

# TNPSC

## FORTNIGHTLY

### CURRENT AFFAIRS-2026



# MARCH

## PART 2

# VETRI IAS STUDY CIRCLE

## Current Affairs

(A book for TNPSC Examination)

**MARCH 2026 - PART 2**



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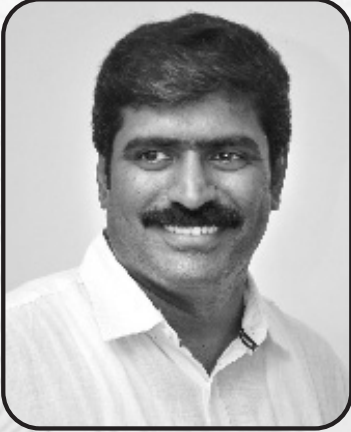
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# Preface



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## GENERAL SCIENCE

**Stem Cell Therapy**

- **Context:** The National Medical Commission (NMC) has mandated that prior approval must be obtained before undertaking unconventional stem cell therapies and research.

**About Stem Cells**

- Stem cells are unique cells capable of generating specialized cells, such as those found in blood, bone, and muscle.
- They play a crucial role in tissue repair and various bodily functions.

**Types of Stem Cells**

- **Embryonic Stem Cells (Pluripotent):** These possess the capacity to differentiate into any type of cell. They are derived from embryos or umbilical cord blood.
- **Tissue-Specific Stem Cells (Multipotent/Unipotent):** These generate only those cells specific to their respective tissues.
- **Induced Pluripotent Stem Cells (iPSCs):** These are cells created in a laboratory setting. They are engineered to function similarly to embryonic stem cells for the purposes of research and drug testing.

**About Stem Cell Therapy**

- Stem cell therapy also referred to as regenerative medicine aims to repair damaged tissues.
- In India, stem cell therapy is regulated under the 'National Guidelines for Stem Cell Research 2025,' which were jointly drafted by the Indian Council of Medical Research (ICMR) and the Department of Biotechnology (DBT).

**Floating LiDAR Buoy System**

- **Context:** The National Institute of Ocean Technology recently carried out a successful test of an **indigenously developed Floating LiDAR Buoy System off the coast of Muttom.**

**About the System**

- It is an advanced ocean-based device designed to monitor wind conditions over marine areas.
- The system integrates a floating buoy platform with LiDAR technology.
- It works by using laser beams to precisely assess atmospheric parameters.
- Developed to observe wind patterns and atmospheric conditions at sea.
- It measures wind speed, direction, and variation at different altitudes above the ocean surface.
- The buoy remains afloat on the sea and emits laser pulses into the atmosphere.
- These pulses reflect off particles in the air and return to the system.
- The reflected signals are analysed to determine wind behaviour and movement.
- This enables the collection of accurate, real-time data, even in locations where conventional tools are less effective.
- It can record detailed wind data up to about 300 metres above sea level, which is higher than many traditional systems.

**Significance**

- Enhances weather forecasting accuracy.
- Helps in better monitoring of storms and cyclones.
- Contributes to climate studies and understanding ocean-atmosphere interactions.

### Smog-Eating Photocatalytic Coatings

- **Context:** The Delhi government partnered with **Indian Institute of Technology Madras to study "smog-eating"** photocatalytic coatings for roads.

#### About Smog-Eating Photocatalytic Coatings

- Designed to neutralize harmful air pollutants like **nitrogen dioxide and volatile hydrocarbons, which contribute to toxic smog**
- Typically made with **titanium dioxide (TiO<sub>2</sub>)**
- Low-cost, chemically stable, and compatible with conventional construction materials
- TiO<sub>2</sub>-based construction materials can break down harmful gases and aid environmental cleaning
- Uses photocatalytic activity to **combat pollution**

#### Mechanism

- Light energy activates the coating
- Converts **toxic gases and organic pollutants into less harmful or harmless substances**
- Helps make air and water cleaner

### Model Context Protocol (MCP)

- **Context:** The Government has introduced a Model Context Protocol (MCP) server to facilitate linking of Artificial Intelligence tools with Official Statistical databases.
- The newly launched MCP server allows access to verified Government data through Artificial Intelligence applications and platforms, with the National Statistical Portal e-Sankhyiki.
- The Beta version of the MCP server which included 7 key statistical products (such as the Periodic Labour Force Survey, Consumer Price Index, Annual Survey of Industries, Index of Industrial Production, National Accounts Statistics), has now been extended for 21 products available on the eSankhyiki portal.

### About Model Context Protocol (MCP)

- The Model Context Protocol (MCP) is an open-source framework that enables Artificial Intelligence systems to seamlessly connect with external data sources, tools, and operational workflows.
- It serves as a standardized interface through which AI models can securely access and interact with databases, applications, or even local files.
- MCP was first introduced as an open standard in late 2024. Later, in early 2026, the Government of India rolled out its own version tailored for use in official statistical systems.
- Its primary goal is to bridge the gap between AI systems and real-world data sources. By doing so, it allows AI applications to generate more precise, reliable, and context-aware outputs by utilizing up-to-date, authenticated data instead of depending only on pre-trained information.

### Akasha300 3D Printer

- **Context:** Indian startup delivers Akasha300 3D printer to the Liquid Propulsion Systems Centre (LPSC), Valiyamala.
- **Can print rocket parts and functional prototypes for high-performance engineering.**
- Supports rapid prototyping and research in environments where conventional manufacturing is limited.
- Developed with support from Space Technology Innovation and Incubation Centre (STIIC), IIST. Backed by Kerala Startup Mission.

#### Significance

- Strengthens India's self-reliance in advanced additive manufacturing.
- Targeted for space and high-end industrial applications.

- Enables faster, precise, and reliable prototyping of complex components.
- It covers major conditions such as substance addiction, bipolar disorder, dementia, OCD, and schizophrenia.

### Technical Features

- Multi-material extrusion system for complex engineering materials.
- Dual-extrusion technology **operating up to 350°C (future upgrade to 500°C).**
- Modular extruder design allows addition of more extrusion systems.
- **Heated bed up to 110°C (upgradeable to 150°C).**
- Enclosed chamber maintains temperatures up to 80°C for stable printing.
- Suitable for high-performance materials requiring strict thermal control.
- It seeks to identify biomarkers and biological mechanisms to facilitate early diagnosis and personalized treatment.

### NIMHANS

▪ The **National Institute of Mental Health and Neuro Sciences is located in Bengaluru, Karnataka.**

▪ It was established under the **National Institute of Mental Health and Neuro Sciences, Bengaluru Act, 2012.**

▪ It functions as the **apex center for mental health and neuroscience education in India,** serving as a premier medical and research institution with autonomous status.

### Applications

- Functional components and prototypes for propulsion systems.
- Materials research and next-generation manufacturing technologies.
- Supports R&D and space sector innovation.

### SPACE

#### Agnikul's Agnite Engine

▪ **Context:** Indian private space company Agnikul Cosmos has achieved a significant breakthrough by successfully conducting a test firing of its Agnite engine.

#### About Agnite Engine

▪ Agnite is recognized as the largest single-piece rocket engine **produced using 3D printing technology.**

▪ Both Agnite and Agnilet are semi-cryogenic engines developed by Agnikul through advanced 3D printing methods.

▪ The engine is constructed using Inconel, a specialized **high-strength alloy capable of withstanding extremely high temperatures and stress.**

▪ These engines are specifically designed to power the booster stage of Agnikul's Agnibaan launch vehicle.

### India's First Repository for Psychiatric Disorders: CALM-Brain

▪ **Context:** With the aim of enhancing research, diagnosis, and treatment of mental illnesses, India has launched CALM-Brain the country's first digital data repository.

#### About CALM-Brain

- CALM-Brain is an acronym for the '**Comprehensive Data Repository on Brain Structure and Function in Psychiatric Disorders.**'
- It has been jointly developed by NIMHANS, the National Centre for Biological Sciences (NCBS), and the Rohini Nilekani Centre for Brain and Mind.
- By utilizing large-scale datasets, it aims to improve the understanding, diagnosis, and treatment of neuropsychiatric disorders.

# GEOGRAPHY

## ENVIRONMENT AND ECOLOGY

### Olive Ridley Turtle Conservation

- **Context:** The Wildlife Management Authority and officials of the Coringa Wildlife Sanctuary in Andhra Pradesh have successfully protected nearly 20,000 Olive Ridley turtle eggs on Hope Island.

### Coringa Wildlife Sanctuary

- It is located in the estuarine region of the Godavari River in Andhra Pradesh.
- It harbors India's second-largest mangrove forests.
- This sanctuary was established in 1978.

### Olive Ridley Turtles

- Olive Ridley turtles are known for their mass nesting behavior, referred to as Arribada.
- The Olive Ridley turtle is classified as a 'Vulnerable' species by the IUCN and is listed under Schedule I of the Wildlife Protection Act, 1972.

## PHYSICAL GEOGRAPHY

### Earthquake Risk Debate in Himalayan and Northeastern India

- **Context:** Scientists, engineers, and government officials are reviewing whether earthquake

risks to structures in the **Himalayan and northeastern** regions are being overestimated. A report is expected to be submitted to the Cabinet Secretariat.

### Withdrawal of Updated Standards

- The **Bureau of Indian Standards (BIS)** withdrew the revised IS 1893 (2025) guidelines after concerns that stricter norms could significantly impact ongoing and future infrastructure projects like metro systems.

### Seismic Zoning in India

- India is divided into **four seismic zones (II to V)**, with **Zone V (Himalayan region) being the most vulnerable**.
- Strong earthquakes (magnitude 8) have occurred here, capable of causing severe structural damage.

### Higher Peak Ground Acceleration (PGA)

#### Values Proposed

- The updated model suggests PGA values ranging from **0.15 g to 0.75 g** (and even higher globally), compared to lower values in current Indian standards.

### Global Comparison

- Countries like Japan and the U.S. design for higher acceleration values (around or above 1 g), while India's current standards are considered relatively low.

# INDIAN POLITY

## Postal Ballot Facility from Home for Senior Citizens and Persons with Disabilities

- **Context:** As per the regulations of the Election Commission of India, individuals aged 85 and above, as well as persons with disabilities, are permitted to cast their votes via **postal ballot from the comfort of their homes, Form 12D has been issued for this purpose.**
- Those unable to contact polling station officials directly may convey their information by calling the **helpline number 1913.**

### About Postal Ballots

- Under Section 60 of the Representation of the People Act, 1951, the facility of postal voting is extended to voters who are unable to appear in person.
- Eligible voters must submit an application to the Returning Officer (RO) within the specified timeframe.

### Eligible Categories as per the Conduct of Elections Rules, 1961

- **Special Voters:** Dignitaries such as the President, Governors, and Ministers.
- **Service Voters:** Personnel belonging to the Armed Forces, Paramilitary Forces, and government employees posted abroad.
- **Election Duty Personnel:** Officials, police personnel, and media representatives.
- **Absentee Voters:** Individuals aged 85 and above, Persons with Disabilities (PwDs), and essential service personnel.

### Absentee Voters – Section 60(c), RPA, 1951

- In 2019, the Election Commission of India (ECI) introduced a new category designated as "Absentee Voters."

- This category comprises the following individuals:

- **Senior citizens aged 85 years or above.**
- Persons with Disabilities (PwDs) with a disability level of 40% or higher.
- Individuals infected with COVID-19 or those exhibiting symptoms of the infection.
- Persons engaged in essential services. This includes the following categories of personnel: Railways, Telecommunications, Electricity, Health (Medical Services), Transport, Aviation, and the Fire Department.
- Journalists authorized by the Election Commission who are engaged in news gathering on election day.

## Singing 'Vande Mataram' Has Not Been Made Mandatory - Supreme Court

- **Context:** The Supreme Court ruled that, in accordance with a circular issued by the Union Ministry of Home Affairs, **singing 'Vande Mataram' is not mandatory.**

- The circular serves merely as a guideline regarding the rendition of the song at government functions and in schools.

- The circular does not specify any penal provisions for failing to sing the song.

### About 'Vande Mataram'

- On **January 24, 1950**, 'Vande Mataram' was officially adopted as the National Song of India by the Constituent Assembly of India.

- It was first published in **Bangadarshan in 1875** and was subsequently incorporated into **Bankim Chandra Chatterjee's novel, Anandamath, in 1882.**

- In **1896**, **Rabindranath Tagore** introduced the song to the public by singing it for the first

time at the **Indian National Congress session held in Calcutta.**

- The Constitution of India does not explicitly mention the National Song. However, **Article 51A(a)** mandates respect for national symbols.
- In 1907, **Bhikaji Cama unfurled the tricolor flag** for the first time outside India, at Stuttgart in Berlin the words 'Vande Mataram' were inscribed on that flag.

### **Cauvery Water Management Authority**

- **Context:** The Cauvery Water Management Authority (CWMA) has ordered the **Government of Karnataka to release 2.5 TMC** (Thousand Million Cubic feet) of water to Tamil Nadu during the month of April.
- This order has been issued based on the **final verdict delivered by the Supreme Court in 2018 regarding the sharing of Cauvery water.**
- The 2018 Supreme Court verdict allocated **404.25 tmcft to Tamil Nadu and 284.75 tmcft to Karnataka**, while also declaring the Cauvery a national asset.
- Two bodies the Cauvery Water Management Authority (CWMA) and the Cauvery Water Regulation Committee (CWRC) operate to implement the Supreme Court's verdict.
- **River water disputes fall under Article 262 of the Constitution of India.**

### **Cauvery River Water Tribunal**

- This Tribunal was constituted in 1990 under the **Inter-State River Water Disputes Act, 1956.**
- It was established by the **Central Government to resolve the water-sharing dispute among the states of Karnataka, Kerala, Tamil Nadu, and Puducherry**

### **Cauvery Water Management Authority**

- Exercising the powers conferred by Section 6A of the Inter-State River Water Disputes Act, 1956, the Central Government notified the 'Cauvery Water Management Scheme' in 2018.
- Through this scheme, the 'Cauvery Water Management Authority' (CWMA) and the 'Cauvery Water Regulation Committee' (CWRC) were constituted.
- The Cauvery Water Management Authority implements the Tribunal's verdict as well as the modified orders issued by the Supreme Court.

- It ensures the storage, allocation, regulation, and control of Cauvery water.
- It ensures that the State of Karnataka releases water at the prescribed levels at the Biligundlu inter-state border point.

### **About the Cauvery River**

- The Cauvery River **originates at Talakaveri in the Kodagu district of Karnataka; it flows through Karnataka and Tamil Nadu for a distance of approximately 800 km before emptying into the Bay of Bengal.**

### **Tributaries of the Cauvery River**

- **Left-bank tributaries:** Harangi, Hemavati, Shimsha, Arkavathi.
- **Right-bank tributaries:** Lakshmana Tirtha, Kabini, Suvarnavathi, Bhavani, Noyyal, Amaravathi.

### **Gujarat – Uniform Civil Code Bill 2026**

- **Context:** Gujarat has become the second state following Uttarakhand to pass the Bill Uniform Civil Code (UCC) in 2026.

### **About the Uniform Civil Code**

- It aims to replace religion-specific personal

laws by introducing a uniform, common law that applies equally to all individuals, regardless of their religion, caste, creed, gender, or sexual orientation.

### **Constitutional Provisions**

- Article 44 of the Indian Constitution serves as a directive principle, guiding the State to endeavor to secure a Uniform Civil Code for citizens throughout India.
- Matters such as marriage, divorce, adoption, and inheritance are listed in the Concurrent List (List III) of the Seventh Schedule to the Indian Constitution.

### **Current Status of UCC in India**

- Currently, a Uniform Civil Code is not in force on a nationwide basis in India.
- **Uttarakhand was the first state in independent India** to implement the Uniform Civil Code (UCC).

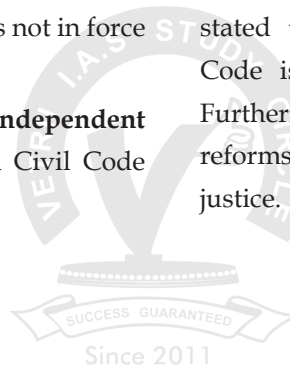
▪ **Goa follows a common civil code system based on the Portuguese Civil Code of 1867.**

### **The Supreme Court's Stance**

- In cases such as **Shah Bano (1985)** and **Sarla Mudgal (1995)**, the Supreme Court of India has recommended the implementation of a Uniform Civil Code.
- In the **Shayara Bano vs. Union of India (2017)** case, the Supreme Court ruled that the practice of **Triple Talaq was unconstitutional and violated the dignity and equality of Muslim women.**

### **21st Law Commission of India (2018)**

- In 2018, the 21st Law Commission of India stated that, at this stage, a Uniform Civil Code is "neither necessary nor desirable." Furthermore, it recommended undertaking reforms in personal laws to ensure gender justice.



## INDIAN ECONOMY

### Minimum Support Price

- **Context:** The Central Government has issued an order stating that **State Governments must not provide any additional incentive amounts** over and above the Minimum Support Price (MSP) fixed for agricultural produce.

### About Minimum Support Price

- The Minimum Support Price (MSP) is a price fixed by the Government of India to ensure that **farmers receive a minimum guaranteed income when market prices decline**.
- It was introduced **during the Green Revolution in 1966–67** with the aim of **boosting agricultural production and ensuring food security**.
- The Commission for Agricultural Costs and Prices (CACP) recommends this price based on economic and agricultural factors. The final decision regarding this is taken by the **Cabinet Committee on Economic Affairs (CCEA)**.
- To provide financial support to farmers, **the government fixes the MSP for a total of 22 crops**.
- This includes **14 Kharif crops, 6 Rabi crops, and 2 commercial crops**.
- Based on the prices of Mustard and Copra (dried coconut kernel), this support price is also extended to Toria and De-husked Coconut, respectively.

### India–China Trade

- **Context:** Border trade between India and China resumes after a hiatus of six years.
- The trade is being conducted through the **Lipulekh Pass** in the state of Uttarakhand.

### Timeline of India-China Relations

- **1950:** Diplomatic relations were established between **China and India**.

- **1954:** The **“Panchsheel” agreement**-comprising five principles was signed between China and India.
- **1962:** A brief border war took place between India and China. This conflict arose over the **disputed regions of Aksai Chin and Arunachal Pradesh**.
- **1976:** Full diplomatic relations were restored after a gap of 15 years.
- **1984:** A **“Most Favoured Nation” (MFN) agreement** for trade was signed.
- **2005:** Chinese Premier Wen Jiabao expressed support for India securing a permanent seat in the United Nations Security Council.
- **2006:** The **Nathu La Pass** was reopened for trade.

### Credit Guarantee Scheme for Microfinance Institutions-2.0 (CGSMFI-2.0)

- **Context:** The Government of India has introduced CGSMFI-2.0 with a total corpus of Rs.20,000 crore.

### About CGSMFI-2.0

- The scheme aims to offer **credit guarantee support to eligible Member Lending Institutions (MLIs)** so they can finance NBFC-MFIs and other MFIs, which in turn provide loans to new and existing small borrowers.

### NBFC-MFI Definition

- These are non-deposit taking NBFCs that must allocate at least **75% of their assets to microfinance loans**, which are collateral-free loans given to households with an annual income of up to Rs.3 lakh.

### Management

- The scheme is administered by the National Credit Guarantee Trustee Company (NCGTC), which is fully owned by the Department of Financial Services under the Ministry of Finance.

**Duration**

- It will remain in force until June 2026 or until guarantees worth Rs.20,000 crore are issued, whichever comes first.

**About Microfinance**

- Microfinance involves providing small-scale financial services such as loans, savings, and insurance to individuals and small enterprises who do not have access to formal banking systems.

**Significance of Microfinance in India****Financial Inclusion and Poverty Reduction**

- It bridges the gap left by traditional banking institutions by integrating low-income populations into the formal financial sector.

**Support to MSMEs and Entrepreneurship**

- It promotes small businesses by offering customized loans without requiring collateral.

**Women Empowerment**

- Women make up around **95% of borrowers in the microfinance sector**, highlighting its role in improving their economic independence (Economic Survey 2025–26).

**Index of Eight Core Industries**

- **Context:** The growth rate of the Index of Eight Core Industries (ICI) **declined to 2.3% in February (year-on-year), compared to 4.7% in January.**
- The Index of Eight Core Industries (ICI) is released by the Office of Economic Advisor, under the Ministry of Commerce and Industry.

**Sectors Showing Growth**

- **Cement** production increased by 9.3%
- **Steel** output rose by 7.2%
- **Fertilizer** production grew by 3.4%
- **Coal** production went up by 2.3%
- **Electricity** generation saw a marginal rise of 0.5%

**Sectors Showing Decline**

- Crude oil production **decreased by 5.2%**
- Natural gas output fell by **around 5%**
- Petroleum refinery products recorded a slight decline

**Overall Significance**

- The **eight core industries together account for more than 40% of the weight in the Index of Industrial Production (IIP)**, making their performance a key indicator of overall industrial growth.

**Index of Industrial Production (IIP)**

- The IIP is an economic measure that tracks **short-term changes in the production volume of a set of industrial goods in India.**
- It indicates the performance of the industrial sector, covering manufacturing, mining, and electricity.
- Released by the **National Statistical Office (NSO) under the Ministry of Statistics and Programme Implementation (MoSPI), Government of India.**
- **Base Year: 2011–12** (updated from the earlier base year 2004–05).

**Sectors Included - Mining, Manufacturing, Electricity**

- Designed to monitor industrial output, guide policy-making, and serve as a leading indicator of overall economic activity.
- Frequency of Release: Published monthly, typically with a one-month time lag.
- Used to assess sector-specific growth, evaluate inflationary pressures, and track the overall development of the industrial sector.

**India's Media & Creative Economy**

- **Context:** Union Minister of Railways of India unveiled three new initiatives aimed at strengthening India's media, broadcasting, and digital sector and promoting the "orange economy", or the creative economy.

- The creative economy includes industries where economic value is generated primarily from creativity, culture, technology, and intellectual property.
- The platform marks a shift from content viewing to active content participation, making WAVES OTT a platform not only for viewing but also for creation.

### **The three initiatives are**

- **National AI Skilling Initiative** in partnership with Google and YouTube through the Indian Institute of Creative Technologies (IICT)
- MyWAVES, a citizen creator platform on WAVES OTT
- Advanced Electronic Programme Guide and in-built satellite tuners in television sets for enhancing access to **DD Free Dish services**.
- MyWaves will support multiple formats including short videos, vertical videos and episodic content, and will offer a multilingual interface across Indian languages.
- MyWAVES is expected to serve as an important platform for emerging creators and storytellers from across the country

### **Advanced EPG & In-built Satellite Tuner in Television Sets**

- The **Ministry of Information & Broadcasting** has introduced television sets with built-in satellite tuners along with a new, user-friendly programme guide (EPG).
- With this initiative, viewers will be able to watch DD Free Dish channels directly on their television sets without the need for a separate set-top box, thereby reducing additional costs, wiring, and the hassle of multiple remotes.
- The Ministry of Information & Broadcasting is leading these efforts as part of its commitment to promoting the '**Orange Economy**', strengthening public broadcasting along with improved accessibility, and building an AI skilled, future ready workforce for the M&E Sector.

### **National AI Skilling Initiative**

- This initiative is being implemented through the Indian Institute of Creative Technologies (IICT), and is aimed at strengthening AI capabilities in areas such as animation, visual effects, gaming, comics (AVGC) and media technology.
- The curriculum will include modules on the art of storytelling, YouTube best practices, and advanced training using AI tools such as Gemini 3, Nano Banana, Veo, and Vertex AI.
- The initiative will support creators, media professionals, students and developers in building future-ready skills and contribute to India's emergence as a global hub for digital content and innovation.
- **Prasar Bharati** continues to play a key role in improving public broadcasting, while IICT will drive the AI skilling programme for the creative sector, and WAVES OTT will provide a platform for citizen participation and content creation including dovetailing of the Create in India challenge.

### **MyWAVES**

- MyWaves, a new feature within the WAVES OTT platform that will enable citizens to create, upload and share content.
- MyWaves is designed as a structured platform for user-generated content (UGC) that will also support participation in national initiatives such as the Create in India Challenge.

### **Mutual Credit Guarantee Scheme**

- **Context:** The Government has revised the Mutual Credit Guarantee Scheme (MCGS) to provide enhanced support to MSME

manufacturers and exporters, in alignment with the Budget 2025-26 provisions.

### About MCGS

- **Launched:** January 2025
- **Purpose:** Provide credit guarantee support to MSMEs for purchasing equipment/machinery
- **Guarantee Coverage:** 60% by National Credit Guarantee Trustee Company Limited
- **Credit Limit:** Up to ₹100 crore per eligible MSME
- **Beneficiaries:** Micro, Small, and Medium Enterprises (MSMEs)

### Key Modifications

- **Upfront Contribution:** Refundable 5% upfront contribution, with 1% refundable each from 4th year onwards, subject to loan performance
- **Eligibility Expansion:** Now includes Service Sector MSMEs
- **Project Cost for Machinery/Equipment:** Minimum cost requirement reduced to 60% of project cost (earlier 75%)
- **Guarantee Tenure:** Guarantee valid for 10 years

### Special Provisions for Exporters

- **Eligible Units:** Profitable exporters with at least 25% of sales turnover from exports in each of the last 3 years, meeting export realisation criteria
- **Guaranteed Loan Amount:** Rs.20 crore
- **Upfront Contribution:** 2% of loan (max Rs.40 lakh), refundable 1% each in 4th & 5th year
- **Guarantee Coverage:** 75% of defaulted amount
- **Guarantee Fee:** 1st year: Nil, Subsequent years: 0.50% of loan outstanding

### India's Inflation Target Extended (2026–2031)

- **Context:** The Union government asked the Reserve Bank of India (RBI) to target retail

inflation at 4% with a margin of 2% on either side for another five years ending March 2031.

### Continuation of Existing Policy

- This is the second extension of the same inflation target framework.
- Initially introduced in 2016, valid until 2021.
- Extended again in 2021, and now continued till 2031.

### Policy Framework

- Inflation targeting was formally adopted in 2016, giving the Reserve Bank of India the responsibility to control price rise.
- The framework operates through the Monetary Policy Committee (MPC), a six-member body.

### About Retail Inflation

- Retail inflation means the increase in prices of everyday goods and services that people purchase for personal consumption – basically, what consumers pay in markets and stores.
- It is tracked using the Consumer Price Index, which monitors the price movement of a fixed basket of commonly used items.
- Base year: In India, 2024 is currently used as the reference year for calculating CPI.
- The figures are published every month by the Ministry of Statistics and Programme Implementation.
- The Reserve Bank of India tries to keep retail inflation within 2% to 6%, maintaining a balance between price stability and economic growth.

### Variable Rate Repo (VRR) Auction

- **Context:** The Reserve Bank of India infused ₹55,837 crore into the banking system through a 3-day Variable Rate Repo (VRR) auction to ease tightening liquidity conditions.

**About Variable Rate Repo (VRR) Auction**

- VRR is a monetary policy mechanism used by the **RBI to supply funds to banks** when cash in the system is limited.
- Unlike the fixed-rate repo, the interest rate in a **VRR is determined through competitive bidding among banks**.
- The RBI announces the total funds available for lending (e.g., ₹1 lakh crore) and the duration of the repo (e.g., 3 days).
- Banks submit bids specifying the amount they want to borrow and the rate of interest they are willing to pay.
- Funds are allocated starting from the highest bid down to the cut-off rate, which is the lowest accepted rate.
- Banks pledge government securities as collateral, which they repurchase at the end of the repo period.

**Aim of VRR**

- **Liquidity Management:** Ensures banks have sufficient funds to meet day-to-day requirements.
- **Stabilizing Interbank Rates:** Prevents the Call Money Rate the rate at which banks lend to each other from rising sharply above the policy repo rate.

**Reduction in Special Additional Excise Duty (SAED) on Fuel**

- **Context:** The Union Government has lowered the Special Additional Excise Duty (SAED) on petrol and diesel in response to rising global crude oil prices.
- The SAED on petrol has been cut from 13 per litre to 3 per litre, while the duty on diesel has been reduced from ₹10 per litre to zero.

- These reductions are intended to offset the impact of crude oil prices exceeding \$100 per barrel and to avoid a sudden increase in retail fuel prices.

- This move supports Oil Marketing Companies (OMCs) by enabling them to keep fuel prices stable without facing extra financial pressure.

**About Special Additional Excise Duty (SAED)**

- SAED is an indirect tax **imposed by the Central Government**, mainly on petroleum products.

- It is levied under Section 147 of the Finance Act, 2002, and applies to items listed in the Fourth Schedule of the Central Excise Act, 1944.

- The Ministry of Finance reviews and adjusts SAED rates every two weeks, **depending on trends in international crude oil prices**.

- SAED is often used as a windfall tax to capture excess profits earned by oil producers during periods of high global oil prices.

- When global prices rise, reducing SAED helps prevent Oil Marketing Companies from transferring the burden to consumers through higher fuel prices.

- Higher SAED on exports discourages companies from exporting fuel when there is a risk of domestic shortages.

- The revenue collected from SAED is retained entirely by the central government and is not shared with state governments.

**Payments Vision 2028**

- **Context:** The Reserve Bank of India has unveiled its "Payments Vision 2028" report, titled Shaping India's Payment Frontier.

- This new roadmap replaces the earlier 4Es vision (Everyone, Everywhere, Every time)

of 2025 and shifts the emphasis toward strengthening user trust in the payment ecosystem.

### **About RBI Payments Vision 2028**

- It is a detailed policy framework and strategic plan aimed at guiding the future development of India's payment systems.
- The focus moves beyond expanding access to achieving global leadership, while ensuring that the digital payments ecosystem remains secure, interoperable, and resilient to evolving cyber risks.
- The initiative is led by the Reserve Bank of India.
- Its core objective is to empower users while ensuring strong protection against fraud and risks.

### **Key Features**

- Suggests a unified system for Trade Receivables Discounting Systems to improve MSME financing and support export-focused small businesses.
- A centralized mechanism that allows users to easily transfer their payment instructions when changing bank accounts, enabling account portability.
- Introduces an option to turn digital payment modes (like UPI, IMPS, etc.) on or off, similar to controls available for debit and credit cards, to reduce fraud risks.
- Proposes a system where both the sending and receiving banks share responsibility in case of unauthorized transactions, enhancing customer protection.
- Plans to implement Cyber Key Risk Indicators for non-bank payment entities to detect and prevent potential security threats early.
- Recommends a single-window approval system for international payments and regular comparison of transaction costs and speeds with global standards.
- Focuses on improving the security of physical cheques while introducing electronic cheques to combine reliability with faster processing.
- Envisions an AI-driven payments data repository to enhance transparency and support research-based policymaking.
- Recognizes smaller players through a continuous regulatory sandbox to encourage innovation in niche payment solutions.

# TAMIL NADU

## HISTORY & CULTURE

### ASI Approves Excavations

- **Context:** The Archaeological Survey of India (ASI) has permitted the Tamil Nadu State Department of Archaeology (TNSDA) to conduct excavations at eight historical sites in Tamil Nadu.
- Keeladi Excavation Continues: Permission includes the 11th phase of excavations at Keeladi, a major archaeological site linked to the ancient Tamil civilisation.
- The ASI had earlier approved underwater archaeological surveys near Poompuhar in September 2025.
- Poompuhar was historically known as Kaveripoompattinam, an ancient port city linked to early Tamil maritime trade.

### Excavations will also take place at

- Pattinamarudhur in Thoothukudi district
- Karivalamvanthanallur in Tenkasi district
- Manikollai in Cuddalore district
- Adichanur in Villupuram district
- Vellalore in Coimbatore district
- Telunganur-Mangadu in Salem district
- Nagapattinam

### Vembakottai excavations

- **Context:** Fragments of torpedo jars believed to have been used in Roman and West Asian regions for transporting liquids such as olive oil and wine have been unearthed during excavations at the Vembakottai archaeological site.
- The Vembakottai excavations carried out in three phases by the state archaeology

department have yielded several rare artefacts including terracotta seals, glass beads, conch bangles, microlithic tools, terracotta earrings, figurines, rings, discs and ivory items.

- The findings of the torpedo jar fragments is considered significant, as such jars are historically associated with overseas trade, especially in the Roman and West Asian regions.
- The presence of these fragments proves that ancient Tamil merchants traded along the Vaippar river basin with foreign regions.

### Artifacts Unearthed So Far at the Vembakkottai Excavation Site

- The site is situated in the Virudhunagar district.
- Gold ornaments were discovered here at depths ranging from 1.15 meters to 1.59 meters. One of these artifacts is conical in shape, while the other is rectangular.
- To date, over 1,300 artifacts have been unearthed, including an ivory die, a terracotta smoking pipe, an earring, and a stone weight.
- A Carnelian intaglio (seal stone) engraved with the image of a humped bull was discovered at this site. This marks only the second instance in the history of archaeological excavations in Tamil Nadu where such a stone has been found.
- Previously, a similar seal stone—engraved with the image of a wild boar—was discovered at Keeladi, near Madurai.
- Carnelian stones are typically found only in the states of Maharashtra and Gujarat. Furthermore, the 'intaglio' carving technique is of Roman origin.
- It is noteworthy that the Carnelian seal stones discovered at both Keeladi and Musiri belong to the Sangam period.

## The Irular Tribe Festival

- **Context:** The **Masi Magam festival** holds immense significance for the Irular community and serves as a vibrant expression of their deep-rooted cultural heritage.

### About the Irular Tribe

- The Irular tribe is found inhabiting the lower slopes and forests at the foothills of the **Nilgiris Mountains in Tamil Nadu**.
- They constitute the second-largest tribal group in the region, following the Badagas.
- This tribal community engages in the collection and production of honey, fruits, medicinal herbs, roots, resins, and natural dyes.
- In recent times, the Irular people have also become involved in catching and collecting snakes to harvest their venom.
- In Tamil Nadu, they have been officially categorized as a "Particularly Vulnerable Tribal Group" (PVTG).

## Toda Tribal Festival

- **Context:** In the Nilgiris, the Toda tribal people renovated a traditional temple and participated in the '**Narsners Kumbabishekam**' (Consecration) festival with songs, dances, and offerings.

### About the Toda Tribe

- The Todas are one of the most ancient ethnic groups inhabiting the **upper plateau of the Nilgiri Hills in Tamil Nadu**.
- They are divided into five clans: Peiki, Pekkan, Kuttan, Kenna, and Thodi.
- They possess a **unique language of their own, though it lacks a written script**.
- They reside in small villages (settlements) known as '**Munds**'.
- Their society follows a patrilineal lineage system and is further divided into two exogamous divisions: **Tharthazoll and Theveioll**.

- Their primary livelihoods are buffalo rearing and traditional embroidery work.
- Their unique **embroidery crafted** on white cloth using red and black threads—was granted a Geographical Indication (GI) tag in 2013.
- Every year, at the end of December or the beginning of January, they celebrate a buffalo festival known as '**Modhweth**'.

## ENVIRONMENT

### Prosopis juliflora

- **Context:** In a **Public Interest Litigation (PIL)** filed for the removal of *Prosopis juliflora* (Seemai Karuvelam), the Madurai Bench of the High Court has constituted a special committee—comprising retired High Court Judges A. Selvam and V. Bharathidasan—to monitor the tree removal operations.

### *Prosopis juliflora* (Seemai Karuvelam)

- The *Prosopis juliflora* is a rapidly growing, invasive plant species that poses a grave threat to water sources, soil fertility, and biodiversity.
- It is a shrub or a small tree (of the Mesquite variety) belonging to the Fabaceae family.
- It is native to Mexico, South America, and the Caribbean islands.
- It is considered one of the most detrimental invasive plant species affecting arid and semi-arid regions.

## AWARDS

### Sahitya Akademi Award 2025

- Tamil writer and essayist **S. Tamilselvan** has won the Sahitya Akademi Award for 2025 in the **literary criticism category**. The award is for his book, **Tamizh Sirugathaiyin Thadangal**, which traces the history of Tamil short stories.

- The book **Tamizh Sirugathaiyin Thadangal** comprehensively examines the evolution of the Tamil short story from 1913 to 1970.
- The book has been published by **Bharathi Puthakalayam**.
- He was born on May 27, 1954, in Nagalapuram, **Thoothukudi District**.
- His first poem, titled *Oru Naal Diary* was published in 1972.
- Mr. Tamilselvan, editor of the **literary magazine Semmalar**.
- Mr. Tamilselvan, a former president and general secretary of the Tamil Nadu Progressive Writers and Artistes Association, also served as a **State committee member of the Communist Party of India (Marxist)**.
- In **2008**, he received the **Best Story Writer Award from the Government of Tamil Nadu**.
- His short story, **Veyilodupoi**, was made into a **film titled Poo**.
- **Tamizh Sirugathaiyin Thadangal** begins with V.V.S. Iyer, whose *Kulathankarai Aalamaram* is considered the first Tamil short story.
- **between 2026–2050**, unlike most major Indian rivers expected to gain flow due to climate change.
- Northern counterparts brace for floods, according to a study by researchers at the **Indian Institute of Technology (IIT), Gandhinagar**.
- The study finds that the Cauvery experienced a **28% decline in streamflow between 1951 and 2012**, based on data from Kollegal, their analysis on actual river flows between 1951 and 2012, measured at nine stations representing nine major river basins.
- The nine rivers are the Cauvery (measured at Kollegal), the Ganga (Farakka), Brahmaputra (Bahadurabad), Indus (Bhakra), Godavari (Polavaram), Krishna (Kurundwad), Mahanadi (Basantpur), Narmada (Mandleshwar), and Tapi (Burhanpur).

### **Cauvery Water Dispute**

- Decades of disputes between **Karnataka and Tamil Nadu led to legal intervention**.

▪ **1990:** Establishment of the **Cauvery Water Disputes Tribunal (CWDT)**.

- Tribunal took 17 years to deliver its **final order (2007)**.

▪ Estimated total water availability: 740 tmcft (in a normal year).

- Water shares were allocated among basin states based on this estimate.

### **2018 Supreme Court verdict finalized allocations**

▪ **Tamil Nadu: 404.25 tmcft**

▪ **Karnataka: 284.75 tmcft**

- The Cauvery river was declared a **national asset** by the Supreme Court.

### **His other works**

- **Arasiyal Enakku Pidikkum**, which explains Left-wing politics in simple terms
- **JindabadJindabad**, recounts a trade unionist's experience in politics
- **Thiruppiaditha Varalaru** is a 1,000-page account of the 100-year history of the communist movement and the empowerment of peasants in the erstwhile composite Thanjavur district.

## **REPORT/SURVEY**

### **Cauvery Basin Faces Decline Despite Warming Climate**

- **Context:** The Cauvery river basin may see approximately **3.5% reduction in water flow**

## NATIONAL - NEWS

### Sujal Gaon ID

- **Context:** Union Minister for Jal Shakti, recently introduced the Sujal Gaon ID to strengthen digital monitoring of rural drinking water infrastructure.

#### About Sujal Gaon ID

- Sujal Gaon ID is a **unique digital identification system** designed to digitally map assets related to rural piped drinking water supply.
- These IDs have been created across 31 States and Union Territories and are connected to about 67,000 Sujalam Bharat IDs.
- Each Sujalam Bharat ID **combines the infrastructure ID of a scheme and the service area ID**, forming a complete digital record of rural water service delivery.
- The system is integrated with the **Sujalam Bharat national digital architecture**, enabling end-to-end mapping of the rural water supply chain from source to tap through unique IDs assigned to every village or service area.
- The initiative has been introduced by the **Ministry of Jal Shakti under the Jal Jeevan Mission**.

#### Key Facts about Jal Jeevan Mission (JJM)

- The Jal Jeevan Mission was launched on **15 August 2019**.
- Its objective is to provide safe and sufficient drinking water to all rural households through **Functional Household Tap Connections (FHTCs)**.
- The programme follows a community-driven approach and emphasises Information, Education, and Communication (IEC) activities to promote awareness and participation.
- **Nodal Ministry: Ministry of Jal Shakti.**

### Funding Pattern

- Centre-State sharing: 50:50
- Himalayan and North-Eastern States: 90:10
- Union Territories: Entire funding is provided by the Central Government

### Dumpsite Remediation Accelerator Programme (DRAP)

- **Context:** The Government of India has introduced the **Dumpsite Remediation Accelerator Programme (DRAP)** to speed up the removal of legacy waste dumpsites in cities across the country.

#### About DRAP

- DRAP is a one-year focused initiative aimed at **quickly clearing long-standing waste dumps in urban areas**.
- The programme adopts a systematic and accelerated strategy to eliminate large garbage dumps and recover the land for beneficial purposes such as parks, public amenities, and waste-management facilities.
- Launched in **November 2025**
- **Nodal Ministry: Ministry of Housing and Urban Affairs**
- The programme is being carried out **under Swachh Bharat Mission – Urban 2.0**.

#### Objectives

- Ensure complete removal of dumpsites within one year after adoption.
- Speed up the treatment and disposal of legacy waste while preventing the formation of new dumping grounds.
- Restore valuable urban land and improve environmental quality and public health.

#### Key Features

- Contributes to the target of eliminating all dumpsites by September 2026 under SBM-U 2.0.

- The programme prioritises 214 large dumpsites located in 202 urban local bodies, which together hold around 80% of the country's legacy waste.
- The Centre provides ₹550 per tonne as Central Financial Assistance (CFA) for treating legacy waste.
- Undertakes geological surveys and exploration activities to discover and assess mineral deposits.
- **Diamond Mining:** Manages India's only mechanised diamond mine located in Panna.
- Uses scientific mining techniques and environmental management practices to ensure responsible resource extraction.

### **5P Implementation Framework**

- The programme operates through five pillars— **Political leadership, Public financing, Partnerships, People's participation, and Project management.**

### **National Mineral Development Corporation (NMDC)**

- Context: NMDC Limited has achieved a milestone by becoming the **first mining company in India to produce 50 million tonnes of iron ore** in a single financial year (2025-26).

#### **About NMDC**

- NMDC Limited is a **Navratna Central Public Sector Enterprise (CPSE)** functioning under the **Ministry of Steel.**
- It is **India's largest iron ore producer** and plays a major role in the development of the country's mineral resources.
- **Established: 1958, Headquarters: Hyderabad**

#### **Objectives**

- To identify, develop, and responsibly utilize mineral resources within India.
- To maintain a stable domestic supply of iron ore for the steel sector.
- To contribute to India's target of increasing steel production **capacity to 300 million tonnes by 2030.**

#### **Major Functions**

- **Iron Ore Mining:** Operates large-scale mechanised mines primarily in Chhattisgarh and Karnataka.

### **Samridh Gram Phyigital Services Pilot Project**

- **Context:** The Union Minister for Communications, will inaugurate the Samridh Gram Phyigital Services Pilot Project at Umri village.

#### **About Samridh Gram Phyigital Services Initiative**

- Samridh Gram is a pilot initiative designed to deliver integrated services in rural areas through a **"phyigital" model, combining physical service centres with digital platforms.**
- It plans to establish Samridh Kendras at the village level that will function as hubs for providing a range of citizen services using digital connectivity.
- Implemented by: Department of Telecommunications
- The project is built upon the **digital infrastructure of BharatNet, one of the world's largest rural broadband connectivity programmes.**
- The initiative is being tested in three villages representing varied socio-economic conditions: **Umri, Narakoduru, Chaurawala**
- Each Samridh Kendra is planned to cater to several nearby villages within a radius of about 5 km.

**Objectives**

- To demonstrate how BharatNet connectivity can support the delivery of integrated government and public services at the village level.
- To create a scalable model for rural digital transformation by integrating digital infrastructure, governance services, and community participation.
- BharatNet Connectivity: Utilises high-speed rural broadband to ensure efficient digital service delivery.

**Central Adoption Resource Authority (CARA)**

- **Context:** The Central Adoption Resource Authority has issued nationwide guidelines aimed at **improving adoption procedures, ensuring the proper maintenance of records, and protecting the identity and rights of adopted children.**

**About Central Adoption Resource Authority**

- The Central Adoption Resource Authority (CARA) is a **statutory organisation** functioning under the **Ministry of Women and Child Development**, Government of India.
- It obtained statutory status through Section 68 of the **Juvenile Justice (Care and Protection of Children) Act, 2015.**
- CARA mainly manages the adoption process for orphaned, abandoned, and surrendered children through a network of approved adoption agencies.
- It serves as India's Central Authority for inter-country adoptions, following the provisions of the Hague Convention on Protection of Children and Co-operation in Respect of Intercountry Adoption, which **India ratified in 2003.**

**Functions of CARA**

- Encourage domestic adoptions and support **inter-state adoptions** in collaboration with state authorities.
- Supervise and regulate inter-country adoptions involving children from India.
- Formulate and update adoption regulations and related guidelines whenever required.
- Perform the responsibilities assigned to India's Central Authority under the Hague Convention on inter-country adoption.
- Carry out additional duties assigned by the government.

**Megamalai Wildlife Sanctuary**

- **Context:** Recently, the Zoological Survey of India (ZSI) identified nine new species during a faunal survey conducted in the Megamalai Wildlife Sanctuary.

**About Megamalai Wildlife Sanctuary**

- The sanctuary is situated in the **state of Tamil Nadu.**
- It lies along the **Tamil Nadu-Kerala border and acts as a buffer zone for the Periyar Tiger Reserve.**
- The sanctuary supports rich biodiversity, with numerous plant species and a wide range of wildlife.
- The vegetation varies from scrub forests at the foothills **to thick evergreen forests and shola grasslands at higher elevations.**
- Important plant species found here include Banyan tree, *Syzygium zeylanicum*, *Nothopegia vajravelui*, *Memecylon flavescens*, *Symplocos oligandra*, *Symplocos wynadense*, and *Meiogyne ramarowii*.
- The sanctuary hosts several animals such as elephants, tigers, leopards, Nilgiri tahr, gaur, spotted deer, barking deer, sambar deer, wild

boar, porcupine, Nilgiri langur, and lion-tailed macaque.

- The **wood snake is a species endemic to Megamalai Wildlife Sanctuary**, meaning it is found only in this region.

### Self Assessment Test and Help for Entrance Exams (SATHEE App)

- **Context:** The SATHEE App has been developed by the **Ministry of Education in collaboration with Indian Institute of Technology Kanpur**.
- It is a free digital learning platform **aimed at helping students prepare for various competitive examinations**.

#### Key Features

- Offers high-quality study resources such as video lectures, mock tests, study materials, and previous years' question papers.
- Designed especially to support students who cannot afford costly coaching institutes.
- Provides a structured and guided approach to exam preparation.
- Content is developed by subject experts from IITs and other reputed institutions.
- Acts as a comprehensive platform for students preparing for entrance and recruitment exams.
- The name SATHEE stands for Self Assessment Test and Help for Entrance Exams, highlighting its focus on self-evaluation and learning support.
- The app supports preparation for several major national-level exams, including: **JEE, NEET, CUET, CLAT, SSC exams, RRB exams, IBPS exams, ICAR entrance exams**
- With its wide range of exam coverage and free access to quality content, the SATHEE App has emerged as a multi-purpose and inclusive platform for competitive exam preparation in India.

### Dimethyl Ether (DME) – An Alternative Fuel

- **Context:** Researchers at CSIR-National Chemical Laboratory developed a patented method to convert methanol into Dimethyl Ether (DME), reducing reliance on imported cooking fuel.

#### About Dimethyl Ether

- DME is a synthetically produced fuel that serves as an **alternative to diesel fuel**.
- It is designed for use in **specially modified Compression Ignition (Diesel) engines**.
- It possesses a very high **Cetane number**, which indicates its excellent combustion properties.
- Under normal atmospheric conditions, DME exists as a **colour less gas**.
- It burns cleanly, generating very low emissions of pollutants such as **Nitrogen Oxides (NOx), Sulfur Oxides (SOx)**, and particulate matter.

#### Applications and Significance

- It delivers thermal efficiency comparable to that of conventional fuels.
- In terms of performance, it serves as an excellent alternative to diesel.
- It can be adapted to serve as an alternative fuel for standard diesel engines currently operating in India.

### India's First National Report on Nagoya Protocol Implementation

- **Context:** India has recently submitted its **first National Report (NR1) on the implementation of the Nagoya Protocol** to the CBD Secretariat, marking an important step in strengthening its biodiversity governance efforts.

#### About the National Report

- The report was prepared by the **Ministry of Environment, Forest and Climate Change** in partnership with the National Biodiversity

Authority and covers the period from November 2017 to December 2025.

- Between 2017 and 2025, India granted a total of 12,830 Access and Benefit Sharing (ABS) approvals.
- Of these, 5,913 were issued by the National Biodiversity Authority, while 6,917 were granted by State Biodiversity Boards and Union Territory Biodiversity Councils for the commercial use of biological resources.

### **Nagoya Protocol**

- The Nagoya Protocol is a supplementary agreement to the Convention on Biological Diversity (CBD).
- The CBD is an international treaty that was adopted at the **United Nations Conference on Environment and Development (Rio Earth Summit) in 1992 and came into force in 1993.**
- Its main goal is to ensure the **fair and equitable sharing of benefits arising from the use of genetic resources**, thereby supporting biodiversity conservation and its sustainable utilisation.
- The Nagoya Protocol was adopted in **2010 and became operational in 2014.**

### **Scope of the Protocol**

- It applies to genetic resources such as plants, animals, and microorganisms.
- It also covers traditional knowledge associated with these resources.
- Additionally, it addresses benefits generated from their use, including research and commercial applications.

### **Core Principles**

- **Access:** Users must obtain Prior Informed Consent (PIC) from the providing country before accessing biological resources.

- **Benefit Sharing:** The benefits derived must be shared in a fair and equitable manner based on Mutually Agreed Terms (MAT).

- **Compliance:** It ensures that the use of resources follows the conditions set under PIC and MAT.

### **India's Institutional Framework**

- India's ABS system functions under the **Biological Diversity Act, 2002**, and is supported by the Biological Diversity Rules, 2024 and ABS Regulations, 2025.

- It operates through a three-tier structure: the National Biodiversity Authority at the national level, State Biodiversity Boards/ Union Territory Biodiversity Councils at the state level, and Biodiversity Management Committees (BMCs) at the grassroots level.

- Additionally, India has issued 3,556 Internationally Recognized Certificates of Compliance (IRCCs), accounting for more than 60% of the global total.

### **India's Innovation Landscape**

- **Context:** India's improving position in global innovation rankings stands in contrast to its weak foundational factors, highlighting structural shortcomings and the necessity for greater involvement from the private sector.

### **Current State of India's Innovation Ecosystem**

- India secured the **38<sup>th</sup> position out of 139 economies** in the Global Innovation Index (GII) 2025.

- In 2024–25, domestic applicants **contributed 62% of total patent filings**; however, India still trails behind countries like China and the United States in overall filings.

- Gross expenditure on research and development remains low at 0.65% of GDP.

- India stands at **101st out of 119 economies** in terms of employment opportunities for women with higher education qualifications.

### Gajapati Empire

- Context:** A recently unearthed **15<sup>th</sup> century Telugu inscription in Guntur, Andhra Pradesh**, has been linked to the Gajapati rulers of Odisha.

#### About the Gajapati Empire

- The Gajapati Empire (c. 1434–1541 CE) was a prominent medieval Hindu kingdom established by **Kapilendra Deva in Odisha**. The term “Gajapati” translates to “Master of Elephants.”
- At the height of its power in the 15th century, the empire stretched from the **Ganges River in the north to the Kaveri River in the south**.
- The rulers were strong patrons of the **Odia language**, and it was during this period that **Sarala Das composed the first Odia version of the Mahabharata**.
- The Gajapatis played a key role in enhancing the Jagannath Temple at Puri and also built the Kapilesvara Temple in Bhubaneswar.
- Although mainly followers of Vaishnavism, they practiced the Hari-Hara tradition, integrating the worship of both Shiva and Vishnu.
- Prataparudra Deva** the last significant ruler of the dynasty, during whose reign the Vaishnava saint **Chaitanya Mahaprabhu** arrived and influenced the region.

### Samarth Incubation Programme

- Context:** The **Centre for Development of Telematics (C-DOT)** recently hosted a Demo Day in New Delhi, showcasing 18 startups selected under its Samarth Incubation Programme.

#### About C-DOT and the Programme

- C-DOT is an autonomous research and development institution in the **field of telecommunications, established in 1984 under the Ministry of Communications**.
- The Samarth Incubation Programme, **introduced by C-DOT in 2025**, provides financial assistance along with infrastructure support to startups recognized by DPIIT.
- The programme is carried out with support from Software Technology Parks of India (STPI), functioning under **the Ministry of Electronics and Information Technology (MeitY), along with TiE (The Indus Entrepreneurs)**.
- Its primary aim is to **encourage homegrown innovation and help early-stage startups** move from the idea stage to market-ready solutions.
- The initiative targets sectors such as telecom software, cybersecurity, next-generation networks like 5G and 6G, artificial intelligence (AI), the Internet of Things (IoT), and quantum technologies.

#### Election Commission of India

- Context:** The Election Commission of India has introduced additional digital facilities-accessible **via online portals and mobile applications**-for filing nomination papers for state legislative assembly elections (including those in Tamil Nadu and Puducherry) as well as by-elections.
- Nomination papers can be **filed using the Suvidha App**. This application was upgraded to **Suvidha 2.0 in 2024**.
- This service has now been integrated into the **ECI Net Portal platform**.
- ECINET** is a comprehensive digital interface currently being developed by the Election

Commission of India (ECI). It consolidates over 40 mobile and web applications-currently in use-into a single unified platform.

### **About the Election Commission of India**

- The Election Commission of India conducts elections for the **Parliament, State Legislative Assemblies, the President, and the Vice President of India.**
- It was constituted under **Article 324 of the Constitution of India.**
- It is a **permanent constitutional body established on January 25, 1950.**
- Initially a single-member body, it currently functions as a multi-member body comprising a Chief Election Commissioner (CEC) and two Election Commissioners.
- Operating as a **multi-member body since October 1, 1993**, decisions within the Commission are taken based on a majority vote.
- The members are **appointed by the President of India.**
- Their tenure is for a **period of 6 years or until they attain the age of 65**, whichever occurs earlier.
- Their salary and status are equivalent to those of **Judges of the Supreme Court of India.**
- The Chief Election Commissioner (CEC) can be removed from office by the President of India—with the approval of the Parliament—following a procedure similar to that adopted for the removal of a Supreme Court Judge.
- **January 25<sup>th</sup> is celebrated as National Voters' Day.**

### **Maternity Leave for Adoptive Mothers**

- **Context:** The Supreme Court of India has ruled that **all women who adopt children are**

**eligible for 12 weeks of paid maternity leave**, irrespective of the child's age.

- Maternity benefits in India are governed by the **Maternity Benefit Act, 1961.** Through the 2017 amendment, adoptive and commissioning mothers were, for the first time, granted 12 weeks of paid leave.
- However, a limitation was imposed this benefit applied only **if the adopted child was younger than 3 months.**
- This condition was later included in the Code on Social Security, 2020 under Section 60(4).
- Adoption procedures regulated by the **Central Adoption Resource Authority rarely allow adoption of infants below three months.**
- Consequently, most adoptive mothers were excluded from maternity leave benefits, making the provision ineffective in practice.
- The **age-based restriction was found to be arbitrary and discriminatory.**
- It violates **Article 14 (right to equality) and Article 21 (right to life and dignity)** of the Indian Constitution.
- The Court affirmed that adoption is a legitimate and equal form of parenthood, and adoptive mothers must not be treated differently from biological mothers.

### **Revamped Mission Vatsalya Portal**

- **Context:** The **Ministry of Women and Child Development** has launched the **Revamped Mission Vatsalya Platform-** an integrated digital platform for **child protection services across India.**
- It aims to ensure the care, protection, rehabilitation, and development of children through an integrated and technology-driven system.

- This platform integrates previous services— such as **Khoya-Paya and TrackChild**—into a single digital interface.
- It facilitates coordination among relevant stakeholders at the state and district levels, including Child Protection Units, Child Welfare Committees (CWC), and Juvenile Justice Boards (JJB).
- It enables the real-time monitoring, data management, and efficient implementation of child protection schemes.
- The platform maintains digital records regarding child care plans, case histories, rehabilitation measures, and services for children under both institutional and non-institutional care.
- The **CARINGS portal**— which digitizes adoption procedures— has now been integrated with the Mission Vatsalya website.

### **Mission Vatsalya**

- This is a **Centrally Sponsored Scheme** launched in the year 2021–22 for the protection and welfare of children.
- Coordinating Ministry: **Ministry of Women and Child Development**.
- It serves as a guiding framework aligned with the **Sustainable Development Goals (SDGs)**, specifically those pertaining to child welfare and protection.
- **Objective:** To ensure the care, protection, rehabilitation, and development of children, guided by the motto: **“Leave no child behind.”**

### **Constitutional Provisions for Child Protection**

- **Article 15(3):** Empowers the State to enact special laws and schemes for children.
- **Article 21A:** Guarantees free and compulsory education for children between the ages of 6 and 14.
- **Article 23:** Prohibits human trafficking, forced labour, and bonded labour.
- **Article 24:** Prohibits the employment of children under the age of 14 in hazardous occupations.
- **Article 39(f):** Ensures the healthy development and dignity of children, as well as protection against exploitation.
- **Article 45:** Mandates that the State shall endeavour to provide Early Childhood Care and Education (ECCE) for children up to the age of 6.

### **Legal Framework for Child Protection**

- **Juvenile Justice (Care and Protection of Children) Act, 2015:** Focuses on the care and rehabilitation of children in vulnerable situations.
- **POCSO Act, 2012**
- **Prohibition of Child Marriage Act, 2006:** Aims to prevent child marriages and render such marriages illegal.
- **Child Labour (Prohibition and Regulation) Amendment Act, 2016:** Prohibits child labour while regulating it under certain specific conditions.

### **National Geo-heritage Site**

- **Context:** The hilly terrain surrounding the **Kalinjar Fort in Banda** has recently been officially designated as a "National Geo-heritage Site" by the Geological Survey of India (GSI).

### **About Geological Survey of India (GSI)**

- The Geological Survey of India was established in **1851 by Sir Thomas Oldham**.
- In addition to identifying geo-heritage sites and national monuments, the GSI conducts geological surveys and research across India.

- The Ministry of Mines provides policy guidance and administrative support to the Geological Survey of India (GSI).

### **Kalinjar Fort**

- Kalinjar Fort is situated in the Banda district of the state of **Uttar Pradesh**.
- It is surrounded by the **Vindhya mountain range and the Ken River**.

### **India's Bioeconomy Growth**

- **Context:** India's bioeconomy has grown significantly – from about **\$10 billion in 2014 to more than \$195 billion in 2025**- showing the country's rapid rise as a global biotechnology center.

### **About Bioeconomy**

- The bioeconomy refers to the use of biological resources, supported by knowledge and innovation, to create goods, services, and processes across various sectors while ensuring sustainability.
- It includes areas such as agriculture, forestry, fisheries, food industries, biotechnology, and bioenergy.

### **Subsectors of India's Bioeconomy**

- **BioPharma:** Focuses on creating healthcare products and services like medicines, medical equipment, and lab-grown tissues or organoids.
- **BioAgri:** Involves the development of genetically engineered crops and animals, advanced farming techniques, and bio-based agricultural products (e.g., Bt Cotton).
- **BioIndustrial:** Deals with producing bio-based chemicals and materials using enzymes, biosynthetic methods, and recombinant DNA technology.

### **Growth of India's Bioeconomy**

- Over the past decade, **India's bioeconomy has grown nearly 20 times**, showing strong progress in biotechnology.
- **India stands 3rd in the Asia-Pacific region and 12<sup>th</sup> globally in biomanufacturing.**
- It contributes **around 5% to the country's GDP**, reflecting its rising economic importance.
- The sector is divided into four main parts: BioIndustrial (47%), BioPharma (35%), BioAgri (8%), and BioResearch (9%).

### **Major Government Initiatives**

- **BioE3 Policy** (Biotechnology for Economy, Environment and Employment): Encourages eco-friendly biomanufacturing and bio-based industries, with focus on smart proteins, targeted therapies, and climate-resilient farming.
- **Research, Development and Innovation (RDI) Fund:** A ₹1 lakh crore fund designed to promote advanced technology innovation and support startup growth.
- **Startup and Incubation Support:** Expanding biotech clusters and innovation centers across the country.
- **Inclusive Talent Development:** Promotes participation from tier-2 and tier-3 cities, women entrepreneurs, and young scientists.

### **Translation of the Kondrai Vendhan Text**

- **Context:** A national workshop regarding the translation of **Avvaiyar's Kondrai Vendhan was held at Banaras Hindu University (BHU)**.
- This workshop was jointly organized by the **Department of Indian Languages and the Central Institute of Classical Tamil (CICT)**.
- **The Central Institute of Classical Tamil** is actively engaged in the task of translating Tamil literary works into other languages.

- As a first phase of this initiative, **Avvaiyar's Aathichoodi** has been translated into more than **60 Indian and foreign languages**.
- Through Visva-Bharati University, the **Pudiyaa Aathichoodi, authored by Subramania Bharati, has also been translated into several languages**.
- Currently, the translation of Avvaiyar's **Kondrai Vendhan** is underway.
- The work is being translated into various languages listed in the **Eighth Schedule of the Constitution of India, as well as into the languages of the Northeastern states**.
- It is also being translated into 12 foreign languages, including Chinese, Japanese, French, German, Korean, and Sinhala.
- This endeavor serves to strengthen cultural connections across different languages.
- **The primary objective of this project is to translate the work into more than 40 languages.**

### **Urea Supply Threatened by West Asia Conflict**

- **Context:** The ongoing West Asia conflict has disrupted LNG and fertiliser supply chains, posing risks to India's urea production just before the Kharif cropping season.

#### **India relies heavily on West Asia for**

- LNG used in domestic urea manufacturing
- Direct urea imports, accounting for 71% of total imports from the region

#### **About Urea**

- Urea is a nitrogen-rich chemical compound with the formula  $\text{CO}(\text{NH}_2)_2$ .
- It contains 46% nitrogen, making it the most concentrated and widely used nitrogenous fertiliser.

- Made from ammonia and carbon dioxide using the Haber-Bosch method and urea synthesis process
- Natural gas (LNG) is a key input as it provides hydrogen for ammonia production
- India has transitioned from naphtha/fuel oil-based plants to gas-based plants

#### **Benefits of gas-based production**

- Higher efficiency
- Lower emissions
- Supports sustainable fertiliser production

#### **Prakriti 2026**

- **Context:** 'Prakriti 2026' an international conference on carbon markets organized by the Bureau of Energy Efficiency (under the Ministry of Power) and the Ministry of Environment, Forest and Climate Change (MoEFCC) was held in New Delhi.
- This serves as a flagship event conducted under the aegis of the 'Bharat Electricity Summit 2026,' with a specific focus on carbon markets and climate action.

- The conference aimed to facilitate discussions on carbon markets, climate finance, and green growth, placing particular emphasis on mobilizing finance and strengthening global partnerships to achieve the Nationally Determined Contribution (NDC) targets outlined in the Paris Agreement.

#### **Key Initiative - Carbon Market Infrastructure**

- Launch of the Indian Carbon Market portal to facilitate and regulate carbon trading within India.
- Strengthening the Carbon Credit Trading Scheme (CCTS) as a pivotal market-based mechanism.

### Carbon Credit Trading Scheme (CCTS)

- This is a market-based mechanism operating under the **framework of the Indian Carbon Market (ICM)**.
- Its objective is to **mitigate Greenhouse Gas (GHG)** emissions by establishing a price for carbon and enabling carbon trading.
- It serves as a successor to the Perform, Achieve and Trade (PAT) scheme, shifting the focus from mere energy efficiency to tangible emission reduction.
- Under this scheme, Carbon Credit Certificates (CCC) are issued, wherein 1 CCC represents an emission reduction equivalent to 1 tonne of CO<sub>2</sub>.

### GARBH-INi Programme

- **Context:** The Union government recently presented the findings of the **decade-long GARBH-INi programme at the India Habitat Centre in New Delhi**.
- GARBH-INi (Interdisciplinary Group for Advanced Research on Birth Outcomes), supported by the Department of Biotechnology, is the **largest pregnancy cohort study conducted in India**.
- It tracks more than 12,000 pregnant women to examine the causes of preterm births and identify genetic indicators that can help predict the likelihood of early delivery.
- The initiative **aims to enhance maternal healthcare and lower neonatal mortality by developing indigenous, AI-based solutions**.
- In terms of implementation, Phase I began in 2015 with the enrollment of pregnant participants. Phase II, launched in 2021, followed their children through the critical first 1,000 days after birth.

- **Garbhini-GA2 is an indigenous AI model created specifically for Indian women by IIT Madras and THSTI to precisely estimate fetal age.**
- Additionally, **GARBH-INi-DRISHTI** serves as a data-sharing platform that offers access to biospecimens and clinical datasets for researchers working in the field of maternal and child health.

### LPG ATM

- **Context: India's first fully automated LPG ATM**, called the Bharatgas Insta LPG Machine, has been recently introduced in Gurugram.
- It has been developed by Bharat Petroleum Corporation Limited (BPCL) as a pilot project under its Bharatgas initiative.
- The system operates as a round-the-clock, self-service kiosk where registered consumers can make digital payments and receive a filled LPG cylinder within 2-3 minutes.
- The machine supplies modern 15 kg fibre composite cylinders, which are lighter than traditional ones (about 31 kg).
- These cylinders are corrosion-resistant and semi-transparent, allowing users to easily check the gas level.
- This initiative offers an alternative method of LPG distribution and promotes technological advancement and innovation in the fuel retail sector.

### Strategic Petroleum Reserves

- **Context: The Ministry of Petroleum and Natural Gas** informed the Rajya Sabha that India's Strategic Petroleum Reserves (SPRs) are currently at 64% of their total capacity.

### About Strategic Petroleum Reserves

- These are massive reserves of crude oil stored underground to ensure energy security and for use during times of supply disruptions.
- This initiative emerged following the global oil crisis of 1973.
- These reserves are managed by **Indian Strategic Petroleum Reserves Limited (ISPRL)**, a subsidiary operating under the Oil Industry Development Board (OIDB).
- This constitutes an integral part of India's energy security strategy. Furthermore, it aligns with the objective of maintaining a reserve equivalent to **90 days of consumption, as recommended by the International Energy Agency (IEA)**.

### Strategic Petroleum Reserves (SPRs) – Locations

- **Phase-I:** Located at Visakhapatnam (Andhra Pradesh), and Mangaluru and Padur (Karnataka).
- **Phase-II:** Expansion works are planned for Chandikhol in Odisha and Padur in Karnataka.

### Strategic Petroleum Reserves (SPRs) – Objective

- The SPRs **aim to ensure energy security** by providing a short-term buffer capable of meeting India's crude oil requirements for approximately 9.5 days during emergency situations.
- This serves to safeguard the nation's economy against global oil price fluctuations.

### India's Updated Climate Targets

- **Context:** India has pledged that by 2035, 60% of its installed electric capacity will comprise non-fossil sources.

### Nationally Determined Contributions (NDCs)

- Nationally Determined Contributions (NDCs)

are **climate action targets** submitted under the United Nations Framework Convention on Climate Change.

- They are part of commitments under the Paris Agreement to reduce global warming.

### India's New 2035 Climate Targets

- **60% of installed electricity** capacity from non-fossil fuel sources.
- **47% reduction in emissions** intensity of GDP (from 2005 levels).
- **Increase carbon sink to 3.5-4 billion tonnes of CO<sub>2</sub> equivalent.**

### Current 2030 Targets

- **50% installed power capacity** from non-fossil sources.
- **44% reduction** in emissions intensity.
- Carbon sink target: To increase its carbon sink to **2.5 billion tonnes - 3 billion tonnes.**

### India's Climate Progress

- Around 52% installed capacity already from non-fossil sources (target achieved early).
- However around 25% of actual electricity generation is non-fossil.
- Carbon sink: 1.97 billion tonnes CO<sub>2</sub> equivalent created (2005–2019).
- Forest & tree cover: 24.6% (2021), up from 21% in 2005 (still below 33% goal).
- Emissions intensity reduced by 36% (2005–2020).

### Conference of Parties (CoP)

- Conference of Parties is a body of nations that convenes annually to **discuss climate issues and transition their economies away from fossil fuel.**
- **India and Argentina were the only two G-20 countries** that had not announced a 2035 NDC as of December 31, 2025.

- A total of 128 parties, representing about 78% of global greenhouse gas emissions, had submitted new NDCs by that date.
- Courts have connected this duty with Article 21, thereby expanding the right to life to include a clean and healthy environment.

### Corporate Social Responsibility (CSR)

- **Context:** By referring to **Article 51A (g)**, courts have highlighted that the freedom to run a business also carries a duty to protect and restore the environment.

#### About Corporate Social Responsibility (CSR)

- CSR is a framework where companies operate in a way that benefits society and the environment, while remaining accountable to stakeholders.
- **It broadly covers four areas:**
  - Environmental responsibility
  - Ethical practices
  - Philanthropic activities
  - Economic/financial responsibility

#### CSR in India

- Under Companies Act 2013 Section 135, certain companies are legally required to spend on CSR.
- Eligible companies must allocate **at least 2% of their average net profits** (from the past three years) toward CSR initiatives annually.
- The **Board of Directors is responsible for ensuring compliance.**
- CSR helps balance profit-making with social responsibility, encouraging businesses to contribute positively to society.

#### Article 51A(g) -Environmental Duty

- Article 51A(g) is a Fundamental Duty under Part IVA of the Constitution.
- Introduced through the 42nd Constitutional Amendment, it requires citizens to protect and improve the natural environment, including forests, rivers, lakes, and wildlife.

### AI in Disaster Management

- **Context:** The Government of India emphasized the growing role of **Artificial Intelligence (AI) in managing disasters**, following the passage of the **Disaster Management (Amendment) Act, 2025.**
- AI and Machine Learning are being applied across all stages of disaster management including preparedness, mitigation, response, and recovery **to improve forecasting, decision-making, and coordination.**

#### Weather Forecasting & Early Warnings

- The India Meteorological Department uses AI/ML for **7-day weather predictions.**
- Cyclone tracking and intensity forecasting are carried out **under Mission Mausam.**

#### Flood Forecasting & Hydrological Modelling

- The Central Water Commission applies AI for short-term flood predictions.
- Real-time flood alerts are provided via digital platforms, using rainfall-based predictive models.

#### Risk Mapping & Decision Support

- The National Disaster Management Authority has developed **Web-DCRA and DSS tools.**
- Dynamic risk maps support cyclone preparedness and evacuation strategies.

#### Remote Sensing & Hazard Mapping

- The National Remote Sensing Centre created Flood Hazard Atlases.
- AI combined with satellite imagery is used to identify high-risk areas.

### **Avalanche Forecasting & Geo-Intelligence**

- The Defence Research and Development Organisation uses AI for:
  - Predicting avalanches
  - Detecting hazards via remote sensing
  - Developing autonomous forecasting systems

### **Transgender Rights Bill**

- **Context:** Transgender Rights Bill proposes major amendments to the Transgender Persons (Protection of Rights) Act, 2019 to strengthen legal safeguards.
- Eliminates the earlier provision that allowed individuals to identify their gender without external approval.
- Introduces a medical board, led by senior medical officials, to help certify transgender identity.
- Brings in stricter penalties for crimes against transgender persons, including severe punishments up to life imprisonment.
- Alters the structure of the National Council for Transgender Persons by including rotating representation from States and Union Territories.

### **Key Issues and Criticisms**

- Moves away from self-identification, placing control with authorities instead of individuals.
- May leave out groups like transmen, non-binary, and gender-diverse persons from protection.
- Requirement of medical verification is viewed as intrusive and harmful to dignity.
- Risks treating gender identity as a medical condition, possibly leading to discrimination or harassment.
- Criticized for being passed without detailed review or sufficient input from the transgender community.

### **PRISM-SG Portal**

- **Context:** The Union Minister for Road Transport and Highways recently introduced the PRISM-SG Portal in New Delhi.

#### **About the Portal**

- **PRISM-SG (Portal for Rail-Road Inspection & Stages Management - Steel Girders)** is designed to improve efficiency, transparency, and coordination among multiple agencies involved in infrastructure projects.
- The portal has been created to **digitize approval and inspection procedures** related to the construction of Road Over Bridges (ROBs).
- It incorporates components such as the **Quality Assurance Plan (QAP), Welding Procedure Specification Sheet (WPSS)**, and inspection of steel girders during fabrication stages.
- It allows complete online handling of processes, including document submission, examination, query generation and resolution, approvals, inspection scheduling, and uploading of reports, photos, and test results.
- The system ensures **real-time tracking and maintains a full audit trail** for transparency and accountability.
- It provides a unified digital platform connecting all major stakeholders like road authorities, Indian Railways, contractors, fabricators, and inspection bodies.

### **India's Target: Producing 5,000 Tons of REPM by 2030**

- **Context:** India has set a target to achieve the capability of domestically producing 5,000 tons of **Rare Earth Permanent Magnets (REPM)** by the year 2030.

#### **About Rare Earth Permanent Magnets (REPM)**

- Rare Earth Permanent Magnets (REPM) are advanced magnets manufactured using

rare earth elements such as **Samarium, Neodymium, Praseodymium, Dysprosium, and Cerium.**

- Compared to Ferrite or Alnico magnets, **REPMs possess higher energy density, superior resistance to demagnetization, greater magnetic strength within a compact size, and deliver excellent performance** in high-precision applications.
- India holds the **world's third-largest reserves of rare earth elements**, accounting for 6% of the total global reserves.
- With the aim of establishing an integrated, self-reliant ecosystem, the Union Budget for 2026–27 announced the creation of dedicated **Rare Earth Element corridors across the states of Tamil Nadu, Kerala, Odisha, and Andhra Pradesh.**
- A scheme worth ₹7,280 crore has been approved to incentivize the production of Sintered Rare Earth Permanent Magnets, with the objective of achieving an integrated annual production capacity of 6,000 tons within India.

### **Khelo India Tribal Games**

- **Context:** The first edition of the Khelo India Tribal Games is taking place in Chhattisgarh, with events hosted in three cities—Raipur, Jagdalpur, and Sarguja. The competition is being over a period of ten days.

### **About Khelo India Tribal Games**

- This marks the first nationwide multi-sport event under the Khelo India Programme that is exclusively focused on tribal athletes.
- The Games include seven medal disciplines athletics, football, hockey, weightlifting, archery, swimming, and wrestling along with demonstration events like mallakhamb and kabaddi.
- More than 60,000 participants from 30 states and Union Territories are competing for a total

of 338 medals.

- The event also acts as a talent scouting platform, with a dedicated Talent Identification and Development Committee (TIDC) tasked with identifying promising athletes for advanced training and support under the Khelo India initiative.

### **Mascot**

- The official mascot is Morveer, a name formed from the Chhattisgarhi words “Mor” (meaning ‘our’) and “Veer” (meaning ‘brave’), symbolising a sense of belonging and courage.

### **National Repository for Deep-Sea Fauna**

- **Context:** The Center for Marine Living Resources & Ecology (CMLRE), **Kochi, Kerala, under the Ministry of Earth Sciences (MoES),** has achieved a landmark milestone in marine conservation.

- The Ministry of Environment, Forest and Climate Change (MoEFCC) has officially designated CMLRE's “**Bhavasagara**” **Referral Centre as a National Repository for Deep-Sea Fauna.**

- This prestigious recognition, conferred under the provisions of the Biological Diversity Act, 2002, establishes the Centre as a critical national facility for the preservation, study, and documentation of India's vast deep-sea biological heritage.

- The “**Bhavasagara**” Referral Centre currently serves as a **vital scientific hub, housing an extensive collection of over 3,500 taxonomically identified and geo-referenced voucher specimens.**

- The collection spans a diverse range of marine life, from invertebrates including cnidarians, annelids, molluscs, arthropods, and echinoderms to vertebrates such as elasmobranchs and teleostean fishes.

**About CMLRE**

- The Centre for Marine Living Resources & Ecology (CMLRE) is a premier institute under the Ministry of Earth Sciences, Government of India, dedicated to the exploration, management, and conservation of marine living resources in the Indian Exclusive Economic Zone (EEZ) and adjacent deep seas.

**OPU-IVF-ET technique**

- **Context:** the ICAR-Indian Veterinary Research Institute (IVRI), Bareilly, has successfully produced five healthy Sahiwal calves for the first time using the advanced OPU-IVF-ET technique.

**About ICAR**

- The Indian Council of Agricultural Research (ICAR), set up in 1929, is an **autonomous organization** functioning under the **Ministry of Agriculture and Farmers Welfare**.
- It oversees and coordinates agricultural research and education across the country.

**About OPU-IVF-ET Technology**

- **This is an assisted reproductive method carried out in three stages:** Ovum Pick-Up (OPU), In Vitro Fertilisation (IVF), and Embryo Transfer (ET).
- **OPU:** Eggs (oocytes) are retrieved from high-quality cows using ultrasound technology without intensive hormonal treatment, allowing repeated collection even from pregnant or young animals.
- **IVF:** The collected oocytes are fertilised in a laboratory using selected high-quality semen to ensure genetic improvement.
- **ET:** The resulting embryos are implanted into the uterus of recipient cows, enabling faster multiplication of superior breeds.

**About Sahiwal Cattle**

- Sahiwal is among **India's finest indigenous cattle breeds**, valued for its ability to tolerate

heat, resist diseases, and adapt well to tropical environments.

- It originated in the **Montgomery region (now in Pakistan)** and is mainly found in parts of **Punjab (Ferozepur, Amritsar), Haryana, and Rajasthan (Sri Ganganagar)**.
- The breed is also known by names such as **Lola, Lambi Bar, Multani, and Teli**.
- Sahiwal cattle are high milk producers, yielding about 2,000–3,000 litres per lactation. Their milk has high butterfat content and contains **A2 beta-casein protein**, which is associated with certain health benefits.

**ASI Begins Excavation at Balirajgarh**

- **Context:** The Archaeological Survey of India has started excavations at **Balirajgarh in Bihar to uncover details about the history of ancient Mithila**.
- Balirajgarh is situated in the **Madhubani district of Bihar**.
- The site is thought to be associated with King Bali and is believed to have served as an **administrative hub of the Videha Kingdom**.
- Findings indicate that the area was continuously inhabited during the **Mauryan, Sunga, Kushan, Gupta, and Pala periods**.
- Previous studies have identified the presence of fortified structures, pointing to well-developed urban planning on a large scale.
- Items such as beads, copper artefacts, terracotta figures, and punch-marked coins reflect a prosperous and advanced civilisation.

**About the Videha Kingdom**

- The Videha Kingdom was an ancient realm located in the **Mithila region, covering parts of present-day Bihar and Nepal**.
- It is closely linked with King Janaka and was an important centre for Vedic knowledge and philosophical thought.

## NATIONAL SCHEMES

### Gyan Bharatam Mission

- **Context:** The Ministry of Culture has launched the 'Gyan Bharatam Mission' to survey, document, preserve, digitize, and make India's manuscripts accessible to all.
- This mission aims to establish **Cluster Centers (CC) and Independent Centers (IC)** across the country.
- To date, more than 40 CC and IC centers have been integrated into this project.
- 28 States and Union Territories have joined as Nodal Coordinating Authorities to implement this project.
- Technical partners provide support for metadata creation, equipment installation, the Artificial Intelligence (AI) platform, and long-term data storage.
- The objective is to survey and digitize approximately 10 million (1 crore) manuscripts housed in educational institutions, museums, libraries, and private collections across the country.
- The digitized manuscripts will be stored with centralized access through the **National Digital Repository (NDR)**.
- The **National Archives of India (NAI)** is undertaking the task of digitizing historical records.
- A Checksum verification method is employed to ensure the integrity and immutability of the data.

### Lower Kopili Hydropower Project

- **Context:** The Prime Minister recently inaugurated the **120 MW Lower Kopili Hydropower Project** via video conferencing.

### Lower Kopili Hydropower Project

- A **120 MW 'Run-of-River'** (utilizing the natural flow of the river) hydropower project has been planned within the Kopili River basin in Assam.
- It is situated within the autonomous district council areas of **West Karbi Anglong and Dima Hasao (North Cachar Hills)**.
- The project has been developed by, and operates under the aegis of, the **Assam Power Generation Corporation Limited**.
- The **Asian Development Bank (ADB)** is providing funding for this project under the Assam Power Sector Investment Program.

### Kopili River

- The Kopili is a river that flows through the states of **Meghalaya and Assam**.
- In Assam, it is the **largest of the southern-bank tributaries of the Brahmaputra River**.
- It originates in the **Meghalaya Plateau**, flows through the districts of Karbi Anglong and Nagaon, and eventually joins the Brahmaputra River.
- Its total length is 256 km (of which 78 km forms the Meghalaya-Assam border, while the remaining 178 km lies within the state of Assam).

### National Rural Employment Guarantee Scheme

- **Context:** The Central Government has announced that over ₹81,500 crore has been released to the states so far during the current financial year for the **Mahatma Gandhi National Rural Employment Guarantee Scheme**.

### Mahatma Gandhi National Rural

### Employment Guarantee Scheme (MGNREGA)

- The MGNREGA scheme was launched in the year 2005.

- It is a **Centrally Sponsored Scheme (funded by the Central Government)**.
- This scheme is implemented by the Union Ministry of Rural Development.
- It aims to guarantee a minimum of 100 days of wage employment to rural households within a financial year.
- The scheme focuses on enhancing livelihood security in rural areas.
- Adult members (aged 18 and above) of registered rural households are eligible to benefit from this scheme.
- **Under Section 27** of the National Rural Employment Guarantee Act, if states fail to comply with the Central Government's directives, funds allocated to those states will be withheld.

### **Viksit Bharat- Guarantee for Rozgar and Aajeevika Mission (Gramin) (VB-G RAM G)**

- Under the new scheme, the guaranteed number of workdays has been increased to 125.
- A new financial sharing ratio of **60:40 between the Central and State** governments regarding the scheme's expenditure has also been introduced.
- The Central Government has stated that the previous Mahatma Gandhi National Rural Employment Guarantee Scheme will remain operational until the new scheme is fully implemented and all pending works are completed.

### **Bharat Audyogik Vikas Yojna (BHAVYA)**

- **Context:** The Union Cabinet approved the **Bharat Audyogik Vikas Yojna (BHAVYA)**, with an allocation of ₹33,660 crore for the development of 100 'plug-and-play' industrial parks across the country.
- The aim was to create **100 "future ready" industrial parks integrated with the PM**

**GatiShakti** to make use of the latter's multi-modal connectivity and last-mile access.

- The objective is to create plug-and-play industrial zones that help **minimise delays and make it easier to start and run businesses**.
- The scheme also offers assistance for external infrastructure, covering up to **25% of the total project cost**, thereby improving overall connectivity.
- These parks will set new benchmarks in industrial infrastructure, ensuring reliability, reducing inefficiencies and enhancing productivity across sectors.
- As per **Department for Promotion of Industry and Internal Trade** the scheme's duration would be for six years starting 2026-27. The first phase would see 50 parks being set up.
  - The minimum land need for the parks would be **100 acre in most cases, and 25 acre for industrial parks in hilly or North Eastern States**. The maximum size is 1,000 acre.

### **PM GatiShakti**

- The PM GatiShakti National Master Plan was launched by Prime Minister on **October 13, 2021**.
- It is a digital platform designed to bring together **16 ministries—including railways and road transport—for coordinated planning and execution of infrastructure projects**.
- The initiative aims to **improve last-mile connectivity and lower logistics costs** across the country.
- It integrates major infrastructure programmes such as **Bharatmala, Sagarmala, inland waterways, dry ports, and UDAN**.
- The plan also includes connectivity support for key economic zones like textile hubs, pharmaceutical clusters, defence corridors, electronics manufacturing zones, industrial corridors, fishing clusters, and agricultural zones.

- Overall, it seeks to enhance connectivity, streamline infrastructure development, and boost the global competitiveness of Indian industries.
- It is implemented by the Agriculture Insurance Company of India Limited.

#### **Aim**

- To increase the **involvement of women in agriculture and insurance-related activities**
- To support inclusive and gender-responsive growth in the agricultural sector
- To acknowledge and promote the contribution of women in enhancing India's farming system

### **PM POSHAN**

- **Context:** A **Parliamentary Standing Committee** has proposed **adding breakfast to the PM POSHAN Scheme** and extending its benefits to students **up to Class 12**.

#### **About PM POSHAN**

- Previously called the **Mid-Day Meal Scheme (MDMS)**, it was **renamed PM POSHAN (Pradhan Mantri Poshan Shakti Nirman) in 2021**.
- The scheme is implemented by the **Ministry of Education** and is approved for the period from 2021–22 to 2025–26.
- It is a **centrally sponsored programme**, meaning both the central and state governments share its funding.
- Currently, it provides one hot cooked meal to students in government and government-aided schools from **primary level up to Class 8**.
- The scheme is designed to tackle **hunger by ensuring children receive** sufficient nutrition, while also improving educational indicators such as school attendance, retention, and overall learning outcomes.

#### **Key Features**

- Planned campaigns such as videos, walkathons, and workshops conducted across 2026
- On-ground sessions to educate women farmers **about crop insurance schemes and their advantages**
- Initiatives focusing on sanitation, hygiene, and rural awareness, especially targeting women in farming communities

### **Small Hydro Power (SHP) Development Scheme**

- **Context:** The Union Cabinet has approved the **Small Hydro Power (SHP) Development Scheme** for the period from FY 2026–27 to FY 2030–31.

#### **About the Scheme**

- The programme seeks to add around **1,500 MW of small hydropower capacity within five years**, especially in identified priority regions.
- It mainly promotes run-of-the-river projects, particularly suited for remote, hilly, and North Eastern areas.
- **Nodal Ministry:** The scheme is administered by the **Ministry of New and Renewable Energy (MNRE)**.
- Financial support is provided through Central Financial Assistance (CFA) based on a graded subsidy structure.
- North Eastern states and districts along international borders are eligible for up to ₹3.6

### **Krishi Sakhi Initiative**

- **Context:** The **Agriculture Insurance Company of India Limited** has introduced the **Krishi Sakhi Initiative** with the objective of **empowering women engaged in farming**.

#### **About the Initiative**

- Krishi Sakhi is a nationwide programme designed to strengthen the role of women farmers by increasing their awareness, encouraging their participation, and building their skills in agriculture and crop insurance.

- crore per MW or 30% of the total project cost, whichever is lower.
- Other states can receive up to ₹2.4 crore per MW or 20% of the project cost, whichever is lower.
- To avail of financial assistance, projects must exclusively use domestically manufactured equipment and machinery, in line with the Atmanirbhar Bharat initiative.
- The scheme helps reduce dependence on long-distance power transmission, lowers energy losses, and contributes to **India's goal of achieving 500 GW of non-fossil fuel-based capacity by 2030.**

### Coconut Promotion Scheme

- Context:** The Union Budget 2026-27 introduced a Coconut Promotion Scheme aimed at boosting **production and improving productivity in the coconut sector.**

#### About the Scheme

- It is a **Central Sector scheme under the Ministry of Agriculture and Farmers' Welfare (MoA&FW).**
- Nodal Agency:** The programme will be implemented by the **Coconut Development Board (CDB), a statutory organization headquartered in Kochi, Kerala.**
- The scheme emphasizes the removal of old, unproductive, and diseased coconut trees and their replacement with improved varieties that are high-yielding, early-maturing, and resilient to climate variations.
- Technology Integration:** Farmers will be linked to **Bharat-VISTAAR, a multilingual AI-based platform that offers real-time guidance on pest control and nutrient management.**

### India's Coconut Production

- India is the world's largest coconut producer, contributing around 30.37% of global output, and ranks second in terms of productivity.

- The country cultivates coconuts on approximately 2.16 million hectares out of the global 12.39 million hectares.
- The sector supports the livelihoods of nearly 30 million people, including about 10 million farmers.
- Karnataka, Tamil Nadu, Kerala, and Andhra Pradesh together account for more than 90% of India's total coconut production.

### Resilience and Logistics Intervention for Export Facilitation (RELIEF) Scheme

- Context:** To assist exporters affected by maritime disruptions in West Asia, the Government has approved the **'RELIEF' (Resilience and Logistics Intervention for Export Facilitation) scheme under the Export Promotion Mission.**

#### About RELIEF

- RELIEF is a time-bound financial and risk mitigation intervention implemented under the Export Promotion Mission (EPM), aimed at supporting Indian exporters facing logistics disruptions, cost escalations, and geopolitical risks in West Asia.
- Approved in **March 2026 under the framework of the Export Promotion Mission.**
- Nodal Ministry: Ministry of Commerce and Industry.**
- Implemented by the **Export Credit Guarantee Corporation of India (ECGC Ltd.).**

### Project Insight (PI)

- Context:** India's adoption of **Artificial Intelligence (AI) in tax administration**-especially through the **Project Insight (PI) programme**-has drawn attention for its role in boosting compliance and increasing revenue collection.

#### About Project Insight (PI) Initiative

- Project Insight is an **AI-enabled system for tax administration** that leverages big data

analytics to monitor financial activities and identify instances of tax evasion.

- It is implemented by the **Income Tax Department under the Ministry of Finance, Government of India.**
- Motivate taxpayers to accurately disclose income using data-driven prompts.
- Use AI and analytical tools to detect and target potential cases of tax evasion.

#### **Key Features**

- Utilises AI to build a comprehensive 360-degree financial profile of taxpayers by integrating data from various sources.
- Issues subtle reminders via SMS or email to help taxpayers rectify inconsistencies in their filings.
- Ranks and prioritises cases based on the level of risk and extent of possible evasion, thereby enhancing administrative efficiency.

#### **Domestic Manufacturing of Rare Earth Magnets**

- **Context:** The Central Government has initiated a bidding process to establish manufacturing plants capable of producing 6,000 metric tons (MTPA) of rare earth magnets annually.
- This scheme is being implemented with an outlay of ₹7,280 crore.
- The plants are being established under a scheme designed to **promote the domestic manufacturing of Sintered Rare Earth Permanent Magnets.**
- These magnets are essential components for **electric vehicles (EVs), wind turbines, electronic devices, as well as the aerospace and defense sectors.**
- Currently, the majority of these magnets are **imported from China.**
- The government aims to reduce imports and transform India into a global manufacturing hub for these products.

#### **About the Sintered Rare Earth Permanent Magnet (REPM) Manufacturing Scheme**

- The objective of this scheme is to establish integrated Rare Earth Permanent Magnet (REPM) manufacturing facilities with an annual production capacity of 6,000 tons (MTPA).
- The scheme is being implemented by the **Ministry of Heavy Industries.**
- The total duration of the **scheme is 7 years**, commencing from the date of its approval.
- This timeframe includes a 2-year period for setting up the integrated REPM manufacturing facility, followed by a 5-year period for providing incentives linked to the sale of REPMs.
- Through this initiative, India's self-reliance will be enhanced, enabling the nation to position itself as a key player in the global REPM market.
- In the Union Budget for 2026–27, the government announced the establishment of **"Rare Earth Corridors" across the states of Odisha, Kerala, Andhra Pradesh, and Tamil Nadu** to facilitate the mining, processing, research, and manufacturing of Rare Earth Permanent Magnets (REPMs).

#### **Agri-Photovoltaics (AgriPV) in India**

- **Context:** The 2026–27 Budget increased funding for the PM-KUSUM scheme to **Rs.5,000 crore**, highlighting a stronger focus on solar energy for farmers, **aiming to improve energy access, water security, farmer incomes, and reduce carbon emissions.**
- Expanding solar projects on farmland raises concerns about reducing agricultural output, making it important to balance energy generation with food production.

**About AgriPV**

- Agri-photovoltaics (AgriPV) combines solar power generation with farming on the same land.
- Solar panels are installed in ways that allow crops to **grow underneath** or between them.

**Importance of Crop Selection**

- Shade-tolerant crops grow well under panels
- Sunlight-demanding crops are suited between panel rows
- Suitable crops vary by region (e.g., vegetables, spices, millets, fruits)

**Business Models for Farmers**

- Farmers can own systems and sell surplus electricity
- Farmer Producer Organisations (FPOs) can develop collective projects
- Private developers may lease land and share revenue
- Government agencies can also set up projects

**AgriPV is Important for India**

- **Supports India's solar target (300 GW by 2030) and net-zero goal (2070)**
- Reduces land-use conflict between **farming and solar projects**
- Helps farmers earn additional income while continuing agriculture

**Environmental and Economic Benefits**

- Reduces water loss (evapotranspiration)
- Improves soil moisture retention
- Protects crops from extreme weather
- Cuts diesel use and supports rural enterprises
- Enables services like cold storage and food processing

**PRARAMBH 2026**

- **Context:** The Union Finance Minister recently inaugurated the **PRARAMBH 2026 initiative**.

**About PRARAMBH 2026**

- PRARAMBH stands for **Policy Reform and Responsible Action for Mission Viksit Bharat**.
- It is a **nationwide awareness campaign focused on the Income Tax Act, 2025**, aimed at educating citizens about its provisions, effective from **April 1, 2026**.
- A multi-channel outreach program spanning print, TV, radio, outdoor media, digital platforms, and social media.

**Key Features of PRARAMBH 2026 Extensive Outreach**

- Provides taxpayer-oriented resources including guidance notes, brochures, tutorial videos, FAQs, educational content, and engagement activities like the MyGov Quiz.
- Brochures and materials are available in 10 regional languages in addition to Hindi and English for broader reach.
- Introduction of **'Kar Saathi', an AI-enabled chatbot** to help taxpayers with queries on the new Act, rules, and procedures.
- Upgraded platform with enhanced usability, simpler navigation, and faster service delivery for taxpayers.

**Remission of Duties and Taxes on Exported Products (RoDTEP) Scheme**

- **Context:** To support exporters facing challenges related to freight costs and transport disruptions caused by the geopolitical crisis in West Asia, the Government of India has reinstated the full rates and value caps under the RoDTEP scheme, thereby lifting the previous 50% restriction.

**About the RoDTEP Scheme**

- RoDTEP is a flagship export promotion scheme launched on **January 1, 2021**.
- It is implemented by the **Ministry of Commerce and Industry**.

- This scheme provides for the reimbursement of unrefunded Central, State, and local duties and taxes levied on exported products.
- It was introduced to replace the erstwhile **Merchandise Exports from India Scheme (MEIS)**.
- It ensures that taxes are not exported—meaning taxes are not embedded in the cost of exported goods—thereby enhancing the global competitiveness of Indian products.
- It compensates for duties and taxes that are not covered under the GST or duty drawback schemes.
- The scheme **aims to increase both the volume and value of India's exports.**

### UDAN Scheme

- Context: The Centre has extended the subsidy period for airlines on select Tier-2 and Tier-3 routes from three to five years, after a large share of those routes fell into disuse.
- The shift comes under the modified UDAN scheme, approved by the Union Cabinet.

### About UDAN Scheme

- UDAN Scheme was launched on 21st October 2016; the first UDAN flight operated between Shimla and Delhi on 27th April 2017.
  - UDAN strengthened regional tourism, healthcare access, and trade, catalyzing economic growth in Tier-2 and Tier-3 cities.
  - UDAN aims to democratize aviation by making flying accessible and affordable for all.
  - Implemented by the Ministry of Civil Aviation, this flagship scheme has since transformed India's regional connectivity landscape.
  - Evolution of the UDAN Scheme (2016–2025)
  - The UDAN Scheme has progressed through multiple phases, each widening its reach and improving implementation. Over time, it has strengthened regional air connectivity, especially in remote areas such as the Northeast, Ladakh, and island regions
- UDAN 1.0 (2017)**
- Marked the launch of the scheme, with the first flight operating between Shimla and Delhi on April 27, 2017.
  - Around 128 routes were allocated to 5 airlines, covering 70 airports, including 36 newly developed ones.
- UDAN 2.0 (2018)**
- Expanded connectivity to 73 underserved airports.
  - Introduced helipad operations for the first time, improving access to remote areas.
- UDAN 3.0 (2019)**
- Added tourism-focused routes to boost travel.
  - Introduced seaplane services.
  - Increased focus on enhancing connectivity in the North-Eastern region.
- UDAN 4.0 (2020)**
- Prioritized connectivity in hilly, island, and border regions.
  - Strengthened the use of helicopters and seaplanes for difficult terrains.
- UDAN 5.0 Series (2023–2025)**
- Represented a major reform phase aimed at improving efficiency and speed of operations.
  - UDAN 5.0 (April 2023): Removed the 600 km distance limit and focused on quicker flight operations.
  - UDAN 5.1 (May 2023): Enhanced helicopter connectivity in remote locations.
  - UDAN 5.2 (July 2023): Promoted small aircraft (under 20 seats) for last-mile connectivity.
  - UDAN 5.3 & 5.4 (2024): Revived inactive routes and expanded seaplane services.

- UDAN 5.5 (2025): Opened bids for 50+ water aerodromes, boosting seaplane-based transport.

## Immigration, Visa, Foreigners Registration and Tracking (IVFRT)

### Scheme

- **Context:** The Union Cabinet has approved the extension of the Immigration, Visa, Foreigners Registration and Tracking (IVFRT) scheme until March 2031.

### About the IVFRT Scheme

- This scheme was approved by the Cabinet Committee on Economic Affairs on May 13, 2010.
- The scheme is implemented by the **Bureau of Immigration, under the Union Ministry of Home Affairs, with the support of the National Informatics Centre (NIC).**
- Its primary objective is to facilitate travel while simultaneously ensuring national security and to integrate the processes of visa issuance, immigration clearance, and the tracking of foreigners.
- IVFRT 3.0 (2026–2031): The next phase of this scheme focuses on leveraging emerging modern technologies, infrastructure upgrades, and enhancing services through mobile platforms and 'Self-Service Kiosks.'
- **To strengthen digital controls over illegal immigration,** the scheme has been integrated with the Immigration and Foreigners Act, 2025.

## Nasha Mukh Vidyalaya

- **Context:** The **Ministry of Education** has released a detailed three-year action plan for the Nasha Mukh Vidyalaya programme, aimed at eradicating substance abuse in schools.

### About Nasha Mukh Vidyalaya Initiative

- **Nasha Mukh Vidyalaya (Drug-Free Schools)** is a focused programme under the larger Nasha Mukh Bharat Abhiyan (NMBA), intended to make schools a frontline defense against drug addiction.
- The initiative seeks to reduce the growing problem of substance abuse among young people by using schools as a platform for awareness, early detection, and long-term behavioural change.
- **Areas within a 500-metre radius around every school must be officially declared drug-free.**
- Principals and designated teachers are obligated to report any drug-related incidents within this zone to local authorities and police.
- Students are encouraged to take part in peer-led activities that promote awareness and mutual support.
- Teachers and school leaders receive structured training to identify early warning signs of substance abuse and conduct awareness programmes.
- A well-defined reporting and tracking mechanism operates at school, district, and state levels to monitor progress and ensure accountability.

## Pradhan Mantri Shram Yogi Maandhan Yojana

- **Context:** The Pradhan Mantri Shram Yogi Maandhan (PM-SYM) Yojana to celebrate its anniversary and highlight its success in providing social security to unorganized workers.

### About Pradhan Mantri Shram Yogi Maandhan Yojana

- Pradhan Mantri Shram Yogi Maandhan (PM-SYM), is a voluntary and contributory pension

scheme launched by the **Government of India to provide social security to unorganised workers.**

- This scheme ensures a **minimum monthly pension of ₹3,000 after the age of 60 for workers** who belong to the unorganised sector and have a monthly income of up to ₹15,000.
- The scheme is a tribute to the workers in the Unorganized sectors who contribute around 50 per cent of the nation's Gross Domestic Product (GDP).
- **PM-SYM was introduced in the Interim Budget 2019.**
- The scheme is administered by the **Ministry of Labour and Employment** in collaboration with Life Insurance Corporation of India (LIC) and Common Service Centres e-Governance Services India Limited (CSC SPV) for seamless implementation.
- The scheme is a part of the government's broader social security initiatives and aligns with the vision of universal pension coverage for workers in the unorganised sector.

#### **Eligibility Criteria**

- To enroll in PM-SYM, individuals must meet the following eligibility conditions:
  - **Age Requirement: 18 to 40 years.**
  - **Income Limit:** Monthly income should be Rs. 15,000 or less.
  - **Unorganised Sector Employment:** Workers engaged in professions such as: Street vendors, rag pickers, rickshaw pullers, Construction workers, daily wage labourers etc

#### **Exclusion Criteria**

- Should not be covered under the Employees' Provident Fund (EPF), Employees' State Insurance Corporation (ESIC), or National Pension Scheme (NPS).

- Should not be an income taxpayer.
- Should not be receiving benefits from any other government pension scheme.

#### **National Household Income Survey (NHIS) 2026**

- **Context:** The country's first household income survey participation is everyone's responsibility
- Survey Period: **April 2026-March 2027**

#### **About National Household Income Survey (NHIS) 2026**

- This survey is being conducted to determine the income of different regions and groups across the country.
- To understand income distribution
- To develop effective strategies

#### **The Shakti Sadan Scheme**

- **Context:** The Shakti Sadan Scheme is designed to **provide a secure and supportive environment for women facing difficult circumstances.**
- **Introduced in 2022 under Mission Shakti,** it was formed by combining the Swadhar Greh and Ujjawala schemes.

#### **Objective**

- Its main aim is to **offer safe accommodation along with rehabilitation assistance to women in distress.**
- It is a **centrally sponsored, demand-based programme** that is implemented by States and Union Territories.
- The scheme provides essential support such as shelter, food, medical care, legal assistance, counselling, and rehabilitation services.
- Its implementation is tracked through field inspections, review meetings, and the Mission Shakti Dashboard.

**About Mission Shakti**

- **Mission Shakti, launched in 2022 by the Ministry of Women and Child Development,** is an umbrella initiative focused on women's welfare.
- This programme is also a **centrally sponsored scheme, implemented through coordination between the Centre and the States** to ensure broader outreach and effectiveness.
- It includes two main components
- **Sambal** – focuses on women's safety and protection
- **Samarthya** – focuses on empowerment and overall development

**PM e-Drive Scheme**

- **Context:** Under the Prime Minister's e-Drive Scheme, the Central Government has extended the timeframe for availing incentives for registered electric two-wheelers and three-wheelers.

**About the Prime Minister's e-Drive Scheme**

- The Prime Minister's **e-Drive Scheme was launched on September 29, 2024.**
- The initial implementation period for this scheme was set for **two years, spanning from April 1, 2024, to March 31, 2026.**
- **This scheme is implemented through the Union Ministry of Heavy Industries.**
- Subsequently, the Union Ministry of Heavy Industries announced that it had extended the scheme's duration until **March 31, 2028.**
- The primary objective of the Prime Minister's e-Drive Scheme is to **promote sustainable transportation by increasing the adoption of electric vehicles, expanding charging infrastructure, strengthening the electric vehicle manufacturing ecosystem, and reducing carbon emissions.**

**Jal Jeevan Mission 2.0**

- **Context:** Meghalaya has emerged as the **twelfth state** to sign a Memorandum of Understanding (MoU) with the Central Government regarding reforms under the Jal Jeevan Mission 2.0 scheme.

**About Jal Jeevan Mission**

- This scheme was launched **on August 15, 2019.**
- It aims to provide **safe and adequate drinking water to all rural households** through **'Functional Household Tap Connections' (FHTC) by the year 2024.**
- The **Ministry of Jal Shakti** is the nodal ministry responsible for implementing this scheme.
- To ensure 100% drinking water connectivity (saturation) for all 19.36 crore rural households, the duration of this scheme has currently been extended **until December 2028.**

**About Jal Jeevan Mission 2.0**

- The Jal Jeevan Mission has been extended by the Union Cabinet until December 2028.
- This new phase, termed Jal Jeevan Mission 2.0, aims to shift the focus from infrastructure creation to providing sustainable and citizen-centric services.

**Jal Jeevan Mission 2.0: New Administrative and Digital Reforms**

- **Sujalam Bharat Digital Framework**
  - This assigns a Unique ID to every village and maps the entire water supply chain.
- **Jal Arpan Initiative**
  - This engages Gram Panchayats and Village Water and Sanitation Committees (VWSCs) in the task of dedicating water supply schemes.
- **Har Ghar Jal Certification**
  - This certification is granted only after ensuring the existence of proper Operation and Maintenance systems at the local level.

- Jal Utsav
  - This is an annual, community-centric event conducted to inspect water systems and promote sustainability.
- The **initiative aims to lessen farmers' reliance on diesel and conventional grid electricity.**
- It also contributes to **India's larger shift toward renewable energy.**

### **PM-KUSUM 2.0 to Include Battery Storage**

- **Context:** The government is exploring the inclusion of a battery energy storage component in the upgraded **PM-KUSUM 2.0** scheme.
- The **Ministry of New and Renewable Energy (MNRE)** is responsible for implementing the scheme.
- It operates on a cost-sharing model, with 30% subsidy each from the central and state governments, and the remaining 40% borne by farmers.

#### **About PM-KUSUM**

- PM-KUSUM refers to the **Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan.**
- The existing scheme, **introduced in 2019**, is scheduled to conclude in March 2026, and its revised version is expected to be named PM-KUSUM 2.0.
- This proposal has gained attention because the current scheme mainly focuses on **solarising agricultural pumps and does not cover battery storage.**

#### **Role of Battery Storage**

- Battery storage systems can capture excess solar energy produced during peak sunlight hours.
- This stored energy can be used later when demand is high but solar generation is low.
- Thus, incorporating battery storage is seen as a way to enhance energy efficiency, ensure a reliable power supply, and maintain grid stability.



## REPORTS & INDICES

### UN Report on Child Mortality (2024)

- **Context:** Around 4.9 million children died before age five in 2024, including 2.3 million newborns.
- The majority could be avoided with low-cost interventions and better access to quality healthcare.
- The report titled “Levels and Trends in Child Mortality” added that under-five deaths globally have fallen by more than half since 2000.
- However, since 2015, this pace has slowed by more than 60%.
- The Union Health Ministry added that India, over the past two decades, has played a pivotal role in reducing **child mortality in the South Asia region**.
- The Ministry, in its release, said that the Neonatal Mortality Rate (NMR) recorded a decline since 1990. **In 1990, India had an NMR of 57 per 1,000 live births, which fell to 17 in 2024.**
- Also, the Under-5 Mortality Rate (U5MR) witnessed a sharp fall – **in 1990, the U5MR stood at 127 per 1,000 live births, while in 2024, it declined to 27.**
- This sharp reduction is due to targeted public health interventions, improved institutional delivery systems, and expanded immunisation coverage.

### World Happiness Report

- **Context:** Finland has once again secured the top position in the World Happiness Report 2026, marking its ninth consecutive year as the world’s happiest country. **Finland, Iceland, Denmark** secured top three positions.
- **India secured 116<sup>th</sup> rank in World Happiness Report.**

### India’s Sports Equipment Sector

- **Context:** NITI Aayog has released a report titled “Realising the Export Potential of India’s Sports Equipment Manufacturing Sector”.
- The report presents a strategic roadmap aimed at positioning India as a leading global center for sports equipment production.

#### Highlights of the Report

- India currently contributes about **0.5% to the \$52 billion international sports equipment export market.**
- Nearly 90% of the country’s sports goods manufacturing is driven by MSMEs.
- Production is largely concentrated in key clusters such as **Jalandhar and Meerut.**
- India’s exports are mainly focused on a narrow set of products, including cricket gear, inflatable balls, boxing equipment, and athletic or weightlifting items.

### Global Terrorism Index 2026

- **Context:** The 2026 **Global Terrorism Index (GTI)** was released by the Institute for Economics and Peace (IEP), an independent non-profit think tank based in Sydney.
- **Pakistan recorded the highest impact from terrorism, ranking first on the index.**
- Nearly 70% of global terrorism-related fatalities occurred in just five countries: Pakistan, Burkina Faso, Nigeria, Niger, and the Democratic Republic of the Congo (DRC).
- **India ranked 13<sup>th</sup> on the Global Terrorism Index.**

### Consumer Justice Report

- **Context:** The India Justice Report has published the Consumer Justice Report 2026: Assessing Capacity of Redressal Commissions in India.
- It is the **first nationwide evaluation** of the consumer dispute redressal system under the Consumer Protection Act, 2019.

### Best Performing States

- **Andhra Pradesh ranked first followed by Madhya Pradesh, Rajasthan, Karnataka, West Bengal.**
- These rankings indicate better efficiency, infrastructure, and case disposal performance.

### Gender Representation Concerns

- Representation of women remains very limited in leadership roles.
- Only Delhi and Sikkim had women serving as Presidents.
- Moreover, in the past five years, just three State Consumer Disputes Redressal Commissions (SCDRCs) were headed by a woman.

### Unified District Education Survey Report

- **Context:** The Central Government's Unified District Education Survey Report was recently released. This report notes that **student enrollment in higher secondary schools in Tamil Nadu has risen significantly.**
- Specifically, in the 2024–25 academic year, the **enrollment rate for female students rose to 76% and for male students to 71%**, marking a significant improvement compared to previous years.
- While female student enrollment stood at 49.8% in the 2020–2021 academic year, it rose to 76% in 2024–2025.
- Similarly, male student enrollment, which was 46.6% in 2020–2021, increased to 71% in 2024–2025.
- Furthermore, the report highlights that Tamil Nadu leads states such as Gujarat, Rajasthan, and Madhya Pradesh in terms of higher secondary school enrollment.

### World Air Quality Report 2025

- **Context:** The **World Air Quality Report 2025 released by IQAir** points to a worsening trend in global air pollution.
- **WHO Standards:** Only 14% of cities complied with the **World Health Organization guideline**

for **PM<sub>2.5</sub> (5 µg/m<sup>3</sup>) in 2025**, compared to 17% in 2024, indicating a decline.

- **Most Polluted Country: Pakistan** recorded the highest pollution levels, with PM<sub>2.5</sub> concentrations exceeding 13 times the WHO limit.
- **Most Polluted City: Loni in Uttar Pradesh** emerged as the world's most polluted city, with PM<sub>2.5</sub> levels roughly 22 times higher than recommended levels.
- **Regional Trend:** A majority of the most polluted cities are located in India, Pakistan, and China, making Central and South Asia the worst-affected region.
- **India's Ranking:** **India ranked as the 6<sup>th</sup> most polluted country in 2025**, showing a slight improvement from 5<sup>th</sup> place in 2024.
- **Polluted Capital: New Delhi** continued to be the most polluted capital city globally for the 8<sup>th</sup> year in a row.

### IIED Food Security Index

- **Context:** The International Institute for Environment and Development (IIED) has released the **Food Security Index.**
- The index assesses the impact of climate change on the four key dimensions of food security: availability, access, utilization, and long-term stability.
- India is identified as one of the most at-risk major economies when it comes to food insecurity under rising global temperatures.
- The country is considered among the most vulnerable in the index rankings.
- Under warming scenarios of **1.5°C and 2°C, India's food security score may decline significantly (around 15%)**, potentially moving it toward a critically insecure category. Increasing temperatures are likely to intensify disparities between developed and developing nations in their capacity to ensure food security.

## Periodic Labour Force Survey (PLFS)

- **Context:** The report, first introduced in 2017, is released by the National Statistics Office under the Ministry of Statistics and Programme Implementation.
- From 2025, the survey timeline has been changed from the **agricultural year (July–June) to the calendar year (January–December)**, along with revisions in methodology.

### About PLFS Report

- The Periodic Labour Force Survey is intended to measure key labour market indicators such as the Labour Force Participation Rate (LFPR), Worker Population Ratio (WPR), and Unemployment Rate (UR).

### These are calculated using both

- Usual Status (principal + subsidiary activity over a year)
- Current Weekly Status (CWS) (based on the last 7 days)

### Key Indicators

- **LFPR:** Proportion of people who are either employed or actively seeking/available for work within the population.
- **WPR:** Share of the population that is currently employed.
- **UR:** Percentage of unemployed individuals among those in the labour force.
- Activity Status Definitions
- Usual Status: Determined based on a reference period of the previous 365 days.
- CWS: Determined based on the previous 7 days before the survey.

### Major Findings of the Report

- **LFPR**
  - For individuals aged 15 years and above, LFPR stood at 59.3%, with male participation at 79.1% and female participation at 40%.

- Among males, the main reason for not joining the labour force was continuing education (69.8%), while for females, household responsibilities such as childcare were the primary reason (44.4%).

### WPR

- The overall Worker Population Ratio for those aged 15+ was 57.4%, with 76.6% for males and 38.8% for females.

### UR

- The unemployment rate for persons aged 15 and above was 3.1%, with rural areas at 2.4% and urban areas at 4.8%.

### Self-Employment Trend

- The proportion of self-employed individuals has slightly decreased from 58.2% in 2023 to 56.2% in 2025.

### Sector-wise Employment

- Agriculture continues to employ the largest share of the workforce, although its proportion declined from 44.8% in 2024 to 43% in 2025.

## Maternal Mortality Rate in India

- **Context:** A report published in The Lancet: Obstetrics, Gynaecology and Women's Health journal states that the Maternal Mortality Rate (MMR) in India has declined by 80 percent over the past 33 years.

### About Maternal Mortality Rate (MMR)

- Maternal death refers to the death of a mother during pregnancy, during childbirth, or within **42 days following delivery**.
- The Maternal Mortality Rate represents the number of maternal deaths occurring per 100,000 live births during a specific period.

### MMR in India According to The Lancet Report

- **India's Maternal Mortality Rate has decreased from 508 in 1990 to 116 in 2023.**
- Approximately 24,700 mothers died in the year 2023.

- According to the Sample Registration System (SRS) data for the 2021–2023 period, the **Maternal Mortality Rate stands at 88**.
- A recent report released by the UN Maternal Mortality Estimation Group indicates that the Maternal Mortality Rate in India has declined by 86 percent since 1990, whereas the global decline stands at 48 percent.

### **Global MMR According to The Lancet Report**

- In 2023, approximately 240,000 mothers died globally.
- Nigeria recorded the highest number of maternal deaths, with 32,900 fatalities.
- Ethiopia and Pakistan recorded 11,900 and 10,300 maternal deaths, respectively.
- Globally, the maternal mortality rate (MMR) declined from 321 in 1990 to 190.5 in 2023.
- **Under the Sustainable Development Goals (SDGs), a target has been set to reduce the maternal mortality rate to 70 by 2030.**
- It is estimated that India has a high probability of achieving this 2030 target.

### **About Tamil Nadu MMR**

- **Tamil Nadu ranks first** in the country in terms of the number of safe deliveries conducted in government hospitals.
- As a result of these efforts, the **Maternal Mortality Rate (MMR) has declined to 35 per 100,000 live births**.
- **The Infant Mortality Rate (IMR) has also declined to 12 per 1,000 live births.**
- Both these figures are **significantly lower than the national average**.

### **Energy Statistics India 2026**

- **Context:** The National Statistics Office (NSO) has published the 33rd edition of its annual report, Energy Statistics India 2026, which offers a detailed and integrated dataset on the country's energy reserves, production, and consumption patterns.

### **About Energy Statistics India 2026**

- This report is an annual publication by the **National Statistics Office (NSO) under the Ministry of Statistics and Programme Implementation (MoSPI)**.
- It acts as a comprehensive source of information on energy resources, covering reserves, installed capacity, production, usage, and trade of various energy sources, including both fossil fuels and renewable energy.

### **Key Highlights of the Report**

- The Total Primary Energy Supply (TPES) reached 9,32,816 KTOE in FY 2024–25, showing a growth of 2.95% compared to the previous year.
- India's total renewable energy potential rose to 47,04,043 MW as of March 2025, with solar power contributing the largest share at around 71%.
- **More than 70% of the renewable energy potential is concentrated in six states—Rajasthan, Maharashtra, Gujarat, Andhra Pradesh, Karnataka, and Madhya Pradesh.**
- Installed renewable energy capacity recorded a compound annual growth rate (CAGR) of 10.93% between 2016 and 2025, while total electricity generation from renewables reached 4,16,823 GWh in FY 2024–25.
- Per capita energy consumption increased from 15,296 MJ in 2015–16 to 18,096 MJ in 2024–25.
- Transmission and Distribution (T&D) losses declined from 22% in FY 2015–16 to 17% in FY 2024–25, indicating better efficiency.
- Coal continues to be the main energy source, with its supply rising to 5,52,315 KTOE in FY 2024–25.
- Credit flow to the energy sector expanded significantly, increasing more than six times— from ₹1,688 crore in 2021 to ₹10,325 crore in 2025.

## AWARDS & HONOURS

### Sangita Kalanidhi award

- The 100th Conference and Concerts of the **The Music Academy, Chennai**, beginning in December this year, will be marked by the conferment of the **Sangita Kalanidhi award on renowned veena player Jayanthi Kumaresh.**
- **Bharatanatyam dancer Narendra G. will receive the Nritya Kalanidhi award.**

### Sahitya Akademi Award 2025

- Established in **1954**, it is an organization that works to promote and develop literature in various Indian languages.
- It is presented annually for literary works – including poetry, novels, short stories, and literary studies – published in 24 languages.

- Nodal ministry- **Ministry of Culture**
- Former diplomat **Navtej Sarna**, awarded in the **English language category for his novel Crimson Spring.**
- Hindi writer **Mamta Kalia** for her memoir **Jeete Jee Allahabad**
- The awardees will receive an engraved **copper plaque, a shawl, and Rs.1 lakh.**

### Academy Awards

- Paul Thomas Anderson's **One Battle After Another** was crowned best picture
- **Michael B. Jordan** win best actor and **Jessie Buckley** won best actress

### Stockholm Water Prize

- **Kaveh Madani** has been selected as the recipient of the 2026 Stockholm Water Prize, the **world's most prestigious water-related honour.**



## IMPORTANT DAYS

### World Consumer Rights Day

- World Consumer Rights Day is observed annually on **March 15**.
- Celebrated internationally since 1983, this day is observed to emphasize consumers' fundamental rights, protection, and awareness.

### National Vaccination Day

- **National Vaccination Day** is observed annually in India on **March 16th** to promote awareness regarding vaccination and public health.
- This day is observed to commemorate the launch of the **Pulse Polio program in 1995**.

### World Social Work Day

- World Social Work Day 2026 will be observed on **17 March**.
- The theme **"Co-Building Hope and Harmony: A Harambee Call to Unite a Divided Society"**.

### Ordnance Factory Day

- Ordnance Factory Day 2026 is celebrated throughout India on **18 March**.
- The occasion highlights the country's strong heritage in defence manufacturing and its progress towards self-reliance.

### International Day of Happiness

- Aimed at promoting well-being, equality, and sustainable development, the **International Day of Happiness 2026 is observed on March 20**.
- In the 2026 World Happiness Report, **India ranked 116th out of 147 countries**.

### World Down Syndrome Day

- World Down Syndrome Day is observed annually on **March 21st**.

- The theme for the year 2026 is **"Unite against Isolation."**

### About Down Syndrome (Trisomy 21)

- The condition in which the **21st chromosome is present in a trisomic state is known as Down Syndrome**.
- The characteristics of this condition include severe impairment in brain development, compromised development of the central nervous system, a wide spacing between the eyes, a flattened nose, hearing impairment, a constantly open mouth, and a protruding tongue.

### International Day of Forests

- In 2012, the United Nations General Assembly proclaimed **March 21st** as the International Day of Forests (IDF).
- The theme for the year 2026 is
- This day celebrates the importance of all types of forests and raises awareness regarding them.

### World Poetry Day

- World Poetry Day 2026 celebrated on **March 21**, it emphasizes the importance of poetry in fostering culture, creativity, and the preservation of languages, while encouraging self-expression, celebrating diversity, and promoting global harmony.

### World Puppetry Day

- World Puppetry Day observed on **March 21**, it celebrates puppetry arts across the globe.
- Initiated by UNIMA, the day highlights the importance of puppetry in preserving tradition, supporting education, and fostering cultural exchange.

### World Day for Glaciers

- World Day for Glaciers 2026 observed on **March 21**, it emphasizes the importance of glaciers as vital freshwater reserves and

key indicators of climate change, calling for worldwide measures to address environmental challenges.

### International Day for the Elimination of Racial Discrimination

- International Day for the Elimination of Racial Discrimination observed annually on **March 21**, this day aims to advance equality and combat racism across the world.

### World Water Day

- World Water Day observed worldwide on **March 22**, it focuses on increasing awareness about the importance of water conservation and ensuring access to clean and safe drinking water for all.
- The 2026 theme is **'Water and Gender'**

### Shaheed Diwas

- India observes Shaheed Diwas on **March 23, 2026**, to honor and remember the sacrifices of Bhagat Singh, Rajguru, and Sukhdev.

### World Meteorological Day

- World Meteorological Day 2026 observed annually on **March 23**, it emphasizes the significance of weather and climate science.
- The 2026 theme is **"Observing Today, Protecting Tomorrow."**

### World TB Day

- World TB Day 2026 is celebrated globally on **24th March**.
- The theme for this year carries a strong and inspiring message: **"Yes! We Can Eliminate TB."**

### International Day for the Right to Truth

- The International Day to Uphold the Right to Know the Truth about Severe Human Rights Abuses and to Honor the Dignity of Victims is commemorated on **24 March**.

### Earth Hour 2026

- Earth Hour 2026 will take place on **March 28** between 8:30 pm and 9:30 pm. It is a global event that is observed every year on the **last Saturday of March**.

### Mahavir Jayanti

- Mahavir Jayanti 2026 will be observed on **31st March, 2026**, commemorating the birth of Lord Mahavir.

### About Lord Mahavir

- Lord Mahavir Swami was born in 599 BCE in **Kundagrama**, in present-day **Bihar**. He belonged to the royal **Vardhaman family** but chose a very different path, renouncing worldly comforts at the age of 30.
- After 12 years of rigorous meditation and austerities, he attained **Kevala Jnana (omniscience)**.
- From that point, he devoted his life to spreading the principles of peace, non-violence, and self-realization.

- His teachings later became the foundation of Jainism, one of the world's oldest religions.
- Even today, his life continues to inspire millions to embrace a path of discipline, simplicity, and spiritual awareness.

### Teachings of Mahavir

- Ahimsa (Non-violence):** Refrain from causing harm to any living being.
- Satya (Truth):** Always be truthful in words and actions.
- Asteya (Non-stealing):** Do not take anything that does not belong to you.
- Brahmacharya (Celibacy):** Maintain self-discipline and control over desires.
- Aparigraha (Non-attachment):** Avoid excessive attachment to material possessions.

## EMINENT PERSONALITIES

### Shyamji Krishna Varma

- He was born on October 4, 1857, in Mandvi.
- He was an Indian revolutionary, lawyer, and journalist.
- The Indian Home Rule Society was founded by Shyamji Krishna Varma in London in 1905 to promote revolutionary nationalism.
- In July 1905, he established the 'India House' organization in London and launched the journal 'The Indian Sociologist'.
- This served as a hub for Indian nationalist activities in Britain.
- He served as the first president of the Bombay Arya Samaj and was one of the mentors who inspired Vinayak Damodar Savarkar (Veer Savarkar).
- During the First World War, he moved to Paris and subsequently to Geneva, where he remained until his passing on March 30, 1930.
- A memorial named 'Kranti Teerth' was inaugurated in his honor in 2010.



## DEFENCE

### Operation Sankalp

- **Context:** The Indian Navy has deployed warships to escort **Indian-flagged merchant vessels** transiting through the Persian Gulf region.
- Three Indian Navy ships have escorted the Indian-flagged merchant ships **Shivalik, Nanda Devi, and Jag Laadki** from the Gulf of Oman after they crossed the Strait of Hormuz.
- The warships ensured the safe transit of vessels through vulnerable waters.
- The warships were operating in the region under **Operation Sankalp**, a mission aimed at **safeguarding merchant shipping and protecting India's maritime interests in the region.**
- Launched in **June 2019**, Operation Sankalp ensures the **safe passage of Indian-flagged vessels through critical sea lanes, and saw action, including during the Houthi attacks**

### Sea Dragon

- **Context:** India is taking part in the U.S.-led multinational naval exercise Sea Dragon 2026, which is presently being conducted near **Guam.**
- The **Indian Navy is participating along with naval forces** from countries such as **Australia, Japan, and New Zealand.**
- The exercise aims to **strengthen coordination among participating nations** and improve operational preparedness in anti-submarine warfare.

### National Defence Industries Conclave (NDIC) 2026

- **Context:** NDIC 2026, conducted in New Delhi, highlighted key priorities such as **defence innovation, integration of MSMEs, and the development of a domestic drone ecosystem.**
- It is a national-level conference organised by the **Department of Defence Production under the Ministry of Defence**, with the objective of advancing **manufacturing capabilities and promoting self-reliance in the defence sector.**
- Theme: **"Advanced Manufacturing Technologies"**
- **Focus Areas:** The conclave centred on emerging technologies including drone production, Artificial Intelligence, robotics, additive manufacturing, digital twins, and smart materials.
- **Initiatives Introduced:** Defence India Start-up Challenge-14, ADITI Challenges 4.0

### Significance

- The event enhances the role of MSMEs, supports defence indigenisation, contributes to the vision of **Atmanirbhar Bharat**, and boosts technological strength and global competitiveness.

### Innovations for Defence Excellence (iDEX)

- **Introduced in 2018** by the **Ministry of Defence** and executed by the Defence Innovation Organisation.
- To **encourage innovation and the development** of indigenous technologies in the defence and aerospace sectors.
- Involves start-ups, MSMEs, individual innovators, and academic institutions.
- Offers financial support, mentorship, and access to testing and validation facilities.

- Functions through initiatives such as **DISC**, **iDEX4Fauji (i4F)**, **SPARK**, and **ADITI**.

### Indian Ocean Ship (IOS) SAGAR

- **Context:** The second edition of the Indian Ocean Ship (IOS) SAGAR has been launched recently as part of India's maritime outreach efforts.
- It is led by the Indian Navy to tackle shared maritime challenges in the **Indian Ocean Region (IOR)**, including piracy and illegal fishing.
- Naval personnel from 16 countries are taking part under the framework of the Indian Ocean Naval Symposium (IONS).
- India has deployed **INS Sunayna**, an Offshore Patrol Vessel, for conducting the initiative.
- The initiative enhances maritime cooperation, coordination, and interoperability among participating nations, **aligning with India's SAGAR and MAHASAGAR visions**.

### INS Taragiri

- **Context:** The **indigenously built stealth warship, INS Taragiri**, is scheduled to be commissioned into the Indian Navy on April 3rd.
- INS Taragiri the fourth vessel in the Nilgiri-class (Project 17A) series of warships was delivered to the Navy on November 28th of last year.
- It was constructed by Mazagon Dock Shipbuilders Limited (MDL) in Mumbai. The ship weighs approximately 6,670 tons.
- It incorporates modern technologies such as a stealth (low-observability) design, high speed, automated systems, and multi-role naval operational capabilities.

- Furthermore, the ship is equipped with:
  - Supersonic missiles capable of striking surface targets
  - Medium-range missiles designed to engage aerial targets
  - Specialized systems for countering submarines.

### Shaurya

- **Context:** The Indian Army is working on raising dedicated Shaurya squadrons within the **Armoured Corps to embed UAV led surveillance** and precision strike capabilities into mechanised operations.
- The concept was successfully demonstrated during **Exercise Amogh Jwala in Babina Field Firing Ranges**.
- The Shaurya Squadrons will be equipped with swarm drones and first person view drones for real time surveillance and precision strikes against armour and logistics targets.
- The aim is to compress the **sensor to shooter cycle and push drone capability** down to the unit level for faster targeting and engagement.

### Vayu Baan

- **Context:** The Indian Air Force has launched Vayu Baan, a trailblazing initiative to develop India's first drone system deployable from helicopters.

### About Vayu Baan

- It is a compact, autonomous drone that can be released from a helicopter in flight.
- The name Vayu Baan means "Air Arrow" and forms part of an indigenous Air-Launched Effects (ALE) program, integrating unmanned aerial systems with manned helicopters.

### Objective

- To provide stand-off attack capabilities, enabling helicopters to detect and neutralize enemy targets from distances exceeding 50 km.

- Keeps helicopters out of the threat range of MANPADS (Man-Portable Air-Defense Systems), enhancing crew safety while maintaining operational effectiveness.
- Vayu Baan represents a significant step in integrating unmanned and manned aerial platforms, boosting India's long-range precision strike and reconnaissance capabilities.
- **Secures Energy Needs:** Helps protect India's crucial imports like crude oil, LNG, and LPG, reducing the risk of disruptions.
- **Boosts Strategic Role:** Strengthens India's position as a key maritime security provider in the Indian Ocean region.

### IMEX TTX 2026

- **Context:** The Indian Navy hosted IONS Maritime Exercise (IMEX) TTX 2026 at the Maritime Warfare Centre, Southern Naval Command, Kochi.
- The exercise witnessed participation from Bangladesh, France, Indonesia, Kenya, Maldives, Mauritius, Myanmar, Seychelles, Singapore, Sri Lanka, Tanzania, and Timor-Leste.
- This diverse multinational representation underscores a shared commitment to fostering mutual trust and enhancing collaborative maritime security across the region.
- As India assumes the IONS Chairmanship for the 2026–2028 cycle after a gap of sixteen years, IMEX TTX 2026 marks a significant milestone in strengthening regional maritime leadership.

### Operation Urja Suraksha

- **Context:** India has initiated **Operation Urja Suraksha, a naval mission aimed at protecting energy supply lines amid rising tensions in West Asia.**
- It is a strategic maritime operation by the Indian Navy **to secure the movement of energy-carrying ships heading towards India from the Persian Gulf.**
- The operation concentrates on safeguarding routes around the Strait of Hormuz, a vital global oil transit point.

### Objectives

- To maintain a **steady and uninterrupted flow** of oil and gas imports to India.
- To ensure **safe passage and navigation for vessels** in high-risk and conflict-prone maritime zones.

### Key Features

- **Escort System by Navy:** Indian naval ships accompany cargo vessels after they pass the Strait of Hormuz, guiding them safely through the Gulf of Oman into the Arabian Sea.
- **Multi-layered Security Setup:** Deployment of advanced warships like destroyers and frigates, supported by coordinated surveillance and communication networks.
- **Secure Route Planning:** Identification of safer sea lanes to minimize risks from threats such as mines and electronic interference.

### P-8I Aircraft

- **Context:** The Ministry of Defence has recently entered into agreements for acquiring the Tunguska Air Defence Missile System and for carrying out depot-level inspection of the P-8I Poseidon long-range maritime reconnaissance aircraft.

### About P-8I Aircraft

- The P-8I Poseidon is a long-range, multi-role maritime patrol aircraft used by the Indian Navy. It is produced by Boeing.
- This aircraft replaced the older fleet of Tupolev Tu-142 previously operated by the Indian

Navy. The P-8I is a modified version of the P-8A Poseidon used by the United States Navy.

### **Features of P-8I Aircraft**

- It is equipped with advanced sensors, weapon systems, and long-range operational capability, allowing it to identify and respond to various threats, including submarines, surface ships, and environmental challenges.
- The aircraft is capable of performing multiple roles such as anti-submarine warfare (ASW), anti-surface warfare (ASuW), intelligence gathering, maritime patrol, surveillance, and reconnaissance missions.
- It has a maximum take-off weight of 85,139 kg.
- It can reach speeds of up to 789 km/h and operate at a maximum altitude of 12,496 metres.
- The aircraft has an operational range exceeding 2,222 km and can remain on station for about four hours.

### **Dweep Shakti**

- **Context:** The Indian Armed Forces have successfully wrapped up Dweep Shakti, a high-intensity joint military exercise involving all three services.

▪ The drill highlighted effective coordination and cooperation among the Army, Navy, and Air Force in safeguarding India's important island regions and maritime boundaries.

### **About Exercise Dweep Shakti**

- Dweep Shakti is a major tri-service military exercise aimed at evaluating and strengthening India's combined combat readiness in coastal and island settings.
- It emphasizes the swift mobilisation of forces to defend distant island territories against sea-based threats.
- The exercise was carried out under the supervision of the Andaman and Nicobar Command (ANC), India's only integrated theatre command, making use of the strategic location of the Andaman and Nicobar Islands.
- The Indian Army, Indian Navy, and Indian Air Force all took part in the exercise.
- Its main goal is to enhance joint operational strategies and standard procedures, ensuring that all three services can function together seamlessly as a unified force during amphibious operations and in maintaining control over maritime areas.

## SPORTS & GAMES

### World Athletics Indoor Championship

- The **Kalinga Indoor Stadium in Bhubaneswar** will host the **2028 World Athletics Indoor Championships**. The venue is also the front-runner to host the **Asian Indoor Championships in 2028**.

## INTERNATIONAL

### G7 Foreign Ministers' Meeting: India's Participation

- **Context:** Union External Affairs Minister traveled to France to participate in the meeting of the G7 Foreign Ministers.
- Although India is not a member of the G7, it has been invited by the current chair, France, in the capacity of a "partner country."
- India will engage in consultations with the G7 nations and other partner countries regarding global issues.

### About the G7 (Group of 7)

- It is an informal forum comprising the **world's seven advanced economies**. Its members include the United States, the **United Kingdom, France, Germany, Italy, Canada, and Japan, along with the European Union**.
- The group began as the **G6 in 1975** and became **the G7 in 1976** following the inclusion of Canada. It expanded to become the G8 in 1998 with the addition of Russia; however, **Russia was expelled in 2014**, and the group reverted to being the G7.
- All decisions made within this forum are based on the consensus of the member nations.

## CURRENT FACTS

### Nivation

- Nivation refers to erosion around and beneath a snowbank caused by **repeated freezing and thawing**.
- This process forms nivation hollows, which deepen over time as snow repeatedly accumulates in the same place.
- Instability in such areas can suddenly release ice, meltwater, and debris, leading to hazards like flash floods.
- **Part XV, Article 326**- Elections to the House of the People and to the Legislative Assemblies of States to be on the basis of adult suffrage.
- **Warli painting**—the traditional folk art of the **Warli tribe from Maharashtra**—**dates back to the 10th century AD** and received a Geographical Indication (GI) tag in 2014.
- **Diethylene glycol** is commonly used as a solvent in the manufacture of resins, oils, and paints.
- **Propylene glycol** is the compound used as a solvent in liquid medications.
- Researchers have discovered a new species of earthworm, **Drawida vazhania**, in the Vazhani Dam area of the Peechi-Vazhani Wildlife Sanctuary in the Thrissur district of Kerala.
- Union Finance Minister has stated that everyone in the country will be brought under the ambit of health insurance coverage by the year 2033.
- **Procedure for suspending Members of the Lok Sabha Rule 373**: This rule empowers the Speaker of the Lok Sabha to order a member behaving in a disorderly manner to immediately withdraw from the House.
- **Rules of Procedure and Conduct of Business in the Rajya Sabha Rule 255**: This rule empowers the Chairman of the Rajya Sabha to order a member behaving in a disorderly manner to immediately withdraw from the House.
- **Part III, Article 32**- Remedies for enforcement of rights conferred by this Part
- **Part VI, Article 226**- Power of High Courts to issue certain writs
- **Ethyl chloroformate** is an organic chemical intermediate widely used in pharmaceutical and agrochemical manufacturing.
- **India is the world's largest producer** of coconuts contributing to 30.37% of the Global coconut production.
- **The Indus River is known as the "Tigris of India."**

### Oru Paisa Tamizhan

- Oru Paisa Tamizhan was a **Tamil weekly journal founded by Pandit C. Iyothee Thass**.
- It began publication in June 1907, from Royapettah in Madras, and was priced at one paisa.
- Issued every Wednesday as a four-page journal, it was renamed Tamizhan in 1908.
- Through it, Iyothee Thass voiced ideas of social reforms

- **Maternity Benefit Act, 1961**
- **Vainava Uraivalam**, an authority on the **Vaishnavite tradition** written by **T. Gnanasundaram**.
- **Armamalai Cave Paintings in Tirupattur** are found in natural caves and were adapted into a Jain shrine in the Eighth Century. The vivid wall and ceiling paintings depict themes from Jainism, including the Astadikpalakas.
- In Tolkappiyam, Pothu was used to refer to the male of several species, including bull, buffalo, deer, crocodile, and peacock.
- Avian influenza A (H5N1), commonly known as bird flu, is a severe viral infection that mainly spreads among birds but can also affect mammals.
- **SUVIDHA app**, a one-stop solution for seeking, tracking and downloading all campaign related permissions as well as ECI updates like Press Notes and latest instructions/ orders at the tip of their fingers. The platform which works on First in First Out principle ensures transparent permissions, thereby removing any discretion.
- India's ambitious energy transition goals – to have 300 GW of installed solar capacity by 2030 and achieve net-zero emissions by 2070
- India imports 60% of its overall LPG requirements, of which 90% is routed through the blockaded Strait of Hormuz.
- India is the fourth largest buyer of natural gas in the world, with an imported supply of 261 lakh metric tonnes in 2025.
- In India, natural gas is primarily used to produce ammonia, which in turn is used to produce fertilizers. In FY26, about 30% of India's LNG supply was used for the production of fertilizers
- The right to vote in India is a statutory right under Article 326 and the Representation of the People Act, and compulsory voting is neither a fundamental duty nor a legal duty.
- *State of Tamil Nadu vs Governor of Tamil Nadu (2025)*, the Court observed that prolonged inaction by a Governor in assenting to Bills is constitutionally impermissible. These rulings together signal a firm judicial commitment to protecting the legislative sovereignty of elected State assemblies.
- **Part XII, Article 280- Finance Commission**
- **Part XI, Article 263- Provisions with respect to an inter-State Council**
- **The Lokpal and Lokayuktas Act 2013** – came into force on January 1, 2014.
- The **Dinesh Goswami Committee** on electoral reforms, set up in 1990, did not favour compulsory voting, citing practical difficulties in implementation. Instead, it recommended improving voter participation through awareness campaigns.
- India was placed **102nd in the 2025 Global Hunger Index (GHI)**. Although the Public Distribution System (PDS) reaches more than 80 crore people, the rate of child wasting remains high at 18.7%, making it the second-highest in the world.
- **Chapchar Kut** is Mizoram's biggest spring festival and is widely known as the Mizo 'festival of joy'.
- **Heat stroke** is a life-threatening condition in which the body overheats due to high temperatures, humidity, or prolonged physical exertion resulting in a body **temperature exceeding 40°C (104°F)**, accompanied by seizures or a coma.

### Reason for EV battery fires

- A common cause of EV battery fires is thermal runaway.
- A lithium-ion battery packs thousands of cells tightly together, each generating heat as it charges and discharges.
- Normally, an onboard computer called the battery management system keeps the temperature within a safe range.
- But if something goes wrong, one cell can overheat, causing neighbouring cells to overheat in a chain reaction that can outpace the cooling system.
- This process releases a toxic cocktail of gases, including hydrogen fluoride, in a flammable vapour that eases the 'path' to a fire.

### Liquefied Petroleum Gas (LPG)

- LPG (Liquefied Petroleum Gas), consisting mainly of propane and butane, is separated from crude oil primarily through a process called Fractional Distillation.
- It is stored in liquid form inside pressurized cylinders and is commonly used for cooking in households.
- Although India produces a portion of its LPG needs domestically, it still relies on imports to satisfy overall demand.
- The government has increased LPG availability through the Pradhan Mantri Ujjwala Yojana, which offers subsidized connections to economically weaker households.

### Compressed Natural Gas (CNG)

- Compressed Natural Gas (CNG) is a cleaner automotive fuel mainly consisting of methane, typically making up about 80–90% of its composition.
- It is stored at high pressure, around 200–250 kg/cm<sup>2</sup>, which allows a significant volume of gas to be contained in relatively small tanks in vehicles.
- Unlike LPG, which is kept in liquid form, CNG is stored as a gas.
- It is commonly used to help lower greenhouse gas emissions from vehicles and reduce air pollution in cities.

### Piped Natural Gas (PNG)

- Piped Natural Gas (PNG) mainly consists of methane (CH<sub>4</sub>), along with small quantities of other hydrocarbons.
- It is delivered directly to homes, businesses, and industries through a network of pipelines.
- Since methane has the lowest carbon-to-hydrogen ratio among fossil fuels, PNG burns more cleanly and produces fewer emissions.
- It removes the need for gas cylinders and provides a continuous and reliable fuel supply.

### Liquefied Natural Gas (LNG)

- Liquefied Natural Gas (LNG) is natural gas, mainly composed of methane, that is cooled to about -160°C to turn it into a liquid state.
- It is shipped using specially designed cryogenic tankers and kept in insulated storage tanks at port terminals.
- Around half of India's LNG imports come from Qatar through long-term agreements, while other major suppliers include the United States, Australia, and Russia.

- Before use, the imported LNG is converted back into gas and then transported via pipelines for applications such as power generation, fertilizer manufacturing, city gas networks, and various industrial activities.
- Compared to regions like Europe, India has relatively limited LNG storage capacity, making it more susceptible to supply interruptions.

### **Strait of Hormuz**

- The Strait of Hormuz is a narrow and strategically vital waterway situated between Iran to the north and the Arabian Peninsula (primarily the United Arab Emirates and the Musandam region of Oman) to the south.
- It is the sole maritime route connecting the oil-rich Persian Gulf (to the west) with the Gulf of Oman and the Arabian Sea (to the southeast).
- Approximately 30 percent of the world's liquefied gas and 25 percent of its oil pass through the Strait of Hormuz.
- The United Arab Emirates and Oman also ship Liquefied Natural Gas (LNG) through this route, and both nations contribute to India's imported LNG supply.
- Overall, the closure of this strait could impact more than 60% of India's imported LNG.

### **Anti-Defection Law**

- Objective: It aims to prevent politicians from switching parties for personal gain.
  - Applicability: This law applies to both the Parliament and the State Legislative Assemblies.
  - 91st Constitutional Amendment Act, 2003: Through this Act, the Anti-Defection Law was further strengthened.
  - Consequently, the provision regarding a party "Split" (i.e., one-third of the members breaking away) was removed.
  - Currently, only the provision regarding a "Merger" remains in force.
- Part V, Article 82- Readjustment after each census
  - The Women's Reservation Act, 2023, known as the Constitution (106th Amendment) Act, 2023, mandates a 33% reservation for women in the Lok Sabha and State Assemblies.
  - Limited Liability Partnership Act, 2008
  - Companies Act, 2013
  - The Supreme Court has said that the right to life granted under Article 21 of the constitution applies to foreigner as well.
  - As per the Election Symbols (Reservation and Allotment) Order, 1968, the Election Commission of India is the sole authority empowered to resolve disputes regarding party symbols.
  - The Directorate of Enforcement (ED) operates under the Prevention of Money Laundering Act (PMLA), 2002, to identify and recover proceeds derived from criminal activities.

### **Sarhul Festival**

- Sarhul is a three-day traditional festival observed by tribal communities such as the **Oraon tribe, Munda tribe, and Ho tribe**.
- It is mainly celebrated in Jharkhand and also in parts of Bihar, Odisha, and West Bengal.

### **Electronic Voting Machine (EVM)**

- An Electronic Voting Machine is a device used to record votes in an electronic format. It was first introduced in 1982 in the Paravur Assembly constituency in Kerala.

- Since 2003, all state elections and by-elections have been conducted entirely using Electronic Voting Machines.
- In 2004, the Lok Sabha elections were conducted using Electronic Voting Machines.

#### Kisan Credit Card (KCC) Scheme

- Based on the recommendations of the R.V. Gupta Committee, the Kisan Credit Card (KCC) scheme—launched in 1998 by the Reserve Bank of India and NABARD—provides farmers with timely and affordable credit.
- This scheme offers loans of up to ₹3 lakh at low interest rates, as well as collateral-free loans of up to Rs.1.6 lakh for fisheries and animal husbandry activities.

#### Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) Scheme

- Under the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) scheme—launched by the Ministry of Agriculture and Farmers Welfare on February 24, 2019—eligible small and marginal farmers receive an annual income support of ₹6,000, disbursed directly into their bank accounts in three equal installments of ₹2,000 each.

#### Barrel is a unit of volume

- 1 barrel = 159 liters
  - 1 barrel = 42 gallons
  - 1 cubic meter = 6.29 barrels
- Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act of 1989
  - Part IV A, Article 51 A- Fundamental duties
  - Part IV A, Article 51 A (g) - to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures
  - Bonn Challenge is a global, voluntary effort to restore 350 million hectares of degraded and deforested land by 2030.
  - Assam has become the first Indian State to float a tender for a group of earth-observation satellites that it says will strengthen disaster response along the flood-prone Brahmaputra valley and help survey the State's borders.
  - Where India stores its crude oil Existing Sites: Visakhapatnam, Andhra Pradesh; Mangalore, Karnataka; Padur, Karnataka. Upcoming Sites: Chandikhol, Odisha; Padur (Extension), Karnataka

#### Dengue

- Dengue is a mosquito-borne disease caused by the Dengue virus (genus: Flavivirus). It is primarily transmitted by *Aedes aegypti* mosquitoes.
- There are four serotypes of the virus: DEN-1, DEN-2, DEN-3, and DEN-4.

#### Evolution of the Collegium System

The Collegium system emerged through a series of judgments delivered by the Supreme Court.

- First Judges Case (1981): It was held that 'consultation' does not imply 'concurrence.' In other words, the government was not bound to strictly accept the Supreme Court's opinion regarding the appointment of judges.
- Second Judges Case (1993): The term 'consultation' was redefined to mean 'concurrence.' A recommendation made by the Chief Justice of India (CJI)—after consulting with two other senior-most judges—was deemed binding on the government.

- Third Judges Case (1998): The Chief Justice of India was required to consult a panel (Collegium) comprising four senior-most judges. The opinion of the majority of these judges was deemed essential.
- NJAC Act (2014): The National Judicial Appointments Commission (NJAC) was introduced as a replacement for the Collegium system. However, in order to safeguard the independence of the judiciary, the Act was declared unconstitutional and subsequently struck down.
- The Supreme Court of India ruled that, under the Constitution (Scheduled Castes) Order 1950, Scheduled Caste status is restricted only to individuals belonging to Hindu, Sikh, and Buddhist communities.
- According to the Central Government's 2024-25 Unified District Information System for Education (UDISE) report, Tamil Nadu has secured the first place in India, with smart classrooms established in 82.5% of its government schools.
- Jacaranda mimosifolia is a deciduous tree species. It belongs to the Bignoniaceae family.
- Following Sriharikota in Andhra Pradesh and Kulasekarapattinam in Tamil Nadu, the State Government plans to establish the country's third rocket launch site near the Gir Somnath district in Gujarat.
- The Constitution of India has been amended 106 times.
- One TMC (Thousand Million Cubic feet) is the volume of water obtained by discharging water continuously for 24 hours at a rate of 11,574 cubic feet per second.

### Consumer Protection Authority

- The Central Consumer Protection Authority (CCPA), established under the Consumer Protection Act, 2019, undertakes the tasks of protecting consumer rights, regulating misleading advertisements, and ensuring product quality.

### E-Jaagriti

- E-Jaagriti is an integrated, AI-based digital grievance redressal platform of the Department of Consumer Affairs.
- It is designed to integrate all consumer grievance redressal forums onto a single, seamless portal.

### Theruvukkalam

- Theruvukkalam is an integrated mobile application that provides information regarding Tamil Nadu government competitive examinations including those conducted by the TNPSC, TRB, TNUSRB, and MRB – all in one place.
- It provides real-time updates on exam notifications, syllabi, and preparation guidelines.

### Centre-State Relations comprise three categories

- Legislative Relations – Part XI, Articles 245–255
- Administrative Relations – Part XI, Articles 256–263
- Financial Relations – Part XII, Articles 268–293
- The 2026 G7 Summit is scheduled to take place from June 15 to 17, under the presidency of France.
- Fluoroquinolones are a class of antimicrobial drugs used to treat a wide range of bacterial infections. They are commonly used to treat various conditions, including typhoid fever, respiratory tract infections, and urinary tract infections.

### Orange Economy

- The Orange Economy refers to a segment of the economy driven by creativity, culture, and intellectual property rights.
- In this sector, value is derived primarily not from physical goods, but rather from ideas, knowledge, artistic expression, and cultural content.

### India's coastline

- In accordance with the guidelines of the National Security Council Secretariat, the National Hydrographic Office, in collaboration with the Survey of India, has re-evaluated India's coastline, revising its length from 7,516.6 km to 11,098.81 km.
- Furthermore, Tamil Nadu's coastline has been revised from 906.9 km to 1,068.69 km, making it the state with the second-longest coastline.

### Sonowal Kacharis

- The Sonowal Kacharis are a plains tribe of the state of Assam. During the Ahom rule, they were engaged in the occupation of gold extraction.
- They belong to the Tibeto-Burman linguistic family and are renowned for their knowledge of traditional herbal medicine.

### Transgender Welfare Board

- Transgender people in Tamil Nadu are called thirunar in Tamil (திருனர்), specifically thirunangai (திருநங்கை) for transgender women and thirunambi (திருநம்பி) for transgender men.
- The state of Tamil Nadu was the first state to introduce a transgender welfare policy.
- The Government of Tamil Nadu has constituted a Third Gender Welfare on 15.04.2008 to redress their grievances.
- The Government provides monthly pension to help Third Gender who are above the age of 40 years.
- An "Award for the third gender" of Rs.1.00 lakh and a citation has been instituted from the year 2020 to encourage the third gender who has done eminent work for the welfare of third gender.
- The award will be felicitated on "Third Gender Day" which falls on 15th April of every year.
- Exclusive Mobile App, "Thirunangaial" has been developed to enable transgender to register their details and easily avail Identity Card. It also helps to enumerate the transgenders by their age, educational qualification, residence, etc. to formulate welfare schemes for them.

### Initiatives by the Government of India

- The Government of India, through the Ministry of Social Justice and Empowerment (MoSJE), has launched several measures to protect and empower transgender persons.
- The National Portal for Transgender Persons, launched on 25 November 2020, enables online applications for identity certificates and access to benefits.
- The SMILE Scheme, introduced in February 2022, provides livelihood, skill training, and shelter support through Garima Greh centres and Ayushman Bharat TG Plus health coverage.
- The Central Government constituted National Council for Transgender Persons on 21st August 2020.
- It serves as a statutory body under the Ministry of Social Justice and Empowerment to safeguard and promote the rights of transgender persons in India.

- SMILE (Support for Marginalised Individuals for Livelihood and Enterprise) scheme launched by the Ministry of Social Justice and Empowerment (MoSJ&E).
- It is a flagship initiative aimed at the comprehensive rehabilitation and empowerment of transgender persons and other marginalised communities in India.
- Introduced as a Central Sector Scheme, SMILE was launched on February 12, 2022 and operationalised to align with the Transgender Persons (Protection of Rights) Act, 2019.
- SMILE aims to uphold the constitutional rights under Articles 14, 15, and 21, ensuring equality, non-discrimination, and the right to dignity for transgender persons.

### Money Bill

- Article 110 of the Constitution of India defines bills containing only specific financial matters as 'Money Bills'.
- These include taxes, borrowing by the Central Government, the custody/withdrawal of funds, appropriation, charged expenditure, receipts, audit, and other matters incidental thereto.
- The final authority to decide whether a bill is a Money Bill or not rests solely with the Speaker of the Lok Sabha.
- It can be introduced only in the Lok Sabha. The prior recommendation of the President is mandatory for this purpose.
- The Rajya Sabha cannot amend or reject this Bill; it can only offer recommendations.
- The President may give assent to the Bill or withhold it; however, he cannot return it for reconsideration.
- In the case of a Money Bill, there is no provision for a joint sitting of both Houses (Article 108) in the event of a disagreement.

### Purchasing Managers' Index

- It is a measure of economic activity in both the manufacturing and services industries.
- It is based on surveys that ask participants to report how key business factors have changed compared to the previous month.
- Separate indices are prepared for the manufacturing and services sectors, which are then combined to form an overall composite index.
- This index indicates whether business conditions, according to purchasing managers, are improving, worsening, or remaining unchanged.
- **Zojila Pass** is an important high-altitude pass in the western Himalayas. Commonly called the "pass of blizzards". It provides the only land connection between the Kashmir Valley and the cold desert region of Ladakh.
- **MY Bharat Budget Quest:** It aims to connect the youth across the country with the Budget process and policymaking.
- **Part V, Article 81-** Composition of the House of the People
- **Galvanizing Organic Bio-Agro Resources Dhan (GOBARdhan)**
- The Galvanizing Organic Bio-Agro Resources Dhan (GOBARdhan) initiative is designed to **turn waste into valuable resources, supporting the development of a circular economy.**

- It seeks to build a robust framework for setting up **Biogas, Compressed Biogas (CBG), and Bio-CNG plants to encourage sustainable development.**
- The **Department of Drinking Water and Sanitation (DDWS)** under the Ministry of Jal Shakti acts as the nodal agency for implementing this initiative.
- **Electronics Components Manufacturing Scheme 2025**
- This scheme was launched in **April 2025** by the Ministry of Electronics and Information Technology (MeitY).
- Its objective is to attract global and domestic investments, integrate **India's electronics industry into Global Value Chains (GVCs), and foster a robust ecosystem for component manufacturing.**
- The scheme offers sales-linked incentives for a **total duration of six years** preceded by a one-year preparatory period and capital incentives for a period of five years.
- **India ranks 7<sup>th</sup> in global coffee production.** Karnataka, Kerala, and Tamil Nadu account for **96% of India's coffee production,** with **Karnataka leading** at an estimated 2,80,275 MT (2025-26).
- As per the findings of the **third NFHS (2005-6),** which is the closest survey to the 2002 constitutional amendment, in 2005, nine States (Himachal, Punjab, Delhi, Goa, Andhra (incl Telengana), Karnataka, Kerala, and Tamil Nadu) had achieved a **TFR of 2.1 or less.** By 2021, most major States had achieved a TFR of 2.1 except **five States (Bihar, U.P., Jharkand, Meghalaya and Manipur).**
- **Rupee depreciation** refers to a fall in the value of the Indian Rupee (INR) relative to major foreign currencies, especially the USD.
- **Devaluation-** An intentional reduction in the value of a country's currency carried out by the government or the Reserve Bank of India (RBI).
- **Depreciation-** A decline in a currency's value that occurs naturally in the market, driven by the forces of demand and supply.
- The Supreme Court reaffirmed the right to die with dignity under **Article 21,** allowing withdrawal of life support and emphasising patient autonomy.

### Suvidha portal

- The Suvidha portal is a technological solution developed by the Election Commission of India to streamline requests from political parties and candidates for permissions and election-related facilities.

### Election commission of India

- The Election Commission of India is an autonomous constitutional authority responsible for administering Union and State election processes in India.
- The body administers elections to the Lok Sabha, Rajya Sabha, State Legislative Assemblies in India, and the offices of the President and Vice President in the country.
- The Election Commission was established in accordance with the Constitution on 25th January 1950. The Commission celebrated its Golden Jubilee in 2001.
- Originally the commission had only a Chief Election Commissioner. It currently consists of Chief Election Commissioner and two Election Commissioners.

- For the first time two additional Commissioners were appointed on 16th October 1989 but they had a very short tenure till 1st January 1990. Later, on 1st October 1993 two additional Election Commissioners were appointed.
- The concept of multi-member Commission has been in operation since then, with decision making power by majority vote.
- The President appoints Chief Election Commissioner and Election Commissioners. They have tenure of six years, or up to the age of 65 years, whichever is earlier.
- They enjoy the same status and receive salary and perks as available to Judges of the Supreme Court of India.
- The Chief Election Commissioner can be removed from office in like manner and on like grounds as a judge of the Supreme Court.
- At the state level, the election work is supervised, subject to overall superintendence, direction and control of the Commission, by the Chief Electoral Officer of the State.
- At the district and constituency levels, the District Election Officers, Electoral Registration Officers and Returning Officers, who are assisted by a large number of functionaries, perform election work.
- If elections are being held only for the Parliament, the expenditure is borne entirely by the Union Government while for the elections being held only for the State Legislature, the expenditure is borne entirely by the concerned State.
- In case of simultaneous elections to the Parliament and State Legislature, the expenditure is shared equally between the Union and the State Governments.
- Political parties are registered with the Election Commission under the law.
- The Commission, as a part of its quasi-judicial jurisdiction, also settles disputes between the splinter groups of such recognised parties.
- The Commission also has advisory jurisdiction in the matter of post election disqualification of sitting members of Parliament and State Legislatures.
- The Commission has the power to disqualify a candidate who has failed to lodge an account of his election expenses within the time and in the manner prescribed by law.
- Article 329 of the Constitution once the actual process of elections is started, the judiciary cannot intervene by entertaining petitions on the conduct of the polls.
- Once the polls are completed and result declared, the Commission cannot review any result on its own.
- Absentee voters have an option entitled to vote by postal ballot.

### **Chief Election Commissioner (CEC)**

- The Chief Election Commissioner is the head of the Election Commission of India and is responsible for maintaining the independence and fairness of the electoral system.
- The CEC is appointed by the President of India as per Article 324(2) of the Constitution.
- The position plays a key role in implementing the Model Code of Conduct (MCC), overseeing the preparation of electoral rolls, and ensuring that elections are conducted in a free and

impartial manner.

- In the T.N. Seshan vs Union of India (1995) case, the Supreme Court ruled that all Election Commissioners have equal authority and status, promoting a system of collective decision-making.
- The CEC is regarded as the protector of India's electoral democracy and is accountable only to the Constitution and Parliament.
- Chief Election Commissioner: Gyanesh Kumar
- Election Commissioners: Dr. Sukhbir Singh Sandhu, Dr. Vivek Joshi

### **Election Commissioner**

- The Chief Election Commissioner and other Election Commissioners are appointed by the President of India under Article 324(2) of the Constitution.
- Appointment orders are issued by the President, and the terms, conditions, and service benefits are governed by the Election Commission (Conditions of Service) Rules, 1992.
- As per the Election Commission (Conditions of Service of Election Commissioners and Transaction of Business) Act, 1991, each Election Commissioner, including the CEC, serves for six years or until reaching the age of 65, whichever comes first.
- Their salaries and allowances are aligned with those of Supreme Court Judges.
- Election Commissioners may resign by submitting a written notice to the President.
- The Chief Election Commissioner enjoys higher constitutional protection: under Article 324(5), the CEC can be removed only in the same manner as a Supreme Court Judge through a special majority in both Houses of Parliament on proven misbehavior or incapacity.
- Other Election Commissioners can only be removed based on the recommendation of the CEC.
- This framework preserves the independence of the Election Commission, ensuring it remains impartial, credible, and free from arbitrary influence by the executive.

