Factly Weekly

Compilation

2025

For UPSC CSE Prelims Exam

2nd Week

September 2025

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Beas River

News: Amid unprecedented rainfall in its catchment, the Beas in Himachal Pradesh recorded its highest-ever inflow of 11.70 BCM between July 1 and September 5.

About Beas River



Figure 1. Source - NewsArenaIndia

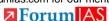
- Earlier it was known as Vipas ("Unfettered river").
- Origin: Beas Kund, near Rohtang Pass (at a height of 4,062 m above sea level) in Himachal Pradesh, on the southern face of the pass in the Kullu region.
- It is an important river of the **Indus system** in northwestern India.

- State covered: Himachal Pradesh, Punjab.
- It forms the renowned Kullu and Kangra valleys.
- It form a gorge at Kati and Largi in the Dhauladhar range.
- Length: Approximately 470 km (traverses about 470 km before meeting the Sutlej at Harike, Punjab).
- Tributary: The major tributaries of the Beas River are Bain, Banganga, Luni, and Uhal, along with Banner, Chakki, Gaj, Harla, Mamuni, Parvati, Patlikuhlal, Sainj, Suketi, and Tirthan.
- Final discharge: To the Arabian Sea via the Indus.
- Major dams
 - Pong (Beas) Dam (also known as Maharana Pratap Sagar)— earth-fill embankment dam in Kangra, Himachal Pradesh.
 - O Pandoh Dam on the Beas River.

Taliban Sanctions Committee (TSC)

News: Taliban foreign minister cancelled a planned India visit after failing to secure a UN Security Council travel-ban waiver.

About Taliban Sanctions Committee (TSC)





Source - ET

- It is a subsidiary body of the **UN Security Council** focused on **Taliban-linked** individuals and entities.
- Established in: It was established in 2011 by Resolution 1988 after the split from the 1267 regime.
- It comprises all 15 Security Council members and decides by consensus.
- **Current Chair** (till 31 December 2025): H.E. Mr. Asim Aftikhar Ahmad (Pakistan); Vice-Chairs for 2025: Guyana and the Russian Federation.
- **Supported by** the Analytical Support and Sanctions Monitoring Team.
- Prepares annual reports, has Guidelines, and announces meetings in the UN Journal.
- Objectives
 - Ensure compliance with **travel bans**, **arms embargoes**, **and asset freezes** against Taliban-affiliated actors who threaten peace in Afghanistan.
 - Oversee implementation of **sanctions** and designate individuals and entities meeting listing criteria.
 - Consider and decide on exemption requests, delisting, and periodic reviews of listings.
 - Examine Monitoring Team **reports** and report to the Security Council; conduct outreach.

Key feature

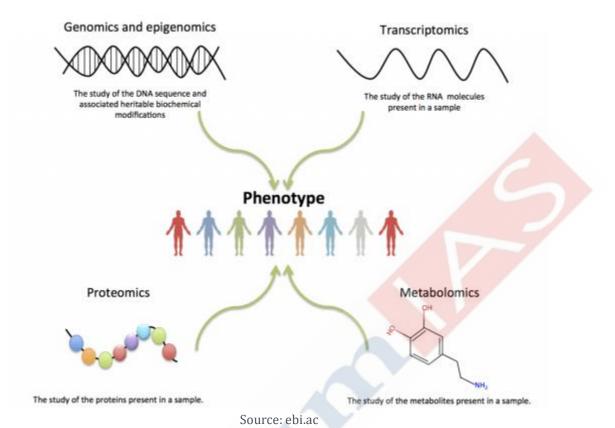
- **List-based regime** covering about 130 individuals and entities.
- Chair exercises procedural control, including agenda-setting, consultations, and recommendations.
- Consensus decision-making limits unilateral action.
- No investigative or enforcement powers; relies on state cooperation for implementation.

Functional Genomics

News: Personalised medicine customises cancer treatment based on genes, but tests can be unclear. Functional genomics helps understand genes better and guide treatment. It is slowly spreading in Africa despite high costs and limited resources.

About Functional Genomics

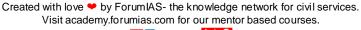




- Functional genomics is the **study of the physiological and biochemical effects of gene functions and interactions**, emphasising how genes impact metabolite levels, which are more directly linked to the phenotype than DNA, RNA, or proteins.
- It focuses on understanding how individual components of a biological system interact to produce specific phenotypes.

Note: Phenotype refers to an individual's observable traits, such as height, eye color and blood type. A person's phenotype is determined by both their genomic makeup (genotype) and environmental factors.

- Scope: Unlike classical genetics, functional genomics often analyzes multiple genes or genomic regions simultaneously ("genome-wide" approach).
- Aim: To narrow down targets for detailed analysis and identify candidate genes or regions relevant to specific traits or diseases.
- Focus Areas: To examine the dynamic expression and function of gene products in specific contexts, such as developmental stages, tissues, or disease conditions.
- Levels of Analysis: Functional genomics can be studied at multiple molecular levels:
 - **DNA level:** Genomics and epigenomics study of the genome sequence and regulatory modifications.
 - **RNA level:** Transcriptomics study of gene expression patterns.
 - **Protein level:** Proteomics study of proteins and their functions.
 - **Metabolite level:** Metabolomics study of metabolites and metabolic pathways.
- By combining transcriptomics, proteomics, and metabolomics data, researchers aim to build a comprehensive model of the biological system.
- Integrated data helps reveal how genes, proteins, and metabolites work together to generate specific phenotypes.





Use:

- To use current knowledge of gene function to create predictive models connecting genotype to phenotype.
- It provides insights for understanding normal biology, disease mechanisms, and potential therapeutic targets.

Self-Respect Movement

News: Oxford conference commemorates the centenary of the Self-Respect Movement, highlighting Periyar's worldwide impact.

About the Self-Respect Movement

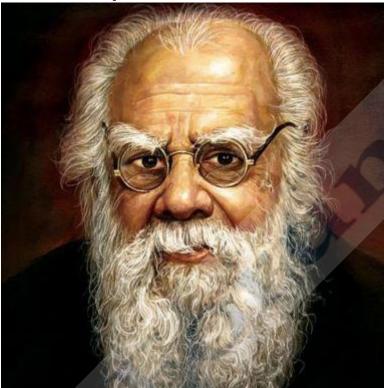
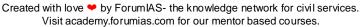


Figure 2. Source: Wallpaper Cave

- It was a social reform movement launched in 1925 by E.V. Ramasamy (Periyar) in Tamil Nadu.
- **Objective:** The main objectives of the movement were:
- O Annihilation of Caste System: Challenged the caste hierarchy and Brahmanical supremacy.
- Promotion of Rationalism:
 Encouraged logical reasoning over blind faith and superstitions.
- **Gender Equality**: Advocated for women's rights, including education and public participation.
- Inter-caste Marriages:
 Encouraged marriages across castes to break societal barriers.
- Dravidian Identity: Promoted a distinct Dravidian identity against Aryan cultural domination
- It advocated **rationalism and the rejection of superstitions** supporting

social hierarchies.

- The Self-Respect Movement mainly operated in the Tamil districts of India and primarily mobilized low-status groups such as Vanniya Kula Kshatriyas and untouchables.
- The movement actively involved women and youth, including both illiterate and semi-educated individuals.
- The Tamil weekly **Kudi Arasu**, founded in **1924**, became the official publication of the Self-Respect Movement and served as its primary propaganda tool.
- Periyar was inspired by anti-caste movements led by **Jyotirao Phule and B.R. Ambedkar** in other parts of India.
- In 1925, Periyar left the Indian National Congress to establish the Self-Respect Movement, focusing specifically on social equality and human dignity.





- The movement actively opposed the Devdasi system, caste-based discrimination, and the prohibition on widow remarriage.
- In February 1929, Periyar organized the first provincial Self-Respect Movement conference in Chengalpattu, which focused significantly on women's issues and was presided over by W.P.A. Soundara Pandian.
- Female leaders like Veeramal and Annai Meenanmbal actively contributed to the movement by seeking justice for Dalit women and promoting gender equality
- The Self-Respect Movement laid the foundation for the **Dravidian Movement**, which later led to the formation of political parties such as the Dravida Munnetra Kazhagam (DMK) and the All India Anna Dravida Munnetra Kazhagam (AIADMK).

Account Aggregator

News: The government announced that 11 crore users had linked financial information as of September 5, 2025, enabling secure, consent-based data sharing across institutions.

About Account Aggregator

- An Account Aggregator (AA) is an RBI-regulated NBFC-AA.
- It enables secure, real-time, consent-based sharing of financial information between institutions.
- It acts as an intermediary between Financial Information Providers (FIPs) and Financial Information Users (FIUs).
- AAs do not store or process data; they facilitate encrypted transfer based on a consent layer.
- Users can choose among multiple AAs. Examples include CAMS FinServ and PhonePe AA.

How it work?

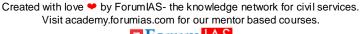
- Users link their bank accounts to an AA.
- They give granular consent to share specific data with an FIU (e.g., a lender or wealth manager).
- The AA fetches the requested data from the relevant FIP (e.g., a bank) and securely delivers it to the FIU.
- Registration is voluntary. Users select which accounts to link, can reject requests, and can revoke ongoing consents at any time. The access duration is shown at the time of consent.
- One AA registration works across banks on the network. Apps (e.g., Finvu, OneMoney, CAMS Finsery, NADL) are available; some AAs may charge users, others may charge institutions.

How is Account Aggregator different to Aadhaar eKYC data sharing, credit bureau data sharing, and platforms like CKYC?

- Aadhaar eKYC and CKYC only allow sharing of four 'identity' data fields for KYC purposes (eg name, address, gender, etc).
- Similarly, credit bureau data only shows loan history and/or a credit score.
- The Account Aggregator network allows sharing of transaction data or bank statements from savings/deposit/current accounts.

Significance of Account Aggregator

- Replaces physical, notarised, or password-based data sharing with a simple, mobile, consent-driven
- End-to-end encryption and digital signatures secure data; AAs cannot view or aggregate personal data.





- Improves access to loans by providing tamper-proof data quickly and cheaply, speeding evaluation.
- Enhances money management by enabling secure consolidation of data stored across locations.
- May enable loans without physical collateral by sharing trusted information (e.g., GST or GeM cash flows).

Stakeholders and Adoption

- FIPs: Banks, mutual funds, insurers, etc.
- FIUs: Lenders, wealth managers, insurers, etc.
- AAs: Licensed entities that route encrypted data.
- 112 institutions operate as both FIPs and FIUs; 56 are only FIPs; 410 are only FIUs, showcasing wider adoption across the financial spectrum.

Unified Consent Infrastructure (DPDP Act)

- The DPDP Act, 2023 introduces Consent Managers (CMs) for consent collection, withdrawal, lifecycle management, and secure sharing.
- Aligning AA and CM frameworks avoids duplication, increases efficiency, promotes innovation, and strengthens Digital Public Infrastructure.

Blood Moon

News: A rare Blood Moon appeared on September 7, 2025, longest since 2022, widely visible across Asia and Europe.

About Blood Moon



Figure 3. Source - HT

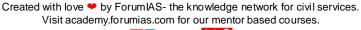
• A Blood Moon is the red glow of the Moon during a total lunar eclipse. It occurs at the full moon phase when Earth's shadow covers the Moon.

Occurring mechanism

- The Sun, Earth, and Moon align, with Earth between the Sun and the Moon.
- The Moon enters Earth's umbra, blocking direct sunlight.
- Sunlight reaching the Moon is filtered through Earth's atmosphere: shorter blue wavelengths scatter away, while longer red wavelengths bend toward the Moon, creating the reddish hue.

About Rayleigh Scattering

- Explained by John William Strutt (Lord Rayleigh).
- When light interacts with particles smaller than its wavelength, scattered intensity is inversely proportional to wavelength.
- Blue light scatters more strongly, which makes the sky appear blue.
- During an eclipse, this scattering removes blue light, letting red light pass through Earth's atmosphere to illuminate the Moon.

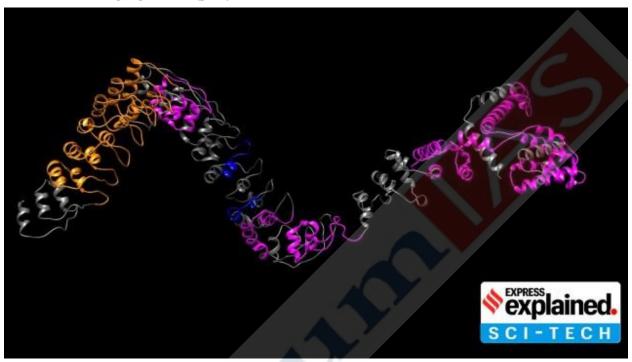




Protein Language Model (pLM)

News: Recently, researchers have tried to shed light on the inner workings of the language models that predict the structure and function of proteins by using Protein Language Model (pLM).

About Protein Language Model (pLM)



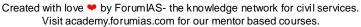
- A **Protein Language Model (pLM)** is a special type of artificial intelligence program designed to study proteins.
- It works like ChatGPT or Google Translate, but instead of human language, it processes **protein** sequences made of amino acids.
- The model treats **amino acids as "words"** and their sequence as a "sentence" to understand biological information.

How Do Protein Language Models Work?

- pLMs are trained on huge collections of protein sequences from various organisms.
- During training, the model learns patterns about how amino acids appear together.
- It understands the "grammar" and "syntax" of protein sequences by learning rules without being explicitly told.
- **Example:** The model can predict a missing amino acid in a sequence, just like language models predict the next word in a sentence.
- This helps the model learn how sequences relate to protein structure and function.

Predicting Protein Structure and Function

- A key use of pLMs is predicting the **3D structure of a protein from its amino acid sequence**. Protein structure is important because small changes can make a protein inactive or harmful.
- The model can **also predict a protein's stability,** how it binds to other molecules, and its role in the cell.
- This helps scientists understand how natural proteins work and the effects of mutations.
- pLMs can design **new proteins with specific properties not found in nature**.





- Scientists provide the desired function, and the model suggests new amino acid sequences to achieve
- **Example applications:**
 - Designing enzymes to break down plastic waste.
 - Creating proteins to convert plant materials into biofuel.
 - Developing therapeutic proteins to treat diseases.
- Designed proteins are then tested in laboratories to check their function.

Impact on Medicine and Biotechnology

- pLMs are changing medicine and biotechnology by:
 - Speeding up **drug discovery**: Helping design proteins that bind to disease targets or improve existing drugs.
 - Supporting personalized medicine: Helping understand how a person's genetic variations affect protein function.
 - Advancing industrial biotechnology: Designing better enzymes for manufacturing, sustainable materials, and advanced diagnostic tools.
- These innovations help scientists develop new medicines, improve industrial processes, and understand diseases faster.

Bhupen Hazarika

News: Recently, Prime Minister Narendra Modi paid tribute to Bharat Ratna Dr. Bhupen Hazarika on his birth anniversary.

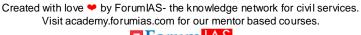
About Bhupen Hazarika



- Bhupen Hazarika was a cultural icon from Assam and Northeast India.
- He was born in 1926 in Sadiya, Assam.
- He was a singer, lyricist, musician, filmmaker, and cultural activist.
- He is popularly known as the "Bard of Brahmaputra" and "Sudhakantho" (Pure Voice).
- Не received the Bharat Ratna posthumously, fulfilling a long-standing demand from his fans and cultural community.
 - The award recognizes his **contribution to**

music, culture, and society.

- He also received many prestigious awards before: Sangeet Natak Akademi Award, Padma Shri, Padma Bhushan, Posthumous Padma Vibhushan and Dada Saheb Phalke Award (1992).
- His songs and lyrics were in Assamese, Bengali, Hindi, and other languages.
- Focused on important themes: Internationalism, Peace and equality, Unity across religions and languages and struggles of the working class
- He used his art to support **marginalized communities** and promote **social reform**.





- His famous song "Manuhe Manuhar Babe" (For Man) expresses humanistic values: "If man would not think for man with a little sympathy, who will?"
- He also composed music for the Hindi film **Rudali**, which brought him fame all over India.
- Bhupen Hazarika is remembered as a **humanitarian who worshipped humanity**.
- He remains an inspiration for promoting **secularism**, **equality**, **and social justice** through music and culture.

National Annual Report & Index on Women's Safety (NARI) 2025

News: The National Commission for Women released the National Annual Report & Index on Women's Safety (NARI) 2025 on August 28, based on a survey of 12,770 women across 31 cities.

About National Annual Report & Index on Women's Safety (NARI) 2025

- NARI 2025 is a **survey-based national safety index** that documents lived experiences, unreported harassment, and perceptions of safety beyond official crime data.
- It assigns a **national safety score of 65%** and classifies cities as **"much above," "above," "below," or "much below"** this benchmark.
- The report is the first such national safety index, released by the NCW and ideated and funded by Pvalue Analytics.

Key Highlights

Perceptions of safety

- Six in ten women felt safe in their city, while 40% considered themselves "not so safe" or "unsafe."
- Safety perceptions decline sharply at night; **educational institutions are 86% safe in daylight**, with notable drops off-campus or after dark.

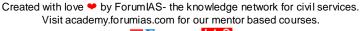
City rankings and patterns

- Safest cities: Kohima, Visakhapatnam, Bhubaneswar, Aizawl, Gangtok, Itanagar, and Mumbai.
- Lowest ranked: Patna, Jaipur, Faridabad, Delhi, Kolkata, Srinagar, and Ranchi; Faridabad ranked 27th and Delhi 28th.
- Higher-ranked cities align with gender equity, civic participation, policing, and women-friendly infrastructure.
- lower-ranked cities reflect weak institutional responsiveness, patriarchal norms, and infrastructure gaps.

Exercise ZAPAD 2025

News: The multilateral joint military exercise ZAPAD 2025 is scheduled to be conducted from 10 to 16 September 2025.

About Exercise ZAPAD 2025





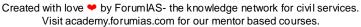


Source: PIB

- It is to be conducted at the **Mulino Training Ground**, **Nizhniy**, **Russia**.
- Aim: The exercise is designed to enhance military cooperation, improve interoperability, and provide a platform for participating armies to exchange tactics, techniques, and procedures.
- Participation: An Indian Armed Forces contingent comprising a total of 65 personnel has departed for the exercise.
- The Indian Army contingent is **led by a battalion of the KUMAON Regiment,** along with troops from other arms and services.
- **Objectives of the Exercise:** The main objectives of Exercise ZAPAD 2025 are:
 - To enhance military cooperation between participating nations.
 - To improve interoperability among multinational forces.
 - To exchange tactics, techniques, and procedures, especially in the areas of conventional warfare and counter-terrorism operations.
- **Key Focus Areas:** The exercise will focus on joint company-level operations conducted in open and plain terrain.
 - The participating troops will undertake Joint operational planning, tactical drills to simulate battlefield scenarios and special arms skills exercises to sharpen combat proficiency.
- Benefits of Participation: Participation in Exercise ZAPAD 2025 offers several benefits for India:
 - It provides a valuable opportunity to hone joint operational capabilities.
 - It facilitates the integration of emerging technologies into combat practices.
 - It helps troops gain experience operating in a multinational and multi-service combat environment.
- **Strategic Importance:** Exercise ZAPAD 2025 is expected to:
 - Further strengthen defense cooperation between India and Russia.
 - Reinforce the spirit of collaboration and mutual trust.
 - Foster camaraderie and mutual understanding among the armed forces of participating nations.

Langkhun / Lankhong Festival

News: Tiwa tribesmen celebrate Langkhun festival in Umsowai village in Karbi Anglong district of Assam.





About Langkhun / Lankhong Festival



Figure 4. Source - Sentinel

- •During this harvest festival, the **Tiwa community** presents sacred offerings to **Ramsa Devota** and other deities, **seeking protection of their paddy from pests and an abundant yield**.
- •They also pray for the prosperity and good health of their families and the entire village, asking for safeguarding from misfortune and disease.
- Region and Tribes:
- oThe **Tiwa people**, also called **Lalung**, are a **Tibeto-Burmese** group mainly in Assam, Meghalaya, Arunachal Pradesh, Manipur, and Nagaland, with presence in Bangladesh and Myanmar.

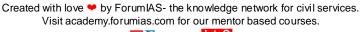
○In Assam, the community is recognized as a Scheduled Tribe and follows traditional agriculture, including jhum or shifting cultivation.

- **Time of celebration:** The festival features bamboo worship over four days and is held variably between October and December.
- Significance.
 - Langkhun marks an important seasonal transition for the Tiwa, reflecting their agrarian roots and strong ties with
 - The festival fosters communal harmony, bringing together people from nearby villages and dignitaries for collective worship and joy.
- Other festivals of the Tiwa tribes are: Three Pis(Bihu), Borot utsav, Sogra phuja, Wanchuwa, Jonbeel Mela, Kabla, and Yangli Phuja.

EnteroMix Cancer Vaccine

News: The Russian Federal Medical and Biological Agency (FMBA) announced that the EnteroMix cancer vaccine is now ready for clinical use.

About EnteroMix Cancer Vaccine





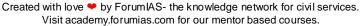


Business Standard

- The EnteroMix cancer vaccine was developed by the **National Medical Research Radiology Centre** (NMRRC), which operates under the Ministry of Health of Russia.
- EnteroMix cancer vaccine is built on mRNA technology. Unlike traditional vaccines that use weakened or inactivated viruses, mRNA vaccines deliver a set of genetic instructions that teach the body's cells to produce a specific antigen.
- In the context of cancer treatment, these antigens appear on the surface of tumor cells. Once the immune system is trained to recognize these tumor-specific antigens, it can produce antibodies and immune cells that target and destroy cancer cells while sparing healthy tissue.
- Mechanism of action: EnteroMix operates by using a combination of four harmless viruses.
 - These viruses are designed to target and destroy cancer cells while simultaneously activating the body's immune defenses.
 - This dual approach helps slow tumor progression and, in some cases, completely eliminate tumors
- One of the unique advantages of the EnteroMix vaccine is its personalization.
 - Each patient's vaccine is customized based on the specific antigens present in their tumor cells
 - This allows the immune system to be trained to recognize multiple tumor antigens simultaneously.
- Unlike traditional preventive vaccines given to healthy individuals, mRNA cancer vaccines are
 designed for patients already living with cancer, aiming to treat existing tumors rather than prevent
 disease.

Global Context of Cancer Vaccine Development

- The UK's National Health Service (NHS), in partnership with BioNTech, **launched the Cancer Vaccine Launch Pad in 2023**, aiming to accelerate personalized mRNA cancer vaccine clinical trials.
- In the United States, the Food and Drug Administration (FDA) has approved only one cancer vaccine
 to date—Sipuleucel-T for prostate cancer in 2010—which extended survival by around four
 months.





• Currently, **more than 120 cancer vaccine clinical trials are underway globally**, focusing on lung, breast, prostate, melanoma, pancreatic, and brain cancers.

Small Satellite Launch Vehicles (SSLVs)

News: On September 10, 2025, ISRO, NSIL, IN-SPACe, and HAL signed India's 100th technology transfer agreement to enable HAL to independently produce Small Satellite Launch Vehicles (SSLVs).

About ISRO Signed 100th Technology Transfer with HAL for SSLV Production

- The agreement, **facilitated by IN-SPACe**, formalizes SSLV technology transfer from ISRO to HAL over 24 months, with training and technical support throughout the period.
- **ISRO** will guide HAL on preparedness-to-flight, covering commercial processes and technology integration, culminating in two missions under the agreement.
- The initiative **advances space-sector reforms**, **strengthens India's industrial ecosystem**, and supports commercial launch capabilities for the global small-satellite market.

Objectives

- Enable HAL to independently produce SSLVs through complete technology transfer within 24 months.
- Build capability through training, workforce preparation, and ISRO's technical guidance up to flight readiness.
- Commercialise SSLV to meet domestic and international demand and capture the growing global small-satellite market.
- Strengthen India's space technology and commercial launch capacity while **fostering a self-reliant**, **cost-competitive ecosystem**.

About SSLV

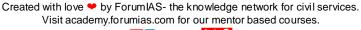
- Engines and Propulsion: SSLV is a three-stage, all-solid launch vehicle and a liquid-based Velocity Trimming Module (VTM) as the terminal stage..
- Payload Capacity: Carry up to 500 kg payloads into Low Earth Orbit.
- **Developed by:** SSLV was developed by the Indian Space Research Organisation (ISRO).
- **Launch operations can be conducted from** Sriharikota for inclined orbits and from the upcoming Kulasekarapattinam site for polar orbits.

Swachh Vayu Survekshan 2025

News: Indore topped Swachh Vayu Survekshan (SVS) 2025 for million-plus cities under NCAP, as announced by the Union Environment Minister.

About Swachh Vayu Survekshan 2025

- SVS is an annual survey conducted by the Ministry of Environment, Forest and Climate Change under the National Clean Air Programme (NCAP).
- It is a rigorous, multi-tiered evaluation based on comprehensive due diligence under NCAP.
- It covers 130 NCAP cities each year to promote healthy competition and accelerate actions to improve air quality.
- It promotes healthy competition and faster action to improve air quality.





 The survey assesses eight areas, including road-dust control, solid-waste management, vehicular and industrial emissions, construction and demolition waste handling, public awareness, and particulatematter improvements.

Key Highlight

- Category-wise rankings:
 - o Million-plus cities: Indore ranked first, Jabalpur second, and Agra with Surat shared third.
 - Population 3-10 lakh: Amravati ranked first; Jhansi and Moradabad shared second; Alwar ranked third.
 - o **Population under 3 lakh:** Dewas ranked first; Parwanoo ranked second; Angul ranked third.
 - **Overall progress:** PM10 declined in 103 of 130 cities. 64 cities achieved a 20% cut while 25 cities reached a 40% cut.

• Metro trends:

- Mumbai showed the highest decline (44%), followed by Kolkata (37%), Hyderabad and Bengaluru (26% each), Delhi (15%), and Chennai (12%).
- Of the 130 cities, 22 met the National Ambient Air Quality Standards (NAAQS) by reporting annual average PM10 concentrations of less than 60 micrograms per cubic metre (ug/m3).
- Among the big metros, only Chennai met the acceptable limit, recording an annual average of 58 ug/m3..

Recognitions and initiatives:

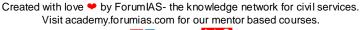
- Indore and Udaipur received Ramsar "Wetland Cities" certificates.
- A target to plant 75 crore plants during "Seva Parv" under "Ek Ped Maa ke Naam" (Sept 17– Oct 2) was announced.

Acharya Vinoba Bhave

News: On September 11, 2025, India commemorates Acharya Vinoba Bhave's 130th birth anniversary, celebrating his legacy in the independence movement, and Bhoodan Movement.

About Acharya Vinoba Bhave

- He (1895–1982) was born in Maharashtra, Vinoba Bhave was a philosopher and social reformer inspired by Gandhi's non-violence and Satyagraha.
- Freedom Struggle Contributions:
 - In 1925, Gandhi entrusted him with the task of overseeing the entry of Harijans into the temple at Vaikom, Kerala.
 - O Bhave was Gandhi's first Individual Satyagrahi in 1940, symbolizing non-violent resistance.
 - He joined the **Quit India Movement** and faced multiple arrests, spending five years in prison for protests.
 - Bhave's involvement with Gandhi's constructive initiatives grew, focusing on Khadi, village industries, education (Nai Talim), sanitation, and hygiene.
- His Sarvodaya philosophy emphasized communal welfare. Bhave founded Brahma Vidya Mandir in 1959 to empower women and promote non-violence.
- His works, like **Ishavasyavritti, reflect** his spiritual approach to social reform.
- Bhoodan and Social Reforms
 - He led the Bhoodan Movement from 1951, promoting land donations for the landless.





- Initiated in **Pochampally (1951), Bhoodan** redistributed land from over 1,000 villages to the landless via Gramdan (1954).
- His **Sarvodaya movement** addressed rural challenges, promoting **self-sufficiency**.
- In 1959, Bhave established the Brahma Vidya Mandir in Paunar, Maharashtra. Brahma
 Vidya Mandir empowered women through non-violent principles.
- Bhave's legacy, marked by his 1982 Samadhi Maran, continues to inspire social justice, sustainable living, and non-violence globally.

Cross River Gorilla

News: Conservationists race to protect as fewer than 300 Cross River gorillas remain in **Nigeria and Cameroon's remote forests.**

About Cross River Gorilla (Gorilla gorilla diehli)



Figure 5. Source - Tol

- It is a western **gorilla subspecies**.
- Habitat and Behavior
- It inhabits Nigeria-Cameroon border forests like
 Cross River National Park, Afi, and Takamanda at
 1,500-3,500m elevations.
- Residing in **dense rainforests**, these **gorillas form cohesive groups led by silverbacks**, foraging widely for vegetation and building ground or tree nests.
- They minimally impact crops, unlike other wildlife.
- Features
- It is known for brownish-grey fur and red crests, silverbacks lead groups of 2-20.
- It feeds on leaves, nuts, and berries.
- **Slow reproduction** (one birth every 4–5 years).
- Each infant requires up to four years of maternal care, which limits population growth.
- Lifespan ranges from 35 to 50 years, adding urgency to conservation efforts.
- IUCN Status: Critically endangered
- Threats: The population faces threats from deforestation, poaching, and slow reproduction.
 - Major threats include **bushmeat hunting**, **illegal pet trade**, **habitat loss from logging**, **and Ebola**.
- Conservation efforts: Initiatives by WWF, WCS, and Nigeria's NCF support protected areas, antipoaching patrols, and community-based conservation under frameworks like CITES and CMS, addressing human-wildlife conflict and promoting sustainable livelihoods.

INS Aravali

News: The Indian Navy will commission INS Aravali at Gurugram on 12 September 2025, enhancing India's maritime domain awareness (MDA) capabilities.

About INS Aravali





Figure 6. Source - TH

- It is named after the steadfast **Aravali** mountain range.
- It is designed to strengthen the Indian Navy's **command**, **control**, **and MDA framework**.
- It is located at Gurugram, Haryana.
- The **base will support** information and communication centres, enabling real-time situational awareness across India's maritime frontiers.
- Motto: Guided by the motto Maritime Security through Collaboration, it exemplifies a

cooperative ethos, working seamlessly with naval units, MDA centres, and allied stakeholders.

- The base highlights India's emphasis on blending **technology**, **vigilance**, **and collaboration** to safeguard national maritime interests.
- **Strategic Role:** INS Aravali will act as a communication hub, enhancing maritime surveillance and supporting naval operations in the Indian Ocean Region.
- **Symbolism of Crest:** Its crest depicts the **Aravali Range**, symbolising strength, with a **rising sun** representing vigilance, resilience, and technological advancement.
- **MDA Integration:** The base will connect with India's coastal radar network, information fusion centres, and allied navies, ensuring round-the-clock monitoring of maritime traffic.
- Collaborative Ethos: Reinforces India's vision of maritime security as a collective responsibility, aligning with doctrines like MAHASAGAR, which translates to "Great Ocean," captures India's broader ambition in the global maritime domain.

Réunion Island

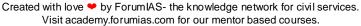
News: The Indian Navy's first training squadron INS Aravali arrives at Réunion island, Mauritius.

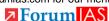
About Réunion Island



Figure 7, Source - Britannica

- Location: Reunion Island is a remote Indian Ocean island located between Madagascar and Mauritius.
- It is an **overseas region of France**.
- Capital: The island's capital is Saint-Denis which is home to one-fifth of the population.
- The Island is home to one of **the world's most active volcanoes**, **the Piton de la Fournaise** which is also a **World Heritage site**.
- **Ports:** Réunion's coast has **no good natural harbors.**
- **Climate:** It has a tropical climate.





- **Geographical Features:** Réunion is mostly **volcanic and mountainous**, deeply dissected by short torrential rivers.
- Rivers: The Marsouins and Galet Rivers are the largest.
- Along with **Mauritius and Rodrigues**, the island forms the **Mascarene Archipelago**.
- **Strategic Importance:** Réunion hosts French naval bases, enhancing Indo-Pacific maritime security, aligning with India's regional interests. Its biodiversity, including 850 endemic species, supports global conservation efforts.
- Demographics and Culture: Today, the population is largely of mixed African, European, and South
 Asian descent. Its Creole culture reflects African, Indian, and French influences, visible in maloya
 music and a spicy fusion cuisine.

All-India Debt and Investment Survey (AIDIS) and the Situation Assessment Survey (SAS) of Agricultural Households

News: The NSO to conduct the All-India Debt and Investment Survey (AIDIS) and the Situation Assessment Survey (SAS) of Agricultural Households from July 2026 to June 2027.

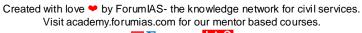
All-India Debt and Investment Survey (AIDIS) and the Situation Assessment Survey (SAS) of Agricultural Households

About All-India Debt and Investment Survey (AIDIS)

- **Conducting agency:** The National Statistics Office (NSO), under MoSPI, conducts AIDIS as part of its large-scale household survey system.
- Historical background:
 - AIDIS traces its origin to the All India Rural Credit Survey (1951–52).
 - It was expanded in 1961–62 to **cover both debt and investment**.
 - Since then, it has been conducted roughly once every decade, most recently in the 77th Round (2019) at the request of the Reserve Bank of India.
- Purpose and coverage:
 - The survey **provides critical data on household indebtedness and asset ownership** in both rural and urban areas.
 - These **data feed into national accounts** and help assess inequality in asset distribution and understand credit markets.
 - The findings inform policies of the RBI, MoSPI, and other government institutions.

About Situation Assessment Survey (SAS) of Agricultural Households

- Conducting agency: The NSO, under MoSPI, conducts the SAS to assess farming livelihoods.
- Historical background:
 - First launched in 2003 and expanded in 2013 to cover all agricultural households.
 - It was further strengthened in 2019 to provide comprehensive insights.
- **Scope**: The survey covers:
 - Household income and expenditure.
 - Indebtedness and access to credit.
 - Land and livestock ownership.
 - Crop and livestock production.
 - Farming practices and use of technology.
 - Access to government schemes and crop insurance.





Significance

- It **assesses the economic conditions of farming communities** and now provides comprehensive insights into agricultural livelihoods.
- Its findings are used by the Ministry of Agriculture and Farmers Welfare, NITI Aayog, researchers, and financial institutions to shape agriculture and rural development policies and programmes.
- By covering income-expenditure, indebtedness and credit access, land and livestock ownership, crop and livestock production, technology use, and access to schemes and crop insurance, it offers a single evidence base for targeted interventions.

Samudra Pradakshina

News: The Raksha Mantri virtually flagged off Samudra Pradakshina, a Tri-service all-women circumnavigation expedition, from the Gateway of India, Mumbai.

About Samudra Pradakshina

- It is a **nine-month voyage** by **10 women officers** aboard the indigenously built Indian Army Sailing **Vessel (IASV) Triveni**.
- The team will **sail about 26,000 nautical miles on an easterly route,** round Capes Leeuwin, Horn and Good Hope, make four international port calls, and return to Mumbai in May 2026.

Aims

- O Commemorate Nari Shakti and the vision for Viksit Bharat.
- O Demonstrate jointness and unity of the three Services.
- Showcase Aatmanirbhar Bharat and India's global vision through maritime diplomacy.

Objective

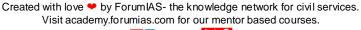
- Complete a global circumnavigation in accordance with WSSRC norms—cross all longitudes, undertake Equator crossings, and cover over 21,600 nautical miles under sail alone, without canals or powered transit.
- Conduct scientific work with the National Institute of Oceanography, including microplastics study, documentation of ocean life, and awareness on marine health..

Features

- Platform: IASV Triveni, a 50-foot, indigenously built yacht from Puducherry.
- Crew: A 10-member Tri-service team led by Expedition Leader Lieutenant Colonel Anuja Varudkar; Deputy Expedition Leader Squadron Leader Shraddha P Raju.
- **Preparation:** Three years of offshore training from Class B vessels to the Class A IASV Triveni (acquired in October 2024), including a Mumbai–Seychelles–Mumbai voyage.

Past Examples

- **First solo global (UK) non-stop circumnavigation (1969):** Sir Robin Knox-Johnston completed the first solo non-stop circumnavigation in 1969.
- First solo Indian circumnavigation (2009–10): Captain Dilip Donde completed
- First Indian non-stop circumnavigation (2012–13): Commander Abhilash Tomy.
- The Indian Navy's Navika Sagar Parikrama (2017–18) and Navika Sagar Parikrama-II (2024–25) on INSV Tarini were successful circumnavigation expeditions.





Sahyadri Tiger Reserve

News: The Union Environment Ministry approved capturing eight tigers from Tadoba–Andhari and Pench for translocation to the Sahyadri Tiger Reserve, to revive the big cat population in the northern Western Ghats.

About Sahyadri Tiger Reserve



Figure 8. Source – Wildlife Conservation Trust

- Location: The Sahyadri Tiger Reserve is located in the Sahyadri Ranges of Western Ghats in Maharashtra along the common boundary with Karnataka and Goa.
- The reserve straddles Kolhapur, Sangli, Satara, and Ratnagiri districts.
- It is the **first** Tiger Reserve of **Western** Maharashtra and the **fourth Tiger** Reserve of the State.
- Major river: The reserve forms the catchment of the Koyna and Warna rivers, which are crucial for neighbouring districts.
- Protected Areas: It comprises Koyna Wildlife Sanctuary (KWLS) and Chandoli National Park (CNP).
- Terrain: The habitat of reserve is composed of woodlands, grasslands and plateau, the latter locally referred to as "Sadaa", which are lateritic in nature with considerable habitat value.
- The **slopes** in the Chandoli National Park habitat are **less steep**, with small water bodies and a number of ecotone areas.
- Vegetation: It include Western (Montane) Subtropical Hill Forests on higher ridges, West Coast Semi-evergreen Forests in valleys, and Southern Moist Mixed Deciduous Forests on the lower slopes..
- **Flora:** The flora includes **medicinal and fruit-bearing trees** such as Anjani (Memecylon umbellatum), Jambhul (Syzygium cumini), and Pisa (Actinodaphaone Angustifolia)...
- Fauna: Tiger, wild dog, and leopard, gaur and sambar, along with four-horned antelope, mouse deer, and giant squirrel; birds including hornbills and vultures; and reptiles like crocodiles and diverse snakes.

SWAGAT-FI

News: SEBI announced a proposal to introduce the Single Window Automatic & Generalised Access for Trusted Foreign Investors (SWAGAT-FI) framework for FPIs and FVCI (Foreign venture Capital Investor).

About SWAGAT-FI





Source - ET

- SWAGAT-FI is a single-window, unified access mechanism for select low-risk foreign investors.
- Full form: Single Window Automatic & Generalised Access for Trusted Foreign Investors
- Aim: The framework aims to unify, streamline, and standardise market access for specified trusted foreign investors, simplify compliance and documentation, and improve India's attractiveness as an investment destination.

• Eligibility

- **Government and government-related investors**, including central banks, sovereign wealth funds, and multilateral entities.
- Appropriately **regulated Public Retail Funds** such as mutual funds, insurance companies, and pension funds.
- Existing FPIs meeting criteria may convert to SWAGAT-FI status.

Features

- Option to register as **both FPI and FVCI** without further documentation, enabling investment in listed equity and debt (as FPI) and in specified unlisted sectors and startups (as FVCI).
- Continuance of registration, fee payment, and KYC **review** every 10 years.
- Optional single demat account for all holdings across routes, with depository-level tagging for supervision.
- **Removal of the aggregate NRI/OCI/Resident** Indian contribution cap for SWAGAT-FIs (currently 50% for FPIs).
- Unified registration across routes with reduced repeated compliance.

Coast Guard Global Summit 2025

News: India participated in the 4th Coast Guard Global Summit (CGGS) in Rome (11–12 September 2025), reaffirming commitment to maritime governance and announcing its bid to host CGGS 2027.

About Coast Guard Global Summit 2025





Source - DD News

- The **Coast Guard Global Summit (CGGS)** is a multilateral forum for dialogue, confidence-building, and cooperation among coast guards worldwide.
- First convened in **2017** by the **Japan Coast Guard** and the **Nippon Foundation**, it has become a vital mechanism for maritime safety, security, and environment protection.
- The 4th edition (2025) was co-chaired by Italy and Japan with the ethos "Guardians at Sea."
- **Summit Themes**: Maritime safety, marine environment protection, disaster response, law enforcement against piracy/smuggling, and technology-driven surveillance.
- Delegates from **115** countries and international organisations attended, making it one of the largest coast guard gatherings globally.
- **Global Cooperation**: Emphasis on countering transnational crimes, strengthening capacity-building, and promoting inter-regional partnerships.
- **India's Bid for 2027**: Hosting CGGS would reinforce India's maritime diplomacy, blue economy initiatives, and its role as a **"Preferred Security Partner" in the Indian Ocean Region (IOR)**.

Belarus

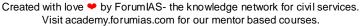
News: Russia and Belarus launched the joint military exercise Zapad-2025 near NATO borders, involving drills in Belarus, Russia, and the Baltic region.

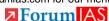
About Belarus



Figure 9. Source - Britannica

- Location: Belarus is a landlocked Eastern European country.
- Bordering countries: It is bordered by Russia, Ukraine, Poland, Lithuania, and Latvia.
- **Capital**: Minsk.
- **Languages**: Belarusian (24%, official), Russian (70%, official).
- Ethnic Belarusians form three-fourths of the population.
- **Relief**: Predominantly **flat** lowlands with **forest cover** (~40%).
- The **Białowieża Forest** is a **UNESCO World Heritage site**.





- Rivers: Dnieper basin dominates; Mukhavyets drains into the Bug River.
- **Climate**: Cool **continental** with Atlantic influence.
- Independent since **1991**, formerly part of the Soviet Union (Belorussia).
- **Zapad-2025 Exercise**: Launched on September 12, 2025, the Russia-Belarus joint military drills simulate repelling attacks and restoring territorial integrity, involving troops, naval deployments in the Baltic and Barents seas, and coalition forces.
- Geostrategic Role
 - Belarus is a close **Russian ally**, forming the **Union State** with Moscow.
 - Borders NATO States: Poland, Lithuania, and Latvia have tightened border controls amid tensions.
- **Significance**: Belarus serves **as Russia's western frontier**, a buffer **against NATO expansion**, and a **critical participant in regional security**, energy transit, and military cooperation.

Pink Tax

News: Rising awareness **highlights Pink Tax** in India, where women often pay more for similar products and **services like razors, shampoos, and haircuts**, **silently eroding household savings** and demanding fair pricing.

About Pink Tax

- Pink Tax is **not a government levy** but a **gender-based pricing phenomenon** where **women's products or services cost more than men's equivalents** despite similar quality.
- Common examples include personal care items, toys, clothing, dry-cleaning, and salon services.
- The term originated in California in 1994; global studies reveal women pay 7–13% more.
- In India, awareness is low, with 67% never having heard of Pink Tax (IFSA research). The 2018 GST exemption on sanitary napkins was a landmark move against such disparity.
- **India's Case**: Women's shampoos, razors, and haircuts are often priced higher; 2018 GST relief on sanitary products marked progress.
- **Economic Impact**: With women earning less on average, Pink Tax deepens inequality and strains family savings.
- Legal & Awareness: No specific anti-Pink Tax law exists, but NCDRC mandates fair pricing.

Defence Procurement Manual 2025

News: Raksha Mantri Rajnath Singh approved the **Defence Procurement Manual (DPM) 2025** to **streamline defence revenue procurement, boost Aatmanirbharta**, and **enhance preparedness** through **simplified**, **transparent processes ensuring timely availability of resources**.

About Defence Procurement Manual 2025





Source - AIR

- The **Defence Procurement Manual (DPM) 2025** replaces the **2009 version** to align with modern warfare and public procurement norms.
- It regulates revenue procurements valued at around ₹1 lakh crore annually under the Ministry of Defence.
- The manual simplifies processes for **operations and sustenance**, empowers **Competent Financial Authorities (CFAs)** for faster decisions, and ensures timely supplier payments.
- It promotes Aatmanirbharta by enabling participation of **private players**, **MSMEs**, **start-ups**, **academia**, **IITs**, **IISc**, **and DPSUs** in defence innovation and indigenisation.
- Significance
 - Ease of Doing Business: Relaxed penalties; maximum Liquidated Damages capped at 5% (10% for major delays).
 - Industry Support: Supportive financing, assured orders up to 5–10 years, and technical handholding by Services.
 - Innovation Push: Dedicated chapter on R&D and indigenisation; collaboration with academia and industry.
 - Flexibility: Limited Tendering allowed up to ₹50 lakh; proprietary items permitted under Propriety Article Certificate.
 - Operational Readiness: 15% work growth provision for repair/refit of aerial and naval platforms to reduce downtime.
 - Transparency & Fairness: NOC from DPSUs removed; competitive bidding mandated; aligned with Government-to-Government (G2G) procurement norms.

Romania

News: The European Union has termed the entry of a Russian drone into Romanian airspace "unacceptable," calling it a "reckless escalation".

About Romania





Source - Britannica

- **Location:** Romania is a country in **Southeastern Europe**;
- Capital: **Bucharest**.
- Borders: It is bordered by Ukraine (north), Moldova (northeast), the Black Sea (southeast), Bulgaria (south), Serbia (southwest), and Hungary (west).
- Climate: Temperate with four distinct seasons; regional variations shaped by relief.
- **Relief:** Dominated by the Carpathian Mountains; substantial areas of hills and plains.
- Major rivers: Danube, Tisza, and Prut.
- Highest peak: Mount Moldoveanu.
- **Biodiversity:** The **Danube delta (UNESCO, 1991)** hosts hundreds of bird species; the Carpathians shelter chamois and other fauna.
- System of Government:
 - The 1991 constitution **established a bicameral parliament** (Chamber of Deputies and Senate) elected by proportional representation.
 - The president is **directly elected for a five-year term**.
 - The **prime minister heads the government**, and laws are approved by majority vote in each chamber.
- International Affiliations: Joined NATO in 2004 and the European Union in 2007; part of the "Bucharest Nine" (founded 2015) on NATO's eastern flank

Erra Matti Dibbalu (red sand dunes)

News: Erra Matti Dibbalu (red sand dunes) beside the Visakhapatnam – in Andhra Pradesh were added to the Tentative List of UNESCO Natural Heritage Sites.

About Erra Matti Dibbalu (red sand dunes)





Source - TH

- Location: It is also called the **Red Sand Hills**, it is located on the **outskirts of Visakhapatnam** along the **Bay of Bengal coast**.
- Origin: It was formed during the late Quaternary Age (about 2.6 million years), these deposits capture climate oscillations and sea-level changes, providing a stratigraphic record of landscape evolution.
- Discovery: The site was first documented in 1886 by British geologist William King.
- The landscape spans about **1,500 acres** and displays rare coastal **geomorphological formations**.
- **Importance:** The striking **red**, **sediment-derived dunes** are an important sedimentary record that offers insights into past climatic conditions, with multi-layered sediments preserved in place.
- Recognition: It was declared a National Geo-heritage Monument in 2016 by the Geological Survey
 of India.
- Key feature
 - It is composed of sand, silt, and clay. The red colour results from long-term natural oxidation.
 - The red sediments form a continuing chapter in Earth's evolution and represent the late Quaternary geologic age.
 - It exhibits badland topography with different geomorphic landforms and features. These
 include gullies, sand dunes, buried channels, beach ridges, paired terraces, the "valley in the
 valley," wave-cut terraces, knickpoints, and waterfalls.
 - O Dendritic drainage and well-preserved sediment layers that record sea-level and climate fluctuations.
 - Extremely rare globally, with only two comparable sites: one in Sri Lanka and another in Tamil Nadu (Teri Sands).

Kaveri / Cauvery River

News: Karnataka Chief Minister said there will be no disputes with Tamil Nadu over sharing Cauvery water this year.

About Kaveri/Cauvery River





Source - WRIS

- It is also called the "Dakshin Bharat ki Ganga," flows southeast through Karnataka and Tamil Nadu.
- Origin: The river originates at Talakaveri in the Brahmagiri range of the Western Ghats, Kodagu (Coorg) district, Karnataka.
- Drains into: It descends the Eastern Ghats with many waterfalls and forms a fertile delta before entering the Bay of Bengal.
- It is the third largest river in southern India after Godavari and Krishna, and the largest in Tamil Nadu, where it is known as "Ponni."
- The basin includes Tamil Nadu, Karnataka, Kerala, and Puducherry, bounded by the Western and Eastern Ghats and northern ridges.
- **Tributaries**
 - O Left bank: Arkavathi, Hemavathi, Shimsa, Harangi.
 - **Right bank:** Lakshmantirtha, Suvarnavati, Noyil, Bhavani, Kabini, Amaravathi.
- **Soil type:** The basin contains black, red, laterite, alluvial, forest, and mixed soils.
 - Red soils occupy large areas, while alluvial soils predominate in the delta, which is the most fertile tract.
- Dams on Cauvery River
 - Krishnarajasagar (Karnataka)
 - Mettur Dam (Tamil Nadu)
 - Kaveri Delta System (Tamil Nadu)
 - Lower Bhavani Project (Tamil Nadu)
 - Hemavati Project (Karnataka)
 - Harangi Project (Karnataka)
 - Kabini Project (Karnataka and Kerala)

Cauvery Water Dispute

- Stakeholders: The dispute involves Karnataka, Tamil Nadu, Kerala, and Puducherry. Hence, all four are riparian stakeholders.
- Tribunal and final award (1990-2007)
 - The Cauvery Water Disputes Tribunal (CWDT) was set up in 1990.
 - After 17 years, it issued a final order in 2007 allocating water in a normal year total of 740 TMC as follows:

Tamil Nadu: 404.25 TMC Karnataka: 284.75 TMC

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Kerala: 30 TMCPuducherry: 7 TMC

- Supreme Court and implementation (2018): In 2018, the Supreme Court declared the Cauvery a national asset and largely upheld the CWDT's sharing arrangement.
 - It directed the Union Government to **notify a management scheme**.
- Management framework (June 2018): The Centre notified the Cauvery Water Management Scheme, creating the Cauvery Water Management Authority (CWMA) and the Cauvery Water Regulation Committee (CWRC) to oversee and regulate implementation.



