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(A book for TNPSC Examination)

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Greetings to all of you! "What we think we become" Gautama Buddha. We all have dreams. To make dreams come into reality it takes a lot of determination, dedication, self discipline and continuous effort.

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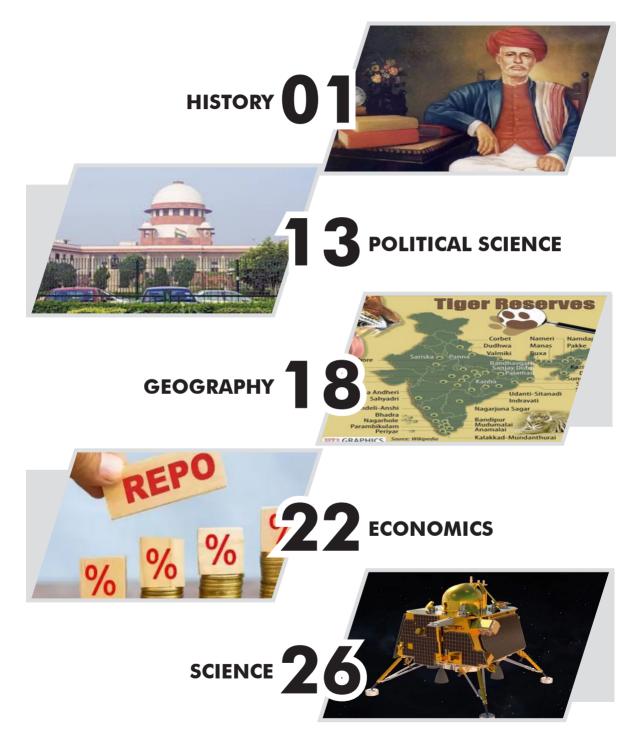
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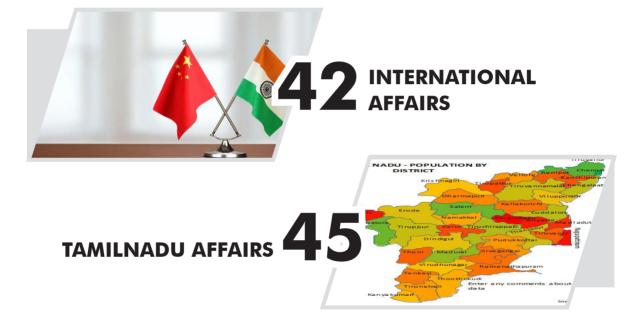
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1. HISTORY





1.1 IMPORTANT DAYS

Date	Day	Theme / Remark
April 2	World Autism	The United Nations (UN) observes World Autism
	Awareness Day	Awareness Day (WAAD) on 2 April 2025
		• Theme - "Advancing Neurodiversity and the UN
	2	Sustainable Development Goals (SDGs)".
	<u> </u>	• World Autism Awareness Day (WAAD) was
		established by the United Nations General
		Assembly (UNGA) in 2007 through Resolution
	Succ.	A/RES/62/139, with the objective of promoting
	21	awareness and understanding of autism.
April 7	World Health Day	• World Health Day 2025 is being observed globally
		on April 7 , marking the anniversary of the founding
		of the World Health Organization (WHO) in 1948.
		• This year, the theme is "Healthy Beginnings,
		Hopeful Futures".
		It puts a spotlight on maternal and newborn health,
		launching a year-long global campaign to reduce
		preventable deaths and improve health outcomes
		for women and infants.

Date	Day	Theme / Remark
April 18	World Heritage Day	 The Archaeological Survey of India (ASI) has declared free entry to its protected monuments on International Day for Monuments and Sites (World Heritage Day) on 18th April 2025. It is a day observed globally to promote awareness about the importance of cultural heritage and the need to preserve it. It was declared by the International Council on Monuments and Sites (ICOMOS) in 1982 and later approved by UNESCO in 1983. The theme for 2025 is "Heritage under Threat from Disasters and Conflicts: Preparedness and Learning
April 21	National Civil Service	 from 60 Years of ICOMOS Actions". WHS in India: As of April 2025, India has 43 World Heritage Sites (34 Cultural, 7 Natural, and 2 Mixed) and 62 sites on the Tentative List. 17th National Ciril Service Day 2025 observed on
April 21	Day	 17th National Civil Service Day 2025 observed on April 21, 2025.
	Succession States	 The theme for National Civil Services Day 2025 is: "Empowering Citizens through Efficient and Transparent Governance".
		 The roots of this day go back to April 21, 1947, when Sardar Vallabhbhai Patel, India's first Home Minister, addressed the first batch of Indian Administrative Service (IAS) officers at Metcalfe House, New Delhi. Charles Cornwallis, who served as the Governor-General of India (1786-1793), is known as the
		 Father of the Indian Civil Service. A key milestone in the evolution of civil services was the Indian Civil Service Act of 1861. This act allowed Indians to compete for administrative roles through a competitive examination system.

Date	Day	Theme / Remark
April 22	Earth Day	 It is observed annually on April 22. The official theme for Earth Day 2025 is "OUR POWER, OUR PLANET". This year's message focuses on the need to shift rapidly to renewable energy, urging individuals, businesses, and governments to triple clean energy production by 2030.
		 The first Earth Day was celebrated on April 22, 1970, initiated by U.S. Senator Gaylord Nelson as a national teach-in on environmental issues.
April 24	National Panchayati Raj Day	 India, as the world's largest democracy, believes in empowering its citizens at the grassroots level. One of the most significant tools of this empowerment is the Panchayati Raj system, which ensures inclusive rural development and encourages local self-governance. To acknowledge its importance, National Panchayati Raj Day is celebrated annually on 24th April. This year, National Panchayati Raj Day is being observed as a major national programme through a "Whole-of-Government" approach, involving participation of six Union Ministries: the Ministry of Rural Development, Ministry of Housing and Urban Affairs, Ministry of Petroleum and Natural Gas, Ministry of Power, Ministry of Railways, and Ministry of Road Transport and Highways.

1.2 DEFENCE, NATIONAL SECURITY AND TERRORISM

HADR Exercise - Tiger Triumph

- Tiger Triumph a tri-service (Army, Navy, Air Force) Humanitarian Assistance and Disaster Relief (HADR) exercise between India and the U.S.
- Schedule: April 1 to 13, 2025.
- Objective:
 - Improve interoperability for HADR operations.
 - Develop Standard Operating Procedures (SOPs) for a Combined Coordination Centre (CCC) to ensure effective cooperation between Indian and U.S. Joint Task Forces (JTF) in crises.
- Location: Visakhapatnam

Training for 44 Foreign Officers Under the "SAGAR" Project

- Under the Indian Navy's "SAGAR" project, personnel from 9 countries are being trained at naval training schools in Kochi, Kerala. The countries include Comoros, Kenya, Madagascar, Maldives, Mauritius, Mozambique, Seychelles, Sri Lanka, and Tanzania.
- The Indian Ocean Ship (IOS) SAGAR project ensures cooperation among countries in the Indian Ocean region. Under this project, the coastal patrol vessel INS Sunayna has been renamed IOS SAGAR, with both Indian naval personnel and foreign personnel stationed on it.
- India has announced its new "MAHASAGAR" vision (Comprehensive Advancement for

Inter-Regional Security and Development) for the southern world.

- The "Africa-India Key Maritime Cooperation
 Exercise" will be held in April to enhance multilateral maritime cooperation with African countries.
- This exercise is being jointly conducted by India and Tanzania and will take place in the coastal area of Dar es Salaam, Tanzania.

INS Sunayna

- the Indian Navy launched the Offshore Patrol Vessel INS Sunayna as part of the Indian Ocean Ship (IOS) SAGAR initiative. This event took place in Karwar, Karnataka
- It coincides with the 10th anniversary of the SAGAR (Security and Growth for All in the Region) initiative and the National Maritime Day.

IOS SAGAR Initiative

• The IOS SAGAR initiative aims to enhance maritime cooperation among nations in the IOR.

New Naval Base for Nuclear Submarines - INS Varsha

- The Navy's Eastern Regional Headquarters operates in Visakhapatnam, Andhra Pradesh.
- A new naval base named INS Varsha is being established in Rambilli. This naval base will function as a special facility for nuclear submarines.
- The Indian Navy currently has 16 dieselpowered submarines. Additionally, there are 3 nuclear-powered submarines: INS Arihant, INS Arighat, and INS Aridhaman.

- The INS Varsha naval base will be commissioned next year.
- INS Kadamba naval base operates in Karwar, Karnataka. Being a natural harbor, this base accommodates large warships.

Laser Weapon System to Destroy Drones Instantly

- The Defense Research and Development Organization (DRDO) have successfully tested a laser weapon system that can destroy drones instantly.
- DRDO tested the 30-kilowatt laser-guided MK-2 energy weapon system in Kurnool, Andhra Pradesh.
- This indigenously developed weapon system successfully targeted and destroyed drones from a distance.
- It also intercepted multiple drone attacks and destroyed surveillance sensors.

Maha-Sagar

- Naval joint exercise between India and 9 African countries begins in Tanzania, lasting 6 days.
- Mutual, Comprehensive Advancement for Regional Security and Growth in All Regions (Maha-Sagar) is the Prime Minister's new vision.
- For the first time, India and 9 African countries have begun naval joint exercises in the Dar-es-Salaam maritime area of Tanzania.
- This 6-day joint exercise is being conducted by the Indian Navy and Tanzanian Defense Forces.

Meghayan-25

- The Indian Navy hosted the 3rd edition of its prestigious Meteorological and Oceanological Symposium – Meghayan-25 on April 14, 2025, at Nausena Bhawan, New Delhi.
- The event marked the celebration of World Meteorological Day 2025 and aimed at promoting awareness and collaboration in Marine Meteorology and Oceanology.
- It was virtually inaugurated by Admiral Dinesh K Tripathi, Chief of the Naval Staff, and featured participation from key scientific and defence institutions.

Exercise DUSTLIK-VI

- Recently, the 6th edition of the India-Uzbekistan Joint Military Exercise DUSTLIK-VI officially commenced at the Foreign Training Node, Aundh (Pune).
- Exercise DUSTLIK is an annual bilateral military exercise conducted alternatively in India and Uzbekistan, with the previous edition (DUSTLIK-V) held in Termez District, Uzbekistan, in April 2024.

The first edition was held in November 2019 in Uzbekistan, marking the beginning of a structured defence partnership.

 The central theme of DUSTLIK-VI is "Joint Multi-Domain Sub-Conventional Operations in a Semi-Urban Scenario".

Operation Chakra V

 CBI Launches Operation Chakra-V against Transnational Organized Cybercrime/ Digital Arrests.

- It was launched to fight against transnational organised cyber-enabled financial crimes in India.
- Launched by: Central Bureau of Investigation
 (CBI)
- It involves a multi-pronged strategy, focusing on identifying and dismantling the broader infrastructure enabling cybercrimes like Digital Arrests in India.

Operation ATALANTA

- Recently, the European Union Naval Force (EUNAVFOR) under Operation ATALANTA has proposed a joint naval exercise with the Indian Navy.
- EUNAVFOR Operation ATALANTA, which operates in the Western Indian Ocean and the Red Sea, has proposed a joint maritime exercise with the Indian Navy to be conducted around the end of May 2025.
- The primary goal of the proposal is to enhance coordination and maritime cooperation between European naval forces and the Indian Navy, particularly in the face of resurgent piracy threats and geopolitical instability in the Red Sea region.
- It was launched in 2008, Operation ATALANTA is the EU's counter-piracy mission in the Western Indian Ocean and the Red Sea, initially targeting piracy off the Somali coast.

Exercise Desert Flag 10

 Recently, the Indian Air Force (IAF) has joined the prestigious Exercise Desert Flag-10 (21 April to 08 May 2025).

- It is a multinational air combat exercise being hosted by the United Arab Emirates (UAE) at Al Dhafra Air Base.
- **Participating Nations**: Along with the Indian Air Force, the exercise involves air forces from Australia, Bahrain, France, Germany, Qatar, Saudi Arabia, South Korea, Turkey, the United Kingdom, the United States, and the host nation UAE.
- Objective: The primary aim of Exercise Desert Flag is to conduct complex and diverse fighter engagements.

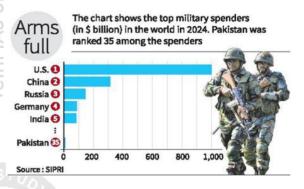
Next Generation Offshore Patrol Vessels (NGOPVs)

- The fourth Next Generation Offshore Patrol Vessel (NGOPV) being built by Garden Reach Shipbuilders & Engineers Ltd (GRSE), Kolkata,
- The Next Generation Offshore Patrol Vessels (NGOPVs) have an approximate displacement of 3000 tonnes.
- They are designed for multi-role maritime operations, including:
 - Coastal defence and surveillance
 - Search and rescue (SAR) missions
 - Protection of offshore assets such as oil rigs and platforms
 - Anti-piracy operations in India's Exclusive Economic Zone (EEZ) and beyond
- The project reflects India's commitment to selfreliance in defence manufacturing under the national initiatives of 'Aatmanirbhar Bharat' and 'Make in India'.

India's military expenditure was 9 times that of Pakistan: SIPRI

- India's military spending in 2024 was nearly nine times that of Pakistan's expenditure, according to a study
- The country's military expenditure, the fifth largest globally, grew by 1.6% to \$86.1 billion while Pakistan spent \$10.2 billion, according to the Stockholm International Peace Research Institute (SIPRI).
- The top five military spenders the United States, China, Russia, Germany and India accounted for 60% of the global total, with combined spending of \$1,635 billion, it said.

China accounted for 50% of all military spending in Asia and Oceania, investing in the continued modernisation of its military and expansion of its cyberwarfare capabilities and nuclear arsenal, it said in the report titled 'Trends in World Military Expenditure 2024'.



1.3 WORLD ORGANISATIONS – PACTS AND SUMMITS

International Big Cat Alliance (IBCA)

 Recently, the International Big Cat Alliance Government of India, formally establishing India as the headquarters and secretariat of the alliance.

About the International Big Cat Alliance (IBCA)

- Launched by Prime Minister Narendra Modi in April 2023 during the 50th anniversary of Project Tiger. Formally approved by the Union Cabinet in February 2024.
- Implementation agency: The IBCA implemented through the National Tiger Conservation Authority (NTCA) under the

Ministry of Environment, Forest and Climate Change (MoEFCC).

- (IBCA) signed an official agreement with the ... Objective: To conserve seven major big cat species across the world: Tiger, Lion, Leopard, Snow Leopard, Puma, Jaguar, and Cheetah.
 - Current ratifying members: India, Nicaragua, Eswatini, Somalia, Liberia are the initial countries that ratified the IBCA Framework Agreement.

Membership: Membership is open to all UN Member States, including.

- Range countries, where big cats naturally occur.
- Non-range countries that are interested in supporting global conservation of big cats.

1.4 EMINENT PERSONS

Bankim Chandra Chattopadhyay

- The death anniversary of Bankim Chandra Chattopadhyay was observed on 8th April, remembering his contributions to Indian literature, nationalism, and the cultural awakening of Bengal during the 19th century.
- Nationalism and Literature: Through works like Anandamath (banned by the British), which narrates the Sanyasi Rebellion, Bankim became synonymous with India's struggle for independence.
- The national song of India, Vande Mataram, originated from Bankim's Anandamath, becoming a symbol of the freedom movement.
- Famous Works: Rajmohan's Wife (1864) (first novel in English by an Indian). His novels Durgeshnandini (1865), Kapalkundala (1866), and Vishabriksha (1873) addressed social issues like women's rights, child marriage, and caste discrimination.

Jyotiba Phule

 Jyotiba Phule was born on April 11, 1827. His vision remains a foundational pillar for social justice movements in India today.

Education & Women's Rights:

 Along with wife Savitribai, founded India's first girls' school in 1848.

- Opened 18 more schools in 3 years; also launched night schools for workers and farmers.
- Advocated universal primary education and financial incentives for schooling.

Social Reform Movements:

- Founded the Satyashodhak Samaj (Society of Truth Seekers) in 1873 to counter caste-based reform monopolies like Brahmo Samaj.
- Championed rights of Dalits, women, and the poor, working with the British while opposing Hindu orthodoxy.

Views on 1857 Revolt:

 Opposed the sepoy mutiny, seeing it as a return to upper-caste theocracy under the Peshwas.

 Focused instead on social transformation and education.

Major Works & Ideas:

- In Gulamgiri (Slavery), he equated caste
 oppression with American slavery.
 - Advocated economic upliftment of lower castes and land reforms in Shetkaryanche Asud (Farmer's Whip).

1.5 PLACES IN NEWS

Nagarahole National Park

- Context : The issue of land grants within the core area of Nagarahole National Park and Tiger Reserve has sparked concern among environmentalists and forest officials.
- It is located in Karnataka. It derives its name from the Nagarahole River, which means 'Serpent River'.
- It connects to the Western Ghats through Brahmagiri Wildlife Sanctuary. It extends towards the Eastern Ghats through Bandipur Tiger Reserve.
- Hosts the world's largest herd of Asiatic elephants.
- The park is known for its high-density tiger population (one of India's premier Project Tiger sites), ranking third in the country after

Corbett and Kaziranga Tiger Reserves (As per All India Tiger Estimation -2022).

It shares its borders with Wayanad Wildlife
 Sanctuary in Kerala to the south and Bandipur
 Tiger Reserve to the southeast.

Veera Kovil sacred grove

- Located in Kasampatty, near Alagar Kovil, in Dindigul district.
- Entry is highly restricted; only men from a particular family can enter for rituals, Women are not allowed.
- Recently notified as a Biodiversity Heritage
 Site by the Tamil Nadu government.
- Forest Department clarifies the grove is on revenue land, not under forest control.
- Acts as a **natural gene bank**; surrounding lands are also rich due to seed dispersal..

1.6 SPORTS AND GAMES

The seventh edition of the Khelo India Youth Games

- The seventh edition of the Khelo India Youth Games will be staged in five cities of Bihar from May 4 to 15.
- There would be 14 different types of Khelo India Games through the season.(Tribal Games, beach games, martial arts games, water games etc.)

Saurabh Chaudhary Wins Bronze in 10m Air Pistol At ISSF World Cup 2025

 Saurabh Chaudhary, a 22-year-old shooter from Uttar Pradesh, made a remarkable comeback to the Indian shooting team by clinching a bronze medal in the 10m air pistol event at the ISSF World Cup in Lima, Peru (April 2025).

- Competing in a star-studded final featuring
 Olympic champions, he demonstrated resilience in a low-scoring and tightly contested match.
- This was his first individual World Cup medal in over two years, marking a strong return to international form.

Laureus World Sports Awards

• Madrid, April 22: In this year's Laureus World

Sports Awards, Swedish track and field star Mondo Duplantis won the award for Best Male Athlete, while American gymnastics star Simone Biles won the award for Best Female Athlete.

- The Laureus Foundation from England honours those who excel in sports at the international level by presenting awards annually.
- In this regard, the 25th annual awards-

ceremony was held in Madrid, the capital of Spain.

Simranpreet Wins Silver Medal: India Finishes in 3rd Place

• At the World Cup Shooting Competition held in Peru, India's Simranpreet Kaur Brar won a silver medal.

India secured 3rd place with a total of 7 medals including 2 gold, 4 silver, and 1 bronze.

1.7 AWARDS AND HONORS

Abel Prize

• The prestigious Abel Prize for mathematics was recently awarded to Japanese mathematician Masaki Kashiwara for his fundamental contributions to algebraic analysis and representation theory, in particular the development of the theory of D-modules and the discovery of crystal bases.

About Abel Prize

- The Abel Prize recognises pioneering scientific achievements in mathematics.
- It is named after Norwegian mathematician Niels Henrik Abel (1802-29), who in his short life made pioneering contributions to multiple fields.
- The prize was established by the Norwegian Parliament in 2002, on Abel's 200th anniversary.

Prime minister received Mitra Vibhushana

• The Sri Lanka Mitra Vibhushana is the

highest civilian honour awarded by Sri Lanka. It recognises foreign leaders who have encourageed strong ties with the nation. Prime Minister of India Narendra Modi received this award during his state visit to Sri Lanka.

- The Sri Lanka Mitra Vibhushana was established in 2008 by then-President Mahinda Rajapaksa.
- It aims to honour Heads of State and government officials who have shown solidarity with Sri Lanka.

Bharatiya Bhasha Award

- Tamil writer S. Ramakrishnan has been announced as the recipient of the Bharatiya Bhasha Award.
- S. Ramakrishnan, who has written more than a hundred books, received the Sahitya Akademi Award for 2018 for his novel "Sancharam".

- He has received various awards including the Tagore Literary Award, Iyal Award, Maxim Gorky Award, and Gnanvani Award.
- Bharatiya Bhasha Parishad is a renowned literary organization established in 1975 in Kolkata to promote Indian languages.
- Founded by Sitaram Sekhasaria and Bhagirath H. Kanodia, it plays an important role in developing Indian literature through book publishing and implementing various literary projects.
- The organization presents awards under the name "Bharatiya Bhasha" to honor writers who have made outstanding contributions to Indian languages.
- This award consists of a prize money of one lakh rupees, a memento, and other recognitions.

Lifetime Achievement Award

• The Minister for Tamil Development and Information announced that a Lifetime Achievement Award and a prize of Rs. 10 lakhs will be given to an artist who has made outstanding achievements in literature, music, dance, drama, and folk arts.

- Tamil music festivals will be conducted in all districts. New courses will be introduced at the Government College of Fine Arts in Kumbakonam.
- New undergraduate degree programs will be started at the Tamil Nadu Government Music College in Chennai.
- To enhance the acting skills of youth, a drama department will be established at Madurai Government College of Fine Arts at a cost of Rs. 24 lakhs. The website of Tamil Nadu Dr. J. Jayalalithaa Music and Fine Arts University will be upgraded. Additionally, a new application will be developed to improve students' musical skills.
- The Chennai Government Museum will complete 175 years in April 2026, and to mark this occasion, the museum complex will be upgraded at a cost of Rs. 100 crores.

1.8 INDIA AND ITS NEIGHBOURS

India and Sri Lanka sign 7 MoUs

- Covers defence, energy, digitisation, health, and multi-sectoral assistance.
- The MoUs signed were on the topics of energy sector cooperation
- The relics of the Buddha, found in 1960 in the Aravali region in Gujarat, would be sent

to Sri Lanka for an exposition during the Vesak festivities — commemorating the birth, enlightenment and the death of the Buddha — in May this year.

 India has decided to reduce the interest rates on loans extended to Sri Lanka to support the country's external debt treatment.

1.9 APPOINTMENTS – WHO IS WHO?

Justice BR Gavai -Next CJI of India

- On April 16, 2025, Chief Justice of India (CJI)
 Sanjiv Khanna named Justice B R Gavai, the
 second-most senior judge of the Supreme
 Court, as his successor.
- This announcement was made through a letter to the Union Law Ministry, and after government approval, Justice Gavai is set to become the 52nd CJI of India.

Justice Gavai, who was appointed to the Supreme Court in 2019, will take office as CJI after the retirement of CJI Khanna on May 13, 2025.

 Justice Gavai's legal journey spans decades, with significant contributions to Indian jurisprudence, particularly in constitutional and administrative law.



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2. POLITICAL SCIENCE

2.1 LATEST COURT VERDICTS

Supreme Court Upholds Due Process In Prayagraj Demolition Case

• The Supreme Court of India condemned the 2021 bulldozing of homes by the Prayagraj Development Authority as "inhumane and illegal," ordering Rs 10 lakh compensation for each affected individual.

SC's Judgment on Demolitions in Prayagraj

- **Right to Shelter:** The SC reiterated that the right to shelter is intrinsic to the right to life and personal liberty under **Article 21**.
- Arbitrary demolition without due process violates both procedural fairness and human dignity.
- Precedents and Legal Framework: The SC cited its 2024 ruling (In Re Directions In The Matter Of Demolition Of Structures), which laid down guidelines against "bulldozer justice," mandating 15 days' prior notice, clear mention of violations, and a fair chance for occupants to challenge demolition orders.
- Bulldozer justice refers to the practice of demolishing properties, often belonging to those accused of crimes, sometimes without following proper legal procedures.

Supreme Court's verdict on Governor's power over bill and pocket vetoes

- Fixed Timelines Set by the Court
- **1 month to grant or withhold assent** on the aid and advice of the State Cabinet.
- 3 months to reserve a Bill for the President.
- If a re-passed Bill under (Article 200) is sent again, the Governor must assent within 1 month.
- The Governor cannot reserve such Bills for President's consideration in the second round.
- The phrase in the Constitution **"shall not** withhold assent there of" makes it mandatory for the Governor to assent after reconsideration.
- The governor 'must' grant assent to a Bill repassed by the State Legislature under Article 200 within a maximum of one month.
- Failure to comply with these limits can be subject to judicial review.
- No room for **'pocket veto'** or indefinite delay.
- Governors must reflect on whether their actions align with the Constitution and people's aspirations.
- The SC pointed out that the phrase "in his discretion", which existed in Section 75 of the Government of India Act, 1935, was

intentionally removed when drafting Article 200.

- This shows that the Governor no longer has
 personal discretion in these matters under the
 Constitution of India.
- Article 200 of the Constitution Article 200 gives the power to governors to grant assent/ withhold assent or reserve the bill for the president's consideration.

Article 142

 Recently, the Vice-President criticized Article 142 as a "nuclear missile against democratic forces", especially after its use in the Tamil Nadu Governor's case.

Above article 142

It empowers the Supreme Court to pass any

order or decree necessary for complete justice in any pending case before it. This power is discretionary and unique to the apex court.

- Article 142 elevates the Supreme Court's role as the guardian of the Constitution, enabling it to intervene in cases involving public interest, human rights, or democratic breakdown, ensuring justice where legislative or executive action is lacking.
- The lack of a clear definition of "complete justice" can lead to subjectivity, inconsistent rulings, and unaccountable discretion. This raises concerns under the basic structure doctrine, particularly the separation of powers.

2.2 PUBLIC AWARENESS & GENERAL ADMINISTRATION

Waqf (Amendment) Bill, 2024

- The Waqf (Amendment) Bill, 2024 was passed by the Lok Sabha and Rajya Sabha.
- The Bill amends the Waqf Act, 1995, allowing the government to regulate Waqf properties and settle related disputes.
- The bill aims to improve Waqf board efficiency, update Waqf definitions, streamline registration, and boost use of technology in record management.

What is Waqf?

• Waqf: It refers to an endowment made by a Muslim for charitable or religious purposes,

such as building mosques, schools, hospitals, or other public institutions. It is inalienable i.e., it cannot be sold, gifted, inherited or encumbered.

- What are the Key Provisions of the Bill 2024?
 Separation of Trusts from Waqf: Muslimcreated trusts under any law will no longer be considered Waqf, ensuring individuals retain full control over their trusts.
- Eligibility for Waqf Dedication: Only practicing Muslims (for at least five years) can dedicate their property to Waqf.

- Properties already registered with Waqf Boards will remain so unless disputed or identified as government land.
- Women's Rights in Family Waqf: Women must receive their inheritance before Waqf dedication, with special provisions for widows, divorced women, and orphans.
- Ending Arbitrary Property Claims: Section 40 of the original Waqf Act (1995) has been removed, preventing Waqf Boards from arbitrarily declaring properties as Waqf.
- Section 40 of the Waqf Act (1995) gives the Waqf Board the authority to decide whether a property is a Waqf property or not.

- Waqf Tribunals: The Waqf tribunals consist of 3 members i.e., a district judge, a state government officer (joint secretary level), and an expert in Muslim law and jurisprudence.
 - Aggrieved parties can appeal directly to the concerned High Court within 90 days of receiving the Waqf tribunal's order.
- Reduced Annual Contributions: Waqf institutions' mandatory contribution to Waqf Boards reduced from 7% to 5% allowing more funds to be allocated for charitable purposes.

2.3 GOVT – WELFARE ORIENTED GOVT SCHEMES

5 years of National Technical Textiles Mission (NTTM)

- The National Technical Textiles Mission (NTTM), launched in 2020 by the Ministry of Textiles, aims to position India as a global leader in technical textiles by 2025-26 has completed 5 years.
- NTTM: The mission focuses on promoting research, market growth, exports, and skill development in key sectors like agriculture, healthcare, and infrastructure in technical textiles.
- Technical Textiles: Technical textiles are functional fabrics made from natural and synthetic fibers, used across industries like defense, healthcare, infrastructure, automotive, medicine etc.

• Examples: Mosquito nets, seat belts, helmets, fireproof jackets, and sanitary napkins.

10th anniversary of the Pradhan Mantri MUDRA Yojana

- Launch Year: 2015
- **MUDRA** Micro Units Development and Refinance Agency
- Type: Central Sector Scheme.
- **Objective:** To provide collateral-free credit up to Rs.10 lakh to non-corporate, non-farm micro and small enterprises (MSEs)
- Nodal Agency: Department of Financial Services, Ministry of Finance. (implemented by MUDRA Ltd under SIDBI)

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- Eligible Beneficiaries: Eligible borrowers include individuals, proprietary concerns, partnership firms, private and public limited ocompanies, and other legal entities.
- Loan Limits Under Various Categories:
 - Shishu Category: Loan Limit: Up to Rs.50,000
 - Kishore Category: Loan Limit: Rs 50,000 to Rs 5 lakh
 - Tarun Category: Loan Limit: Rs 5 lakh to Rs 10 lakh
 - Tarun Plus Category:Loan Limit: Rs.10 lakh to Rs. 20 lakhs (Raised Union Budget 2024-25)

New scheme to modernise irrigation network

- The Union Cabinet on Wednesday approved "Modernisation of Command Area Development and Water Management (M-CADWM)" as a sub-scheme of the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY).
- This initiative, with an initial outlay of Rs,1,600
 crore, is set to run from 2025-26 and is designed to enhance the irrigation infrastructure in <a>u
 India.
- Its key goal is to modernise the irrigation water supply network, ensuring that water reaches the designated farming clusters from existing canals or other water sources.
- This will help farmers with small landholdings, by improving water-use efficiency through the use of advanced technologies such as Supervisory Control and Data Acquisition and the Internet of Things.

 In addition to modernising the irrigation systems, the scheme aims to build sustainable farming practices in the country.

Electronics Components Manufacturing Scheme

- The Ministry of Electronics and Information Technology (MeitY) recently notified the Electronics Components Manufacturing Scheme.
- It is the first dedicated production-linked incentive (PLI) scheme to promote the manufacturing of select passive electronic components, including resistors, capacitors, speakers, microphones, special ceramics, relays, switches, and connectors.
- The scheme will offer three incentive structures:
- Turnover-linked incentive (based on revenue)
- Capex-linked incentive (for investments in plants & machinery)
- Hybrid incentive model (a combination of both)
- This scheme has a tenure of six years, with a one-year gestation period.
- The scheme focuses particularly on passive electronic components. In contrast, active components fall under the purview of the India Semiconductor Mission (ISM).

PM POSHAN Scheme

- Cabinet Committee on Economic Affairs (CCEA) has approved the continuation of 'National Scheme for PM POSHAN in Schools' for the five year period 2021-22 to 2025-26.
- This is a Centrally-Sponsored Scheme.

- The earlier name of the scheme was 'National Scheme for Mid Day Meal in Schools' popularly known as Mid Day Meal Scheme.
- It is considered as the world's largest school meal programme aimed to attain the goal of universalization of primary education.
- It aims to provide one hot cooked meal in Government and Government-aided schools from 2021-22 to 2025-26.
- It will cover all school children studying in Classes I-VIII of Government, Government-Aided Schools.
- Extension of Coverage: The scheme is proposed to be extended to students studying in pre-primary or Bal Vatikas of Government and Government-aided primary schools, in addition to all the children from elementary classes.

Pradhan Mantri Khanij Kshetra Kalyan Yojana

- The Central Mining Department has ordered the establishment of a project management 201 It aims to integrate inland fisheries and unit to facilitate constructive coordination with states for the smooth implementation of the Prime Minister's Mineral Sector Welfare Scheme (Pradhan Mantri Khanij Kshetra Kalyan Yojana) for the development of people affected by mineral mining activities throughout the country.
- In 2015, the central government implemented the Prime Minister's Mineral Sector Welfare Scheme (PMKKKY) by the Ministry of Mines to improve the welfare of areas and people affected by mining operations.
- Central, state government institutions, or private companies engaged in mineral mining

must contribute 30 percent of the royalty payment from the granted leases to PMKKKY.

This fund is added to the DMF account. Of this, 70 percent of the funds should be spent directly on various development and welfare schemes in mining-affected areas to improve the living standards of people in these areas.

PM Matsya Sampada Yojana (PMMSY)

- The Pradhan Mantri Matsya Sampada Yojana (PMMSY) is initiative aimed at transforming India's fisheries sector.
- Launched in 2020, this scheme addresses critical gaps in fish production, productivity, and welfare of fishermen.
- Recently, Union Minister George Kurian announced various projects, including infrastructure development and financial assistance for fishermen under this scheme in Karaikal.
- The programme is set to run from 2020 to 2025, with an investment of Rs.20.050 crore.
- aquaculture into the broader economy.
- The vision aligns with "Viksit Bharat @2047," focusing on sustainable growth and development in the fisheries sector.

PMMSY has two main components.

- The Central Sector Scheme (CS) is fully funded by the central government.
- The Centrally Sponsored Scheme (CSS) is partially funded and implemented at the state level.
- Each component includes various activities aimed at enhancing production, infrastructure, and fisheries management.



3. GEOGRAPHY

3.1 POLICY ON ENVIRONMENT AND ECOLOGY

Tigers Outside Tiger Reserves project

- Recent reports indicate that nearly 30% of the country's estimated 3,682 tigers reside outside designated reserves.
- To address this, the Ministry of Environment, Forest and Climate Change is working on a project called "Tigers Outside Tiger Reserves."
- The main goals of the project include monitoring tiger populations outside reserves, reducing poaching, and addressing humananimal conflict. Community outreach will also be a focus area.
- The National Tiger Conservation Authority 2 (NTCA) will implement the project in 80 forest divisions across ten states.
- These areas have been identified based on the all-India tiger estimation of 2022 and recent conflict trends.
- The initiative will supplement existing funding under Project Tiger, enhancing conservation efforts.

Agasthyamalai Biosphere Reserve

 The Supreme Court has directed the Central Empowered Committee (CEC) to carry out a detailed survey of the Agasthyamalai landscape to identify any non-forestry activities and encroachments.

- Aim of the Survey: To identify all instances of non-forestry activities that violate statutory laws like the Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972.
- To provide comparative forest cover data to reveal the extent of degradation.
- Key Areas Under Survey:
- Periyar Tiger Reserve
- Srivilliputhur Grizzled Squirrel Wildlife Sanctuary
- Meghamalai Wildlife Sanctuary
- Thirunelveli Wildlife Sanctuary
- Agasthyamalai:
- It is part of a 3,500 sq. km biosphere reserve recognised by UNESCO.
 - It stretches across Tamil Nadu and Kerala in the southernmost stretch of the Western Ghats.
 - The **Neelakkurinji flower**, which blooms once every 12 years, grows in this landscape.
 - The region is inhabited by indigenous communities, especially the Kani tribe.

Gandhi Sagar Wildlife Sanctuary

Gandhi Sagar Wildlife Sanctuary (GSWS) in

Madhya Pradesh will become the second home for African cheetahs after Kuno National Park (KNP).

 Two South African male cheetahs, Prabhas and Pavak, will be relocated from KNP to GSWS as part of India's ongoing cheetah reintroduction project.

About Gandhi Sagar Wildlife Sanctuary

- Situated in northwestern Madhya Pradesh along the Madhya Pradesh–Rajasthan border.
- Declared a wildlife sanctuary in 1974 and expanded in 1983 to cover 62 sq km.
- Recognized as an Important Bird and Biodiversity Area (IBA) by BirdLife International.
- The Chambal River flows through the sanctuary, enhancing aquatic biodiversity and dividing the forest landscape.

India - world's second-largest emitter of N₂Os

- India, the world's second-largest emitter of N₂O after China, faces climate risks as N₂O has 300 times the global warming potential of CO₂.
- Nitrogen is the most abundant atmospheric gas, constituting ~78% of Earth's atmosphere.
- Atmospheric nitrogen (N₂) is inert and unusable by plants or animals.
- Plants rely on diazotrophs (N-fixing bacteria) through symbiotic association (e.g., in legumes).
- Nitrifying bacteria convert ammonia into nitrites (NO₂-) and then nitrates (NO₃-) the form plants can absorb.

- Nitrification: Ammonia → Nitrites → Nitrates (plant-usable form).
- Denitrification returns excess nitrates back to the atmosphere, maintaining the natural nitrogen cycle.

India's Greenhouse Gas Emission Intensity Targets

- Recently, the Ministry of Environment, Forest and Climate Change in India released a draft notification under the Energy Conservation Act, 2001.
- This notification introduces the "Greenhouse Gas Emission Intensity Target Rules, 2025".
- It is component of India's Carbon Credit Trading Scheme, 2023.
- The primary aim is to establish a national framework for reducing greenhouse gas emissions through carbon credit trading.
- The Bureau of Energy Efficiency (BEE) will determine these targets based on tonnes of CO₂ equivalent emissions per tonne of production.
- The targets will be applicable from 2025-26 to 2026-27, using baseline data from 2023-24.
- These emission intensity rules support India's broader climate strategy, which aims for net zero emissions by 2070.

The Surat Emissions Trading Scheme (ETS)

 The Surat Emissions Trading Scheme (ETS) is the world's first market-based mechanism specifically designed to control particulate air pollution.

- An EmissionsTrading Scheme (ETS) is a regulatory tool that aims to reduce air pollution by introducing economic incentives.
- An ETS is a market-based approach to control pollution by providing economic incentives to reduce emissions, commonly known as capand-trade systems.
- The Surat Emissions Trading Scheme (ETS)
 launched in 2019, is the world's first ETS focused on trading particulate pollution (not CO₂), and India's first emissions market for any pollutant.
- It targeted 342 high-emitting industries, mainly in the textile sector, which used solid fuels like coal and lignite, and liquid fuels like diesel.

Greenhouse Gas Emission Intensity Target Rules, 2025

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- This notification introduces the "Greenhouse Gas Emission Intensity Target Rules, 2025".
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- The new rules aim to set specific emission reduction targets for various industries.
- The Bureau of Energy Efficiency (BEE) will determine these targets based on tonnes of CO₂ equivalent emissions per tonne of production.
- The targets will be applicable from 2025-26 to 2026-27, using baseline data from 2023-24.

Cheetah Corridor

- A Cheetah Corridor is being set up as part of India's wildlife conservation efforts.
- The Cheetah Corridor will cover 17,000 square kilometres.
- It will stretch across 27 districts in Rajasthan, Uttar Pradesh, and Madhya Pradesh.
- It will interlink several protected areas, including Shahabad Conservation Reserve, Shergarh Wildlife Sanctuary, Mukundra Wildlife Sanctuary, Gandhi Sagar Wildlife Sanctuary, Madhav National Park and Ranthambhore Tiger Reserve.

Project Cheetah

- Project Cheetah is a conservation effort launched by the Indian government to bring cheetahs back to the country's wild landscapes after their extinction in 1952
- The National Tiger Conservation Authority (NTCA) and the Wildlife Institute of India (WII) endorse the project.

3.2 PHYSICAL GEOGRAPHY

Atmospheric River

- experienced heavy rain, strong winds, and severe thunderstorms due to a meteorological phenomenon known as an Atmospheric River (AR).
- Definition: An atmospheric river is often described as a "river in the sky". It refers to a relatively long and narrow band in the atmosphere that transports enormous amounts of water vapor from the tropical oceans to continental regions. Unlike rivers on Earth, they are not visible.
- The "Pineapple Express" is a well-known example of AR storms that bring heavy rainfall

3.3 MISCELLANEOUS

Bird Flu

 A casualty was observed in Andhra Pradesh from bird flu virus marking India's second 201 has not been confirmed in humans. recorded human fatality from H5N1 since 2021.

About Bird flu

- Bird flu, or avian influenza, is a highly 0 contagious viral disease that affects both wild and domestic birds.
- It is caused by avian influenza A viruses, with subtypes such as H5N1 and H5N8 being particularly significant.
- Transmission: H5N1 spreads primarily through direct contact with infected live or dead birds or contaminated environments (e.g., live bird markets).
- Rarely, transmission from infected mammals to humans has been observed. Though human

to the US West Coast, particularly California.

- In April 2025, a large part of the US • AR in India: A study found that between 1951 and 2020, India experienced 596 major atmospheric river (AR) events, with over 95% occurring during the summer monsoon season (June to September).
 - Notably, 70% of major floods from 1985 to 2020 were linked to ARs, including the devastating 2013 Uttarakhand floods, 2018 Kerala floods, and 2007 South Asian floods.
 - The frequency and severity of ARs have increased in recent decades, particularly in the Indo-Gangetic Plains and peninsular India, leading to significant destruction and loss of life.

infections are rare, H5N1 has a high fatality rate ($\sim 60\%$), much higher than the peak fatality of Covid-19 (~3%). Also, airborne transmission

 Human-to-human transmission remains extremely rare. The virus continues to evolve, and if it mutates to allow sustained human-tohuman transmission, it could trigger a global pandemic.

Hence, H5N1 is listed as a priority disease under WHO R&D Blueprint.

- Treatment: Antiviral drugs like oseltamivir are effective, especially when administered early in high-risk or severe cases.
- Vaccination: Current seasonal flu vaccines do not protect against H5N1.
- Some countries have developed H5N1-specific vaccines for emergency use.

4. ECONOMICS

4.1 CURRENT SOCIO-ECONOMIC PROBLEMS

Rising Informality of Women in Manufacturing Workforce

22.2

- The manufacturing sector, contributing approximately 17% to India's GDP, is considered a key driver for economic growth under the vision of Viksit Bharat.
- However, women remain significantly underrepresented in the sector, particularly in formal employment, reflecting deeper structural and socio-economic challenges.

Current Status of Women in Manufacturing in India

- Formal Sector: Women's share in formal manufacturing has declined from 20.9% in 2015-16 to 18.9% in 2022-23, with only 1.57 million women out of 8.34 million formal workers.
- Tamil Nadu employs the highest share (41%) of women, followed by Karnataka, Maharashtra, Andhra Pradesh, and Gujarat, together accounting for nearly 75% of all women in formal manufacturing.
- Gender disparity is high in Bihar, West Bengal, Chhattisgarh, and Haryana (less than 6% women), and even in industrialised states like Gujarat, Maharashtra, and Uttar Pradesh (less than 15% women).
- In contrast, southern states like Kerala, Karnataka, and Tamil Nadu show relatively better female participation.

- Women are mostly employed in textiles, apparel, and food processing, which make up 60% of female employment.
- **Informal Sector**: Women make up 43% of the informal manufacturing workforce, but are mostly employed in low-paying, low-skilled jobs without job security or benefits.

Extreme poverty has decreased in India

- According to a World Bank report, extreme poverty has decreased, with 171 million people lifted above the poverty line between 2011 and 2023
- Extreme poverty in India fell from 16.2% in 2011-12 to just 2.3% in 2022-23.
- India transitioned into the lower-middleincome category as defined by the World Bank
- The five most populous states Uttar Pradesh, Maharashtra, Bihar, West Bengal, and Madhya Pradesh – accounted to two-thirds of the overall decline in extreme poverty.
- However, they still represented 54% of the extremely poor population.
- The Multidimensional Poverty Index (MPI) reflects non-monetary poverty. It decreased from 53.8% in 2005-06 to 16.4% by 2019-21. The MPI was measured at 15.5% in 2022-23,

4.2 CURRENT TRENDS IN INDIAN ECONOMY

RBI cuts repo rate by 0.25%

- The RBI reduced the repo rate by 25 basis points to 6%.
- India's GDP growth forecast lowered from 6.7% to 6.5% for 2025-26.
- The Monetary Policy Committee (MPC) shifted stance from neutral to accommodative, signaling a focus on supporting growth.

About Repo rate

- Repo rate (Repurchase Agreement Rate) is the interest rate at which commercial banks borrow money from the central bank.
- Higher repo rate → Costlier loans for banks
 → Higher interest rates for consumers & businesses → Slower borrowing & spending.
- Lower repo rate \rightarrow Cheaper loans for banks \rightarrow Lower interest rates for borrowers \rightarrow Increased borrowing & spending.

4.3 REPORTS AND INDICES

Energy Statistics India 2025

- The National Statistics Office (NSO) has released its annual Energy Statistics India 2025 report providing key data on energy reserves, capacity, production, and consumption across different energy sources.
- India's Total Primary Energy Supply (TPES) grew by 7.8% in 2023-24 despite global uncertainties.
- TPES is a country's total available energy, including domestic production and imports, exported energy (subtracted off) and international transport use.
- The industrial sector is India's largest energy consumer, with demand rising from 2.42 lakh KToE in 2014-15 to 3.12 lakh KToE in 2023-24.
- Renewable Energy Growth: India's renewable energy potential stands at around 21 lakh MW, with wind power (55%) as the largest

contributor, followed by solar and large hydropower projects.

 State-wise Renewable Energy Statistics: Rajasthan (20.3%), Maharashtra (11.8%), Gujarat (10.5%), and Karnataka (9.8%) accounts for over 50% of the total renewable energy potential.

India's Key initiatives for Sustainable Energy Transition

- National Solar Mission
- National Green Hydrogen Energy Mission
- Faster Adoption and Manufacturing of Electric Vehicles (FAME)
- Perform, Achieve & Trade (PAT) Scheme
- Energy Conservation Building Code (ECBC)

WCD Report on Climate Change Impact on Women and Children

Union Ministry of Women And Child
 Development (WCD) recently released the

report titled "How Does Climate Change Impact Women and Children Across Agroecological Zones".

- According to the report, women and children face higher risk of death during disasters compared to men.
- Women and children are 14 times more likely to die in disasters than men (UNDP).
- This disparity is exacerbated by existing societal roles and responsibilities.
- It highlighted the need for genderdisaggregated data is crucial for developing effective disaster management strategies.

26th edition of Women and Men in India 2024

 The Ministry of Statistics and Programme Implementation (MoSPI) of India has released its 26th edition of Women and Men in India 2024 – Selected Indicators and Data.

Gender Disparities in Financial Inclusion

 Women own 39.2% of all bank accounts in India. In rural areas, this figure rises to 42.2%.
 Women contribute to 39.7% of total bank deposits.

Female Entrepreneurship Growth

 The number of startups with at least one woman director increased from 1,943 in 2017 to 17,405 in 2024.

Political Participation and Voter Turnout

 The total number of electors in India has increased dramatically from 173.2 million in 1952 to 978 million in 2024. Female voter turnout reached 65.8% in 2024.

Education and Gender Parity

• The Gender Parity Index (GPI) for primary and higher secondary education remains high,

indicating robust female enrolment.

Labour Force Participation Rate

The Labour Force Participation Rate (LFPR) for individuals aged 15 and above rose from 49.8% in 2017-18 to 60.1% in 2023-24.

Unlocking \$25+ Billion Export Potential – India's Hand & Power Tools Sector'-Report

- NITI Aayog launched a report titled 'Unlocking \$25+ Billion Export Potential – India's Hand & Power Tools Sector', aiming to explore the potential of India's hand and power tools industry in the global trade landscape.
- The report identifies the transformative role that this sector could play in boosting India's economic growth, creating jobs, and enhancing its position as a global manufacturing hub.
- With the global market for these tools expected to grow significantly by 2035, India's focus on strengthening this sector could lead to \$25 billion in exports over the next decade and the creation of 35 lakh jobs.
- India's Current Position: India's tools industry is a small player globally, with USD 600 million in hand tools exports (1.8% global market share) and USD 425 million in power tools exports (0.7% global market share).
- India has the potential to increase its exports to \$25 billion over the next decade, which represents a 10% market share in power tools and 25% market share in hand tools.

Revolutionizing health and safety: The role of AI and digitalization at work'.

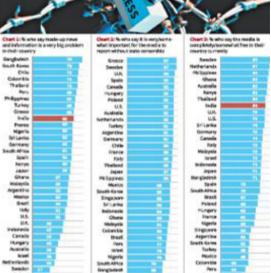
• ILO released a report titled 'Revolutionizing health and safety: The role of AI and digitalization at work'.

- It was published ahead of the World Day for Safety and Health at Work on April 28.
 It highlighted the impact of algorithmic or management (AM) on job quality in India.
- The International Labour Organisation (ILO) has noted a decline in job quality due to increased surveillance and monitoring.

Indians fear fake news but are less concerned about press freedom

- In India, the share of people who believe that media freedom exists is higher than the share of people who believe it is important
- The data indicates that many citizens view misinformation as stemming from sources such as social media, WhatsApp, or other nongovernmental actors, rather than from state censorship or suppression.
- n India, 65% of the respondents said that made-up news and information is a very big problem in the country.
- This is one of the highest rates among the 35 countries surveyed and places India among the top 10 nations where this concern is most strongly felt.
- This dichotomy has serious implications for press freedom in India, which has been deteriorating rapidly.
- In 2024, India ranked 159 out of 180 countries in the World Press Freedom Index published by Reporters Without Borders.
- While India has consistently ranked below 100 since 2003, the situation has worsened significantly in recent years.





IIP grows 3% as electricity, manufacturing output surge

- Electricity production surged 2.7 percentage points to 6.3% in March as summer spikes demand; consumer durables and construction see the sharpest increase at 6.6% and 8.8% respectively
- The Index of Industrial Production (IIP) grew 3% as electricity and manufacturing sector production surged in March 2025, according to data from the Ministry of Commerce and Industry.
- In the use-based classification, consumer durables and construction registered the sharpest increase in growth, coming at 6.6% and 8.8% respectively.
- These sectors grew at 3.7% and 6.8% respectively in February.
- On a year-on-year basis, IIP growth came in at 4%, making it the slowest in four years.



5. SCIENCE

5.1 LATEST INVENTIONS ON SCIENCE & TECHNOLOGY

National Gene Bank

 The Government of India has announced the creation of a Second National Gene Bank to conserve 10 lakh crop germplasm. This initiative aligns with the "Investing in Innovations" theme of the Union Budget 2025-26.

India's First National Gene Bank

 It was established in 1996 by the Indian Council of Agricultural Research – National Bureau of Plant Genetic Resources (ICAR-NBPGR) in New Delhi.

- It is the **second-largest Gene Bank globally**, following the Svalbard Global Seed Vault in Norway.
- It supplies plant genetic resources to both public and private entities engaged in crop improvement and genetic conservation.

About Gene Bank

 A Gene Bank is a specialized storage facility designed to preserve seeds, pollen, and plant tissues to safeguard plant species from extinction and ensure their availability for future needs.

5.2 SPACE

First human spaceflight in a polar orbit

- Recently, SpaceX successfully launched a private astronaut crew on a historic polarorbiting mission aboard a Falcon 9 rocket from NASA's Kennedy Space Centre in Florida.
- First human spaceflight in a polar orbit: Unlike traditional missions that follow an equatorial orbit, this mission will orbit Earth from pole to pole.
- This trajectory allows full observation of Earth's surface over time, making it crucial for climate studies, global surveillance, and research.
- Polar Orbit (PO) A Polar Orbit (PO) is a type of Low Earth Orbit (LEO) that ranges between 200 km to 1,000 km in altitude.

- Unlike equatorial orbits, satellites in a polar orbit travel from one pole to the other rather than from west to east.
- Polar orbits allow satellites to cover the entire Earth's surface over time as the planet rotates below them.

Chandrayan's ChaSTE

Chandrayan's ChaSTE becomes the first mission to successfully penetrate the soil of a celestial body (at Shiv Shakti landing site of Moon) to deploy a thermal probe.

About ChaSTE (Chandra's Surface Thermophysical Experiment)

 It is one of the payloads aboard the Lander (named Vikram) of the Chandrayaan-3 mission.

- Developed by: The instrument was designed by the Physical Research Lab, Ahmedabad and the Space Physics Lab (SPL), VSSC.
- **Objective**: It has the objectives of measuring lunar surface temperatures, thermal conductivity, and the temperature gradient to a depth of 100 mm.
- Significance: The findings of the study will provide a comprehensive understanding of the moon's thermo-physics and its nearsurface and sub-surface water-ice distribution, laying the groundwork for future exploration and habitation strategies.

Biomass Satellite Mission

- It is a European Space Agency (ESA) mission to provide more accurate measurements of forest biomass to enhance our understanding of the carbon cycle.
- It will provide detailed 3D maps of the world's most dense and remote tropical forests.
- It is the first space satellite to carry a longwavelength radar, called P-band.

NISAR Mission

 The NISAR Mission is expected to be launched in June 2025 onboard a GSLV (Geosynchronous Satellite Launch Vehicle).

About the NISAR Mission

- NISAR (NASA-ISRO Synthetic Aperture Radar) is a joint Earth observation satellite mission developed by NASA and ISRO under a bilateral agreement signed in 2014.
- The satellite is scheduled for launch in June 2025 from the Satish Dhawan Space Centre, Andhra Pradesh, aboard ISRO's Geosynchronous Satellite Launch Vehicle Mark II (GSLV Mk II).

- It marks the first-ever collaboration of its kind between India and the United States in radarbased Earth monitoring from space.
- NISAR aims to map the entire Earth's surface every 12 days, enabling high-frequency, precise, and repeat observations.

It will monitor ecosystem changes, ice sheet dynamics, vegetation patterns, sea level rise, and groundwater variation, and will track natural hazards like earthquakes, volcanoes, tsunamis, and landslides.

Aryabhata

- 50 Years Since the Launch of Aryabhata India's First Satellite
- Aryabhata was India's first indigenouslybuilt satellite, named after the ancient Indian mathematician and astronomer Aryabhata, who lived in the 5th century CE.
- It was launched on April 19, 1975, from Kapustin Yar, a Soviet launch site, with the help of the Soviet Union.
- Since 20 By launching Aryabhata, India joined an elite club of 11 countries capable of sending satellites into orbit, including the USA, USSR, UK, France, China, West Germany, Australia, Canada, Japan, and Italy.
 - Aryabhata was designed to conduct experiments in solar physics and X-ray astronomy.
 - Aryabhata eventually re-entered Earth's atmosphere on February 10, 1992, giving it an orbital lifespan of nearly 17 years.

SpaDeX Mission- Successfully Executed the Second Docking

• The Indian Space Research Organisation

(ISRO) has successfully executed the second docking of the two satellites – SDX01 (Chaser) and SDX02 (Target) – that are part of the Space Docking Experiment (SpaDeX) mission.

- The PSLV-C60 / SPADEX mission was successfully launched on 30 December 2024.
- It is designed to develop and demonstrate the technology needed for spacecraft rendezvous, docking, and undocking using two small satellites.
- The demonstration of this technology is essential for future missions, such as sending an Indian astronaut to the moon, returning samples from the moon, and the building and operation of an Indian space station.
- The other aims of the mission include demonstration of the transfer of electric power between the docked spacecraft, which is essential for future applications, such as inspace robotics, composite spacecraft control, and payload operations after undocking.
- India became the fourth country after the U.S., Russia, and China to conduct the docking experiment.

Devasthal Optical Telescope (DOT)

- Indian astronomers using the Devasthal Optical Telescope (DOT) have detected and precisely measured the mass of an Intermediate-Mass Black Hole (IMBH) in a faint galaxy located 4.3 million light-years away.
- The DOT is the largest optical telescope in India, located at Devasthal, Nainital, Uttarakhand.
- It was commissioned in 2016 and operated by the Aryabhatta Research Institute of Observational Sciences (ARIES).

Comprehensive Remote Sensing Observation on Crop Progress (CROP)

ISRO's satellites, under the CROP framework,

have forecasted India's wheat production at 122.724 million tonnes across eight major wheat-growing States for the Rabi season 2024-25.

About (CROP)

- It is a semi-automated, scalable remote sensing framework developed to monitor crop sowing, growth, and harvesting stages in near realtime.
- **Developed by**: National Remote Sensing Centre (NRSC), Indian Space Research Organisation (ISRO).
- It aims to enable systematic, timely, and scalable monitoring of agricultural crops using satellite data and To provide accurate crop condition assessments supporting early agricultural planning and food security strategies.

Water Bears and Axiom – 4 Mission

- ISRO is set to send tardigrades (water bears) to the International Space Station as part of the Axiom-4 mission, marking India's first human experiment in microgravity using these resilient micro-animals.
- It is a 14-day crewed mission to the International Space Station (ISS) under the Axiom Space program, involving research in microgravity biology, biotechnology, and sustainability.
- Joint initiative by ISRO (India), NASA (USA), and ESA (Europe), with astronaut Group Captain Shubhanshu Shukla representing India.

Objectives

- Explore life science, space agriculture, and human physiological responses.
- Assess microbial resilience, muscle regeneration, and food growth in zero gravity.
 - Contribute towards India's Gaganyaan Mission and future long-duration spaceflight.



6. NATIONAL – DIARY OF EVENT

Green Credit Programme (GCP)

- The Environment Ministry launched the **Green Credit Programme (GCP)** to enhance forest cover, promote sustainable practices, and incentivize pro-environmental actions.
- Green Credit (GC) is a unit of incentive provided for engaging in environmentally positive activities.
- These credits can be traded on a dedicated exchange, similar to carbon credits.
- The Green Credit Programme (GCP) operates under the Environment (Protection) Act, 1986.
- Who can earn Green Credits Individuals, communities, and industries that engage in eco-friendly activities.
- Green credits can be traded on a domestic platform, enabling entities to meet their legal obligations, such as compensatory afforestation for industrial projects.

Uttarakhand government has sealed madarasas

 The Uttarakhand government has sealed over 136 such institutions so far. This has put a spotlight on the State for its actions on issues related to the minority community – from laws such as the Uniform Civil Code to removal of Mazars.

Uniform Civil Code

The Uniform Civil Code refers to a single set

of laws governing personal matters such as marriage, divorce, adoption, inheritance, and succession for all citizens of India.

- The concept of UCC is mentioned in Article 44 of the Indian Constitution as a Directive Principle of State Policy, which states that the state shall endeavor to secure a uniform civil code for citizens throughout the territory of India.
- However, it's important to note that this is not a legally enforceable right but a guiding principle for the state.

"NITI NCAER States Economic Forum" portal

eco-friendly activities.
It was developed by NITI Aayog, in
Green credits can be traded on a domestic collaboration with the National Council of platform, enabling entities to meet their Applied Economic Research (NCAER).

- It is a comprehensive repository of data on social, economic, and fiscal parameters, research reports, papers, and expert commentary on state finances for a period of about 30 years from 1990-91 to 2022-23.
- The portal has four main components -State Reports , Data Repository , State Fiscal and Economic Dashboard, Research and Commentary.
- The portal will facilitate an understanding of macro, fiscal, demographic and socioeconomic trends; easily accessible data and a

user-friendly format; and will also address the ongoing need for consolidated sectoral data in one place.

Sangama Dynasty - copper plates found

- A set of rare copper plates dating back to the early 15th century, from the reign of Devaraya I of the Sangama Dynasty, has been unveiled in Bengaluru by Falcon Coins Gallery in collaboration with the Archaeological Survey of India (ASI).
- These copper plates are written in Sanskrit and Kannada, using Nāgarī characters and are particularly significant as they were issued during the coronation of King Devaraya I.
- The plates are dated Saka 1328 (1406 CE), confirming the coronation date of Devaraya I.

About Sangam Dynasty

- The Sangama Dynasty was the founding dynasty of the Vijayanagara Empire, ruling from 1336 to 1485 AD.
- Established by Harihara I and Bukka Raya I, this dynasty laid the foundation for one of the most powerful empires in South India.
- The rulers of this dynasty significantly strengthened administration, military power, and territorial expansion, making Vijayanagara a dominant political and cultural center.

Mitathal and Tighrana Harappan Sites

 The Haryana Government has officially declared Mitathal and Tighrana, two Harappan civilisation sites in Bhiwani district, as protected archaeological sites under the Haryana Ancient and Historical Monuments and Archaeological Sites and Remains Act, 1964.

- Shows uninterrupted human settlement from Pre-Siswal to Post-Harappan periods.
- Offers rich insights into early agricultural practices, craftsmanship, and community structure in Indo-Gangetic divide.

Mitathal Site:

- Yields Copper-Bronze Age material dating back to 3rd–2nd millennium BCE.
- Evidence of Harappan town planning, sturdy red pottery with black painted motifs (e.g. pipal leaf, fish scale).
- Artefacts: beads, copper tools, bangles, terracotta, and bone items.
- Excavations from 1965–68 and four more since 2016 by Central University of Haryana.

Tighrana Site:

Rich in post-Harappan and pre-Harappan
 layers, showing cultural continuity.

- Associated with Sothian culture (Chalcolithic farmers).
- Houses made of mud bricks, possibly fortified; early use of bichrome wheel-made pottery.
- **Artefacts**: green carnelian bangles, indicating active bead and jewellery industry.

Krishi Nivesh Streamlines Agricultural Investments

• The Government of India has launched a unified digital platform named Krishi Nivesh to streamline investments in the agriculture sector.

- It serves as a one-stop source for information on various agricultural schemes.
- This initiative aims to enhance transparency and accessibility for investors.
- The platform is intended to help investors navigate the complexities of multiple government initiatives.
- It integrates information from multiple ministries, including agriculture, food processing and renewable energy.
- The platform currently provides details on 11 major agricultural schemes, these include the Agriculture Infrastructure Fund and PM KUSUM.
- The goal is to simplify the investment process and improve the overall efficiency of agricultural financing.

Operation Brahma

- A 7.7 magnitude earthquake hit Mandalay, Myanmar, killing over 140 people and causing structural damage across Myanmar and neighbouring countries.
- India has launched Operation Brahma, sending humanitarian aid and relief supplies to the affected region.
- It was Launched by the Indian Air Force using C-130J aircraft.
- Neighbouring Countries:
 - India, China, Bangladesh, Thailand, Laos.
 - Bordered by Andaman Sea and Bay of Bengal to the south.

Seaweed

 Seaweed farming is gaining global recognition as a sustainable and profitable industry.

What is Seaweed

- Seaweed is a nutrient-rich marine plant, packed with vitamins, minerals and amino acids.
- It contains 54 trace elements and essential nutrients that help fight diseases like cancer, diabetes, arthritis, heart problems and high blood pressure.
- Seaweed is a sea plant that grows in the ocean and seas.
- Seaweed cultivation requires no land, freshwater, fertilizers or pesticides, making it sustainable.
- The **\$5.6 billion seaweed** industry is booming, with India's production increasing steadily.
- Under one of its components, the Pradhan Mantri Matsya Sampada Yojana (PMMSY)
 aims to boost seaweed production to 1.12 million tonnes in five years.
- Japan, China and South Korea are the biggest consumers of seaweed.
- The government, along with the **National Fisheries Development Board (NFDB)**, is working to boost this sector through policies, infrastructure support and collaborations with states and research institutes.

Key Seaweed Developments in India

First National Conference on Seaweed Cultivation (Jan 2024) in Kutch, Gujarat, promoted seaweed as a job creator, especially for fish farmers. The Kori Creek Pilot Project was launched to boost seaweed farming.

PMMSY Scheme: Aims to increase seaweed production. Since K. alvarezii (a common seaweed) is disease-prone, India now allows the import of new seaweed varieties through guidelines issued in October 2024.

Seaweed Clusters in Lakshadweep: Promotes collaboration among small and large businesses to improve seaweed production, processing, and exports.

Centre of Excellence (Mandapam, Tamil Nadu): Launched on 9th January, 2025, Centere of Excellence in Mandapam focuses on seaweed research, better farming techniques, seed banks and creating 5,000+ jobs for 20,000 farmers.

Coastal Aquaculture Authority Act (2023 Update): Supports eco-friendly practices like seaweed farming, simplifying rules to encourage business growth.

Guidelines for Import of Live Seaweeds into India: On 31st October 2024, the Department of Fisheries announced guidelines to import live seaweeds, aiming to boost seaweed farming, create jobs, and support coastal communities.

Seaweed Farming in Gujarat: The government promotes seaweed cultivation in the Gulf of Kutch (Kori Creek area) to boost local livelihoods.

India's Aquaculture Growth:

- India is 3rd largest aquaculture producer globally.
- 2nd in prawn production, with Andhra **Pradesh** leading the pack, followed by **West** Bengal, Tamil Nadu, Odisha, and Gujarat.

Protected archaeological sites and monuments

- The Haryana government has officially
 ZooWIN Portal located in Bhiwani district - Mitathal and Tighrana – as protected archaeological sites and monuments.
- These sites, dating back over 4,400 years, . hold immense historical and cultural value, shedding light on the evolution of early agricultural societies, town planning, craft> industries, and trade during the Harappan and post-Harappan periods.

World Tea Exports

- In the 2024 calendar year, India is in third place in global tea exports. In the assessment year, India has captured 13.55 percent of the world market.
- Kenya and China have secured the first two positions in tea exports. The International Tea Committee has released these statistics.

- declared two Harappan civilization sites The Union Health Ministry recently launched the ZooWIN portal to monitor the availability of anti-rabies and anti-snake venom vaccines in real time.
 - **ZooWIN (Zoonoses-WIN)** is a digital portal to monitor stocks of Anti-Rabies Vaccine (ARV) and Anti-Snake Venom (ASV) across India.
 - It ensures better coordination among healthcare systems, especially in rural and underserved areas.

Developed By:

- The portal is developed by the National Centre for Disease Control (NCDC) under the Ministry of Health and Family Welfare (MoHFW).
- It is technically supported by the **United** Nations Development Programme (UNDP).

India Skills Accelerator (ISA)

- The Ministry of Skill Development and Entrepreneurship (MSDE), in collaboration with the World Economic Forum (WEF), launched the India Skills Accelerator (ISA).
- It is a national public-private collaboration platform aimed at fostering cross-sectoral cooperation to address complex challenges in India's skilling ecosystem, with a focus on innovation, knowledge sharing, and policy reform.
- It supports India's demographic dividend and aims to make India the Skill Capital of the World.
- With 65% of organizations citing skill gaps as a major barrier, the initiative aims to close these gaps through inclusive upskilling, reskilling and aligning education with industry needs.

India's First-Ever Climate Change Station

- India has inaugurated the Himalayan High Altitude Atmospheric and Climate Research Centre at Nathatop, Jammu & Kashmir, marking a major milestone in global climate science.
- Strategic Location: The centre is located at an altitude of 2,250 meters above sea level in

Nathatop, chosen for its clean air and minimal pollution.

- Which makes the centre Awards & Honours ideal for high-accuracy atmospheric and climate measurements.
- The centre will facilitate cutting-edge studies on cloud formation, aerosol interactions, and weather patterns.
- It will enhance India's leadership in climate science and support efforts to meet global climate targets, including the country's commitment to net-zero emissions (by 2070).
- ICE-CRUNCH: The inauguration marked the launch of the Indo-Swiss Joint Research Project, ICE-CRUNCH (Ice Nucleating Particles and Cloud Condensation Nuclei Properties in the North-Western Himalayas).
- It focuses on understanding Ice-Nucleating Particles (INPs) and cloud condensation nuclei (tiny suspended particles, either solid/liquid), pivotal to climate modelling and precipitation patterns in the region.

National Critical Mineral Mission (NCMM) in 2025

- The Government of India launched the National Critical Mineral Mission (NCMM) in 2025 to boost self-reliance in the critical minerals sector and support India's clean energy goals.
- It is a strategic initiative by the Ministry of Mines aimed at ensuring long-term availability, security, and processing of critical minerals that are vital for clean energy technologies, economic development, and national security.

- It aligns with India's commitments to net-zero emissions by 2070 and reducing the emissions intensity of GDP by 45% by 2030 (from 2005 levels).
- Critical minerals are those that are essential for modern technologies and national security, but have supply chain risks due to their limited availability or geographical concentration.
- Their 'criticality' changes over time depending on technological demand and supply dynamics.
- 30 critical minerals were identified by a Ministry of Mines committee in 2022- Antimony, Beryllium, Bismuth, Cobalt, Copper, Gallium, Germanium, Graphite, Hafnium, Indium, Lithium, Molybdenum, Niobium, Nickel, PGE, Phosphorous, Potash, REE, Rhenium, Silicon, Strontium, Tantalum, Tellurium, Tin, Titanium, Tungsten, Vanadium, Zirconium, Selenium, and Cadmium.
- Applications of Critical Minerals Solar Panels, Wind Turbines, Electric Vehicles (EVs), Energy Storage Systems, Also used in electronics, defence, aerospace, and medical technologies.

'Blue Category' - The Central Pollution Control Board (CPCB)

- The Central Pollution Control Board (CPCB) has recently introduced a new category of industries called the 'Blue Category', which falls under Essential Environmental Services (EES).
- The **'Blue Category'** is introduced as part of a subset of EES activities like composting,

biogas plants, sewage treatment, and material recovery facilities.

Waste-to-Energy (WTE) incineration, previously under the 'Red Category' with a PI of 97.6, is now reclassified as a 'Blue Category' industry.

About Pollution Index (PI)

- The Union Ministry of Environment, Forest and Climate Change (MoEFCC) introduced a Pollution Index (PI) to categorise industries based on pollution levels.
- PI is calculated on the basis of emissions (air pollutants), effluents (water pollutants), hazardous waste, and resource consumption.
- PI ranges from 0 to 100, with industries classified as:
 - White Category (0-20): Least polluting
 - Green Category (21-40)
 - Orange Category (41–59)
 - Red Category (60–100): Most polluting

The Indian Council for Cultural Relations (ICCR)- 75th anniversary

 The Indian Council for Cultural Relations (ICCR) marked its 75th anniversary with a grand celebration hosted by the Indian Cultural Centre under the High Commission of India in Dhaka.

The event highlighted ICCR's legacy since its establishment in 1950, its crucial role in cultural diplomacy, and its deep contributions to India-Bangladesh cultural ties.

• The celebrations included traditional performances and showcased the vibrant

exchange of artistic and educational initiatives between the two nations.

Purpose of ICCR

- Promote India's rich cultural heritage globally.
- Strengthen international cultural diplomacy.
- Facilitate people-to-people and educational exchange.

National Task Force

- Three research groups have been established under the National Task Force on preventing suicide incidents in higher education institutions, including Indian Institutes of Technology (IITs).
- This national task force, headed by former Supreme Court Justice S. Ravindra Bhat, includes 15 members including advisors from various scientific and research institutions and mental health doctors.

Etalin Hydroelectric Project

- The Arunachal Pradesh government recently allocated Rs 269.97 Crore for the construction of the Etalin Hydroelectric Project in Dibang Valley.
- It is a 3,097 MW hydropower project planned in the Dibang Valley of Arunachal Pradesh.
- It is one of the largest hydropower projects proposed in the country in terms of installed capacity.
- The project area falls under the "richest biogeographical province of the Himalayan zone" and "one of the mega biodiversity hotspots of the world".
- The project area is dominated by indigenous populations belonging to Idu-Mishmi tribes.

Rongali Bihu

- Rongali Bihu, also known as Bohag Bihu, is celebrated across Assam from 14th to 20th April 2025, marking the Assamese New Year and the beginning of the harvesting season.
- Rongali Bihu is the most prominent of the three Bihus celebrated annually in Assam, the other two being Kati Bihu (October) and Magh Bihu (January).
- Primarily a harvest festival, it marks the onset of spring, with prayers for a prosperous agricultural season.
- Celebrations: The Bihu dance (vibrant, fastpaced folk dance from Assam) is performed to the rhythm of folk songs and traditional instruments such as the dhol, pepa, gogona, toka, taal, and hutuli.

Prawn Aquaculture in India

- India's Aquaculture sector plays a key role in the country's nutrition and economy, making it the world's third-largest aquaculture producer and second largest in prawn production.
- India's prawn production has seen a 17%
 annual growth, contributing to both domestic consumption and exports.
 - Andhra Pradesh is the largest contributor to prawn production in India followed by West Bengal, Tamil Nadu, Odisha and Gujarat.
 - Prawns, with their high protein and low fat content, are increasingly in demand both domestically and internationally.
 - Telangana Implements Scheduled Castes Sub-Categorisation Act

- Telangana became the first state of India to implement the Scheduled Castes (SC) subcategorisation.
- This landmark decision follows the passing of the Telangana Scheduled Castes (Rationalisation of Reservations) Act 2025.
- The Act aims to divide the existing 59 SC communities into three distinct groups to enhance the effectiveness of reservation policies in education and employment.
- The categorisation will be based on empirical data regarding socio-economic status, educational attainment, and employment opportunities.

Q-Shield Platform

- QNu Labs, a quantum-tech startup under India's National Quantum Mission (NQM), launched Q-Shield, the world's first unified platform for quantum-safe cryptography management.
- Q-Shield is a comprehensive cryptography ²⁰ management platform designed to secure critical infrastructure against future quantum threats.
- QNu Labs, incubated at IIT Madras Research Park (2016)
- Supported by the Department of Science and Technology (DST) under the National Quantum Mission
- **Objective :** To empower enterprises with tools that ensure data privacy and cybersecurity across cloud, on-premises, and hybrid environments in a quantum-resilient manner.

Rashtriya Karmayogi Jan Seva Programme

- Ministry of Ayush organized a special session of the Rashtriya Karmayogi Jan Seva Programme at Ayush Bhawan, Delhi.
 - The initiative is part of the Mission Karmayogi framework, in collaboration with the Capacity Building Commission (CBC).
 - The programme aims to enhance service orientation, professional capacity, and public service efficiency among Ministry personnel.
 - It is under the framework of Mission Karmayogi.

Defence Literature Festival 'Kalam & Kavach 2.0's

- The Centre for Joint Warfare Studies (CENJOWS), under the aegis of the Headquarters Integrated Defence Staff (HQ IDS) of the Ministry of Defence, in collaboration with Pentagon Press, hosted the second edition of the Defence Literature Festival 'Kalam & Kavach 2.0' in New Delhi on April 15, 2025.
- The event, held at the Manekshaw Centre, revolved around the theme, 'Securing India's Rise through Defence Reforms', aligning with the Prime Minister's vision for 'Aatmanirbhar Bharat' (Self-reliant India).
- The festival gathered experts from the armed forces, strategic policymakers, industry leaders, and domain specialists to discuss pressing issues in India's national security, focusing particularly on Defence Technology and Future Warfare, Defence Manufacturing, and Procurement Reforms.

WAVES 2025 - Anti-Piracy Challenge

- A Key Initiative Under "Create in India" to Promote Indigenous Innovation in Digital Content Security.
- The Anti-Piracy Challenge is a flagship initiative under the Create in India Challenge, part of WAVES (World Audio Visual and Entertainment Summit) 2025.
- Organised by the Ministry of Information and Broadcasting, Government of India, WAVES 2025 will be held from May 1-4, 2025, in Mumbai, Maharashtra.
- The challenge aims to advance technologies like fingerprinting and watermarking to combat the rising threat of digital piracy in India.

About WAVES 2025

- WAVES (World Audio Visual & Entertainment Summit) is a global event organized by the Government of India.
- It aims to position India as a hub for media innovation, IP creation, and content development.

Bombay Stock Exchange (BSE)

- The Bombay Stock Exchange (BSE) is celebrating its 150th anniversary on April 17, 2025, in Mumbai, with Finance Minister of India attending the celebrations.
- BSE Ltd. is Asia's oldest stock exchange and a major platform for trading equities, debt, mutual funds, derivatives, and commodities in India.
- Established in: 1875, originally as "The Native Share & Stock Brokers' Association" founded by cotton merchant Premchand Roychand.

- It became the first exchange to be recognized under the Securities Contract Regulation Act, 1956.
- Launched India INX (first international exchange) in 2016.
- Listed itself on National Stock Exchange in 2017.

First High-Speed Rail Network

- Japan is set to enhance India's high-speed rail capabilities by providing two shinkansen trains for free.
- These trains, models E5 and E3, will serve as test vehicles for the Mumbai-Ahmedabad bullet train project.
- The Mumbai-Ahmedabad High-Speed Rail Corridor is part of India's National Rail Plan (NRP) 2030.
- This initiative marks step in India's ambition to develop its first high-speed rail network.
- Japan will deliver one E5 and one E3 train to India in early 2026.
- The shinkansen, or bullet train, is a high-speed
 rail system in Japan.

Vizhinjam International Seaport

 On May 2, 2025, Prime Minister will inaugurate the Vizhinjam International Seaport near Thiruvananthapuram, Kerala.

About the Project

- India's first semi-automated Deepwater international container transhipment port.
- The project is a result of a collaborative Public-Private Partnership (PPP) between the Kerala government, the Centre, and Adani Ports.
- With a strategic location close to international shipping routes, the port is expected to significantly enhance India's trade capabilities and position Kerala as a crucial maritime hub.

• It Supports India's "Make in India" initiative through infrastructure advancement

India Justice Report (IJR) 2025

- The India Justice Report (IJR) 2025 has been released, presenting a comprehensive assessment of the capacity and performance of Indian states in delivering justice.
- It is a first of its kind national periodic reporting that ranks the capacity of states to deliver justice.
- The IJR 2025, initiated by Tata Trusts and supported by several civil society organisations and data partners, tracked the performance of States across four areas – Police, Judiciary, Prisons and Legal Aid.
- Parameter: It assesses 4 pillars: Police, Prisons, Judiciary, Legal Aid & SHRCs, using 5 parameters: human resources, infrastructure, budgets, workload, and diversity.
- Categorization of States: States are categorized as large/mid-sized (>1 crore population) and small (<1 crore) for fair comparison.
- Overall Rankings: Karnataka, Andhra Pradesh, and Telangana top the large & midsized states, while Sikkim leads among small states. Bihar, Chhattisgarh, and Odisha show the most improvement.
- Tamil Nadu retained its top position in managing prisons, with increased budget allocation and 100% utilisation.
- Tamil Nadu has among the lowest staff vacancies in prisons nationwide, it stated, adding that with 22 inmates per officer, it has the best officer workload among all large States.

 But Tamil Nadu's rank in policing fell from 3 in 2024 to 13, owing to poor performance on budgetary and training indicators. The report added that T.N. continues to fare poorly in legal aid, dropping from 12th to 16th position with low budgets and fewer paralegal volunteers.

UNESCO Memory of the World (MoW) Programme

- Recently, UNESCO has added manuscripts of the Bhagavad Gita and Bharata's Natyashastra to the Memory of the World (MoW) Register in 2025.
- The MoW Programme was launched by UNESCO in 1992 with the goal of preserving global documentary heritage and preventing what it called "collective amnesia."
- It aims to safeguard rare documents, including manuscripts, oral traditions, audio-visual content, and archive materials, of global and universal value.
- As of 2025, the Register contains 570 entries, including Shaiva Siddhanta manuscripts (India).

HEALD Initiative

- Union Home minister unveiled the 'HEALD' initiative to combat liver diseases across India.
- HEALD (Healthy Liver Education and Alcohol-associated Liver Disease Prevention)
 is a first-of-its-kind nationwide initiative aimed at tackling liver disease in India.
- It was launched by the Institute of Liver and Biliary Sciences (ILBS).
- The initiative is grounded in the principle that "behind every failed liver lies a missed opportunity" -- and HEALD seeks to ensure no such opportunity is lost again.

 HEALD is envisioned as a multi-sectoral combining public program education, early screening, psychological and medical (). treatment of alcohol use disorder, and liver disease management.

India's First Seed Germination Database

- India is developing its first-ever seed germination database to help farmers, scientists, and foresters select the right species for climate-resilient agriculture, forestry, and ecological restoration.
- It is India's First Seed Germination Database.
- It is a free-access database, offering more than 1,000 germination techniques for 465 native plant species.
- Launched by: It is an initiative launched by the Ecological Restoration Alliance-India (ERA-I) in partnership with Auroville Botanical Gardens, the Ashoka Trust for Research in Ecology and the Environment, the Nature Conservation Foundation (NCF), and the 20 It is highlighting India's sustained efforts Wildlife Trust of India.
- Objective: It intends to make it easier for restoration practitioners, nursery managers, 0. and native plant enthusiasts to be more successful with growing native plants in nurseries.

India's Leather Industry

- The Centre has proposed a mega leather cluster in Ramaipur, Kanpur.
- Kanpur earned the title "Leather City of India" due to its flourishing British-era tanning industry, its proximity to the Ganga river, and abundant labour.

- India is the 2nd largest producer and consumer of leather footwear globally, after China.
- It accounts for 13% of the world's leather production, making it a major export contributor.
- India has 20% of the world's cattle and buffalo population, and 11% of goat and sheep population, ensuring ample raw material supply.
- States like Tamil Nadu, Uttar Pradesh, West Bengal, Maharashtra, and Punjab are leading producers.
- Tamil Nadu, the largest leather exporter, saw an 18% decline, significantly affecting the national figures.

Anemia Mukt Bharat (AMB) campaign

- The Ministry of Health and Family Welfare released a progress update on the Anemia Mukt Bharat (AMB) campaign.
- to combat anemia, a major public health challenge.
- It was launched in 2018 with the aim to reduce anemia through a 6x6x6 framework.
- It highlights major statistics from NFHS-5(National Family Health Survey -5), including 67.1% of children and 59.1% of adolescent girls being anemic.
- The 6x6x6 framework targets 6 vulnerable groups with 6 key interventions through 6 institutional mechanisms to reduce anemia prevalence.

India's First Quantum Computing Village

- Recently, the Government of Andhra Pradesh
 Sunrise industry examples include alternative energy industry highlighte Quantum Computing Village in Amaravati.
 Sunrise industry examples include alternative energy industry highlighte 2003 and 2007, the social media and or social media and or social media.
- This initiative aims to create a pioneering ecosystem for quantum computing research and collaboration.
- The project is backed by the Real-Time Governance Society (RTGS) and is set to occupy 50 acres of land.
- The facility will serve as a hub for institutions and companies to access advanced quantum computing resources.

India's Largest Cruise Terminal

- India's largest cruise terminal, the Mumbai International Cruise Terminal (MICT), officially began operations.
- Inaugurated by Union Minister for Ports, Shipping, and Waterways.
- The MICT marks a significant boost to India's cruise tourism and maritime infrastructure.
- Designed to cater to 1 million passengers annually and five ships simultaneously, this Rs 556 crore terminal is a pivotal development in India's vision to become a global maritime hub.

Sunrise Industry

- Finance Minister Nirmala Sitharaman recently said India plans to increase the share of the manufacturing sector from 12% to 23% over the next two decades helped by sunrise sectors.
- Sunrise industry is a term frequently used for a

sector that is developing and poised for rapid growth.

Sunrise industry examples include the alternative energy industry highlighted in 2003 and 2007, the social media and cloud computing industries of 2011 and 2012, and blockchain industries established from 2013 to 2017.

National plan for the River Cities Alliance (RCA)

- The National Mission for Clean Ganga (NMCG) has approved a national plan for the River Cities Alliance (RCA).
- The **River Cities Alliance (RCA**) is initiative aimed at promoting sustainable urban river management in India.
- Established in 2021, it is a collaborative effort by the Ministry of Jal Shakti and the Ministry of Housing and Urban Affairs.
- The RCA operates on three main themes Networking, Capacity Building, and Technical Support

Indian Cyber Crime Coordination Centre

- The Indian Cyber Crime Coordination Centre (I4C) has recently been authorised to share information with the Enforcement Directorate (ED) under the Prevention of Money Laundering Act.
- This initiative aims to combat rising cyber frauds, which increasingly target the general public.

About I4C

• I4C operates under the Ministry of Home Affairs.

- It serves as a central hub for addressing cybercrime in India.
- The centre aims to strengthen the country's response to cyber threats.
- It focuses on enhancing public awareness and improving the capacity of law enforcement agencies.

Sachet mobile application

- The Sachet mobile application, launched by the National Disaster Management Authority (NDMA), aims to improve disaster preparedness in India.
- The Sachet app is designed to deliver real-time geo-tagged alerts about various disasters.
- It operates on the Common Alerting Protocol (CAP), ensuring timely notifications based on users' locations.
- The app covers disasters such as floods, cyclones, landslides, tsunamis, forest fires, and more.

INCOIS

- The Indian National Centre for Ocean Information Services (INCOIS) has initiated a submarine cable project to enhance long-term observations of the Indian Ocean.
- This project, supported by the international scientific community, will improve the understanding of ocean dynamics, seismic activity, and tsunami risks.
- The initiative involves the installation of a 150 km cable west of Wandoor in the Andaman and Nicobar Islands, featuring advanced

sensors for oceanographic and geophysical data collection.

- India's first AI-based real-time forest alert system
- Madhya Pradesh has launched India's first AI-based real-time forest alert system, a groundbreaking initiative aimed at enhancing forest conservation efforts.
- The system aims to detect changes in land use, deforestation, and encroachment, facilitating immediate corrective actions.
- The system uses satellite imagery from the Google Earth Engine and AI algorithms to track land use changes like vegetation shifts, construction, or agricultural encroachment.

Cabinet decides to include caste count in next Census

 The 2021 Census has been postponed indefinitely, initially due to the COVID-19 pandemic.

- The last time that India's entire population was counted by caste was in pre-Independent India, in 1931. Since then, only Scheduled Castes and Scheduled Tribes have been counted in the Census exercises.
- Unlike the 2011 Socio-Economic Caste Census (SECC), which was done outside the purview of the Census exercise and did not mandate caste disclosure, this time, caste will be enumerated in the second and final phase of the Census, giving the count a statutory backing.



7. INTERNATIONAL AFFAIRS

75 Years of India and China Relations

 On 1st April 2025, India and China marked 75 years of diplomatic ties, established on 1st April 1950. The Chinese President described India-China ties as a "Dragon-Elephant Tango", symbolizing coexistence, shared growth over rivalry.

75 Years of India-China Diplomacy

- India-China relations have evolved from ancient cultural and trade exchanges, including the spread of Buddhism via the Silk Road, to post-independence (1950s) symbolised by the "Hindi-Chini Bhai-Bhai" spirit.
- The Sino-Indian War (1962) led to a diplomatic freeze, but ties normalized in the 1980s–2000s through 1993 Agreement on Peace and Tranquility, 1996 Agreement on Military Confidence Building Measures (CBMs) and growing trade.
- India and China maintain robust economic ties, with bilateral trade reaching USD 118.4 billion in 2023–24, and investments of over USD 3.5 billion in Indian unicorns.
- Cultural ties are reinforced through academic exchanges, and events like Tagore's centenary seminar in 2025.
- Multilaterally, they collaborate in BRICS, SCO, G-20 and support initiatives like the International Solar Alliance (ISA).
- Key issues include the undefined 3,488 km LAC causing frequent clashes such as Doklam

(2017) and Galwan (2020) and strategic concerns over China's BRI and CPEC through PoK.

6th BIMSTEC Summit

• The **Indian Prime Minister** participated in the **6th BIMSTEC Summit**, hosted by **Thailand** under its chairmanship.

Key Initiatives Announced by India

- BIMSTEC Centres of Excellence.
- BODHI India introduced **Program:** BODHI Program (BIMSTEC for Organized Development of Human Resource Infrastructure) for skill development, providing training, scholarships, and capacitybuilding for various professionals across **BIMSTEC** nations.

About BIMSTEC

- BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation) is a regional organization comprising 7 member states as Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka, and Thailand.
- It aims to foster multifaceted technical and economic cooperation among countries in the Bay of Bengal region.
- It was founded in 1997 with the adoption of the Bangkok Declaration.
- Initially comprising 4 members, it was known as BIST-EC (Bangladesh, India, Sri Lanka, and Thailand Economic Cooperation). In

1977, Myanmar joined, and the grouping was renamed BIMST-EC.

 With the inclusion of Nepal and Bhutan in 2004, the name was further changed to BIMSTEC.

Inter-Parliamentary Union

 Lok Sabha Speaker recently delivered the keynote address on 'Parliamentary Action for Social Development and Justice' at the 150th Assembly of Inter-Parliamentary Union in Tashkent.

About Inter-Parliamentary Union

- The IPU is the global organization of national parliaments.
- It was founded in 1889 as the first multilateral political organization in the world, encouraging cooperation and dialogue between all nations.
- The slogan of IPU is "For democracy For everyone."
- The headquarters of IPU is in Geneva, Switzerland.
- Member Parliaments.
- The Governing Council is made up of three MPs from each Member Parliament.

Japan Created 3D-Printed Train Station

- Japan has constructed the world's first 3D-printed railway station (Hatsushima Station), completed in just 6 hours using additive manufacturing (3D printing) technology.
- The station's 3D-printed parts, made with special mortar reinforced with concrete, were transported by separate trucks to the construction site, reducing labor needs and

on-site construction time, which was then assembled in short time.

3D printing or Additive Manufacturing (AM), is a process that creates 3-dimensional objects by adding material layer by layer based on a digital design.

India votes in favour of first global carbon tax on shipping

- India, China, Brazil and 62 other countries voted in favour of the world's first-ever global carbon tax imposed on the shipping industry by the shipping agency of the United Nations.
- The decision, taken at the International Maritime Organisation (IMO) headquarters in London aims to reduce maritime greenhouse emissions and cleaner promote gas technologies.
- This is the first time global carbon tax has been imposed on an entire industry. Starting 2028, ships will have to shift to lower-emission fuels or pay a fee for the pollution they generate.
- Today, the IPU comprises 181 national The deal was supported by 63 countries, including China and Brazil, but opposed by oil-rich nations such as Saudi Arabia, the UAE, Russia, and Venezuela.

India Cuts Ties with Pakistan: Treaty Ended, Borders Sealed, **Diplomats** Expelled

- India has taken an unprecedented step by terminating the Indus Water Treaty (IWT) with Pakistan, a move that signifies the most serious breakdown in diplomatic relations between the two nations in recent years.
- Alongside the treaty's termination, the Atari-Wagah border has been sealed, visa services

for Pakistani citizens suspended, and defence advisors from both countries have been withdrawn.

 These actions reflect a decisive strategic shift in India's foreign policy approach toward its western neighbour.

The Indus Water Treaty

- Signed in 1960 under the mediation of the World Bank, the Indus Water Treaty was one of the longest-standing agreements between India and Pakistan, surviving multiple wars and political upheavals.
- The treaty allocated the eastern rivers (Ravi, Beas, Sutlej) to India and the western rivers (Indus, Jhelum, Chenab) to Pakistan, with detailed mechanisms for dispute resolution and cooperation

The World Social Report

- The World Social Report is the flagship publication of the United Nations Department of Economic and Social Affairs (UN DESA) on
 social development issues.
- Insecure Livelihoods & Enduring Poverty Risks: Over 690 million live in extreme poverty, and 2.8 billion are near it
- Income inequality, measured by the Gini coefficient, has increased in 52 of 128 countries over the past 30 years.
- E.g., Inequality has grown in populous nations like China and India, and in most high-income countries.

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8. TAMILNADU AFFAIRS

Tolukudi Research Project Certificate for Students

- The Department of Adi Dravidar and Tribal Welfare has launched the Tolukudi Research Project to research the tribal people of Tamil Nadu. This project has an annual budget allocation of Rs. 250 crore.
- For the first time in India, the Tolukudi Research Project is being implemented to conduct research on tribal lifestyle, art, language, handicrafts, and heritage. Accordingly, 70 students have been selected for undergraduate, postgraduate, and doctoral research studies.
- Postgraduate students receive Rs. 10,000 per month and doctoral research students receive Rs. 25,000 per month.

15th Century Perumal Statue Discovered

 Archaeological enthusiasts have discovered a 15th-century Perumal (Vishnu) statue in
 Vadamalapuram, Pudukkottai district. During the 15th and 16th centuries AD, this area was ruled by Pallava kings. The statue has been carved in Pallava style with artistic precision.

Women Beneficiaries of Dream Home Project in Self-Help Groups

 The Tamil Nadu government has ordered that women beneficiaries of the Dream Home project must be ensured membership in selfhelp groups. Following this, Additional Chief Secretary of Rural Development and Panchayat Department, Gagandeep Singh Bedi, has issued guidelines for the project.

- If a hut is located on unobjectionable government poramboke land and the encroachment has been regularized by the Revenue Department, providing a house will be considered. From the total unit cost for each house, funds for 90 person-days for house construction and 10 person-days for toilet construction will be provided under the Mahatma Gandhi National Rural Employment Guarantee Scheme.
- Under the Swachh Bharat Mission, Rs. 12,000 will be provided as unit cost for building toilets. All houses should be provided with gas, electricity connections for huts.

• Drinking water connections should be provided under the 15th Finance Grant. If beneficiaries wish, they can obtain loans up to Rs. 50,000 through the Tamil Nadu Rural Livelihood Mission or from cooperative and commercial banks.

Kumbakonam betel leaf - GI tag

- The Kumbakonam betel leaf, which is renowned for its remarkable tenderness (Kozhundhu Vettrilai), owing to its early harvest, has secured the Geographical Indication (GI) tag.
- Unique Harvesting Process: Unlike other regions where betel leaves are harvested every 30 days, Kumbakonam betel leaves are

harvested every 15 to 18 days, making them exceptionally soft.

- The 'Vellaikodi' variety has a pale yellowishgreen hue and elongated leaves, while 'Pachaikodi' variety of leaves are greenish and heart-shaped.
- The Kumbakonam betel leaf finds references in literary works and poems.
- Freedom fighter Subramania Bharathiyar, in one his poems, referred to the betel leaves grown on the banks of the Cauvery river as follows: Gangai nadhi purathu gothumai pandam, Cauveri vettrilaikku maaru kolvom.

Hornbill Conservation Initiative

- Tamil Nadu is developing a blueprint to conserve four species of hornbills – Great Hornbill, Malabar Pied Hornbill, Indian Grey Hornbill, and Malabar Grey Hornbill.
- Centre of Excellence: A Centre of Excellence for Hornbill Conservation will be established in the Anamalai Tiger Reserve (ATR) to study and protect hornbills.
- Ecological Role: Hornbills are frugivorous birds that help in seed dispersal, contributing to ecological restoration.
- No one has estimated the population of hornbills in the entire mainland so far. That is why, the initiative of the Tamil Nadu government is significant.
- These trees are very important for the hornbills
 to nest. They are rare species. Among them,
 Dipterocarpus indicus and Cryptocarya
 anamalayana are 'endangered', according to
 the IUCN Red List, while Myristica malabarica
 is 'vulnerable'

Key conservation areas identified include:

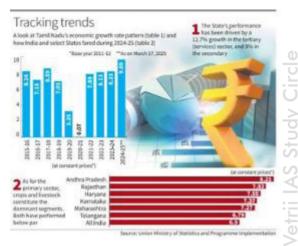
- Anamalai Tiger Reserve (ATR) Great Hornbill, Malabar Grey Hornbill
- Athikkadavu-Pilloor-Bhavanisagar Valley Malabar Pied Hornbill
- Sathyamangalam forests Indian Grey Hornbill

IUCN Red List Status

- Great Hornbill & Malabar Grey Hornbill Vulnerable
- Malabar Pied Hornbill Near Threatened
- Indian Grey Hornbill (widespread distribution in the country) – Least Concern

Tamil Nadu's economic growth

- Tamil Nadu's real economic growth rate of 9.69% for 2024-25 marks the highest for any State in the country, besides being the highest for the State in the past 10 years.
- The previous high was 8.59% during 2017-18.
 The lowest (0.07%) was recorded during 2020-21, the year of the COVID-19 pandemic.
- The term, real growth rate, denotes the rate that is exclusive of inflation.
- The one that includes inflation is called nominal economic growth rate. For instance, Tamil Nadu's nominal growth rate for 2024-25 is 14.02%, also the highest among States.
- The State's performance has been driven by a 12.7% growth in the tertiary (services) sector and 9% in the secondary.
- The primary sector's performance is abysmally poor, with 0.15%.
- The tertiary sector's contribution to the State's Gross State Value Added is around 53%, followed by the secondary with 37% and the primary with 10%.



Synchronised survey reveals steady rise in vulture population in State A total of 157 vultures were recorded in Tamil Nadu

- Minister for Forests on Friday released the report of the Synchronised Vulture Survey, 2025, in Tamil Nadu. It revealed a steady rise in the number of vultures.
- The survey was carried out in Tamil Nadu, Kerala, and Karnataka by the Tamil Nadu Forest Department, in coordination with the Forest Departments of Kerala and Karnataka, an official release said.
- The survey covered the Mudumalai Tiger Reserve, the Sathyamangalam Tiger Reserve, and the Nellai Wildlife Sanctuary in Tamil Nadu; the Wayanad Wildlife Sanctuary in Kerala; and the Bandipur Tiger Reserve, the Biligiri Rangaswamy Temple Tiger Reserve, and the Nagarhole Tiger Reserve in Karnataka.
- A total of 157 vultures were recorded in Tamil Nadu, showing an increase in the vulture population in the State. The white-rumped vulture is the most abundant species (110

individuals), followed closely by the longbilled vulture (31 individuals), the red-headed vulture (11), and the Egyptian vulture (5).

 The census report was released in the presence of Supriya Sahu, Additional Chief Secretary,
 Environment, Climate Change, and Forests Department; Srinivas R. Reddy, Principal Chief Conservator of Forests (HoFF); Rakesh Kumar Dogra, Principal Chief Conservator of Forests and Chief Wildlife Warden; and members of the Tamil Nadu State-Level Committee for Vulture Conservation.

2 sanctuaries in T.N. part of study to track diseases

- Tamil Nadu is among three States taking part in a first-of-its-kind study led by the Indian Council of Medical Research to build a surveillance model for tracking zoonotic diseases in increased bird-human interaction settings.
- It is the inter-Ministerial, first-of-its-kind study will be carried out at select sanctuaries and wetlands in Sikkim, Maharashtra, and T.N. using the One Health approach to monitor health of human populations and migratory bird species.
 - In Tamil Nadu, the study will be conducted at the Point Calimere bird sanctuary in Nagapattinam and Vaduvur bird sanctuary in Tiruvarur.
 - This project, involving collaboration between multiple Ministries, including the Ministry of Environment, Forests and Climate Change, the Ministry of Health and Family Welfare, and the Ministry of Agriculture will establish an early warning system for zoonotic spillovers.

New Pamban Sea Bridge

- PM inaugurates India's first vertical lift sea bridge built over the Palk Strait at a cost of **1**. The survey will span 89 census blocks in ₹531 crore
- Connects Ramanathapuram with Rameswaram Island.
- Replaces the British-era over-a-century-old cantilever bridge (commissioned in 1914).

Technology & Design:

- New bridge features a vertical lift span (72.5) metres) - first of its kind in Indian Railways.
- Designed by Spanish firm TYPSA; proofchecked by IIT-Madras, altered by IIT-Bombay for added stability.

Make-in-India Highlights:

97–98% materials sourced domestically.

Tamil Nadu Green Initiatives

- Tamil Nadu's Chief Minister launched the Green Tamil Nadu Movement in 2021, marking the first such initiative in India, with the aim of increasing the state's green cover from 23.7 percent to 33 percent.
- In 2021, an announcement was made to establish 100 Maragatha Pooncholai (village tree parks) at a cost of Rs. 25 crores. So far, 83 Maragatha Pooncholai projects have been completed, while work is ongoing at 17 locations. This program is being implemented only in Tamil Nadu across all of India.
- Forests around major cities like Chennai, Madurai, Trichy, and Coimbatore are being affected by urbanization. significantly the Athivanam To reclaim these areas, Development Project (Native Forest Development Project) has been announced.

Kerala and T.N. to conduct joint Nilgiri tahr census from April 24

- Kerala and 176 blocks in Tamil Nadu over the four-day period.
- The synchronised survey of the mountain ungulate is being conducted to commemorate the 50th anniversary of the establishment of the Eravikulam National Park.
- The Kerala and Tamil Nadu's Forest departments have begun preparations to conduct the census across the contiguous Nilgiri tahr habitats, covering areas both inside and outside protected forest zones.
- The data collected will be analysed using the 'bounded count' method to estimate the population in each block.

"Nimirndhu Nil" Project

- The Minister for Micro, Small and Medium Enterprises announced that awareness and training programs called "Nimirndhu Nil" (Stand Tall) will be implemented at a cost of Rs. 19 crores for 6 lakh students studying in 2,000 educational institutions to encourage innovation and entrepreneurial thinking among youth.
 - The maximum limit of the 10 percent additional investment subsidy provided to micro manufacturing enterprises has been increased from Rs. 5 lakhs to Rs. 10 lakhs.
 - Coconut Fiber Value-Added Product А Development Center will be established at a cost of Rs. 9.86 crores.

Supreme Court: Governor's withholding of 10 bills passed for the second time is illegal

- Bill to appoint the Chief Minister as Chancellor of universities
- Tamil Nadu Dr. Ambedkar Law University
 Amendment Bill
- Tamil Nadu Dr. MGR Medical University
 Amendment Bill
- Tamil Nadu Agricultural University
 Amendment Bill
- Tamil Nadu Mother Teresa Women's University Amendment Bill
- Tamil Nadu Fisheries University Amendment Bill
- Tamil University Amendment Bill
- Tamil Nadu Veterinary and Animal Sciences
 University Bill
- Anna University Amendment Bill
- Bill for establishing a new Siddha Medical University in Tamil Nadu

Underwater Acoustics Testing

- The National Institute of Ocean Technology in Chennai has received global recognition and international certification for underwater acoustics testing facilities.
- This system installed at the National Institute of Ocean Technology has been recognized by the International Bureau of Weights and Measures in Paris.
- It came into effect on January 30 last year.
- It is the only institution in the country with national standards for underwater acoustic measurements.

Heat index maps for Tamil Nadu

• The Regional Meteorological Centre (RMC), Chennai, is now using the Heat Index on an experimental basis in the State to forecast how temperature and humidity could affect human discomfort.

- The heat index maps for Tamil Nadu, which are now being used by weather forecasters, provide information about the impact of humidity on high temperature and real-feel temperature.
- With colour codes like red, yellow, and orange for experimental heat index,
- The RMC also provides inputs to the State Disaster Management Authority and the State Planning Commission for heat-action plan and heat-mitigation strategy.
- The RMC is equipping itself to improve forecast accuracy and increase the density of observational network, under Mission Mausam.
- A total of 22 agro-meteorology automatic weather stations would be set up across the State.

 Tamil Nadu would also get two more Doppler weather radars, including one at Kanniyakumari.

Impact of telemedicine in STEMI care system: A five-year experience from Tamil Nadu, India'

- The Tamil Nadu Government Heart Attack Management Programme – operationalised in a hub-and-spoke model, networking 18 government medical college hospitals and 188 district/taluk government hospitals.
- A study analysing the five-year (2019-2023) experience of the programme has found that WhatsApp groups are a cost-effective way of networking larger and smaller hospitals in a hub-and-spoke model to provide telemedicine

guidance for early diagnosis and treatment of major heart attacks (STEMI – ST-segment elevation myocardial infarction).

Study results

- There was a 67% annual increase in the total number of individuals treated for STEMI.
- The proportion of individuals receiving pharmaco-invasive therapy increased from 7.9% to 31.7%.
- The number of individuals who did not receive guideline-directed treatment decreased by 20%.

Thooimai Mission

- The Tamil Nadu government has issued an order to form a State-level mission titled 'Thooimai Mission' for sustainable waste management in the State.
- The **Clean Tamil Nadu Company Limited** (**CTCL**) be brought under this mission.
- The mission shall serve under the Special Programme Implementation Department.
- It will ensure alignment with State ²¹ priorities, facilitate collaboration among key departments, oversee technical guidance, and monitor overall mission progress to achieve its ⁽¹⁾ objectives

Governing body

- The Mission Secretariat will function with a Governing Body and a State-Level Committee.
- The Chief Minister will be the Chairperson of the Governing Body, while the Deputy Chief Minister will be the Vice-Chairperson.
- Minister for Water Resources, Minister for Municipal Administration, Minister for Rural Development, Minister for Finance and

Environment and Climate Change, Minister for School Education, Minister for Higher Education, and Minister for Health will be the members of the Governing Body.

- The body will also have two to three experts as members, besides 10 ex-officio members.
- It shall meet at least once in six months or as and when situation warrants.
- The Chief Secretary will be the Chairperson of the State-Level Executive Committee, while the Additional Chief Secretary/Principal Secretary/Secretary to Government, Special Programme Implementation Department, will be its convenor.
- Secretaries from departments including Finance, and Municipal Administration and Water Supply Department will be members of the State-Level Executive Committee.

Thovalai Flower Garland - GI Tag

- The Thovalai flower garland of Kanyakumari have been granted Geographical Indication (GI) Tags by the Government of India.
 - Famous in southern Tamil Nadu and Kerala.
 - Handcrafted using white, red, and green flowers woven like a mat.
 - Recognized for its artistic floral arrangements.

Six new - GI Tag

- Six new products from Tamil Nadu have been awarded the Geographical Indication (GI) tag, bringing the state's total to 69.
 - These products, renowned for their unique qualities, include Panruti Jackfruit, Panruti Cashew, Puliyankudi Acid Lime, Virudhunagar Samba Vathal, Chettikulam Small Onion, and Ramanadu Chithiraikar Rice.

T.N. forms panel on autonomy of States

- Three-member high-level committee had been formed to review provisions of the Constitution, laws and policies pertaining to Centre-State relations, and recommend steps to strengthen the States' autonomy and federalism.
- Justice Kurian Joseph, the former Supreme Court judge who will lead a high-level committee.
- Retired IAS officer and former Vice-Chancellor of the Indian Maritime University K. Ashok Vardhan Shetty and former vice-chairman, State Planning Commission, M. Naganathan will be its members.
- The committee would recommend
 - ways to restore subjects moved from the State List to the Concurrent List,
 - propose measures for States to overcome administrative challenges,
 - suggest reforms to ensure maximum autonomy for States without compromising the unity and integrity of the nation,
 - consider the recommendations of the Rajamannar Committee and subsequent commissions formed by the Union government on the Centre-State relations. -
- The committee is expected to submit its interim report by January 2026, and the final report within two years.
- The panel will examine if Centre-State relations need glasnost (transparency) and, if need be, perestroika (restructuring/reform) to fulfil the need of the hour and live up to the expectations of the people.
- "Constitution was an organic document that should live up to the people's aspirations".

Other Commissions related to Centre- State relations

- Rajamannar Committee 1969- By Tamil Nadu Government
- Sarkaria Commission 1983
- Punchhi Commission 2007

12 locations in T.N. to be declared protected sites, monuments

12 new locations in Tamil Nadu will be declared protected monuments/sites.

- Tamili inscriptions Mannarkoil, Tirunelveli district
- Rock-cut caves Aralipatti, Sivaganga district
- Koothapoondiyan Valasu Dindigul district
- V. Kottaiyur Pudukkottai district
- Avoor Tiruvannamalai district
- Nayanur Villupuram district
- Dolmens Mallachanthiram, Krishnagiri
 district
- Thirupullani palace Ramanathapuram district
- Maraiyur Choultry Narikkudi, Virudhunagar district
- Boulder and cave paintings Meenakshipuram, Rajapalayam taluk
- Old mandapam Mamsapuram, Virudhunagar district
- Old mandapam Pillayar Natham, Virudhunagar district

• A museum for inscriptions is planned at the World Tamil Sangam campus in Madurai.

• The State government will formulate a programme to publish the cultural history

of Tamil Nadu in 18 volumes to capture the history of various regions within the State.

 A Sangam-era port survey at Korkai identified an "anomalous feature" (details not disclosed).

Kalaignar Kaivinai Thittam - Alternative to the Centre's PM Vishwakarma scheme

- Chief Minister launched the Kalaignar Kaivinai Thittam, an artisan development scheme by the Tamil Nadu government, as an alternative to the Centre's PM Vishwakarma scheme (2023).
- It focuses on inclusivity, upskilling, and social justice, avoiding caste-based vocations (the centre's scheme will only promote caste-based vocation) and encouraging individuals to pursue trades of their own choice.
- Launched by the MSME Department.
- It aims to develop artisan skills in a socially inclusive manner.
- Offers loans ranging from Rs.50,000 to Rs.3 lakh with subsidy.
- Covers 25 trades (as opposed to 18 trades in the Vishwakarma scheme).
- Minimum age to apply: 35 years (to prioritize higher education first).
- Applicants can choose any trade, not limited to traditional family trades.

India's first Prototype Fast Breeder Reactor

- India's first Prototype Fast Breeder Reactor (PFBR) at Kalpakkam, Tamil Nadu, is set to be commissioned in 2026.
- It will mark the second stage of India's three-stage nuclear programme that aims to

recycle spent fuel to reduce the inventory of radioactive waste.

- The PFBR is the first-of-its-kind nuclear reactor to use plutonium-based mixed oxide as fuel and liquid sodium as coolant, which ensures high efficiency in power generation..
- Unlike traditional nuclear reactors, the PFBR uses fast neutrons for energy generation and employs liquid sodium as a coolant instead of water.
- The PFBR was developed by BHAVINI
 (Bharatiya Nabhikiya Vidyut Nigam Limited), a government enterprise set up in 2003 under the Department of Atomic Energy (DAE) to focus on fast breeder reactors.

Tamil Nadu Ranks 4th in Solar Power Generation

- In the year 2024-25, Tamil Nadu has maintained its 4th position at the national level for the third consecutive year by generating 10,153 megawatts of solar power - According to the Union Ministry of New and Renewable Energy.
- Gujarat state ranks 1st (28,286 megawatts)
- Maharashtra state ranks 2nd (10,687 megawatts).

Bharathidasan Birth Anniversary

- On the occasion of Paveanthar Bharathidasan's birth anniversary, the Chief Minister announced in the Legislative Assembly that Tamil Week Festival will be celebrated.
- Tamil Week Festival will be celebrated for one week from April 29 to May 5.
- During this week, various events will be held throughout Tamil Nadu to celebrate the Tamil language and Bharathidasan's contributions.

 As part of this, a young writer or scholar who excels in Tamil language will be awarded the 'Bharathidasan Izham Padaippalar' award.

Tamil Nadu is among the top 10 regions in Asia in terms of talent pool

- Tamil Nadu is among the top 10 regions in Asia in terms of talent pool and NITI Aayog has described the State as a model for the innovation ecosystem, in a reflection of its strong potential, said Atul Anand, Additional Chief Secretary, Micro, Small and Medium Enterprises (MSMEs) Department, Tamil Nadu.
- Chennai known as the software services capital, with a buoyant medical tourism sector and agriculture start-ups, he said.
- The State had grown in the past four years, from having just 2,000 start-ups to over 10,000, indicating that its start-up ecosystem is robust,
- He said the State government had, in its recent Budget, allocated Rs.10 crore to develop startups in the space sector.
- The Global Startup Report 2024 had ranked Chennai in the 18th position.
- The State had a wide spectrum of economy, with around 30% coming from manufacturing and the rest from a broad sector of services.

Gramam Thorum Puthozhil (Establishing Start-ups in Villages)

 The Tamil Nadu Startup and Innovation Mission (StartupTN) will be launching a scheme called Gramam Thorum Puthozhil (Establishing Start-ups in Villages) this year, focusing on inclusive entrepreneurship, rural innovation, and sustainable economic growth.

- The policy focuses on three major inclusive aspects – gender inclusivity, caste inclusivity, and geographical inclusivity.
- Tamil Nadu currently had over 10,700 startups.
- "In 2023, the Government of Tamil Nadu introduced a policy that slightly modified the Government of India's definition of a start-up.
- While the Centre defines a start-up as being less than 10 years old with a turnover of less than Rs.100 crore,
- Tamil Nadu's policy revised the turnover threshold to Rs.50 crore.
- Tamil Nadu's definition expands beyond new innovations. For example, while e-commerce may no longer be considered an innovation, if a marginalised community — such as a tribal one — is using an online platform to sell their products, it qualifies as a start-up to tamil nadu government

10,800 start-ups were registered in Tamil Nadu

 Until March 2021, only 2,032 start-ups were registered in Tamil Nadu, and now, this number has increased to over 10,800 and nearly 50% of these are founded by women,

- "In the last four years, regional innovation centres have been established in Erode, Tirunelveli, Hosur, Salem, Cuddalore, Thanjavur, and Coimbatore."
- Around 31,11,000 students studying in schools and colleges have been provided with entrepreneurship and innovation training.
- Over 205 start-ups have benefited under the TANSEED scheme (including 36 Scheduled Castes and Scheduled Tribes (SC/STs) start-ups).

- Launch pad programmes are being conducted to introduce new businesses. 'Pre Incubation Centres' have been set up in educational institutions across cities in Tamil Nadu
- 59,584 entrepreneurs were created. This includes 21,281 are women, 9,224 are from SC/STs, 2,497 are from minority communities and 717 are disabled individuals.

Urudhunai loan scheme

- Urudhunai loan scheme launched by the Tamil Nadu government for Adi Dravidars and Scheduled Tribes.
- It is to provide small and micro loans, worth Rs.25 crore, at reduced interest rates to small retailers, traders and manufacturers from Adi Dravidar and tribal communities through the National Finance Development Fund.
- The loans under the scheme would be provided, with the State government's subsidy, through co-operative banks.
- Under this scheme training would be provided to 500 entrepreneurs to improve the participation of companies owned by Scheduled Castes/Tribes and SC/ST entrepreneurs in public procurement, at a cost of Rs.50 lakh.

Makkalai Thedi Maruthuvam (MTM)

- Tamil Nadu's flagship scheme Makkalai Thedi Maruthuvam (MTM) – has demonstrated an improvement in the management of hypertension and diabetes in the State.
- Among adults with hypertension, the beneficiaries with blood pressure control rose

to 17%, and for diabetes, those with controlled blood sugar levels rose to 16.7%.

This finding from Tamil Nadu STEPS (World Health Organization STEPwise approach to non-communicable diseases risk factor surveillance) Survey 2023-24, which was taken up by the **Indian Council of Medical Research-National Institute of Epidemiology** (ICMR-NIE)

Effective initiative

The table shows the number of beneficiaries under the *Makkalai Thedi Maruthuvam* (MTM) till March 31, 2025

Service		First-time beneficiaries		Repent beneficiaries	A THUR T	
Hypertension		1,13,77,200		1,73,08,450	2 771 2 2 7	
Diabetes		54,19,368		1,24,15,468	LA DE LA CAL	
Both hypertension and diabetes		49,40,439		1,03,51,762	SOME HIGHLIGHTS The proportion of individuals hypertension seeking care in go facilities rose from 45.5% in STE	
Palliative care		6,04,413		13,46,585		
Physiotherapy		8,07,545		30,07,716		
Continuous ambulatory peritoneal dialysis bags		488		8,476	 a 37.7% of individuals with hyper received drugs through women h 	
Comparison of non-communicable diseases control					volunteers (WHVs) at their homes	
between STEPS I and II surveys					Among those with diabetes, 54.	
NCD	STEPSI(2019-20)	STEP	5 II (2023-2024)	treatment from the government s 24s when compared to 33.9% in 2	
Hypertension	7.30%		17.00%		 Among those with diabetes, 3 drugs through WHVs at their hor 	
Diabetes	10.80%		16.70%			
				1.000		

• The scheme was rolled out in August 2021.

This survey substantiates the efforts taken by the State government under MTM to achieve the Disbursement-Linked Indicators (DLI) set by the World Bank.

September 6 - 'Police Day'

- The Madras District Police Act was passed in 1859.
- Based on this, the modern and organized police force was established on September 6.
- To commemorate this and to honor the police who protect public peace, Chief Minister announced that September 6 will be celebrated as Police Day every year.