

Factly Weekly

Compilation

2025

**For UPSC CSE Prelims
Exam**

2nd Week

October 2025

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Securities Transaction Tax (STT)

News: On October 6, 2025, the Supreme Court decided to examine a plea challenging the constitutional validity of the Securities Transaction Tax under the Finance Act, 2004.

About Securities Transaction Tax (STT)

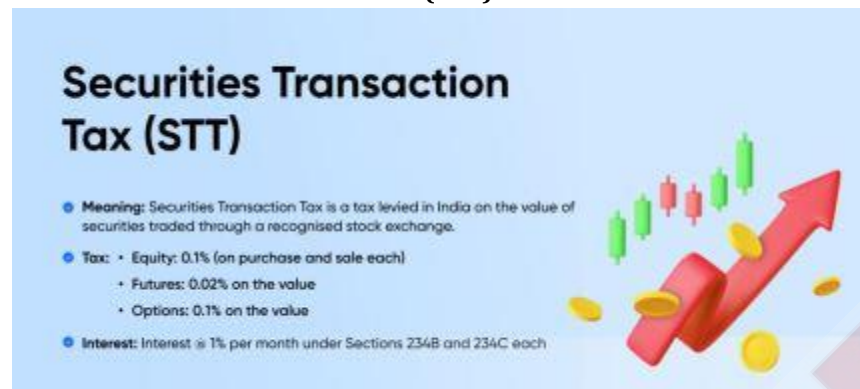


Figure 1. Source – ClearTax

- It is a **direct tax** on every purchase and sale of securities listed on recognised stock exchanges in India.
- **Introduced in:** It was introduced in **2004**.
- **Aim:** It was introduced to **combat tax evasion** in the stock

market.

- STT is **currently 0.1%** on **both buy and sell sides** for stock trades.
- Taxable securities include **equity, derivatives, and units of equity-oriented mutual funds**.
- It also covers **unlisted shares sold under an offer for sale in an IPO that are later listed**.
- **Legislative backup**
 - **Imposed under** the Finance Act, 2004.
 - **Governed by** the **Securities Transaction Tax Act**, which lists taxable transactions, valuation rules, and the liable party (buyer or seller).
- **Concerned with Securities Transaction Tax**
 - **Double taxation:** STT taxes the same transaction twice. A trader first pays STT on the transaction value and then pays Short-Term Capital Gain (**STCG**) or long-term capital gains (**LTCG**) on the profit from the same transaction.
 - **Constitutional concern:** STT taxes the act of trading rather than profits which violates **Articles 14, 21, and 19(1)(g)** of the Constitution.

Supermoon

News: An incredible supermoon was visible on October 7 and will appear again twice in November and December across India.

About Supermoon

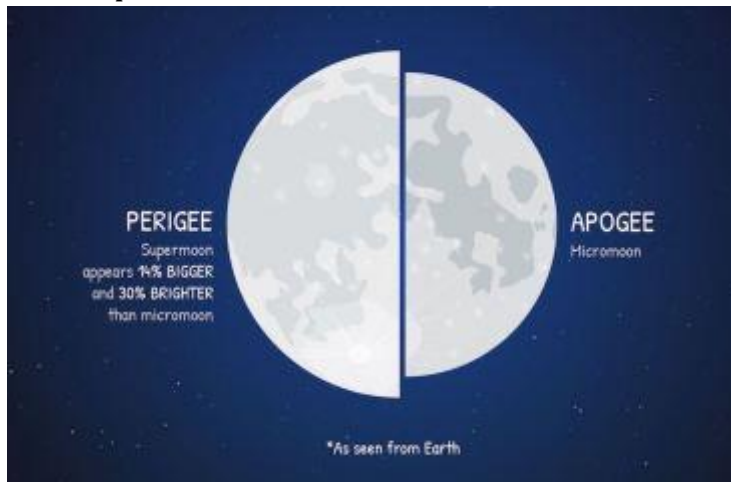


Figure 2. Source – The Sun

- A “supermoon” occurs when a **full Moon** coincides with the **Moon’s closest approach to Earth** in its elliptical orbit, a point known as **perigee**.
- **Term coined by:** The term “supermoon” was **popularised** by **astrologer Richard Nolle** in the 1970s.
 - The term is typically used for a **full moon within at least 90% of perigee**.

- **Frequency:** Supermoons **occur three to four times a year** and appear consecutively.
- **Feature:** When the **moon is near its perigee** and also **directly opposite the sun**, the **full moon** appears about **14% larger and 30% brighter** than when it is at its farthest point.
- **Impact of Supermoon**
 - **Tides:** Creates **perigean spring tides** that are slightly higher and lower than usual.
 - **Observation:** Brighter moonlight helps astronomers and photographers observe lunar surface details and tidal effects more clearly.
 - **Culture:** Supermoons inspire folklore and spiritual observances across civilisations.

Schedule M Norms

News: 18 States use the Online National Drugs Licensing System (ONDLS), but none has fully met the Corrective and Preventive Action (CAPA) requirements under the revised Schedule M norms.

About Schedule M Norms



Source – Apollo Hospitals

- Schedule M prescribes **Good Manufacturing Practices (GMPs)** to ensure medicines are **safe, effective**, and of **consistent quality**.
- **Legality:** It is a key part of the **Drugs and Cosmetics Act, 1940 (and Rules, 1945)**.
- **Origin:** It was first established in 2001.
- **Recent revision (2023–2024):** The revised Schedule M **updates India's Good Manufacturing Practices (GMP)** for pharmaceutical products and mandates stronger, system-based quality controls.
- **Compliance deadline:** Manufacturers must achieve full compliance with these revisions by **December 31, 2025**.
- **Scope:** Applies to **all pharmaceutical manufacturing** units in India for **both** domestic and export markets.
- **Key features of revised Schedule**
 - It mandates stronger **quality systems**, including a **Pharmaceutical Quality System (PQS)**, **Quality Risk Management (QRM)**, and **Product Quality Review (PQR)** to ensure consistent product quality.
 - It requires **qualification and validation of equipment** so that manufacturing processes remain reliable and controlled.
 - It asks manufacturers to set up **computerised storage systems for all drug products** to improve control, traceability, and record-keeping.
 - It introduces **regulatory tools** such as the **Online National Drugs Licensing System (ONDLS)** for licensing and **Corrective and Preventive Action (CAPA)** for continual improvement and issue prevention.

- It aligns India's Good Manufacturing Practices with **international GMP guidelines**, bringing them closer to **WHO-GMP** and **PIC/S (Pharmaceutical Inspection Co-operation Scheme)** guidelines

Nobel Prize for Physics 2025

News: The 2025 Nobel Prize in Physics has been conferred upon three scientists for their groundbreaking experiments that turned quantum physics from a purely theoretical concept into practical, real-world technology.

About Nobel Prize for Physics 2025

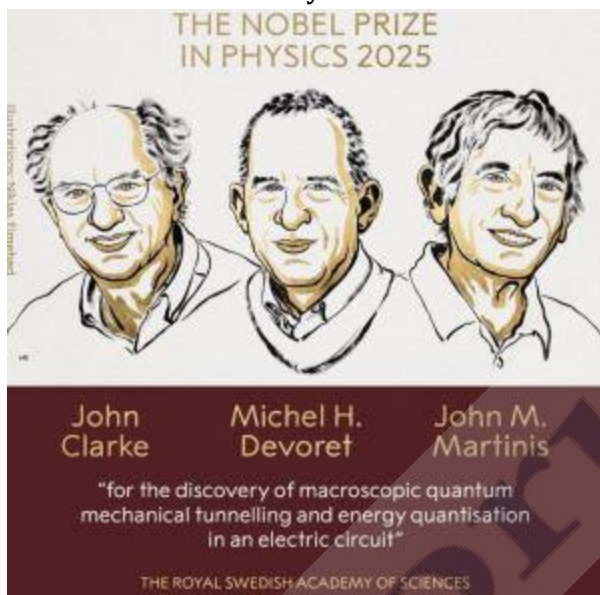


Figure 3. Source – Swedish Academy of Science

- **Nobel Prize for Physics 2025** was awarded to **John Clarke, Michel Devoret, and John Martinis**.
- They were honoured by the **Royal Swedish Academy of Sciences**.
- Their work explored **quantum mechanics**, the science of how very small particles behave.
- They studied **the strange phenomenon** called “**quantum tunnelling**”, where particles can pass through barriers that should block them.
- Normally, **tunnelling cannot be seen in large (macroscopic) objects** — only in tiny particles.

- The **three scientists found a way to make many particles act together** so they could show tunnelling on a larger, observable scale.

Experiments Conducted

- They built an **electrical circuit** using **two superconductors** materials that let electricity flow with **no resistance**.
- Between these superconductors, they placed a **thin insulating layer** called a **Josephson junction**, which doesn't normally conduct electricity.
- Their experiments showed that the charged particles in the superconductors could act **together as one single “super-particle.”**

- They demonstrated that this collective “particle” could behave like an electric current **even without voltage**.
- Together, they successfully demonstrated **macroscopic quantum tunnelling**.
- The discovery shows how **quantum mechanics**, even after 100 years, continues to offer **new surprises and great practical value**, forming the **basis of all digital technology**.

Kherson, Kharkiv and Poltava regions

News: Recently, the Russian forces carried out strikes on multiple Ukrainian military facilities and gas infrastructure, causing critical damage to sites in the Kherson, Kharkiv and Poltava regions.

About Kharkiv Region

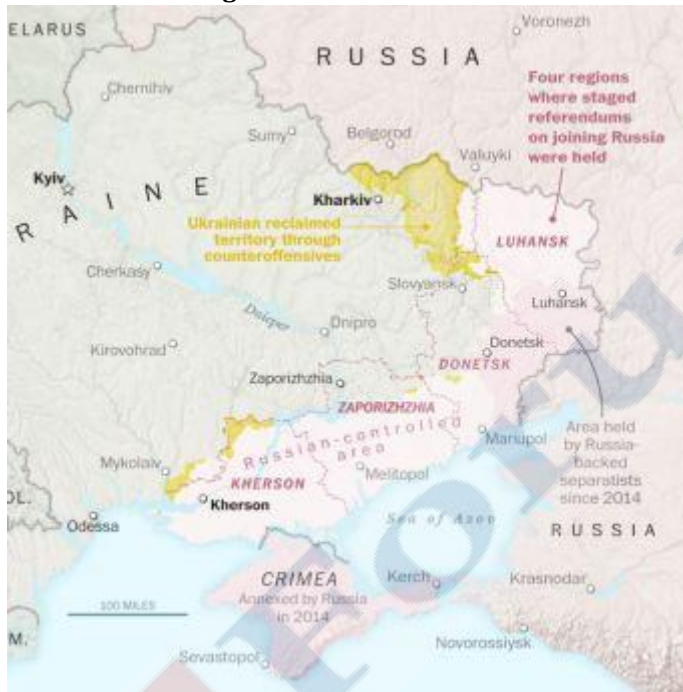


Figure 4. Source – WP

- The **Kharkiv region** is located in the **northeastern part of Ukraine**, along the **banks of the Dnieper and Don rivers**.
- It covers an area of **31,418 km²**, making it the **fourth largest region** in the Ukraine.
- Kharkiv shares borders with **five Ukrainian regions**: Donetsk, Lugansk, Poltava, Sumy, and Dnepropetrovsk and also with the **Russian Belgorod region**.
- The **northeastern part** of the region lies on the **Central Russian Upland**, while the **southern part** extends into the **Donetsk Ridge**.

- The **Dnieper–Donbass Canal** is a major waterway which passes through the Kharkiv region.
- The **Don River** supplies about **75% of the region’s water resources**, serving as its principal water source.

About Kherson Region

- Kherson Region is located **by the Black Sea and on the right bank of Dnieper River**.
- The region extends **180 km from north to south** and **258 km from west to east**.

- The **Dnieper River** divides the territory into two parts: the **right bank** and the **left bank** (also known as **Northern Tavria**).

About Poltava Region

- The **Poltava region** is located in **Left-Bank Ukraine**, in the **central part** of the country.
- It shares borders with **Sumy** and **Chernihiv** provinces to the **north**, **Kharkiv** to the **east**, **Dnipropetrovsk** and **Kirovohrad** to the **south**, and **Kyiv** and **Cherkasy** regions to the **west**.
- The region lies within the **Dnieper Lowland plains** and is characterized by **flat terrain**.

Draft National Labour & Employment Policy — Shram Shakti Niti 2025

News: The Ministry of Labour and Employment released the draft National Labour & Employment Policy – Shram Shakti Niti 2025 for public consultation.

About Draft National Labour & Employment Policy — Shram Shakti Niti 2025

Source – ET

- The draft presents a **renewed vision for a fair, inclusive, and future-ready world of work** aligned with the national aspiration of **Viksit Bharat @2047**.
- It emphasises **cooperative federalism, evidence-based policymaking, digital transparency, and coordinated action among the Centre, States, industry, and social partners**.
- **Released by:** Ministry of Labour and Employment, Government of India.
- **Inspired by:** India's civilisational ethos of 'śrama dharma' – **the dignity and moral value of work**.
- **Aim :** To build a balanced, inclusive, and future-ready labour and employment ecosystem that protects workers, boosts productivity, and supports sustainable enterprise-led livelihoods.
- **Phased implementation**
 - **Phase I (2025–27)** focuses on institutional setup and social-security integration.
 - **Phase II (2027–30)** completes the nationwide rollout of universal social security accounts, introduces skill-credit systems, and establishes district-level Employment Facilitation Cells.
 - **Phase III (beyond 2030)** brings paperless governance, predictive analytics, and continuous policy renewal.
- **Key Highlights**
 - **National Career Service (NCS)** as **India's Digital Public Infrastructure for Employment** with open APIs, multilingual access, credential verification, skill alignment, and AI-driven innovation reaching Tier-II/III cities, rural districts, and MSME clusters.

- **Creation of a universal account** by integrating **Employees Provident Fund Organisation, Employees State Insurance Corporation, Pradhan Mantri Jan Arogya Yojana, e-SHRAM**, State welfare boards, and NCS into a unified Labour Stack.
- Implementation of the **Occupational Safety and Health Code** with risk-based inspections and gender-sensitive standards; AI-enabled safety systems; near-zero workplace fatalities as an outcome.
- **Increase women's labour-force participation to 35% by 2030** and expand entrepreneurship and career guidance initiatives for youth.
- **Promotion of green jobs** and just-transition pathways; creation of millions of green and decent jobs.
- **MSME enablement**: Single-window digital compliance with self-certification and simplified returns for MSMEs; sharp reduction in informal jobs through digital compliance.
- Progress will be tracked through **real-time dashboards, the Labour & Employment Policy Evaluation Index (LPEI)** to benchmark States, an Annual National Labour Report to Parliament, and independent third-party reviews.

Electronic Bank Guarantees (e-BGs)

News: During the Global Fintech Fest 2025, the National e-Governance Division and National E-Governance Services Limited signed a MoU to link Entity Locker with the Digital Document Execution platform for electronic bank guarantees (e-BGs).

About Electronic Bank Guarantees (e-BGs)

Source – Moneycontrol

- **Paper BG:** The Paper BG in India are issued as **paper documents by banks**, on request from customers (Applicant) and in favour of beneficiaries.
 - The **paper BG** is stamped as **per stamp duty requirement**, signed by bank official(s) and then **delivered to beneficiary** through the customer or collected by beneficiary from the bank's branch.
- **e-BG:** An e-BG **eliminates the physical documentation** usually associated with issuance of BG.
- It **reduces the turn-around time** of the BG issuance and delivery to the beneficiary from an industry average of **3-4 working days** to a few minutes.

- It is a **fully digital bank guarantee issued with National E-Governance Services Limited (NeSL)**, using e-stamping and e-signing, and delivered instantly to the beneficiary.
- **Minister involved: Ministry of Electronics and Information Technology (MeitY) and the Ministry of Finance.**
- **Working mechanism**
 - NeGD's cloud-based **Entity Locker** (an extension of DigiLocker) integrates with **NeSL's Digital Document Execution (DDE)** platform.
 - Banks issue, renew, amend, or invoke e-BGs **end-to-end digitally** with e-stamp and e-sign.
 - The **e-BG PDF**, digitally signed by a bank official, is stored in **NeSL's e-BG repository**.
 - **Beneficiary and applicant** securely access, view, and download the e-BG directly via **Entity Locker/NeSL**, receiving **notifications** on issuance or any status change.
 - **Aim** : To enhance efficiency, reduce paperwork, and improve security in bank guarantees through instant, paperless, and legally enforceable digital workflows.
- **Key features**
 - The e-BG is **completely digital**, with e-stamping and a digitally signed BG PDF, and it supports issuance, amendment, invocation, and closure through an end-to-end online process.
 - It **allows flexible documentation**, so beneficiaries and applicants can continue using their existing BG templates without shifting to a standardized format.
 - It is **tamper-proof** because the BG is digitally signed by a bank official under the Information Technology Act, and any alteration would invalidate the signature.
 - **NeSL acts as the central repository**, storing every e-BG and recording subsequent events such as amendments, invocation, and closure after confirmation from the issuing bank.
 - The platform offers **24×7 availability with direct notifications from NeSL**, enabling easy search, verification, viewing, and downloading for all concerned parties.
 - **Stamp duty enforcement is streamlined** through online payment and the issuance of a digital stamp certificate.

Moscow Format

News: India has recently participated in the 7th Moscow Format Consultations in Moscow along with Russia, China, Iran and Central Asian countries.

About Moscow Format

Source – TH

- It is a **regional platform** where neighbouring and major regional countries coordinate practical **approaches to the Afghan peace settlement**.
- **Aim:** It aims to coordinate regional **approaches for an Afghan settlement**, support independence and peace, counter terrorism and drugs, promote economic integration, and keep international humanitarian assistance depoliticised.
- **Introduced in:** It was introduced in **2017**.
- **Origin :** It was formed on the basis of the **earlier six-party consultation mechanism**.
 - Prior to this, Russia hosted **six-party talks** in **February 2017** with Pakistan, Afghanistan, China, Iran, and India.
- **Members**
 - Regular participants include **Russia, Afghanistan, India, Iran, China, Pakistan**, and **five Central Asian countries: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan**.
 - **Belarus** joined as a **guest** delegation (in 7th Moscow Format, 2025).
- **Significance**
 - **Formal inclusion of Taliban government:** At the 7th meeting, the forum formally included a representative of the **Taliban-led government for the first time**.
 - **Security consensus and coordination:** Participants opposed any **foreign military infrastructure** in Afghanistan.
 - **Economic and humanitarian alignment:** The forum backed Afghanistan's **integration into regional economic systems**.

Humpback Mahseer Fish and Lion-Tailed Macaque

News: Tamil Nadu government has sanctioned Rs. 1 crore for a new conservation programme aimed at protecting four lesser-known endangered species including the lion-tailed macaque, Madras hedgehog, striped hyena, and hump-headed mahseer fish.

About Humpback Mahseer Fish

- The **Humpback Mahseer (Hypselobarbus mussullah)** is a **large and striking freshwater fish**.
- **Family:** *Cyprinidae*.

- It is **endemic to the Cauvery river system** including Kerala's Pambar, Kabini and Bhavani rivers.
- It is popularly known as the **"Tiger of the Cauvery river"**.
- **Habitat:** It **thrives in pristine mountain streams and clear, oxygen-rich waters** with swift currents, rocky substrates, and abundant aquatic vegetation.
- It is **one of the largest freshwater fish in India** and can **grow up to 1.5 meters** in length.
- **Physical features**
 - The **most distinguishing feature is its high-backed body**, which sets it apart from other mahseer species.
 - It has a **stout, elongated form** with a noticeable **hump behind the head** and a **tall dorsal fin**.
 - Its **broad pectoral and pelvic fins** help it navigate fast-flowing waters.
 - The fish's **color ranges from silver and greenish brown to golden tones**, with a darker back and lighter flanks.
 - It has a **terminal mouth with thick lips** suited for grazing, along with **two pairs of barbels** that act as **sensory organs for detecting food along the riverbed**.
- **Diet:** Its **diet includes algae, aquatic insects, and crustaceans**
- **Ecological Significance:** Ecologically, the Humpback Mahseer plays an essential role as a **keystone species in river ecosystems**.
- **Conservation Status:**
 - **IUCN: Endangered species.**
- **Threat:** Habitat loss, river damming, pollution, and overfishing.

About Lion-Tailed Macaque

Source: zoochat

- The lion-tailed macaque is a **species of Old World monkey**.
- **Family:** Cercopithecidae.
- **Scientific name:** Macaca silenus
- It is **native to the mountainous regions in southwest India**.
- It is **one of the smallest among macaque species**.
- **Distribution:** These monkeys are **exclusively found in the Western Ghats**.

- **Physical Feature:** The most **distinguishing feature is its silver-white mane**. It surrounds the macaque's head and comes down along its cheeks to the chin, making it look like a 'bearded ape'.
- **Habitat:** They inhabit the **upper canopy of monsoon forests and tropical evergreen forests**.
- **Diet:** It is an **omnivorous animal** and consumes a wide variety of foods.
- **Behavior:** They are an **arboreal and diurnal creature**.
 - They **use 17 different sounds and calls to communicate**, including a loud cry **to indicate territorial boundaries**.
 - One of the **distinguishing features** of this species is that the males mark or establish the boundaries of their territories through vocal calls.
- **Conservation Status:**
 - **IUCN:** Endangered
 - **CITES:** Appendix I
 - **The Wildlife (Protection) Act, 1972:** Schedule I
- **Threat:** Habitat loss, fragmentation, and human encroachment

Foreign Currency Settlement System (FCSS)

News: Recently, Finance Minister Nirmala Sitharaman launched the foreign currency settlement system in GIFT City.

About Foreign currency settlement system (FCSS)

Source: Fintechbiz

- **Launched by:** The International Financial Services Centres Authority (IFSCA)
- The IFSCA has **authorised CCIL IFSC Limited (CIL)** to operate the FCSS under the relevant provisions of the **Payment and Settlement Systems Act, 2007**.
- **Standard Chartered Bank, IBU (SCB)**, will act as the **designated Settlement Bank**.
- **Objective:** To boost international trade, investment, and ease of doing business.
- The system will be starting **initially with the United States Dollar (USD)** and **operates on a gross settlement procedure** during its business hours on all business days.
- **Role:** Foreign currency settlement system (FCSS) **facilitates seamless and efficient settlement of foreign currency transactions** within IFSC on a **real-time basis**.

- **This is to enhance liquidity management and operational resilience and ensure compliance with regulatory oversight** under PSS Act.
- The FCSS platform is **built to comply** with the **ISO 20022 messaging standards**, ensuring compatibility and standardisation in communication formats.

PM-KUSUM

News: India will scale up PM-KUSUM and showcase it across developing nations through the International Solar Alliance to expand irrigation access, energy security, and clean power.

About PM-KUSUM

Source – PIB

- **Full form:** Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan
- It is a government scheme for farmers to **install solar pumps and grid-connected solar and other renewable power plants** in India.
- **Launched in:** It was launched in 2019.
- **Nodal Ministry:** Ministry of New and Renewable Energy (MNRE)
- **Aim:** It is aimed at ensuring **energy security for farmers** in India, along with honouring India's commitment to **increase the share of installed capacity of electric power from non-fossil-fuel sources to 40% by 2030** as part of Intended Nationally Determined Contributions (INDCs).
- **It has 3 components:**
 - **Component-A:** For Setting up of **10,000 MW of Decentralized Grid Connected Renewable Energy Power Plants** on barren land.
 - Under this component, renewable energy based power plants (REPP) of capacity 500 kW to 2 MW will be setup by individual farmers/ group of farmers/ cooperatives/ panchayats/ Farmer Producer Organisations (FPO)/Water User associations (WUA) on barren/fallow land.
 - These power plants can also be installed on cultivable land on stilts where crops can also be grown below the solar panels.
 - The renewable energy power project will be installed **within five km radius of the sub-stations** in order to avoid high cost of sub-transmission lines and to reduce transmission losses.
 - The power generated will be **purchased by local DISCOM at pre-fixed tariff.**

- **Component-B:** For Installation of **17.50 Lakh stand-alone solar agriculture pumps**.
 - Under this Component, individual farmers will be supported to install standalone solar agriculture pumps of capacity **up to 7.5 HP** for replacement of existing diesel Agriculture pumps / irrigation systems in off-grid areas, where grid supply is not available.
 - Pumps of capacity higher than 7.5 HP can also be installed, however, the financial support will be limited to 7.5 HP capacity
- **Component-C:** For **Solarisation of 10 Lakh Grid Connected Agriculture Pumps**.
 - Under this Component, individual farmers having grid connected agriculture pump will be **supported to solarise pumps**.
 - The farmer will be able to use the generated solar power to meet the **irrigation needs** and the **excess** solar power will be **sold** to DISCOMs at pre-fixed tariff
- **Eligibility for the Scheme**
 - Individual farmer.
 - Group of farmers.
 - Farmer Producer Organisation (FPO)
 - Water User Associations.

Plutonium Management and Disposition Agreement (PMDA)

News: In October 2025, Russia's State Duma voted to withdraw from the PMDA, ending the long-suspended U.S.-Russia pact on disposing weapons-grade plutonium.

About Plutonium Management and Disposition Agreement (PMDA)

Source – NDTV

- It is a **bilateral arms control accord** between the **United States and Russia**, to **eliminate significant amounts of surplus weapons-grade plutonium** from their military stockpiles.
- It was **signed in 2000 and came into force in 2011** after a **2010 protocol**.
- **Objective:** To **eliminate excess weapons-grade plutonium** and **reduce proliferation risk** by **converting it into proliferation-resistant forms** so it **cannot return to nuclear weapons use**.
- **Commitment:**
 - Both countries committed to **dispose of 34 metric tons each** of weapons-grade plutonium.

- Both countries agreed to **turn weapons-grade plutonium into mixed-oxide (MOX) fuel** and then **burn (irradiate) it in power reactors** so it **could not be easily used again for weapons**.
- **Verification: Bilateral monitoring and inspection**, with **International Atomic Energy Agency (IAEA) verification** once appropriate agreements are concluded; the **2010 protocol** called for **early consultations with the IAEA**.
- **Concern with PMDA**
 - The **US began constructing its MOX Fuel Fabrication Facility** as part of its obligations, but later (2016) **shifted to a dilution-and-disposal approach due to cost**, which was **criticized by Russia for potential reversibility**.
 - In **2016, Russia suspended its participation**, citing **US non-compliance and policy disagreements**.
 - In **October 2025, Russia officially withdrew from the agreement**, further **deteriorating bilateral nuclear arms control** and **increasing proliferation concerns**

Paramparagat Krishi Vikas Yojana (PKVY)

News: As of January 30, 2025, the Government of India has released ₹2,265.86 crore under Paramparagat Krishi Vikas Yojana (PKVY), highlighting its significant contribution to sustainable agriculture, rural digitization, and inclusive market access.

About Paramparagat Krishi Vikas Yojana (PKVY)

- **Launched in:** 2015 under the **National Mission for Sustainable Agriculture (NMSA)**
- **Aim:** To promote and support organic farming, thereby contributing to the enhancement of soil health.
- **Objectives:** To advance a scalable model of eco-agriculture that integrates low-cost, chemical-free techniques with farmer-led collectives, enhancing food safety, income generation, and environmental sustainability.
- PKVY provides farmers with a **structured system for training, certification, and market linkage** and supports the vision of **resilient and sustainable agriculture**.
- It is **open to all farmers and institutions**, subject to a **maximum landholding limit of two hectares**.
- **Financial Assistance Structure:** Farmers receive **₹31,500 per hectare for a three-year period**.

Cluster-Based Organic Farming Model

- The foundation of PKVY lies in the **cluster approach**, where farmers are grouped into **clusters of 20 hectares** each.
- It encourages **collective adoption** of organic practices to ensure **uniform standards** and **cost efficiency**.
- It promotes **resource-sharing** among farmers for composting, input preparation, and seed exchange.
- It enables farmers to reduce chemical dependency, improve soil health, and adopt **diversified, sustainable cropping systems**.
- It includes **training, capacity building, and exposure visits** to equip farmers with practical organic farming skills and confidence for transition.
- It builds a **scalable model of eco-agriculture** integrating **low-cost, chemical-free techniques** with **farmer-led initiatives**.

Organic Certification Systems

PKVY has established **two primary certification systems**, along with a special fast-track program:

Third-Party Certification (NPOP)	<ul style="list-style-type: none">● It is implemented under the National Programme for Organic Production (NPOP) by the Ministry of Commerce & Industry and conducted by Accredited Certification Agencies to ensure international standard compliance.● Covers the entire organic value chain — production, processing, trading, and exports.● Enables farmers to access global organic markets and export certified produce.
Participatory Guarantee System for India (PGS-India)	<ul style="list-style-type: none">● It is managed by the Ministry of Agriculture & Farmers Welfare.● It is a farmer-centric, community-based certification system emphasizing peer verification and collective responsibility.● It provides low-cost and inclusive certification for small and marginal farmers and primarily serves the domestic organic market

Seneca Lake

News: Residents near Seneca Lake in New York continue to report mysterious loud booms, known as the “Seneca Guns,” echoing from the lake. Scientists are actively investigating the cause behind these unexplained sounds.

About Seneca Lake

Source: Fingerlakes.com

- Seneca Lake is located in **upstate New York**, known as the **Finger Lakes**.
- **Water Sources:** It is fed by **Catharine Creek** and the **Keuka Lake Outlet**, with its outflow leading to the **Seneca River** and **Cayuga Seneca Canal**.
- It is the **largest and deepest of New York’s Finger Lakes**.
- The lake is bordered by **Geneva** to the north, **Lodi**, **Romulus**, and **Hector** along its shores, and **Watkins Glen** at the southern tip.
- **Size:** It is **38 miles long** and **about 3 miles wide** at its widest point.
- It is **famous for its world-class wineries, scenic hiking trails**, and a wide range of outdoor activities.
- **Unique phenomenon:** There are “**Seneca Guns**” and “**Seneca Drums**” heard occasionally since centuries.
 - These are **intermittent and inexplicable booms** with reaction of the displaced water.
- **Flora:** The region also features rich **woody vegetation**, including **northern hardwoods** such as *Fagus grandifolia* (American beech) and *Acer saccharum* (sugar maple).
- **Fauna:** **White-tailed deer** and more elusive species like **black bears** and **river otters** can sometimes be spotted in secluded areas.

‘SAKSHAM’ Anti-Drone Grid

News: Recently, the Indian Army has initiated procurement of the indigenous ‘SAKSHAM’ Anti-drone Grid.

About SAKSHAM

Source: The week

About	<ul style="list-style-type: none">● SAKSHAM stands for Situational Awareness for Kinetic Soft and Hard Kill Assets Management.● It is a cutting-edge command and control network designed to detect, track, identify, and neutralise enemy drones in real time.
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	<ul style="list-style-type: none"> ● This initiative aligns with the Indian Army's Decade of Transformation (2023-2032).
Developed by	Indian Army in partnership with Bharat Electronics Limited (BEL) .
Purpose	To provides real-time airspace awareness and counter-UAS (unmanned aerial systems) capabilities across Army formations.
Features	<ul style="list-style-type: none"> ● It effectively connects radar, optical, acoustic, and radio-frequency sensors onto a unified network, giving commanders a seamless view of the tactical airspace. ● It uses the secure Army Data Network (ADN) to provide a single "Recognised UAS Picture" over the recently established Tactical Battlefield Space (TBS) <ul style="list-style-type: none"> ○ TBS is a region up to 3,000 meters (10,000 feet) above the ground. ○ This expanded domain ensures that ground forces maintain control over low-altitude airspace, allowing for both defensive and offensive operations involving friendly drones and aerial platforms. ● Functions as a modular Command and Control (C2) system, offering situational awareness for Counter-UAS (CUAS) management.
System Capabilities And Functionality	<ul style="list-style-type: none"> ● It features AI-driven decision-support tools to optimise operator response time. ● It integrates both soft-kill (jamming and spoofing) and hard-kill (destruction using kinetic weapons) measures, depending on the threat type and proximity.

	<ul style="list-style-type: none">● The system's automated response algorithms assess multiple parameters including drone altitude, flight path, and payload signature to select the appropriate countermeasure.
Integration and Coordination	<ul style="list-style-type: none">● SAKSHAM's data will also be fed into the Army's overarching Sudarshan Chakra command architecture.● Works in tandem with Akashteer to map friendly, neutral, and hostile airspace users within the combat zone.

Sa-Dhan Bharat Microfinance Report 2025

News: Sa-Dhan's Bharat Microfinance Report 2025, highlights rising delinquencies in FY2024–25 and a temporary slowdown.

About Sa-Dhan Bharat Microfinance Report 2025

Source – TH

- **Prepared by:** The **Bharat Microfinance Report 2025** has been prepared by **Sa-Dhan**, in partnership with **NABARD**, using data from over **200 micro-lending institutions** that cover **98% of industry** operations.
- It brings together **information from credit information companies and industry sources** to present a clear picture of **client outreach, portfolio size, regional trends**, and the role of different institution types..
- **Key findings**
 - **Delinquencies increased:**
 - The share of loans overdue by more than 30 days (PAR 30+) rose to 6.2 percent from 2.1 percent in 2023–24.
 - **Rising NPA:** The share overdue by more than 90 days rose to 4.8 percent from 1.6 percent.
 - **Bihar** showing 7.2 percent loans overdue by more than 30 days and 4.6 percent loans overdue by more than 90 days.
 - **Rural stress:** Rural borrowers show the highest stress: **6.4%** overdue (30+ dpd) versus **6.1%** in semi-urban and **6.0%** in urban areas.

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- **Top microfinance states:** Bihar, Tamil Nadu, Uttar Pradesh, West Bengal, Karnataka.
- **Support livelihoods :** **91%** of loans were used for income generation.
- **Inclusion:** **The Self-Help Group Bank Linkage programme** also expanded, with total outstanding loans reaching ₹3.04 lakh crore across 84.9 lakh SHGs, connecting 17.1 crore households to formal credit.
- **Industry structure:** **NBFC-MFIs and NBFCs** serve **86%** of clients and hold **84%** of the portfolio.
- **Slowdown:** Loan accounts fell **13%** to **13.99 crore**; loan outstanding fell **14%** to **₹3,81,225 crore**; FY25 disbursements dipped **26%** to **₹2,84,130 crore**.
- **Reasons for slowdown:** The fall in disbursement and portfolio growth was driven by a liquidity crunch, deteriorating asset quality, tighter regulatory measures, and a cautious lending approach after rapid expansion and rising defaults.

About Sa-Dhan

- Sa-Dhan is an **association of Impact Finance Institutions** and an RBI appointed **Self-Regulatory Organization (SRO)** for Microfinance Institutions.
- It is the **first and largest association** of community development finance institutions in India formed over two decades ago for supporting and **strengthening the agenda of fostering Inclusive Impact Finance in India**.
- It strives for **creating a better understanding of the microfinance sector** among policymakers, funders, banks, governments, researchers, and practitioners.
- It is also **recognized as a National Support Organization (NSO)** by **National Rural Livelihood Mission (NRLM)**.

Sawalkote Hydrel Project

News: The Indian government has now recommended environmental clearance for the 1,856-MW Chenab project in Jammu and Kashmir.

About Sawalkote Hydrel Project

Source – IE

- **Location :** The project is located in **Jammu and Kashmir, (Ramban district)**
- **River:** The project is on the **Chenab River**.
- **Build by:** The project will be built by **National Hydroelectric Power Corporation (NHPC) Limited**.

- **Key features**

- Planned installed capacity is distributed across two stages: **Stage I of 1,406 MW and Stage II of 450 MW.**
- The scheme proposes a **5-metre-high** concrete gravity dam, creating a reservoir of about 530 million cubic metres over roughly 1,159 hectares.
- Although substantial storage is envisaged, the project is officially categorised as a **run-of-river** hydropower development.
- The Sawalkote Hydroelectric Power Project is poised to become **Jammu and Kashmir's largest hydropower** initiative.

- **Other projects on Chenab River**

- Operational projects include **390-MW Dulhasti (Kishtwar)**, **890-MW Baglihar (Ramban)**, and **690-MW Salal (Reasi)**.

Some Important Project on Indus River System

Project	River
Kishanganga HEP (330 MW)	Kishanganga/Neelum (Jhelum tributary)
Ratle HEP (850 MW)	Chenab
Pakal Dul HEP (1,000 MW)	Marusudar (Chenab tributary)
Baglihar HEP (900 MW)	Chenab
Salal HEP (690 MW)	Chenab
Pandoh project	Beas
Uri project	Jhelum in Jammu & Kashmir
Thein project	On Ravi in Punjab
Pong project	On river Beas Reservoir- Maharana Pratap Sagar
Bhakra Nangal project	On river Satluj India's largest multipurpose project Reservoir- Gobind Sagar

National Red List Assessment (NRLA) Initiative

News: India launched its National Red List Roadmap at the IUCN World Conservation Congress in Abu Dhabi, unveiling Vision 2025–2030 for the National Red List Assessment (NRLA).

About National Red List Assessment (NRLA) Initiative

Source – PIB

- The NRLA is a **nationally** coordinated, inclusive, and science-based framework to assess and monitor the **conservation status of Indian species**, aligned with IUCN global standards.
- **Prepared by:** Zoological Survey of India (ZSI) and Botanical Survey of India (BSI), in close collaboration with **IUCN-India** and the **Centre for Species Survival, India**.
- **Lead by:** NRLA is lead by the Ministry of Environment, Forest and Climate Change (**MoEFCC**), **Government of India**, with ZSI and BSI as nodal agencies.
- **Funding:** Entirely from public funds; **estimated ₹95 crore**, mobilized by BSI, ZSI, IUCN-India, and Centre for Species Survival: India – Wildlife Trust of India (CSS: India – WTI).
- **Aim:** To establish a nationally coordinated red-listing system that provides a tool for accurate assessment, conservation planning, threat mitigation, and evidence-based policy.
- **Goal:** To **publish National Red Data Books for both flora and fauna by 2030** and accomplish a comprehensive threat assessment of native species under IUCN guidelines.
- **International cooperation:** Anchored in commitments under the Convention on Biological Diversity (CBD) and the Kunming–Montreal Global Biodiversity Framework (KM-GBF).
- **Significance:** The Red List **strengthens India's National Biodiversity Mission** by helping policymakers set conservation priorities, guide funding allocations, and enforce wildlife protection measures under the updated **National Wildlife Action Plan (2023–2032)**.
- **India's ecological status**
 - **India is one of 17 megadiverse countries** and hosts **four biodiversity hotspots: Himalayas, Western Ghats, Indo-Burma, and Sundaland**.
 - With **2.4% of global land**, India harbours **~8% of global flora and 7.5% of fauna; 28% plants and over 30% animals are endemic**.
 - Strong legal protection under the **Wild Life (Protection) Act, 1972, amended in 2022** to extend protection to species listed under CITES appendices.

National Tele Mental Health Programme (Tele MANAS) and Tele MANAS App

News: Recently, on the occasion of the World Mental Health Day 2025, Union Minister of Health and Family Welfare launched several new initiatives for the National Tele Mental Health Programme (Tele MANAS) and Tele MANAS App.

About Tele MANAS Programme

- **Launched in:** 2022
- The programme was **introduced as a toll-free helpline (14416) available nationwide**, offering a **wide range of mental health services**.
- **Aim:** To provide **universal access to equitable, affordable, and quality mental health care** through a 24×7 tele-mental health service.
- It forms a key digital component of the **National Mental Health Programme (NMHP)**.
- **Key objectives include:**
 - **Expanding Access:** Provide 24×7 tele-mental health services across all States and UTs for universal reach.
 - **Building a Comprehensive Mental Health Network:** Offer counseling, medical and psychosocial support, e-prescriptions, and specialist consultations.
 - **Inclusive Care:** Focus on vulnerable and hard-to-reach populations to ensure no one is left without support.
- It offers guidance on issues like **sleep disturbances, technology overuse, substance misuse, and more**.
- It extends support **to parents and caregivers of children and adolescents with developmental disorders** such as intellectual disabilities, autism, and ADHD.
- Tele MANAS strives **to empower individuals to take control of their mental health** and break through the barriers of stigma, by **offering promotive, preventive, and curative mental health services**.
- It ensures that everyone has the **right to access affordable, high-quality mental health care**.
- The service under the programme is structured in a **two-tier system** to **optimize care delivery** and enhance support:

- **Tier 1** comprises **state Tele MANAS cells staffed with trained counsellors and mental health specialists**. These professionals provide immediate support through: **Tele-Counseling and Tele-Consultation**
- **Tier 2** includes **specialists from DMHP facilities and medical colleges** who provide both in-person and audiovisual consultations through e-Sanjeevani.

About Tele MANAS mobile app

- Tele MANAS mobile app **serves as a comprehensive platform** offering mental health resources, including self-care tips, stress management strategies, and tools to recognize early distress signals.
- It **engages users through interactive activities** like mind challenges, games, and mindfulness practices, ensuring a user-friendly experience.
- The app provides **free, confidential counseling 24/7**, connecting users to trained mental health professionals across India.
- Video consultations add another layer to the existing audio call services, **allowing mental health professionals to conduct more thorough assessments by observing the caller directly**.
 - This feature supports **history taking, clarifying concerns, and enables brief physical or Mental State Examinations (MSE)** when necessary.
- The app has **new feature of Tele MANAS App Enhancements** (Multi-lingual UI, Chatbot, Accessibility, Emergency Module).
- Tele MANAS App is now available in **10 regional languages**, in addition to the **English and Hindi languages**.
- The app now includes accessibility features **to make the interface more user-friendly for visually impaired users**.
- The app has a feature of **chatbot feature ('Asmi')** allowing users **to engage with the app and seek information or help regarding mental health**.
- Emergency response content has been incorporated **to ensure timely guidance and support during emergencies**.

Nobel Prize for Literature 2025

News: The Nobel Prize for Literature 2025 has been awarded to Hungarian author László Krasznahorkai.

About Nobel Prize for Literature 2025

Source – AIR

- **Winner:** It has been awarded to **Hungarian author László Krasznahorkai**.
- The Swedish Academy gives the award.
- It carries a monetary reward of **11 million Swedish crowns (approximately USD 1.2 million)**
- Krasznahorkai is regarded as a **great epic writer** in the **Central European tradition**.
- He is known for postmodern and apocalyptic novels and novellas like *Satantango* and *The Melancholy of Resistance*.
- His work is marked by **absurdism, philosophical depth, and grotesque excess**, portraying the chaos and despair of modern existence.
- His writings often blend **existential anxiety, apocalyptic vision, and surrealism**, capturing the **human condition amidst chaos and uncertainty**.

G20 Energy Transitions Ministerial Meeting

News: Recently, the Union Power Minister attended the G20 Energy Transitions Ministerial Meeting (ETMM), which was held in South Africa.

G20 Energy Transitions Ministerial Meeting

Source: PIB

- It is a **major annual meeting** under the **G20 framework** that brings together **energy ministers** and leaders from the world's largest economies to **accelerate the global transition** toward clean, secure, and equitable energy systems.
- **Aim:** It aims to facilitate **cooperation, share best practices, and coordinate policy** on the core pillars of energy security, affordability, technology transfer, energy transition, and climate change.
- **2025 ETMM:** It was held in **KwaZulu-Natal, South Africa**, under South Africa's G20 Presidency.

Key Highlights of the Meeting

- **Focus on Energy Security:** It was emphasised that **energy security** is a major global challenge, especially for the **Global South**.
 - It was also urged for stronger **G20 cooperation** for economic stability, sustainability, and equitable access to energy.
- **India's Leadership in Clean Energy:**
 - India's achievement of its **NDC target**, reaching **50% non-fossil fuel capacity by 2025**, five years ahead of schedule was highlighted.
 - India's vision to become a **global hub for green hydrogen production** was outlined.

- India's target of achieving **100 GW of nuclear power capacity by 2047** was announced.
- **Success of India's Biofuels Programme:**
 - India's achievement of **20% ethanol blending** in fuel was noted.
 - India's leadership in the **Global Biofuels Alliance**, now comprising **32 countries and 14 international organizations** was also highlighted.
- **Climate Justice & Finance:** The need for **climate justice** and **support for developing nations** was stressed. The importance of **climate finance** and **technology transfer** under the **Paris Agreement** was also reiterated.
- **Support for Africa's Mission 300:** India's commitment to **Mission 300**, aimed at **electrifying 300 million Africans by 2030** was also reaffirmed.
- **Call for Global Cooperation:** It was urged all nations to work together to build **resilient, sustainable, and equitable energy systems**.

Sugamya Bharat App

News: Recently, the Department of Empowerment of Persons with Disabilities (DEPwD) launched the revamped 'Sugamya Bharat App' at the Purple Fest in Goa. The revamped version builds upon the original app launched under the Accessible India Campaign (Sugamya Bharat Abhiyan).

About Sugamya Bharat App

Source: PIB

- It is a **means for sensitising and enhancing accessibility** in the built environment, transportation sector and ICT ecosystem in India.
- **Launched by:** Department of Empowerment of Persons with Disabilities (DEPwD)
- **Purpose:** To create a **digitally inclusive India** by making accessibility information and services easily available to persons with disabilities (PwDs).
- **Vision:** Serves as **India's digital accessibility hub** under the **Accessible India Campaign (Sugamya Bharat Abhiyan)**.
- **Developed by:** The app has been developed with the support of the SBI Foundation and in technical partnership with NAB Delhi, ISTEM, and Mission Accessibility.
- **Features:**
 - The **Sugamya Bharat App** has been redesigned with a **user-first and accessibility-first approach** to serve as **India's digital accessibility hub**.

- It is available in 23 languages.
- It **provides persons with disabilities easy access to information, government schemes, and services**, thereby promoting digital inclusion and empowerment.
- The app also features **curated job and education listings** from **both government and private sectors**, specifically tailored for persons with disabilities.
- The app is **screen reader compatible**, supports **voice navigation**, and offers **multi-language options** to ensure accessibility for all users.
- It is fully compatible with **assistive technologies** and available for download on both **Android and iOS platforms**.
- The app includes an **accessibility mapping feature** that allows users **to locate and rate public places based on accessibility standards**, encouraging community-driven data collection.
- It offers a **comprehensive directory of government schemes, scholarships, benefits, and employment opportunities**, eliminating the need to visit multiple websites or portals.
- Through its **grievance redressal module**, users can directly report issues related to inaccessible public infrastructure or services, promoting accountability and improvement.

Exercise AUSTRAHIND 2025

News: Exercise AUSTRAHIND 2025 has been scheduled to be conducted from 13th to 26th October 2025.

About Exercise AUSTRAHIND 2025

Source: PIB

- It is the **annual joint military exercise** between **India- Australia**.
- **Started in: 2022**
- **Host for 2025 edition: Perth, Australia**
- The Indian Army contingent is being led by a **Battalion of Gorkha Rifles** along with troops from other arms and services.
- **Aim:** To enhance **military cooperation, improving interoperability** and providing a platform for participating armies to exchange tactics, techniques and procedures in the domains of sub conventional warfare in urban/ semi urban terrain.
- The exercise will **involve joint company-level operations** in **open and semi-desert terrain**.
- Troops will carry out missions such as **joint planning, tactical drills, and specialized training**.

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- It will **help improve operational skills, use new technologies, and enhance joint combat readiness.**
- The exercise will **also strengthen defence cooperation and friendship** between the Indian and Australian armies, promoting teamwork and mutual trust.

Greenhouse Gas Emission Intensity (GEI) Target Rules, 2025

News: Recently, the Environment Ministry notified India's first legally binding Greenhouse Gas Emission Intensity (GEI) Target Rules, 2025.

About Greenhouse Gas Emission Intensity (GEI) Target Rules, 2025

- The Rules **set targets for how much greenhouse gas can be emitted to make one unit of product**, measured in tonnes of CO₂-equivalent (tCO₂e) per unit of output.
- **Enforced by**
 - **Notified by the Ministry of Environment, Forest and Climate Change.**
 - The **Bureau of Energy Efficiency** issues the **carbon credit certificates** and determines the **average trading price** used for compliance calculations.
 - The **Central Pollution Control Board** imposes the **environmental compensation** on non-compliant facilities and is **responsible for recovering these.**
- **Objective:** To promote the **adoption of sustainable, cutting-edge technologies** across traditionally high-emission industries, for addressing climate change.
- **Linked with:**
 - **Carbon Credit Trading Scheme (CCTS):** GEI Rules are directly linked to the **CCTS 2023**, because they **create the emission-intensity targets** that will **generate tradable carbon credits** in India's domestic carbon market.
 - **Paris Climate Agreement, 2015:** It is also align with the Paris Climate Agreement, 2015, by supporting India's nationally determined targets to reduce the emission intensity of GDP by **45% by 2030** from **2005** levels and to achieve **net zero by 2070.**
 - **Perform, Achieve and Trade (PAT) scheme :** The Rules build on the PAT scheme (energy efficiency without direct carbon limits)

- **Carbon Border Adjustment Mechanism (CBAM):** In addition, they **help Indian exporters** prepare for mechanisms like the European Union's CBAM, which affects carbon-intensive exports such as cement, steel, and aluminium.
- **Key feature**
 - **First legally binding emission** intensity targets for **four high-emission sectors (aluminium, cement, chlor-alkali, and pulp and paper).**
 - It cover **282 units for 2025–26 and 2026–27.**
 - **Sectoral** reduction ranges over **two years:**
 - 3.4% (cement)
 - 5.8% (aluminium)
 - 7.5% (chlor-alkali)
 - 7.1% (pulp and paper).
 - Each facility is assigned a **GEI target using a 2023–24 baseline**, and the target is measured as **tonnes of carbon dioxide equivalent (tCO₂e) per unit of product.**
 - If a facility performs better than its target, it **earns tradable carbon credit certificates.**
 - If it fails to meet the target, it must **purchase equivalent carbon credits** or **pay environmental compensation** set at **twice the average trading price** for that year.
 - Any environmental compensation that becomes due **must be paid within 90 days.**

Siddi Tribal Community

News: Recently , President Droupadi Murmu expressed happiness that the Siddi tribal community, a Particularly Vulnerable Tribal Group, has achieved a literacy rate of over 72 per cent.

About Siddi Tribal Community

Source – History TV

- The Siddi are an ethnic group in India and Pakistan with **African roots from the Bantu community.**
- They are also called **Sheedi, Sidi, Siddhi, Habshi, and Badsha.**
- **History:** They are believed to have **first come to India in the 7th century with Arab merchants.**
 - In the **16th century, they arrived with the Portuguese and the British**, largely as slaves.
- **Geographic distribution:** They are scattered across **Karnataka, Gujarat, Maharashtra, Andhra Pradesh, Goa and Tamil Nadu, often in isolated villages and interior forests,**

- **Status in India**
 - In 2003, the Union government classified Siddis under the list of **Scheduled Tribes**.
 - They are included in the **Centre's list of Particularly Vulnerable Tribal Groups (PVTGs)**.
- **Cultural contribution**
 - The Siddis are known for **folk music and dances** such as **Dhamal and Rasda**, with men performing the Dhamal dance.
 - Percussive instruments like the **dammam, duf, and gumte** are popular among men and women.
- **Religion:**
 - They practise different religions, such as **Christianity, Hinduism and Islam**, but some cultural practices and rituals are shared.
 - Irrespective of religion, almost all are **devotees of the deity Yallamma** and may worship pu or at home.
- **Language used:** This tribe speak either **Konkani, Urdu or Marathi** as their main language

Nobel Prize in Economic Sciences 2025

News: The Royal Swedish Academy of Sciences awarded the 2025 Economics Nobel to Joel Mokyr, Philippe Aghion, and Peter Howitt for innovation-driven growth.

About Nobel Prize in Economic Sciences 2025

Source – Nobel Prize Committee

- It is the “**Sveriges Riksbank Prize**” in Economic Sciences in Memory of Alfred Nobel 2025,” **popularly called the Nobel prize for economics**.
- **Winners of 2025 Prize**
 - **Joel Mokyr** – Northwestern University, **US**.
 - **Philippe Aghion** – Collège de France, INSEAD, and LSE.
 - **Peter Howitt** – Brown University, **US**.
- Prize money is **11 million Swedish kronor (Rs 10.25 crore)**; **half** goes to Mokyr, and the **other half is shared** between Aghion and Howitt.

- **Recognized work:** It recognizes their **explanation of innovation-driven economic growth** and why **sustained growth emerged in the last two centuries** when stagnation dominated most of human history.
- **Key contribution by winners**
 - **Joel Mokyr (economic historian)**
 - Joel Mokyr **used historical sources** as one means to **uncover the causes of sustained growth becoming the new normal**.
 - He demonstrated that **if innovations are to succeed** one another in a self-generating process, we not only need to know that something works, but we also need to have scientific explanations for why.
 - The **latter was often lacking prior to the industrial revolution**, which made it difficult to build upon new discoveries and inventions.
 - He also emphasised the **importance of society** being open to new ideas and allowing change.
 - **Philippe Aghion & Peter Howitt**
 - Both also studied the **mechanisms behind sustained growth**.
 - They constructed a **mathematical model** for what is called **creative destruction**: when a new and better product enters the market, the companies selling the older products lose out.
 - The innovation represents something new and is thus creative.
 - However, it is also destructive, as the company whose technology becomes passé is outcompeted.

Virtual Museum of Stolen Cultural Objects

News: UNESCO launched the Virtual Museum of Stolen Cultural Objects to confront illicit trafficking and reconnect communities with stolen heritage.

About Virtual Museum of Stolen Cultural Objects

Source – UNESCO

- It is an **online museum** that helps **communities reconnect with their stolen cultural treasures** and works to **stop the illegal trade** of heritage items, including those taken during colonial times.

- **Aim:** To **protect shared heritage** by stopping illicit trafficking and reconnecting communities with stolen objects.
 - It **also aims** to help recover these items and return them to their countries of origin, restoring public access and recognition.
- **Launched by:** It is launched by **UNESCO**.
- **Launching:** It is launched at **UNESCO's World Conference on Cultural Policies and Sustainable Development in Barcelona**.
- **Designed by:** It is designed by Pritzker Architecture Prize-winner **Francis Kéré**.
- **Financial support:** is financially supported by the **Kingdom of Saudi Arabia**, and the project was **developed in collaboration with the INTERPOL**.
- It was **developed in response to the call of UN member states** for a coordinated strategy to raise awareness on illicit trafficking.
- **UNESCO's 1970 Convention calls on signatory states** to combat the illicit trade in cultural property—a market that Interpol warns is increasingly dominated by organized criminal networks.
- **Key feature**
 - The visual structure of the website in the form of a baobab tree, which is a noted **symbol of strength in the African continent**.
 - The website also **features testimonies from affected communities, and points to locations on a map** from where the objects were stolen.
 - It offers **3D, spinnable digital reconstructions (including AI-assisted models)**, interactive tools, searchable attributes, community testimonies, and maps of theft locations.
 - The museum currently **displays almost 240 missing objects from 46 countries**.
- **About Sculptures from Indian temple**
 - The museum shows **two ninth-century sandstone sculptures** from the **Mahadev Temple in Pali, Chhattisgarh**: a Nataraja of Shiva and a seated Brahma.

Logistics Excellence, Advancement, and Performance Shield (LEAPS) 2025

News: Union Minister Piyush Goyal launched LEAPS 2025 during the 4th Anniversary of PM GatiShakti at Bharat Mandapam, New Delhi.

About Logistics Excellence, Advancement, and Performance Shield (LEAPS) 2025

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Source – DPIIT

- It is a **flagship initiative** to benchmark **logistics excellence** and to **acknowledge and reward best practices, innovation, and leadership** across India's logistics ecosystem.
- **Nodal Ministry:** Ministry of Commerce and Industry
- **Implemented by:** It is implemented by the **Department for Promotion of Industry and Internal Trade (DPIIT)**.
- **Aim:** The initiative **aims** to benchmark logistics performance, recognize excellence and innovation, and promote a sustainable, efficient, and resilient logistics ecosystem **aligned with PM GatiShakti and NLP 2022**.
- **Key features**
 - It **covers a wide spectrum of logistics players**, including air, road, sea, and rail freight operators; warehousing; multimodal transporters; MSMEs; startups; and academia.
 - It **emphasizes sustainability**, ESG (Environmental, Social, and Governance) practices, and Green Logistics to guide responsible and efficient operations.
 - It **encourages collaboration** between government, industry, and academia to enhance efficiency, transparency, and resilience in the logistics ecosystem.
 - The awards cover **13 categories**, including Green Logistics Champion, Digital Transformation Leader, and Regional Infrastructure Performer.

Alliance Air's "Fare se Fursat" Fixed Airfare Scheme

News: Minister of Civil Aviation inaugurated Alliance Air's "Fare se Fursat" Fixed Airfare Scheme to promote ease of flying in the country.

About Alliance Air's "Fare se Fursat" Fixed Airfare Scheme

Source – NDTV

- **Initiative by:** Alliance Air, an Indian government-owned regional carrier.
 - Alliance Air connects **Tier-2 and Tier-3 cities** to the national aviation network.
- **Aim:** To give passengers freedom from the **stress of fluctuating airfares and promote ease of flying** in the country.
- **Objective:** To address this long-standing challenge by introducing **transparency and stability in pricing**.

- **Implementation:** The initiative will be implemented on a **pilot basis** from October 13 to December 31, 2025 across **select routes**.
- Under this scheme, the airline will offer a single, **fixed fare that remains constant regardless of the booking date**, even on the day of departure.
 - The **static fare system** eliminates uncertainty and stress associated with fluctuating airfares, ensuring predictability of costs, even for last-minute bookings.
- The initiative is expected to **encourage first-time flyers from smaller towns** to opt for air travel making air travel available, accessible and affordable.

India's 2023 Vital Statistics Report

News: Recently, India's 2023 Vital Statistics Report was published by the Office of the Registrar General of India (ORGI), which works under the Ministry of Home Affairs.

About India's 2023 Vital Statistics Report

Source: TH

- The **Vital Statistics of India** based on **Civil Registration System (CRS) 2023** provides a nationwide picture of the **country's birth and death registrations, institutional births, and sex ratio at birth**.
- **Released by: Registrar General of India (RGI)** under the Office of the Registrar General and Census Commissioner.
- **Legal Context:** The Civil Registration System (CRS) operates under the **Registration of Births and Deaths Act, 1969**, mandating compulsory registration of every birth and death in India.
 - The recently **proposed amendments** to the Registration of Births and Deaths Act (effective from 2024) further emphasize **digitization and integration** of CRS data with other national databases to enhance real-time demographic tracking.

Findings of the report

Factly Compilation [Second Week] October 2025

Birth Statistics	<ul style="list-style-type: none"> ● Total Births Registered (2023): 2.52 crore (25.2 million) ● Comparison with 2022: Decline of 2.32 lakh births (2022 recorded approximately 2.54 crore births). ● Registration Coverage: 98.4% of births were registered in 2023. ● Institutional Births: Accounted for 74.7% of all registered births, indicating a continued trend toward hospital deliveries, though data from Sikkim was not included.
State-wise Registration Efficiency	<ul style="list-style-type: none"> ● 11 States/UTs achieved more than 90% registration within 21 days of birth. ● Five States reported 80-90% timely registration ● Fourteen States showed 50-80% registration within the prescribed time.
Death Statistics	<ul style="list-style-type: none"> ● Total Deaths Registered (2023): 8.66 million (86.6 lakh) ● 2022 Figures: 8.65 million (86.5 lakh), a marginal increase of 0.1 lakh deaths, suggesting a relatively stable mortality rate post-pandemic. ● Pandemic Context: The CRS data shows no significant spike in deaths during 2022 and 2023, contrasting with earlier pandemic years. <ul style="list-style-type: none"> ○ This demonstrates that the impact of COVID-19 on overall mortality had largely stabilized by 2023.
Sex Ratio at Birth	<ul style="list-style-type: none"> ● Lowest SRB States: Jharkhand has the lowest SRB. <ul style="list-style-type: none"> ○ Other states with lowest SRB states: Bihar, Telangana, Maharashtra, Gujarat, Haryana and Mizoram. ○ Notably, Bihar has consistently reported the lowest SRB since 2020.

	<ul style="list-style-type: none">● Highest SRB States: Arunachal Pradesh has the highest SRB.<ul style="list-style-type: none">○ Other states with lowest SRB are Nagaland, Goa, Ladakh and Tripura and Kerala.
Institutional Births and Health Infrastructure	<ul style="list-style-type: none">● Institutional births accounted for 74.7% of total registered births in 2023.● However, the remaining 25.3% non-institutional births suggest continued gaps in healthcare accessibility, particularly in rural and marginalized regions.

Twinning Rate

News: New analyses on twinning rates and twin mortality, including projections for India and a call to establish a twin registry, have refreshed policy attention.

About Twinning Rate

Source – The Guardian

- The twinning rate is the **number of twin births per 1,000 deliveries**.
- **Indicator of:** It indicates **how common twin pregnancies are** and helps public health systems plan for **higher-risk care** and understand **fertility patterns**.
- **Study of Twinning Rates**
 - Recent studies analyzed 3 million+ births across 39 low-income countries, projecting **future twinning with UN population data**.
 - A separate **India study** used all **five NFHS rounds (1993–2021)** to track twin births and deaths.

Key Findings of Studies

India

- **Rising twinning:** The proportion of twin births increased from 0.9% in 1993 to 1.5% in 2021.
- **Mortality burden:** Twins formed 7.7% of all under-five deaths; mortality declined over time but remained high at 179.8 per 1,000 live births in 2021.
- **Excess risk vs singletons:** Death risk was 7.5 times higher in the early neonatal phase and 10 times higher in the late neonatal phase.

- **Wealth gradient:** Twin survival varied sharply by household wealth, identifying twins as a vulnerable group needing targeted interventions.
- **Birth-order nuance:** Twins are more often born in later pregnancies, yet twins born in the first or second pregnancy face higher death risk.
- **India projections:** Twin births are projected to **decline by about 10.5% by 2100**, but India may still hold the **largest share (23.4%)** among studied countries; projections may underestimate future twinning because growing use of medically assisted reproduction was not included.

Global

- The absolute number of twin births will **rise** in many countries due to population growth.
- **South Asia, including India and Bangladesh**, is projected to see **declines** in the number of twin births because fertility is below replacement and fewer women will give birth.

Recommendations

- **Train frontline health workers** to monitor and care for twins to improve local birth outcomes.
- **Establish a twin registry** to track health and development, support policy, and advance research on survival and biological aspects of twinning.

Madagascar

News: In Madagascar, after lawmakers impeached President Andry Rajoelina, army seized control.

About Madagascar

Source – Britannica

- It is the **world's fourth-largest island** and the **second-largest island country**.
- **Capital:** Its capital is **Antananarivo**.
- **Location:** It lies about **250 miles east of Mozambique** in the **southwestern Indian Ocean**.
- **Boundaries:** It is bordered by the Indian Ocean, with the west along the **Mozambique Channel**; nearby Islands are **Comoros, Réunion, and Mauritius**.
- **Government:**
 - It is a **semi-presidential republic**.
 - Voters elect a president who appoints a prime minister to form a cabinet.
- **Major rivers:** It includes **Mangoky, Onilahy, Betsiboka, and Sofia**.
- **Major lakes:** It includes **Lake Alaotra** is the largest lake on the island, and others include **Lake Itasy** and **Lake Kinkony**.

- **Highest peak:** The **Mount Maromokotro** is the highest point.
- **Soil:** The Central Highlands are dominated by red lateritic soils, giving the country its nickname, “**the Great Red Island.**”
- **Signature flora:** The **baobab** is the national tree.
 - Its trunk stores rainwater.

Crew Escape System (CES) of Gaganyaan

News: In October 2023, ISRO tested the Crew Escape System, which is crucial for astronaut safety in the Gaganyaan mission.

About Crew Escape System (CES) of Gaganyaan

- The CES is an **emergency escape measure** designed to **quickly pull the crew module** along with the **astronauts** to a safe distance from the launch vehicle in the event of a launch abort.
- **Developed by:** It is developed by the Indian Space Research Organisation (**ISRO**).
- **Aim:** To ensure astronaut safety by extracting the crew module, with the crew inside, to a safe distance **in the least possible time if something goes wrong during the mission.**
- **Types**
 - **Puller type:** The CES pulls the crew module away from the launch vehicle.
 - Example – This one is used in Gaganyaan.
 - **Pusher type:** The crew module is pushed away using compact, high-thrust liquid-fuel engines.
 - The **choice depends on propulsion technology and system integration aspects.**
 - Example – vehicles like SpaceX's Falcon 9)
- **Working mechanism**
 - **The CES operates during** the ascent's atmospheric phase, when the Human-rated Launch Vehicle Mark-3 (**HLVM3**) **accelerates** to hypersonic speeds and faces very high structural loads.
 - **Speed matters:** HLVM3 lifts off using **two S200 solid-fuel boosters** that cannot be shut down after ignition. So, if there is a problem, the CES must act faster than the rocket and pull the crew module away immediately.
 - **Escape action:** CES pulls the crew module away with very **high acceleration, up to ten times gravity.**

- **Crew safety posture:** Astronauts sit in a “**child-in-cradle**” position so the brief high force is tolerable.
- **After separation:** CES releases the module at a safe distance.
- **Descent control:** A multistage parachute system slows the module step by step.
- **Landing:** The module splashes down in the sea within safe impact limits.
- **Trigger decision:** An **Integrated Vehicle Health Management system** monitors everything in real time and activates CES if needed.

All-India Synchronous Elephant Estimation 2025

News: Recently, the Synchronous All India Elephant Estimation (SAIEE) 2021–25 was released by Wildlife Institute of India (WII).

About All-India Synchronous Elephant Estimation 2025

Source: IE

- The **SAIEE 2021–25** is India’s **latest** national census for **Asian elephants (Elephas maximus indicus)**.
- It provides a **new population baseline** due to a shift in methodology from earlier estimation techniques.
- **Conducted by:** Union Ministry of Environment, Forest and Climate Change (MoEFCC) in coordination with **state forest departments**, the **Wildlife Institute of India (WII)**, and various research institutions.
- **Released by:** Wildlife Institute of India (WII)
- The SAIEE 2021–25 adopted a **new survey design**. For the first time, the estimation used a **genetic mark-recapture model** to identify individual elephants.

Key Findings of the Survey

- **Total population:** The total population of elephants in India has been estimated at **22,446 individuals** in 2025.
 - Compared to the 2017 estimate of 27,312 elephants, this shows a decrease of about **17.81 percent** (or 4,065 elephants).
 - The figures are **not directly comparable** because of the **adoption of a new scientific method**, and the current number should be treated as a **new population baseline**.
- **Regional Distribution**

- The highest number of elephants, **11,934**, are found in the **Western Ghats** region.
- The **North Eastern Hills and Brahmaputra floodplains** host around **6,559 elephants**.
- The **Shivalik Hills and Gangetic plains** support approximately **2,062 elephants**.
- The **Central India and Eastern Ghats** region has an estimated **1,891 elephants**.
- **State-wise Distribution:**
 - **Karnataka** continues to have the largest elephant population in India, with **6,013 elephants**.
 - **Assam** ranks second with **4,159 elephants**, followed by **Tamil Nadu** with **3,136 elephants**.
 - **Kerala** has **2,785 elephants**, **Uttarakhand** has **1,792**, and **Odisha** has **912 elephants**.
 - Together, these states account for the majority of India's wild elephant population.
- **Conservation Challenges Identified:**
 - The report highlights serious **habitat fragmentation** and the loss of traditional elephant corridors due to urbanization and agricultural expansion.
 - It notes that **railway lines, highways, and power infrastructure** have disrupted elephant movement and caused rising cases of accidents and conflicts.
 - **Encroachments, fencing of farmlands, and plantation expansion** in the Western Ghats have further isolated elephant populations.
 - In **Central India**, mining operations pose a major threat to elephant habitats.
 - The **Northeastern states** faced challenges in data collection due to difficult terrain and limited field coverage.
- **Recommendations:**
 - The report recommends that the 2025 estimation be treated as a **new baseline** for all future monitoring exercises.
 - It calls for enhanced **connectivity between fragmented elephant habitats** through corridor restoration.
 - It suggests improving **coordination among states** that share elephant ranges to ensure migratory safety.
 - The use of **genetic monitoring** should be made a standard component of wildlife population surveys.

- Greater **community participation** and **conflict mitigation programs** are required to reduce human–elephant clashes.
- The report emphasizes that conservation success depends on **scientific management, law enforcement, and cooperative governance** across all elephant landscapes in India.

Project Seabird of Indian Navy

News: Under the Project Seabird of the Indian Navy, new residential accommodation for Senior Sailors and Defence Civilians of the Indian Navy has been inaugurated by Chief of the Naval Staff.

About Project Seabird of Indian Navy

Source – Indian Navy

- Project Seabird is a **strategic naval infrastructure project** of the **Indian Navy**.
- **Location:** Karwar, Karnataka, on the western coast of India.
- **Aim:** To establish a **state-of-the-art naval base** to support India's maritime security and operational readiness.
- It is the **largest naval infrastructure project for India**.
- Upon completion, it will be the **largest naval base on the west coast** and **also the largest naval base east of the Suez Canal**.
- The project conforms to **extant norms of the Ministry of Environment, Forest & Climate Change (MoEF) and the Indian Green Building Council (IGBC)**.
- The project aligns with the concept of '*Aatmanirbhar Bharat*', sourcing **over 90%** of materials and equipment domestically.
- **Phases of Development:** It has been developed in two phases:
 - **Phase I** focused on creation of berthing, docking, and basic logistic facilities for naval ships.
 - **Phase IIA (Ongoing)** focuses on expanding base capacity to accommodate a **large fleet of ships, submarines, and aircraft**.
- **Features:**
 - The base will have a **specialized dockyard** for repair and maintenance of ships and submarines.
 - A **Naval Air Station** will also be built, with **multiple runways, hangars, housing areas, and ordnance handling zones**.

- There will also be **housing and residential complexes** built at different locations for naval personnel and their families.
 - It will accommodate about **10,000 naval and civilian personnel** with families.
- **Strategic Importance**
 - Strengthens India's **maritime security posture** in the **Arabian Sea**.
 - Provides strategic depth to the **Western Naval Command**.
 - Reduces **congestion at Mumbai** naval dockyard and enhances **fleet dispersal and survivability**.