019.

Reason for the Decline:

- Favourable base effect: Refers to the impact of the corresponding reference year on current growth estimates.
- Decline in inflation: In items like Pulses and Products, Transport and communication, Vegetables, Cereal and products, Education, etc.

About CPI:

- Meaning: It the change over time in general level of prices of goods and services that households acquire for
- Significance: Widely used macroeconomic indicator of inflation, tool for inflation targeting by governments and central banks, deflators in national accounts, indexing dearness allowance to employees.
- **Published by:** Central Statistical Office (CSO) on 12th of every month.
- **Components:** Includes 4 CPI numbers at the national level, namely:
 - CPI for Industrial Workers (IW),
 - CPI for Agricultural Labourers (AL),
 - CPI for Rural Labourers (RL) and
 - CPI for Urban Non-Manual Employees (UNME).
 - Base Year for CPI: 2012
- Comparison with Wholesale Price Index (WPI): WPI captures the inflation at the wholesale level, and differs with CPI in terms of their weighing patterns.
 - Food has a larger weight in CPI while fuel group has greater weight in WPI.















Context

RBI committee unveiled Framework for Responsible and Ethical Enablement of Artificial Intelligence (FREE-AI) to balance innovation with risk management in financial services.

About FREE-AI Vision

- Aim: Ensuring safe, fair and accountable AI adoption in India's financial sector
- **7 Sutras:** Foundational principles for AI adoption (refer to the infographics)
- **Dual Approach**
 - Fostering Innovation
 - Shared infrastructure for democratized data and compute access, which may be integrated with the AI Kosh established under the India AI Mission.
 - AI Innovation Sandbox for testing indigenous financial AI models
 - Create AI policy for regulatory guidance
 - Institutional capacity building (boards and workforce)
 - Relaxed compliance for low-risk AI solutions to facilitate inclusion and other priorities

Mitigating Risk

- Board-approved AI policies by Regulated Entities
- Inclusion of AI-related aspects in product approval processes, consumer protection frameworks and audits
- Strengthened cybersecurity and incident reporting
- Robust AI lifecycle governance
- Consumer awareness when they interact with AI.

Why FREE-AI Vision Matters

- AI's Growing Impact: The financial sector's AI investment is projected to reach:
- Rs 8 lakh crore (\$97 billion) by 2027 across banking, insurance, capital markets, and payments
- Rs 1.02 lakh crore (\$12 billion) by 2033 for GenAI alone, growing at 28-34% annually
- Emerging Complex Risks: AI introduces data privacy, algorithmic bias, market manipulation, cybersecurity vulnerabilities, and governance failures that traditional risk frameworks struggle to address.
- These risks could undermine market integrity, erode consumer trust, and create systemic vulnerabilities without proper management.

Indian Ports Act. 2025

Economy

Context

The President of India has given her assent to the Indian Ports Act, 2025 which replaces the Indian Ports Act, 1908.

Indian Ports Act 2025

It seeks to consolidate the law relating to ports, promote integrated port development, facilitate ease of doing business and ensure optimum utilisation of India's coastline.

Key features of the Act

The Statutory recognition to Maritime State Development Council (MSDC): It is established by the Central Government to make recommendations on the legal framework, port sector growth, competition, efficiency, and port connectivity.

Composition

- Union Minister of Ports, Shipping and Waterways shall be the ex-officio Chairman.
- Ministers-in-charge of each coastal state,
- Secretaries in the Indian Navy and Coast Guard dealing with coastal security, and
- Secretary of the Union Ministry for Ports, Shipping and Waterways.













Ports in India

- Presently India has 12 major ports (13th major port is under construction at Vadhavan, Palghar District, Maharashtra) and approximately 200 nonmajor ports.
- Major Ports: Wholly-owned by Central Government
- Non-Major Ports: Managed by and under the control of the respective State Maritime Board / State Government.
- 95% of India's trading by volume and 70% by value is done through maritime trade.
- Major ports handled 53% of maritime cargo traffic, while non-major ports (including private ones like Mundra and Sikka) handled 47%.
- Over the past decade (FY 2014-15 to FY 2024-25), key productivity indicators also showed substantial progress.
- Output per Ship Berth Day (OSBD) increased from 12,458 tonnes to 18,304 tonnes
- Average Turnaround Time (TRT) improved by 48%, reducing from 96 hours to 49.5 hours
- Idle Time (%) dropped by approximately 29%, from 23.1% to 16.3 per cent.

Initiatives for port development

- Sagarmala (2015): Port led development of India's maritime sector.
- Maritime India Vision 2030: Aimed at enhancing the performance and productivity of the maritime sector through ports, shipping and waterways.
- Major Ports Authority Act, 2021: Provide for regulation, operation and planning of Major Ports in India
- FDI Policy: Allows for 100% Foreign Direct Investment (FDI) in the construction and maintenance of ports and harbours, under the automatic route.

100th Birth Anniversary of Ms Swaminathan

Economy

Context

Prime Minister addressed the M.S. Swaminathan Centenary International Conference in New Delhi.

Additional Information:

- The theme of the conference is "Evergreen Revolution: The Pathway to Biohappiness", reflecting Swaminathan's lifelong dedication to food security.
- The "M. S. Swaminathan Award for Food and Peace" was instituted in his honour.
- This international award will be presented to individuals from developing countries who have made significant contributions in the field of food security.
- The first award was conferred to Nigerian scientist Prof. Ademola A. Adenle.

Dr M. S. Swaminathan 7 August 1925 - 28 September 2023 "Father of the **Green Revolution** in India"

Key contribution of MS Swaminathan:

- Green Revolution Architect (1960s-70s): Focused on increasing food production through the adoption of advanced breeding & modern techniques.
- He along with Norman Borlaug initiated a breeding program that incorporated dwarfing genes into wheat, producing shorter, stronger plants that boosted yields.
- Introduced semi-dwarf Mexican wheat (Sonora, Lerma Rojo 64) and high-yielding Indica rice varieties.
- Played a key role in the development of Pusa Basmati (1989), which was the world's first semi-dwarf and high yielding basmati variety.
- Championing the Evergreen Revolution: Swaminathan supported the Green Revolution but cautioned against its side effects like chemical overuse, monoculture, and soil damage. He proposed the "Evergreen Revolution" for lasting productivity without ecological harm.
- This represented a paradigm shift from a commodity centric to a "systems approach".
- **Ecological Foundations and Practices**
- Advocated Integrated Pest Management (IPM) and Integrated Nutrient Management (INM) to reduce chemical reliance and maintain soil fertility.















- Stressed rainwater conservation and renewable energy (e.g., biogas, solar, wind) in farming.
- Focused on climate-resilient crops (drought/salt-tolerant) and championed millets (Shree Anna), demonstrating foresight on climate adaptation.
- Underlined biodiversity conservation: By influencing acts like the Protection of Plant Varieties and Farmers' Rights Act – 2001 and the Biological Diversity Act-2002.
- Introduced the idea of 'biohappiness': Biohappiness is the state of well-being and fulfilment that arises when biodiversity is conserved and utilized in ways that enhance human health, nutrition, and livelihoods, creating harmony between people and nature.
- Women in Agriculture: The Women Farmers' Entitlements Bill, 2011, a private member bill, was introduced by MS Swaminathan.
- It aims to provide for the gender specific needs of women farmers, to protect their legitimate needs and entitlements and to empower them with rights over agricultural land, water resources etc.
- Focus on Nutritional Security: Advocated shifting from "food security" to "nutrition security," targeting protein hunger, calorie hunger, and hidden hunger (micronutrient deficiencies).
- Promoted bio-fortified and nutrition-rich crops.
- Leading National Agricultural Initiatives
 - Chaired National Commission on Farmers (NCF) from 2004-2006, producing five reports on farmer distress. A key recommendation was setting Minimum Support Price (MSP) at least 50% above the weighted average cost of production.
 - He founded the National Academy of Agricultural Sciences (NAAS) in 1990 for unbiased agricultural policy guidance.

Key Achievements and Prizes of MS Swaminathan:

- Bharat Ratna (2024, posthumously).
- Padma Shri (1967), Padma Bhushan (1972)
- Padma Vibhushan (1987)
- Shanti Swarup Bhatnagar Award (1961)
- Lal Bahadur Shastri National Award (1999).
- Indira Gandhi Prize (2001).
- World Food Prize (1987): Inaugural recipient.
- · Ramon Magsaysay Award (1971).
- Albert Einstein World Science Award (1986).
- Named "Father of Economic Ecology" by the United Nations Environment Programme.
- International Orders:
 - Order of Golden Heart (Philippines)
 - Order of Agricultural Merit (France),
 - Order of the Golden Ark (Netherlands)
 - Order of Cambodia.













Agriculture **Biofortified Potatoes**

Context

Iron-rich bio-fortified potatoes are being introduced to Indian markets to combat malnutrition.

About Biofortification

This involves conventionally bred tubers with higher micronutrient content, specifically iron, zinc, and Vitamin B6. The variety also has low phytate content, which enhances iron absorption.

Breeding Method

- The potatoes were developed using a technique called marker-assisted selection and conventional breeding. The International Potato Centre (CIP) shared the germplasm with ICAR-CPRI Shimla for local adaptation.
- Benefits: In addition to addressing "hidden hunger," these potatoes are late-blight tolerant, reducing the need for fungicides, and can thrive in acidic soils.

Agriculture **GM Maize Field Trials**

Context

The Genetic Engineering Appraisal Committee (GEAC) has approved confined field trials of two GM maize varieties by Bayer at Punjab Agricultural University.

Traits Being Tested

- The maize varieties are engineered for herbicide tolerance (HT) and insect resistance (IR), protecting them from pests and allowing for effective weed control with glyphosate-K.
- GEAC: The apex regulatory body for genetically modified organisms (GMOs) in India, operating under the Ministry of Environment, Forest & Climate Change (MoEFCC).

Agriculture Soybean in India

Context

India's soybean sector is facing stagnation, leading to calls for declaring 2026 as the "Year of Soy" to revive growth.

Overview

Soybean is a kharif crop and a key oilseed, accounting for 34% of India's oil crop area. India is the fifthlargest producer globally, with Madhya Pradesh, Maharashtra, and Rajasthan as the top-producing states.

Challenges

The sector faces low profitability due to unstable prices and climate shocks. There is also an "identity crisis," as it is primarily viewed as animal feed, leading to low domestic consumption.

Way Forward

India needs to stabilise profitability with MSP reforms and crop insurance, diversify products into health foods and nutraceuticals, and create processing hubs to improve storage and grading.

Agriculture Brown Revolution 2.0

Context

The proposed Brown Revolution 2.0 aims to restore soil fertility and reduce dependency on chemical fertilisers by using the Amul cooperative model for agricultural waste management.

Why it's Needed

Indian farmlands are experiencing a crisis of soil degradation due to low organic matter. Less than 20% of















- agricultural waste is scientifically recycled, and the rest is burned, releasing pollutants and causing water eutrophication.
- Proposed Model: The model involves establishing village-level cooperatives to scientifically process agrowaste into compost, vermicompost, and biochar. This dual-benefit approach would restore soil health while reducing the need for costly chemical fertilisers.
- Policy Framework: This would require mandatory funding for agro-waste clusters, economic incentives like a minimum support price for processed biomass, and the strict enforcement of a ban on open burning.

Space Technology in Indian Agriculture

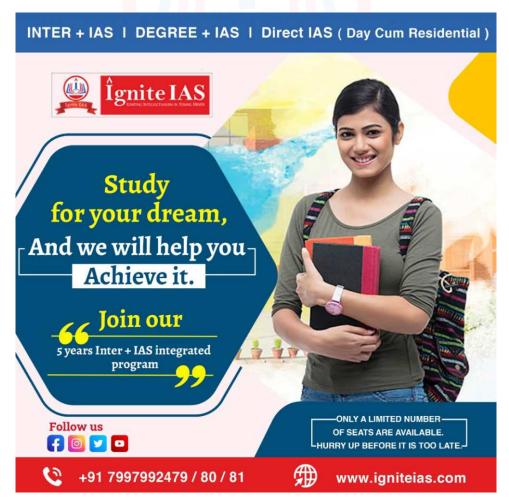
Agriculture

Context

The Ministry of Agriculture & Farmers' Welfare is using satellite technologies for various applications in agriculture, including farm-level planning, forecasting, and insurance estimation.

Applications

- Crop Estimation: The FASAL (Forecast of Agricultural Output using Space, Agrometeorology & Land-based Observations) program estimates crop output and sown area using remote sensing data.
- Drought Tracking: ISRO's drought geoportal monitors rainfall, temperature, and soil moisture.
- Yield Estimation: The YESTECH (Yield Estimation System based on Technology) uses geo-tagged data for timely and transparent claim settlements under the PMFBY.
- Agricultural Management: The Krishi-DSS (Krishi-Decision Support System) integrates various data sources for agricultural advisories.
- Significance: These technologies improve input efficiency, optimise crop yields, enhance disaster preparedness, and aid small farmers with real-time, local agronomic guidance.

















Fair and Representative Global Order

Context

• India's External Affairs Minister called for a fair and representative global order at the first BIMSTEC Traditional Music Festival.

Why global order is not fair and representative

- Unequal Representation in Global Institutions: E.g., The P5 countries (China, France, Russia, UK, and US) hold permanent status and veto powers, disproportionately influencing United Nations Security Council (UNSC) decisions and sidelining non-permanent members.
- Marginalization of the Global South: Global North (industrialized countries) has 9 times more Voting Power at the IMF Than the Global South (Developing or underdeveloped countries).
 - E.g., United States has 16.49% of the votes on the IMF's board despite representing only 4.22% of the world population.
- Ineffective Multilateralism: Powerful nations bypass multilateral forums undermining truly global cooperation leading to fragmented and interest-driven global responses.
 - E.g., United States is set to officially withdraw from Paris Climate Agreement and World Health Organization
- Trade as Instrument of Geopolitical Power: E.g., United States' 25 % tariff on goods imported from India, EU's carbon tax etc. highlight the asymmetry in trade relationships.
- Climate Change Inequities: Industrialised countries like United States, account for 20% of all historical emissions and the consequences disproportionately affect countries in Global South.
 - E.g., In 2024, the Philippines faced an extreme heatwave, causing drought and heat-related deaths.
- Technology and Knowledge Divide: E.g., 100 companies, mostly in the United States and China, are behind 40 % of the world's private investment in research and development, highlighting a sharp concentration of power. (Technology and Innovation Report 2025).

Way forward for a Fair & Representative Global Order:

- Multilateral Reforms: E.g., G4 Ministers representing Brazil, Germany, India, and Japan support each other's bids for permanent seats on the United Nations Security Council (UNSC).
- Decolonising Multilateralism: Initiatives such as the Voice of the Global South Summit exemplify India's potential as a champion for a more equitable world order.
- Implement Rio de Janeiro Declaration: Adopted in the 17th BRICS Summit, it advocates for inclusive AI governance and realignment of IMF quotas to better reflect current global realities and sovereign interests.
- Bridging the Digital & Technology Divide: Promote open-source, inclusive digital public infrastructure.
 - E.g., India's model of Digital Public Infrastructure (DPI) was held up as a blueprint for the Global South.
- Climate Justice: Strengthen frameworks like Common but Differentiated Responsibilities (CBDR), updating them to meet contemporary economic and climate challenges.
- A fair global order needs inclusive institutions, equitable finance, and balanced North-South cooperation, with emerging powers like India bridging gaps for a just and effective world system.

Armenia-Azerbaijan Peace Agreement Brokered by the United States

International Relations

Context

• The deal aims to bring an end to decades of conflict between the two South Caucasus countries.

Key Provisions of the deal

- Cessation of Hostilities: Both nations agreed to end armed conflict, establish diplomatic relations.
- Trump Route for International Peace and Prosperity" (TRIPP): New transit route linking Azerbaijan to its exclave Nakhchivan through Armenian territory.
- The US has exclusive development rights
- US Cooperation Deals: Both countries also signed separate agreements with the United States to enhance cooperation in energy, technology, and the economy.















Background of the Conflict:

- The Armenia–Azerbaijan conflict is mainly over Nagorno-Karabakh, a mountainous region inside Azerbaijan but predominantly populated by ethnic Armenians.
- 1980s: Nagorno-Karabakh broke away from Azerbaijan with Armenia's support.
- 1991: Both countries gained independence from the Soviet Union, but the dispute continued.
- 2023: Azerbaijan regained full control, causing nearly 100,000 Armenians to flee to Armenia.

India's Interest:

- India supports the peace deal, calling it an "important achievement" for dialogue and diplomacy. The deal is important for India as:
- Armenia is the only country in the region with which it has a Friendship and Cooperation Treaty (signed in
- · Azerbaijan falls on the International North-South Transport Corridor route, connecting India with Russia through central Asia.

India's Strategy In Indian Ocean

International Relations

Context

Parliamentary Committee on External Affairs presented report on 'Evaluation of India's Indian Ocean Strategy' in Lok Sabha.

Why Indian Ocean matters:

- Indian Ocean is 3rd-largest oceanic division in the world.
- Hosts 1/3rd of the world's population.
- Over 2/3rd of the world's oil shipments transit through it.
- 90% of India's trade by volume, including nearly all oil imports, passes through the Indian Ocean.
- India has a 2.4 million sq. km Exclusive Economic Zone (EEZ) in the Indian Ocean Region (IOR).

India's Strategy in the Indian Ocean:

- Strategic Partnerships: India's approach to the IOR has been guided by 'Neighbourhood First' policy and SAGAR (Security and Growth for All in the Region) doctrine.
- In March 2025, India outlined MAHASAGAR (Mutual and Holistic Advancement for Security and Growth Across Regions) doctrine, an extension of SAGAR doctrine.
- Net Security Provider: India has established itself as the net security provider in the IOR.
- India actively engages in counter-piracy operations and cooperates with other nations to combat IUU fishing, maritime terrorism and maritime criminal activities.
- India also conducts joint EEZ surveillance exercises and shares information through Information Fusion Centre (IFC-IOR).
- **Engagement with Littoral States:** India has fostered strong bilateral partnerships with IOR littoral states such as Mauritius, Maldives, Sri Lanka, and Seychelles.
- Developmental assistance, capacity building programmes, HADR support and defence and maritime security cooperation are the core pillars of such partnerships.
- Regional Leadership: India plays a key role in multilateral platforms in the IORA including Indian Ocean Rim Association, Indian Ocean Commission, etc.
- Infrastructure and Connectivity: India has been investing in the development of ports, such as Chabahar Port, across the Indian Ocean, such as in Sri Lanka, Mauritius, and Seychelles, to enhance connectivity and strategic
- Sagarmala 2.0: India's flagship initiative to enhance port connectivity, develop inland waterways, and promote industrial growth to further enhance India's maritime competitiveness.
- Humanitarian Assistance and Disaster Relief: India plays the role of a reliable 'first responder'.
- For instance, in the wake of floods caused by Typhoon Yagi, India launched Operation 'Sadbhav' and provided disaster relief material and medical supplies to Myanmar, Laos, and Vietnam.















Challenges and Threats to the Indian Strategy:

- Geopolitical: Increasing presence of extra regional players with investments in ports and infrastructure (e.g., strategic competition in Sri Lanka and Maldives with China) thereby expanding their strategic footprint and adversely impacting our security interests.
- · Island states' hedging between partners is a challenge in steady economic and security engagement.
- Maritime Security: Region faces issues like piracy, terrorism, illegal, unreported, and unregulated fishing (IUU fishing), drug trafficking, and smuggling.
- Infrastructure and Connectivity Gaps: Several IOR countries, including India's key partners like Sri Lanka, Maldives, Mauritius and Seychelles, face infrastructural and financial limitations.

Way Forward:

- Tailored strategic engagement plan: India should formulate a comprehensive and flexible strategic engagement plan covering all 35 littoral states with key focus areas including maritime security, climate resilience, infrastructure development, defence cooperation, etc.
- Institutionalise strategy execution: Establish a dedicated Inter-Ministerial Task Force comprising key ministries to address existing institutional silos, streamline decision-making, and enable faster, better-coordinated execution of India's interests in the region.
- Integrating Indian Ocean and Indo-Pacific strategies: Develop a unified and coherent maritime strategy integrating Indian Ocean and Indo-Pacific policies including strengthening cooperation through key multilateral platforms such as the Quad, IORA, and ASEAN.
- Green MAHASAGAR: Integrate environmental sustainability into India's regional strategy with focus on marine ecosystem protection, pollution reduction, disaster response, and promotion of the Blue Economy.
- Strengthen maritime strategy: Enhancing India's maritime deterrence through advanced technologies, including satellite surveillance and AI-driven Maritime Domain Awareness.

Association of Southeast Asian Nations (ASEAN) Centrality

International Relations

Context

ASEAN Centrality is under growing strain from great-power rivalry, trade tensions, and a shifting order requiring bold reforms and deeper partnerships in Indo-pacific Region.

About ASEAN:

- Genesis: Established in 1967 in Bangkok, Thailand, with the signing of the ASEAN Declaration (Bangkok Declaration).
- · Aims: Accelerate regional economic and cultural progress; Promote peace, stability, and the rule of law; Foster collaboration across education, trade, agriculture, and industry.
- Secretariat: Jakarta (Indonesia).
- Member Countries: 10 countries (see map)
 - Indonesia, Malaysia, Philippines, Singapore and Thailand are founding members.
- ASEAN Summit: It is the highest policy-making body in ASEAN comprising the Heads of State or Government of ASEAN Member States.
- Article 1.15 of the ASEAN Charter emphasises that the grouping's primary goal is to uphold the centrality and active role of ASEAN as the main driving force behind its relations and cooperation with external partners.

Relevance of ASEAN Centrality in the Region:

- Security and Stability: Through forums like the ASEAN Regional Forum (ARF) and ASEAN Defence Ministers' Meeting-Plus (ADMM- Plus), ASEAN provides space for defence, maritime, and security dialogue involving both member and external powers.
- Economic Integration: RCEP (Regional Comprehensive Economic Partnership) was ASEAN-led, strengthening regional trade links across Asia-Pacific.
- Norm-building: E.g., Treaty of Amity and Cooperation (TAC), originally meant for Southeast Asian states, has evolved into a key regional framework, with major powers like China, US, and Russia also becoming signatories.











Threats to ASEAN Centrality

- Great-Power Rivalry: US-China competition risks marginalizing ASEAN, fragmenting regional unity (e.g., BRI vs Indo-Pacific Strategy).
- US tariffs: The tariffs are destabilising the international trade systems crucial for ASEAN economies.
- Overlapping Regional Architectures: New minilateral arrangements such as QUAD and AUKUS (Australia, UK, and US) challenge ASEAN-led security mechanisms like the East Asia Summit, AADMM-Plus etc.
- Internal Divisions: E.g., Vietnam put strong pressure on ASEAN members to confront China whereas Cambodia, along with Laos, have also become increasingly dependent on Chinese infrastructure loans.
- Credibility Crisis: E.g., On the Myanmar crisis, ASEAN has struggled to enforce its "Five-Point Consensus," allowing external powers to step in the Indo-pacific region.
- Weak Institutional Capacity: ASEAN Secretariat's limited resources curtail ambitious initiatives.

Way-forward to Strengthen ASEAN Centrality

- Upgrade ASEAN: ASEAN's Community Vision 2045 and ASEAN Political-Security Community Strategic Plan. ASEAN Economic Community (AEC) Strategic Plan (2026-2030) marks step in the right direction.
- · Cooperate with like-minded partners: E.g., EU seeks Free Trade Agreements (FTAs) with ASEAN and most of its members, is expanding its presence in the Indo-Pacific.
- Formal consultation mechanisms: With groupings like the QUAD, proposing joint initiatives on shared concerns, and exploring ways to connect minilateral arrangements with ASEAN-led processes.
- Closer partnership with India: India shares ASEAN's interest in enhancing regional trade, increasing economic diversification, and promoting regional stability.

India-philippines Strategic Partnership

International Relations

The Philippines and India formally elevated their bilateral ties through a declaration on establishing a Strategic Partnership guided by the Plan of Action (2025-2029).

Additional Information

The strategic partnership marks 75 years of diplomatic ties (established in 1949), further strengthened by India's Look East (1992) and Act East (2014) Policies.

Convergence of India-Philippines Relations

- Defense Partnership: Growing trust and defense cooperation exemplified by India's arms exports, like \$375m BrahMos missile deal with Philippines (1st foreign buyer).
- China Factor: Increasing Chinese assertiveness in the South China Sea threatens Philippine sovereignty and also India's maritime trade routes, bringing both towards closer cooperation.
- Maritime Security: India backs the Philippines' stance on the 2016 arbitration ruling, reinforcing a rules-based order under UNCLOS.
- India calls a rules-based order and freedom of navigation in the SCS region.
- Indo-Pacific Vision: India's Act East Policy and Indo-Pacific outreach have Philippines as a key player.
- India-Philippines relations are becoming more strategically deep through collaboration in cyber, economics, maritime, and defense. The partnership promotes a rules-based Indo-Pacific and enhances India's Act East Policy. By working together, both countries can guarantee shared prosperity, stability, and security in the region.

UN-India Global Capacity-building Initiative

International Relations

Context

India launched projects with the UN under Global Capacity Building Initiative for Asia, Africa and Caribbean countries.

About Global Capacity Building Initiative

Genesis: India and the United Nations jointly launched it in September 2023.















- Objective: Share India's development experiences, best practices, and expertise with Global South nations through capacity-building and training programs for accelerating progress on the Sustainable Development Goals (SDGs).
- Implemented through the new UN India SDG Country Fund as well as the Indian Technical and Economic Cooperation Programme (ITEC).

Intermediate-range Nuclear Forces (INF) Treaty

International Relations

Context

Russia officially end commitment to 1987 Intermediate-Range Nuclear Forces (INF) Treaty. Russia cited recent US military actions as key reason including the US order of repositioning two nuclear submarines closer to Russian shores and deployment of Typhon missile system in Philippines.

About INF Treaty

- Signed between the United States and the Soviet Union in 1987, the treaty required destruction of all ground launched ballistic and cruise missiles with ranges of 500-5,500 km.
- It was the first major agreement to reduce nuclear arsenals, remove an entire class of weapons, and allow on-site inspections for verification.
- INF Treaty had already weakened after the US withdrew in 2019.

Implications on nuclear arms control

- Breakdown of Arms Control Frameworks: Eroding trust and hindering efforts towards future nuclear disarmament movements.
- Negative impact on nuclear disarmament: Major powers accelerating nuclear modernization, while nonnuclear states are reconsidering their non-proliferation commitments, heightening global instability.
- Return to Cold War Politics: Collapse of treaty has stoked fears of a replay of Cold War-era European missile crisis.
- Increasing Security Risk: Such weapons take less time to reach targets, raising the likelihood of a global nuclear conflict over a false launch warning.

Alaska Summit

International Relations

Context

• The President of USA and Russia met in Alaska regarding Ceasefire in Russia-Ukraine war.

About Alaska:

- It is a non-contiguous U.S. state on the northwest extremity of the North American continent.
- It was bought by the USA from Russia as per Alaska Treaty 1867.
- Maritime Boundaries: Beaufort Sea and Arctic Ocean (North), Gulf of Alaska and Pacific Ocean (South), Bering Sea (West), Chukchi Sea (Northwest)
- The Northern Lights or Aurora Borealis, are visible across much of Alaska
- Nearly one-third of the state lies within the Arctic Circle, and about 85% of Alaska is underlain by permafrost.

Asia-Pacific Institute for Broadcasting Development (AIBD)

International Relations

Context

• India has been elected as the Chairman of the Executive Board of AIBD at 23rd General Conference in Thailand.

About Asia-Pacific Institute for Broadcasting Development:

- Genesis: Founded in 1977 under the auspices of UNESCO, AIBD is a unique regional inter-governmental organization.
- Secretariat: Kuala Lumpur.
- Mandate: To achieve a vibrant and cohesive electronic media environment in the Asia-Pacific region.
- Members: It currently has 92 member organizations from 45 countries.















India is a founding member of AIBD, and Prasar Bharati India's public service broadcaster represents the Ministry of Information & Broadcasting in the organization.

Eurasian Economic Union

International Relations

Context

India and Eurasian Economic Union recently signed Terms of Reference for trade deal. Signing of Terms of Reference marks, the formal commencement of Free Trade Agreement (FTA) negotiations with the goal to establish a long-term framework for trade cooperation.

Potential Benefits of FTA with EAEU:

- **Economic Benefits:**
 - Trade expansion: It will unlock untapped trade potential, increase investments and establish a stronger, durable India-EAEU economic partnership.
 - Bilateral Trade turnover stood at USD 69 billion in 2024 (7% rise from 2023).
 - Market access: It will open wider opportunities for Indian exporters amid increasing US tariffs and support diversification into new sectors and geographies.
 - Enhance competitiveness: It will strengthen India's position against non-market economies.
 - It will significantly benefit Indian Micro, Small and Medium Enterprises (MSMEs).
 - Energy partnership: EAEU offers abundant natural resources and energy crucial for India's growth.
 - E.g. Russia now accounts for 35-40% of India's total oil imports by volume.
 - Strategic Benefits: Strengthening ties with Russia-led bloc will reinforce India's policy of multialignment.

About Eurasian Economic Union (EAEU):

- Overview: It is an international organization for regional economic integration.
- Genesis: Established by the Treaty on the Eurasian Economic Union (2014).
- Benefits: Provides for free movement of goods, services, capital, and labour, etc.

Africa's Objection to the Mercator Map

International Relations

Context

- The African Union has endorsed the "Correct the Map" campaign to replace the Mercator world map with a sizeaccurate projection.
- Mercator Projection: Developed in 1569 for maritime navigation, it preserves angles and shapes but distorts land areas, especially near the poles.
- Issues with the Mercator Map: It exaggerates the size of Europe and North America, creating a Eurocentric bias and diminishing the perceived size of Africa. This distortion has historically been used to justify colonial exploitation.
- Alternatives: Alternatives to the Mercator projection include the Gall-Peters (equal-area), Equal Earth (balanced view), and Winkel Tripel (minimum overall distortion) maps.

India-Nigeria Defence Meeting

International Relations

Context

- India and Nigeria held talks to strengthen their long-standing defence ties and explore cooperation in new areas.
- Focus Areas: The talks focused on counterterrorism training, maritime cooperation (anti-piracy and hydrography), defence manufacturing, and joint R&D.
- Nigeria: Known as the "Giant of Africa," it is the continent's largest democracy. It joined the BRICS Plus Partnership in 2025.













Thailand-Cambodia Border Disputes

Context

• Thailand and Cambodia agreed to an unconditional ceasefire after border clashes, which were mediated by Malaysia and supported by the U.S. and China.

Disputed Sites

The dispute, which dates back to a 1907 French-drawn map, involves Khmer temples like the Preah Vihear Temple (a UNESCO site) and the Ta Moan Thom Temple. The Chong Bok Plateau is also a strategic highland zone where militarisation intensified during recent clashes.

India-Maldives Relations

International Relations

Context

- PM Modi attended the Maldives' 60th Independence Day in July 2025, becoming the first Indian PM to do so.
- Key Developments: India extended a Rs 4,850 crore credit line in rupees, restructured past loans, and formally launched Free Trade Agreement (FTA) negotiations. Other initiatives include gifting Arogya Maitri cubes for emergency health response and formalizing UPI payments in the Maldives.
- Strategic Implications: The visit reaffirmed India's role as a reliable partner in the Indian Ocean, countering the "India Out" narrative with a cautious "India In" narrative. It also advanced India's MAHASAGAR Vision for security and growth in the region.
- Challenges: The relationship is tested by rising radicalization, increasing Chinese influence through projects like the Sinamalé Bridge, and the "India Out" campaign which calls for the removal of Indian military presence.

India-UK Free Trade Agreement

International Relations

Context

- India has signed its 14th Free Trade Agreement (FTA) with the UK, making it the UK's largest post-Brexit deal.
- Key Provisions: The agreement provides zero-duty access for nearly 99% of Indian manufacturing exports to the UK. It also includes tariff cuts on UK exports like whisky and cars. India's marine exports and agri-exports will also get duty-free access.
- Benefits for India: The FTA is expected to boost India's exports, increase farm incomes, and promote the growth of the textile sector and digital economy.
- Challenges: There are concerns about delayed gains due to a 10-year tariff staging plan, quota constraints on key exports, logistical gaps, and divergent safety standards that could hinder market access.

Labour Mobility as a Diplomatic Tool

International Relations

Context

India is strategically using labour mobility as a diplomatic tool to strengthen global partnerships and leverage its demographic advantage.

Mechanisms

India is signing Mobility Partnerships to regulate labour flows, aligning skills with demand in host countries, and promoting mutual recognition of qualifications.

This approach boosts remittances, strengthens India's bargaining power in trade talks, and expands its soft power through diaspora networks.

Challenges

The model faces challenges like skill mismatches, visa bottlenecks, and the presence of informal recruitment agents who exploit migrants.

Government Initiatives

The Pravasi Kaushal Vikas Yojana (PKVY) provides pre-departure orientation to equip workers with countryspecific skills and safeguards.















Context

- · ASEAN's central role in the Indo-Pacific is under threat from growing U.S.-China rivalry and weakening multilateral frameworks.
- Challenges: The U.S.-China rivalry divides ASEAN members, weakening their unity and diplomatic response capabilities. Weakened multilateralism in forums like AUKUS and Quad further reduces ASEAN's influence.
- Recommendations: To strengthen its position, ASEAN should improve its crisis response mechanisms, deepen partnerships with other nations like the EU and Australia, and strengthen relations with India via platforms such as BIMSTEC.
- ASEAN: A regional group of ten countries promoting economic, political, and security cooperation. It was established in 1967 with its secretariat in Jakarta. India is not a member of ASEAN.

Russia-India-China (RIC) Troika

International Relations

Context

• Russia is seeking to revive the dormant RIC Troika to counter Western pressure and protectionism.

RIC Troika

- An informal trilateral strategic grouping proposed by Russia in the late 1990s to foster Eurasian cooperation and counter Western dominance. It became inactive after the India-China Galwan border confrontation in 2020.
- Drivers for Revival: Renewed U.S. tariffs and Western sanctions on Russia, a push for non-Western payment systems, and the need for secure intra-RIC trade channels are driving the revival.
- Challenges: Ongoing India-China border tensions and India's growing ties with the West continue to pose major obstacles to deeper cooperation within the grouping.

India's Tibet Policy

International Relations

Context

- The 14th Dalai Lama's affirmation of a traditional reincarnation process has revived debates on Tibet's future and its impact on India-China relations.
- Traditional Reincarnation: A centuries-old Tibetan Buddhist tradition where senior lamas identify the Dalai Lama's successor through spiritual signs.
- Implications: A delayed process could reduce the new Dalai Lama's global influence. China aims to gain control if the successor is found in the Tibet Autonomous Region (TAR). For India, it may reduce short-term diplomatic
- · Challenges: China uses its economic leverage to push its Tibet narrative, while India's stance is often diplomatically ambiguous. Tibet's strategic importance for India's border security also remains a key issue.

India-U.S. Trade Tensions

International Relations

U.S. President Donald Trump has proposed a 25% tariff on Indian goods, citing India's trade with Russia and its protectionist policies.

Triggers

The tariffs are a response to concerns over a large U.S.-India trade deficit and India's continued oil purchases from Russia. The move is seen as strategic posturing to gain leverage in stalled trade talks.

Implications

The tariffs undermine WTO norms and global trade architecture. They also create a trust deficit in India-U.S. relations, potentially stalling progress on a comprehensive trade pact. Indian sectors like textiles, pharmaceuticals, and auto parts are vulnerable.















Way Forward: India should pursue high-level bilateral talks, diversify its export destinations to regions like the EU, ASEAN, and Africa, and strengthen domestic manufacturing through schemes like PLI to absorb external shocks.

Import Diversification of Crude Oil

International Relations

Context

- Russia's narrowing crude oil discount and U.S. tariff pressures highlight the need for India to diversify its oil imports for energy security.
- Current Landscape: India imports about 90% of its crude oil. Russia is the top supplier, followed by Iraq and Saudi Arabia. The U.S. share has risen to 8%, while imports from sanctioned countries like Iran and Venezuela are negligible.
- Benefits of Diversification: It insulates India from geopolitical supply shocks, provides economic leverage in price negotiations, and safeguards against sanctions.
- Challenges: Diversification faces challenges such as cost escalation, refinery compatibility issues, and logistical barriers from longer transportation routes.

Iran's GPS Exit and the Tech Cold War

International Relations

Context

Iran's shift from using the U.S.-controlled GPS to China's BeiDou system reflects a broader "tech cold war" and global technological realignment.

Rationale

- GPS disruptions during a conflict revealed Iran's vulnerability to foreign digital control, leading to security concerns. Using BeiDou offers an alternative that supports digital independence.
- Technological Multipolarity: The dominance of Western tech is being challenged by regional systems like BeiDou (China), GLONASS (Russia), and Galileo (Europe). These systems are building a tech ecosystem that promotes strategic ties beyond the West.
- Way Forward for India: India should fast-track indigenous systems like NaviC while also building diversified global tech partnerships to maintain its strategic autonomy.

Israel's Plan to Control Gaza

International Relations

Context

Israeli Prime Minister Netanyahu's post-war plan proposes indefinite Israeli security control over Gaza, replacing Hamas with local governance under Israeli oversight.

Current Governance

Gaza's governance is defined by a dual authority, with Hamas controlling internal affairs and Israel regulating external access points. Egypt controls the Rafah terminal.

The plan aims to dismantle Hamas's governance but risks creating an administration that lacks legitimacy without inclusive Palestinian representation. It also raises legal questions about Gaza's status as an occupied territory.

Russian Territorial Control in Ukraine

International Relations

Context

• Russia controls about one-fifth of Ukraine's territory, including key industrial and strategic hubs.

Kev Controlled Areas

This includes Crimea, annexed in 2014; Luhansk, an industrial hub in Donbas; Kherson, which forms a crucial "land bridge" to Crimea; Zaporizhzhia, home to Europe's largest nuclear power plant; and Donetsk, part of the heavily fortified Donbas region.















India's First Hydrogen-Powered Train Coach

Context

Indian Railways tested its first hydrogen-powered train coach at the Integral Coach Factory (ICF), Chennai, as part of the National Green Hydrogen Mission.

Project Overview

The coach, a retrofit of a diesel-powered car, will operate between Jind and Sonepat. The project is part of the "Hydrogen for Heritage" program, which aims to deploy 35 hydrogen trains on heritage rail routes.

Hydrogen fuel cells generate electricity through a non-combustion process, with the only byproduct being water. This technology enables green mobility on non-electrified routes and reduces India's dependence on crude oil.

Challenges

The project faces challenges related to high capital costs, a lack of sufficient electrolyser capacity, and the logistical complexity of transporting compressed hydrogen.

Lunar Module Launch Vehicle (LMLV)

Science & Technology

Context

• ISRO is developing its heaviest rocket, the LMLV, for India's first crewed Moon landing by 2040.

Key Features

The LMLV will replace the Next Generation Launch Vehicle (NGLV). It is a three-stage rocket with a payload capacity of 27 tonnes to the Moon and 80 tonnes to Low Earth Orbit. It uses liquid propellants for the first two stages and cryogenic propellants for the third. The rocket is expected to be operational by 2035.

India's Need for a National Space Law

Science & Technology

Context

Despite ratifying the Outer Space Treaty (OST) of 1967, India lacks a statutory law for space governance, which is hindering private sector participation and sustainability.

Outer Space Treaty

The treaty declares space a global common, prohibits the placement of weapons, and holds states responsible for all activities in space.

Benefits of a National Law

A law would provide legal certainty, attract foreign investment, set mandatory safety standards to reduce space debris, and secure intellectual property rights (IPR).

Current Governance

India's space policy is based on the 2023 Indian Space Policy, which encourages private launches. However, IN-SPACe, the body that authorises private satellites, lacks statutory backing, and the draft Space Activities Bill remains pending.

Way Forward

Enacting a comprehensive law, granting statutory powers to IN-SPACe, and developing pooled risk-sharing insurance models are crucial steps.















Science & Technology **Bharat NCX 2025**

Context

The National Security Council Secretariat (NSCS) and Rashtriya Raksha University (RRU) organised the Bharat National Cybersecurity Exercise 2025 to bolster India's cyber defence.

Key Highlights

The exercise focused on the security of Industrial Control Systems (ICS) and AI-driven threats like deepfakes and adversarial AI attacks. It included a strategic exercise to simulate national-level cyber crises and an exhibition to promote homegrown cybersecurity innovations.

Significance

The exercise boosted readiness in critical sectors and promoted collaboration among public, private, and academic institutions to strengthen India's cybersecurity ecosystem.

CRIB Rare Blood Group Found in India

Science & Technology

Context

A new human blood group antigen named CRIB was discovered in Bengaluru and officially recognised by the International Society of Blood Transfusion (ISBT).

CRIB Discovery

The name "CRIB" combines Cromer (the blood group system it belongs to) and India-Bengaluru (IB), indicating its origin. The antigen was found during routine diagnostics after a blood sample showed panreactivity—reacting with all tested donor samples.

India's Unique Genetic Legacy

Science & Technology

Large-scale genomic studies reveal that India's more than 5,000 endogamous ethnic groups offer unique insights into human evolution and disease.

Key Insights

Modern Indians are descended from a single out-of-Africa migration about 50,000 years ago and have genetic heritage from various ancestral groups. Long-standing endogamy has preserved ancient genetic variations but also led to a higher prevalence of population-specific recessive disorders.

Way Forward

The Genome India Project, which has already sequenced 10,000 genomes, is a crucial first step. The next steps should involve sequencing millions of genomes and setting up a national biobank to enable personalised medicine and public health interventions.

Universal Health Coverage in India

Science & Technology

Context

Strengthening decentralised and affordable diagnostics is essential for achieving India's goal of Universal Health Coverage (UHC).

Diagnostic Landscape

India's diagnostic market is large, but only 1.2% of its 100,000 labs have NABL accreditation, and there is a significant urban-rural divide in access to services. The country also faces a severe workforce deficit, with a rural doctor-to-population ratio of 1:11,082.

Importance of Diagnostics

Accessible diagnostics enable early disease detection, reduce treatment costs, and are crucial for epidemic control.















Government Initiatives

The government has launched several initiatives, including the National List of Essential Diagnostics (NLED), ICMR protocols, and the strengthening of Primary Health Centres (PHCs) with semi-auto analysers. Telediagnostics are also being promoted to link rural areas to urban specialists.

Way Forward

• The government should expand insurance coverage to include outpatient diagnostics, make NABL accreditation mandatory for all labs, and invest in skill development and rural infrastructure.

E. coli Turned into Mercury Sensor

Science & Technology

Scientists have engineered E. coli bacteria into a living, self-powered biosensor capable of detecting chemicals like mercury.

Key Features

The biosensor is low-cost and designed for real-time detection of harmful compounds in water. It is ultrasensitive, capable of detecting mercury ions below WHO limits. The sensor also detects E. coli itself, aiding in drinking water safety checks.

HPNPV Eco-Friendly Biocontrol for Teak Defoliator

Science & Technology

Context

The Kerala Forest Research Institute (KFRI) has mass-produced the Hyblaea puera Nucleopolyhedrosis Virus (HpNPV), an eco-friendly biocontrol agent to combat the teak defoliator moth.

What it is?

- HpNPV is a naturally occurring virus that is lethal only to teak defoliator moth larvae and poses no risk to other organisms.
- Mode of Action: The virus multiplies rapidly inside the larvae, and when the host dies, it releases viral particles that infect the surrounding pest population. This natural process disrupts the pest life cycle, making it a sustainable and effective solution.

Isro Inaugurates Hope Analog Mission In Tso Kar Valley, Ladakh

Science & Technology

- The Himalayan Outpost for Planetary Exploration (HOPE) is a specially designed Habitat Module for crew living and a Utility Module for operations and support systems, which are interconnected for seamless workflow.
- The HOPE station set up by ISRO aims to simulate space-like conditions on Earth to aid research for future interplanetary missions.

About HOPE Mission

• It was led by ISRO's Human Space Flight Centre (HSFC), with industry partners and top Indian institutions.

Objectives

- Simulates extraterrestrial environments like the Moon and Mars.
- Enables testing of human survival, health protocols, and equipment in space-like environments.
- Studies to be conducted:
 - Epigenetics, genomics, physiology, psychology.
 - Sample collection and microbial analysis techniques.
 - Validation of health monitoring and planetary surface operation protocols.

Why was Tso Kar Valley chosen:

- For Mars-like conditions:
 - High UV radiation, Low atmospheric pressure, Extreme cold and Saline permafrost
 - Supports both technological tests and astrobiology research.
- Part of a broader analogue missions trend globally, aimed at preparing for long-term extra-terrestrial human missions.
- Other similar research stations across the World
 - Mars Desert Research Station of the US, Flashline Mars Arctic Station of Canada, and BIOS-3 of Russia.















Disaster Management **Cloudburst**

Context

A recent cloudburst in Uttarkashi, Uttarakhand, triggered flash floods and landslides, highlighting the hazards of such events.

Definition

A cloudburst is a sudden, intense rainfall event, typically exceeding 100 mm/hour over a small area of 20-30 sq. km.

Formation

It occurs within cumulonimbus clouds under unstable, moisture-rich conditions, often due to orographic uplift in hilly regions. The Langmuir Effect explains how raindrops coalesce until gravity causes a sudden downpour.

Hazards

Cloudbursts lead to flash floods, landslides, and debris flows, which can sweep away infrastructure and settlements.

NDMA Guidelines

The National Disaster Management Authority (NDMA) has issued guidelines for cloudbursts that include risk mapping, expanding Doppler radar coverage, and enforcing land-use regulations in prone areas.

Flash Floods in India

Disaster Management

Context

Flash floods are claiming hundreds of lives annually in India, with recent tragedies in Himachal Pradesh and Sikkim underscoring the growing climate crisis.

Definition

Flash floods are sudden, localised increases in water levels that occur immediately after intense rainfall, typically within six hours.

Drivers

They are caused by a combination of natural factors, such as extreme rainfall and saturated soil, and anthropogenic factors like unplanned construction on floodplains and dam operations. Climate change is also a major driver, with a 1°C rise in temperature increasing atmospheric moisture by 7%.

Adaptation Strategies

These include localised planning based on regional topography, improving early warning systems, investing in resilient infrastructure, and enforcing land-use and flood management policies in vulnerable areas.

India's Response to GLOF Risks

Disaster Management

Context

Following a severe Glacial Lake Outburst Flood (GLOF) in Nepal, India is intensifying mitigation efforts in the Himalayas.

GLOF Definition

A GLOF occurs when water trapped in a glacial lake suddenly breaches its boundary, causing massive downstream flooding.

India's Approach

India has launched a multi-pronged GLOF mitigation approach led by the NDMA, shifting from post-disaster relief to a coordinated, preventive strategy. The National GLOF Risk Mitigation Programme covers 195 glacial















lakes and uses advanced technologies like SAR Interferometry and Electrical Resistivity Tomography (ERT) for early warning and risk assessment.

- Challenges: Key challenges include data deficits in remote areas, accelerated glacial melt due to climate change, and a lack of indigenous technological tools for monitoring.
- Way Forward: The government should incentivise indigenous technology, mandate GLOF risk assessments in all hydropower projects, and build cross-border alert systems with neighbouring countries.

Kamchatka Earthquake & Tsunami

Disaster Management

Context

A magnitude 8.8 megathrust earthquake struck near Russia's Kamchatka peninsula, triggering trans-Pacific tsunami warnings.

Earthquake

• It was a megathrust earthquake caused by the Pacific Plate subducting beneath the Okhotsk microplate.

Tsunami Formation

Tsunamis are generated when megathrust earthquakes vertically displace the overlying water column. Over 80% of global tsunamis originate from such subduction-related events.

Why it wasn't severe

The tsunami's impact was limited by a broad, shallow continental slope, a narrow subduction trench, and a segmented rupture that scattered the energy, preventing a large vertical water displacement.

Kamchatka

Located in the Russian Far East, it lies on a convergent plate margin within the Pacific Ring of Fire. It is home to about 150 volcanoes, including Klyuchevskoy, Eurasia's tallest active volcano.















Introduction

In recent times, allegations of political misuse of several public institutions like the Election Commission of India, the Enforcement Directorate, the Central Bureau of Investigation, etc., have raised concerns about erosion of trust in India's public institutions. The UN's World Social Report 2025 highlights a broad decline globally in institutional trust since the start of the 21st century. Today, over half of the global population has little or no trust in their government, says the UN report, citing survey data collected between 1995 and 2022.

What is meant by Trust

- OECD defines trust as "a person's belief that another person or institution will act consistently with their expectation of positive behaviour."
- Trust is a key component of the social contract, making it important for governance to be guided by a clear understanding of the nature of trust, along with deep insight into its drivers and consequences.
- **Types of Trust:**
 - Horizontal Trust: Trust that members of a community have in each other.
 - Vertical Trust: Trust that members of a community have in the institutions presiding over that community.
 - Social Trust: It is a generalised trust, which is not directed at specific people for a specific purpose. It is trust, confidence, or faith in strangers and reflects long-term optimism.
 - Political Trust: It is confidence in institutions and their actors (e.g., the executive, legislative, judiciary, bureaucracy, police, media, private sector or business, NGOs, etc.)

Reasons behind erosion of Trust in Public Institutions

- Non-performance of administrative structures: E.g., poor service quality, lack of responsiveness, subjective and negative abuse of authority. (2nd ARC)
- Widespread Economic Insecurity: Providing economic security is a key role of the state and its institutions and a foundation of the social contract.
- Economically insecure individuals (e.g., lower-income, less-educated groups) report significantly lower institutional trust compared to more secure groups. (UNDESA)
- Political Exclusion: Limited political influence among the marginalised sections hinders their ability to demand redistributive policies or improved services.
- Scandals and Corruption: It undermines public trust by suggesting that public institutions are not acting in the best interests of the people or the country.
- Disinformation and social media: social media can emphasise institutional failures (real or perceived), enable sophisticated targeting of information campaigns, manipulate views, and affect trust in the legitimacy of election
- Inefficient Judicial systems: They impair the rule of law and hamper remedies in case of grievances with public institutions.

Measures to rebuild/improve Trust in Public Institutions

- Foster citizen engagement and participation: E.g. promoting open and inclusive policymaking through measures like Social Audit.
- Consistent implementation and results: Improving citizens' experiences through day-to-day interactions in the delivery of public services. E.g., Direct Benefit Transfer.
- Promoting transparency and communication: Ensuring data used for policy making is accessible and openly verifiable, e.g., through government dashboards.
- Ensuring ethical governance: Integrity of action, attention to equity, and focus on marginalised groups are critical for ethical behaviour and the public trust.
- Independent anti-corruption mechanisms: E.g., the Lokpal and Lokayukta Act, 2013 mandated the establishment of Lokpal at the union level and Lokayukta at the state level to deal with complaints relating to corruption against certain public functionaries.
- Strengthening Institutional Frameworks: A harmonious and cooperative relationship between parliament and the executive, along with an independent judiciary, is key to building trust.
- Addressing Misinformation and Leveraging Technology: Governments need to proactively tackle misinformation and disinformation by adopting new governance models to ensure that information ecosystems support democratic debate and discussion. E.g., establishing Fact Checking Units.













Dilemma of Balancing Public Safety and Animal Welfare in Controlling Stray Dogs

- Over 37 lakh dog bite cases were reported in 2024, according to the National Centre for Disease Control (NCDC). The WHO notes that India accounts for one-third of global rabies deaths. Recently, the Supreme Court modified its Suo motu order that had directed confinement of all stray dogs in Delhi-NCR shelters. It ruled that dogs, once dewormed and vaccinated, should be released back to their original areas.
- These developments underline the need to balance stray dog protection with citizen safety concerns.

Ethical Values in Conflict in the Management of Stray Dogs:

- Compassion vs. Public Safety: Feeding strays may keep them alive, but can also increase their population and territorial aggression.
- Animal Rights vs. Human Rights: The fundamental principle that "every creature with a will to live has a right to live free from pain and suffering" conflicts with humans' legitimate rights to security, property protection, and freedom from fear in public spaces.
- Supreme Court, in Jallikattu Case 2014, has interpreted the right to life and liberty (Article 21) as extending to animals as well.
- Kant's Deontology vs Utilitarianism: Kant's categorical imperative demands treating all beings as ends in themselves, never merely as means. Forcible relocation or dumping of strays violates their dignity.
- This perspective goes against the utilitarian model that might sacrifice individual animals for human convenience
- The Non-Maleficence Dilemma: The medical principle of "not harm" applies to both animals and humans, requiring solutions that minimise harm to all parties.
- Current approaches often fail this test by either harming animals through cruel control methods or humans through inadequate population management.
- The Rights-Duties Paradox: While animals don't bear legal duties, they still deserve rights—just like infants or the disabled—because of their vulnerability and sentience, not their utility.

Ways for Ethical Management of Stray Dogs:

- The Principle of Beneficence: Active promotion of welfare for both animals and humans require proactive, welldesigned interventions rather than reactive measures.
- The Animal Birth Control (ABC) Rules, 2023, represent an attempt to operationalise this principle through systematic sterilisation and vaccination programs.
- The Netherlands imposed higher taxes on store-bought dogs to encourage shelter adoptions.
- Proportionality and Graduated Response: Responses to stray dog issues must be proportionate to actual risks while avoiding both inadequate action and excessive reaction. This principle demands:
- Evidence-based assessment of local situations rather than blanket policies
- Escalating interventions that begin with the least harmful approaches.
 - For example, after a spike in rabies cases in Delhi-NCR, the Supreme Court ordered building shelters, moving strays, and ensuring professional handling, sterilisation.
- Regular evaluation and adjustment based on outcomes for all affected parties
- Virtue Ethics: This approach focuses on cultivating virtues like compassion, responsibility, and wisdom in addressing the issue.











Prelims-Specific Topics Miscellaneous Events

International Tiger Day 2025

Celebrated on July 29 with the theme "Securing the Future of Tigers with Indigenous Peoples and Local Communities at the Heart".

Kargil Vijay Diwas

• Observed on July 26 to commemorate India's victory in the 1999 Kargil War.

Partition Horrors Remembrance Day

• Observed on August 14 to honour the victims and survivors of the 1947 Partition.

National Handloom Day

Celebrated on August 7 to mark the 1905 Swadeshi Movement.

Akhil Bharatiya Shiksha Samagam (ABSS) 2025

An event to mark 5 years of NEP 2020, with new digital and tech launches for education.

The 19-year-old chess player won the 2025 FIDE Women's World Cup, becoming India's fourth female Grandmaster.

India's Commonwealth Games Bid

The Indian Olympic Association has approved a bid to host the 2030 Commonwealth Games in Ahmedabad.

Kev Initiatives & Terms

Prelims-Specific Topics

- Matri Van Initiative: An urban afforestation project in Gurugram, Harvana, part of the 'Ek Ped Maa Ke Naam' program.
- SabhaSaar: An AI-powered meeting summarisation tool for Panchayats, linked with the Bhashini platform.
- **Dhirio:** An illegal bullfight tradition in Goa that continues despite a 1997 ban.
- Naangarni Spardha: A traditional monsoon ploughing race held in Dervan village, Maharashtra.
- Rhinoscope Project: A South African initiative to combat rhino poaching by tagging horns with radioactive isotopes for detection.
 - Uranium Hexafluoride (UF₆): A key compound used in the uranium enrichment process for nuclear fuel production.
- PMO Shift: The Prime Minister's Office will move to the newly constructed Executive Enclave under the Central Vista Project. The old North and South Blocks will be converted into a museum called "Yuga Yugin Bharat Sangrahalaya".
- Polnet: India's secure satellite communication system for police and security forces.
- Mycelium Bricks Sustainable bricks made from the root-like structure of fungi, offering a low-carbon construction solution.
- **Soursop:** A tropical fruit whose leaves contain compounds with anti-cancer effects.
- Shahid Udham Singh: A revered martyr who shot Michael O'Dwyer in London to avenge the Jallianwala Bagh massacre.
- Bluebird Communications Satellite: An American satellite to be launched by ISRO's LVM3 rocket, providing space-based broadband access to smartphones.















Brain-Computer Interface (BCI)

Context

- Stanford scientists have created a password-protected mind-reading Brain-Computer Interface (BCI).
- The innovation ensures brain-computer interfaces respect user privacy by requiring mental passwords before decoding thoughts into text or audio.

What is a Brain-Computer Interface?

- A BCI enables direct brain-to-device communication, translating neural signals into commands.
- This bypasses muscular control, allowing users to operate applications with thought alone.
- BCIs acquire brain activity (via invasive implants or non-invasive wearables), process signals, and send commands, with feedback crucial for user adaptation.

Key Applications of BCIs

- Medical: Restoring mobility and speech for patients with paralysis, ALS, or stroke.
- Mental Wellness: Providing feedback for mental health management.
- Gaming/Industry: Enabling immersive gaming and decision support systems.
- Cognitive Enhancement: Potential for enhancing memory, attention, and decision making.

Key Concerns Related to BCIs

- Cybersecurity: Risks like brain tapping (intercepting private thoughts/beliefs), misleading stimuli attacks (mind control), and adversarial attacks on AI components.
- Privacy: Protecting sensitive neural data from unauthorised access.
- Cognitive Liberty: Threat to an individual's mental self-determination.
- Health Impacts: Unclear long-term consequences of BCI use.
- Regulatory & Cost: Lack of standardised regulations and high costs limit accessibility.

Kerala Bbecomes India's First 100% Digitally Literate State

Prelims-Specific Topics

- The achievement stems from the "Digi Keralam" programme, launched in 2023, to extend the digital revolution and e-services to all residents, irrespective of age.
- It also builds upon Kerala's earlier Akshaya project, which made Malappuram the first e-literate district in India.

Digital Literacy

- It is "the ability of individuals and communities to understand and use digital technologies for meaningful actions within life situations".
- A Digitally Literate Household means that at least one member (5 years of age or older) can operate a computer and use the internet.

Positive Impacts on Socio-Economic Development

- Improved government efficiency: Projects like Kisan Call Centres, Common Services Centres (CSCs) lead to better service delivery and transparency.
- Global connectivity: Provides a "window to the world" for accessing information and decision making, and also helps in improved social life and family bonds.
- Participation in Democratic Processes: Empowers citizens to engage more actively with governance.
- Accelerated Financial Inclusion: Fast-tracks schemes like Direct Benefit Transfer (DBT) and Unified Payment Interface (UPI)
- Imparting Basic ICT Skills and enhancing livelihood opportunities for the evolving digital economy.

Multidisciplinary Education and Research Improvement in Technical Education (MERITE) Scheme

Prelims-Specific Topics

Context

Union Cabinet approved Budgetary Support for the MERITE Scheme.

About the MERITE Scheme:

- Type: Central Sector Scheme
- **Nodal Ministry:** Ministry of Education.















- **Objective:** To improve the quality, equity and governance in technical education covering all States/UTs.
- Aligned with the National Education Policy 2020.
- **Budget:** Rs. 4200 crore for a period from 2025-26 to 2029-30.
- Includes external assistance of Rs. 2100 crore from the World Bank as a loan.
- Beneficiaries: 275 technical institutions comprising 175 engineering institutions and 100 polytechnics.

Adi Karmayogi Abhiyan

Prelims-Specific Topics

Context

The Ministry of Tribal Affairs has officially launched the Adi Karmayogi Abhiyan.

About Adi Karmayogi Abhiyan

- It is a tribal grassroots leadership programme aimed at empowering tribal communities, strengthening responsive governance, and creating local leadership opportunities across the country.
- Target: Develop a Cadre of 20 lakh to operate in over 1 lakh tribal-dominated villages across 30 States/UTs, 550+ districts, and 3,000 blocks.
- It is expected to reach and uplift over 10.5 crore tribal citizens.
- Vision: Aadi Karmayogi cadre as a "Tribal Seva Path", driven by Seva (Service), Samarpan (Dedication), and Sankalp (Resolve)—ensuring responsive governance and last-mile service saturation in tribal areas.

Key Objectives

- Promote responsive, transparent, and accountable governance.
- Facilitate bottom-up visioning and participatory planning.
- Institutionalise proactive grievance redressal and feedback systems.
- Ensure last-mile delivery through convergence of flagship tribal initiatives (see infographic)
- It forms a key part of the Janjativa Gaurav Varsh (from 15 November 2024 to 15 November 2025) to commemorate Bhagwan Birsa Munda's 150th birthday.

Key Features of the Scheme

- Multi-tiered leadership structure from the habitation to the State.
- Multi-Department Convergence: Tribal Welfare, Rural Development, Women & Child Development, Jal Shakti, School Education, and Forest.

Implementation Strategy

- Governance Learning Workshops Rollout: Regional Process Labs (RPLs) at centres like Bengaluru, Bhopal, Bhubaneswar, Guwahati, Dehradun, Ranchi, etc.
- Village Visioning and Development Action Plans: Every village co-creates the Village Vision 2030 document & Development Action Plan with Officials and Villagers.
- Mentorship Ecosystem: Retired civil servants, tribal elders, Padma awardees, etc., as mentors.
- Aadi Karmayogi Digital Platform: To provide ongoing training, data-driven tools, knowledge sharing, and impact dashboards.

Shresth Initiative

Prelims-Specific Topics

Context

Union Health Ministry launched the State Health Regulatory Excellence Index (SHRESTH), a national initiative to benchmark and strengthen state drug regulatory systems.

About SHRESTH

- Proposed by the Central Drugs Standard Control Organisation (CDSCO).
- Aim: To drive improvements in the performance of state drug regulatory authorities across India, ensuring drug safety and quality standards are consistently met.
- It will have Indices based on five key themes: Human Resources, Infrastructure, Licensing Activities, Surveillance Activities and Responsiveness.













