

DEPARTMENT OF EMPLOYMENT AND TRAINING

DAILY CURRENT AFFAIRS - 19.08.2026

Highlights of the Day

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Director,
Department of Employment and Training.

TamilNadu Highlights

Porunai (Tamirabharani) River as a Legal Person

Context

- The **Madurai Bench** of the **Madras High Court** declared **Tamil Nadu's Tamirabharani (Porunai)** River as a deity, thereby granting it legal personhood.
- The decision aims to protect the river from pollution caused by funeral rites and waste dumping.
- The Court also imposed protective conditions on State officials and directed them to ensure compliance.

Earth Jurisprudence

- **Earth Jurisprudence** promotes an eco-centric approach, recognising nature as having intrinsic value and legal rights rather than treating nature merely as a resource for humans.
- The **Supreme Court** in **T.N. Godavarman Thirumulpad v. Union of India (2012)** observed that environmental justice requires moving from an anthropocentric to an eco-centric approach.

Legal Personhood of Nature

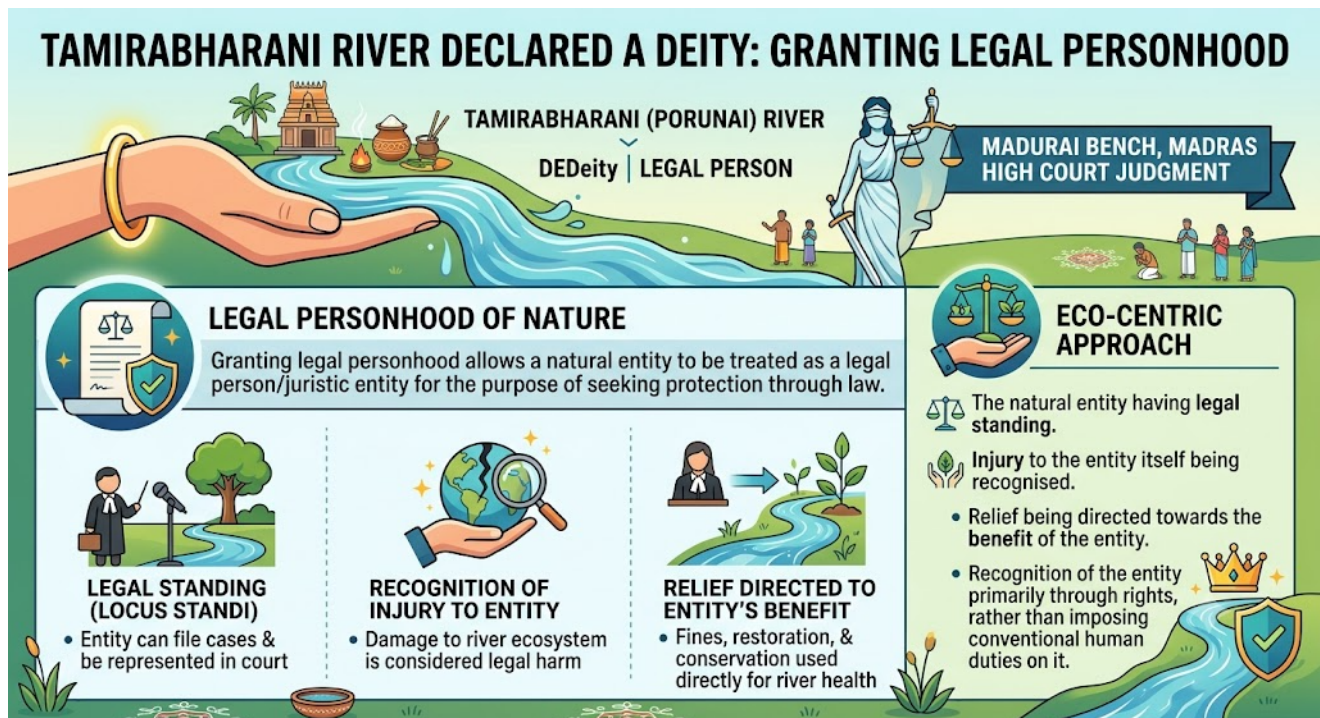
- Granting legal personhood allows a natural entity to be treated as a legal person/juristic entity for the purpose of seeking protection through law.
- An eco-centric approach emphasises:
 - The natural entity having legal standing.
 - Injury to the entity itself being recognised.
 - Relief being directed towards the benefit of the entity.
 - Recognition of the entity primarily through rights, rather than imposing conventional human duties on it.

Earlier Judicial Developments

- In **Mohammed Salim v. State of Uttarakhand (2017)**, the **Uttarakhand High Court** recognised the **Ganga** and **Yamuna** as legal persons.
- Similar approaches were subsequently adopted for the animal kingdom and the **Sukhna River**.
- The **Supreme Court** later stayed the Uttarakhand judgment, citing practical and administrative difficulties, including the question of guardianship for rivers flowing through multiple States.
- In **2023**, the **Supreme Court**, in the **People's Charioteer Organization** case, held that legal personality could not be extended to non-human and non-living entities.

Significance

- The decision represents a renewed judicial attempt to advance **Rights of Nature** and **Earth Jurisprudence** in India.
- It places emphasis on the intrinsic ecological value of the river and the need for direct legal protection.
- It also highlights the evolving relationship between environmental protection, constitutional values and judicial intervention.



Topic: Economy

Saptadhara

In News

- **Prime Minister** launched the seven-point '**Saptadhara**' reform framework to accelerate India's journey towards **Viksit Bharat** by **2047**.

What is Saptadhara?

- **Saptadhara** refers to the seven strategic streams of India's progress and national strength highlighted in the **Prime Minister's Independence Day 2026** address.
- It integrates industry, agriculture, technology, infrastructure, defence, green and blue economy, and soft power as interconnected pillars of national development.

Manufacturing Power

- Aim to make India a global manufacturing and supply-chain hub.
- Focus on cost competitiveness, quality, scale, precision, components and finished products.
- Build the complete value chain from design and components to finished products.
- Promote zero-defect and precision manufacturing, with quality as a key principle.

Agriculture & Food Production

- Use **Free Trade Agreements** to connect Indian agriculture with global markets.
- Promote millets, spices, fruits, vegetables and traditional foods as global brands.
- Encourage chemical-free agricultural products that meet international standards.

Technology & Innovation

- Build upon **Unified Payments Interface** and **Digital Public Infrastructure**.
- Develop indigenous **6G** technology.
- Position India as an innovation hub for data centres, robotics, emerging technologies and next-generation communications.

Gati Shakti

- Reduce logistics constraints through seamless, high-speed multimodal connectivity.
- Focus on roads, motorways, high-speed rail and port-led development.
- Ports are envisioned as engines of economic development, rather than merely loading and unloading centres.

Raksha Shakti

- Promote **Aatmanirbhar** defence manufacturing.
- Focus on drones, counter-drone systems and next-generation defence technologies.
- Position India as a global defence supplier.
- Utilise India's youth capabilities in cybersecurity.

Green & Blue Economy

- Aim to become a global leader in green hydrogen, renewable energy and energy storage.
- Promote the **Blue Economy** through fisheries, coastal tourism and ocean technologies.

India's Soft Power

- Strengthen India's global cultural outreach through:
 - Yoga
 - Handicrafts
 - Cinema

- Animation
- Gaming
- Digital content
- Tourism
- Creative economy

Significance

- Links economic growth, technological capability, infrastructure, energy security and cultural influence within a broad development framework.
- Emphasises exports, global supply chains, innovation and connectivity to strengthen India's position in the global economy.



Foreign Currency Non-Resident (Bank) Deposits

Context

- The **Reserve Bank of India** advanced the deadline for fresh **Foreign Currency Non-Resident (Bank)** deposits to qualify for its special United States dollar–Indian rupee foreign exchange swap window to **31 August 2026**.

What are Foreign Currency Non-Resident (Bank) Deposits?

- These are foreign-currency term deposits maintained by **Non-Resident Indians** and **Overseas Citizens of India** with authorised banks in India.

- Deposits are maintained in foreign currencies, unlike rupee-denominated **Non-Resident External** and **Non-Resident Ordinary** accounts.
- This protects depositors from foreign-exchange conversion risk.

Origin & Regulatory Framework

- The original Foreign Currency Non-Resident scheme was introduced in **1975**.
- The revised **Foreign Currency Non-Resident (Bank)** scheme was introduced in **May 1993**, shifting foreign-exchange exposure management to commercial banks.
- Governed by the **Foreign Exchange Management Act, 1999** and **Reserve Bank of India** regulations on non-resident deposits.

Purpose

- Attract stable foreign-currency capital into the Indian banking system.
- Support India's **Balance of Payments** and foreign-exchange reserves.
- Provide **Non-Resident Indians** with a foreign-currency-denominated investment avenue without exchange-rate risk.

How It Works

- Depositors place funds in freely convertible currencies such as **United States dollars, Pound sterling, Euro, Japanese yen, Canadian dollars** and **Australian dollars**.
- Deposits generally have a maturity period of 1–5 years.
- Principal and interest remain denominated in the selected foreign currency, insulating them from Indian rupee depreciation.

Special Foreign Exchange Swap Window

- Under the special swap arrangement, a commercial bank can sell foreign currency to the **Reserve Bank of India** and receive equivalent rupees.
- A forward contract allows the bank to repurchase the foreign currency at maturity.
- This helps banks obtain rupee liquidity while managing foreign-exchange risk.

Key Features

- Available as foreign-currency term deposits, not ordinary savings/current accounts.
- No exchange-rate risk for the depositor on the foreign-currency principal and interest.
- Interest is exempt from Indian income tax, subject to the applicable non-resident conditions stated in the source.
- Principal and interest are freely repatriable overseas.
- Deposits generally have 1–5 year tenors.

Topic: Science and Technology

Friedreich's Ataxia

Context

- Consanguineous marriages can increase the risk of certain rare genetic disorders, including **Friedreich's ataxia**.

What is Friedreich's Ataxia?

- **Friedreich's ataxia** is a genetic disorder that progressively damages the nervous system and heart.
- Symptoms typically begin between 5 and 15 years of age.
- It is caused by mutations in the **FXN gene**.

Major Symptoms

- Unsteady movement and impaired coordination.
- Slurred or slowed speech.
- Difficulty in swallowing.
- Progressive deterioration of hearing and vision.
- Fatigue and loss of sensation.
- Many patients eventually develop severe heart disease and may die at a relatively young age.
- There is currently no cure.

Genetic Transmission

- The disease is more likely when both parents carry the defective gene.
- Consanguineous marriages, such as marriages between close relatives, increase the possibility that both parents carry the same rare genetic mutation.

Topic: Environment

The E20 Transition

Context

- India has moved towards a nationwide **E20** fuel regime, under which petrol contains up to **20%** anhydrous ethanol with a minimum **Research Octane Number** of 95.
- The transition has generated debate over vehicle compatibility, fuel quality, consumer costs and policy implementation.

What is E20?

- **E20** is petrol blended with **20%** ethanol under the **Ethanol Blended Petrol Programme**.
- It aims to replace a portion of fossil petrol with domestically produced renewable ethanol.
- Ethanol is hygroscopic (absorbs water) and has around 30–**35%** lower energy density than pure petrol.

E20 Status in India

- Nationwide mandatory sale of **E20** petrol became effective from **1 April 2026**.
- Petrol is required to have a minimum RON of 95.
- Unblended **E0** petrol has been phased out from retail pumps.
- Vehicles manufactured after **April 2023** are described in the source as being better equipped for **E20** compatibility through ethanol-calibrated systems and suitable fuel-system components.

Legacy Vehicle Exposure

- India has around **310 million** petrol vehicles, of which approximately **240 million** (nearly **77%**) are legacy vehicles.
- Most of these are two-wheelers that were not factory-engineered specifically for **E20**.
- The source highlights concerns regarding mileage reduction, component wear and maintenance costs in older vehicles.

Fuel Quality Concerns

- Industry fuel tests reportedly detected organic chloride contamination well above the stated safety ceiling in some locations.
- Water contamination in retail storage tanks has also been reported.
- Excess moisture can cause phase separation, potentially affecting fuel quality and increasing corrosion risks.

Technical Challenges

- Phase separation: Ethanol absorbs moisture; excessive water can cause ethanol-water separation and fuel-system corrosion.
- Rubber component deterioration: Older nitrile rubber components such as hoses, O-rings and pump diaphragms may experience swelling, hardening and leakage.
- Fuel-filter clogging: Ethanol can loosen accumulated rust and deposits in older fuel systems, potentially clogging filters and affecting injectors.
- Underground storage tanks: Water ingress into storage tanks can lead to fuel contamination and phase separation.

Impact on Consumers

- The source reports that more than **66%** of pre-**2023** vehicle owners surveyed experienced mileage loss exceeding **10%**.
- Around **55%** reported increased maintenance frequency and premature component wear.
- Concerns arise over the absence of a lower-blend or unblended fuel alternative for owners of older vehicles.

Government & Industry Measures

- Minimum RON of 95 has been prescribed for **E20** fuel to improve anti-knocking performance and combustion stability.
- India accelerated **E20** distribution ahead of the earlier **2030** target, supported by expansion of domestic ethanol production.
- The **Society of Indian Automobile Manufacturers** has initiated a multi-stakeholder study to assess the long-term compatibility of **E20** with legacy vehicles.



United Nations Convention to Combat Desertification

Context

- The **17th Conference of the Parties** to the **United Nations Convention to Combat Desertification** opened in **Ulaanbaatar, Mongolia**, under the theme “**Restoring Land, Restoring Hope.**”

About the Convention

- The **United Nations Convention to Combat Desertification** is the only legally binding international agreement specifically linking environment and development with sustainable land management.
- It is one of the three **Rio Conventions**, along with:
 - **United Nations Framework Convention on Climate Change**
 - **Convention on Biological Diversity**

Origin & Membership

- Its genesis came from **Agenda 21** adopted at the **1992 Rio Earth Summit**.
- Adopted in Paris on **17 June 1994**.
- Entered into force in **December 1996**.
- Has **197 Parties** — 196 countries plus the European Union.

Aim

- Combat desertification and reverse land degradation.
- Mitigate the effects of drought, particularly in arid, semi-arid and dry sub-humid areas.
- Promote **Land Degradation Neutrality** by **2030** and sustainable livelihoods.



Major Functions

- Promotes **Land Degradation Neutrality** by maintaining or improving the quantity and quality of land resources.

- Supports drought preparedness, resilience and early-warning systems.
- Promotes bottom-up governance, involving local communities, farmers, pastoralists, indigenous peoples and women in National Action Programmes.
- The **Global Mechanism** helps mobilise domestic, bilateral, private and multilateral finance for sustainable land management.
- Initiatives such as the **Peace Forest Initiative** promote transboundary ecological restoration in conflict-affected regions.

Significance

- Helps restore degraded land and protect soil fertility, water resources, agricultural productivity and rural livelihoods.
- Restored soils can function as carbon sinks and support biodiversity conservation and climate goals.

Topic: Reports and Indices

UDISE+ 2025–26 Report: School Education Progress

Context

- The **Unified District Information System for Education Plus (UDISE+) 2025–26** Report provides a comprehensive assessment of India's school education system.
- It covers **14.67 lakh** schools, **1.03 crore** teachers and **24.72 crore** students.
- The report highlights improvements in enrolment, **Gross Enrolment Ratio**, teacher availability, retention, transition rates, dropout rates and school infrastructure.
- It also reflects progress in gender equity, social inclusion and digital education under the **National Education Policy 2020**.

About UDISE+

- **UDISE+** is a digital platform developed by the **Department of School Education and Literacy** for collecting and managing school education data across India.
- Launched in **2018–19**, it supports evidence-based planning, policymaking and monitoring.
- It serves as an important database for tracking implementation of the **National Education Policy 2020**.

School Education Landscape

- Schools: **14.67 lakh**
- Teachers: **1.03 crore**
- Students: **24.72 crore**

- Average of around 7 teachers and 169 students per school.
- Overall **Pupil–Teacher Ratio (PTR): 24:1**, within the **30:1** benchmark recommended under the **National Education Policy 2020**.

Gross Enrolment Ratio

- Secondary stage: **71.7%**
- Middle stage: **89.6%**
- Share of total enrolment:
 - Secondary: **27.16%**
 - Preparatory: **25.60%**
 - Middle: **25.58%**
 - Foundational: **21.66%**

Pupil–Teacher Ratio

- Foundational: **10:1**
- Preparatory: **12:1**
- Middle: **17:1**
- Secondary: **21:1**
- A lower PTR enables greater individual attention and improved teacher–student interaction.

Retention, Transition & Dropout

- Dropout rates:
 - Preparatory: **1.8%**
 - Middle: **3.6%**
 - Secondary: **7.0%**
- Retention rates:
 - Foundational: **98.5%**
 - Preparatory: **91.1%**
 - Middle: **83.7%**
 - Secondary: **51.9%**
- Transition rates:
 - Foundational → Preparatory: **99.2%**
 - Preparatory → Middle: **93.8%**
 - Middle → Secondary: **88.3%**



Single-Teacher & Zero-Enrolment Schools

- Single-teacher schools: decreased by around **3%** to **1,00,843**.
- Zero-enrolment schools: declined by **29%** compared with **2024–25** to **5,663**.
- The decline reflects efforts towards rationalisation and better teacher deployment.

Gender & Social Inclusion

- Girls: **48.4%** of total student enrolment.
- Women teachers: **54.9%** of the teaching workforce.
- Social composition of enrolment:
 - **Other Backward Classes: 44.9%**
 - General category: **27.5%**
 - **Scheduled Castes: 17.7%**
 - **Scheduled Tribes: 10%**
- **Scheduled Castes + Scheduled Tribes: 27.7%** of total enrolment.
- Among **Children with Special Needs**, **57.16%** are boys and **42.84%** are girls.

Digital Infrastructure

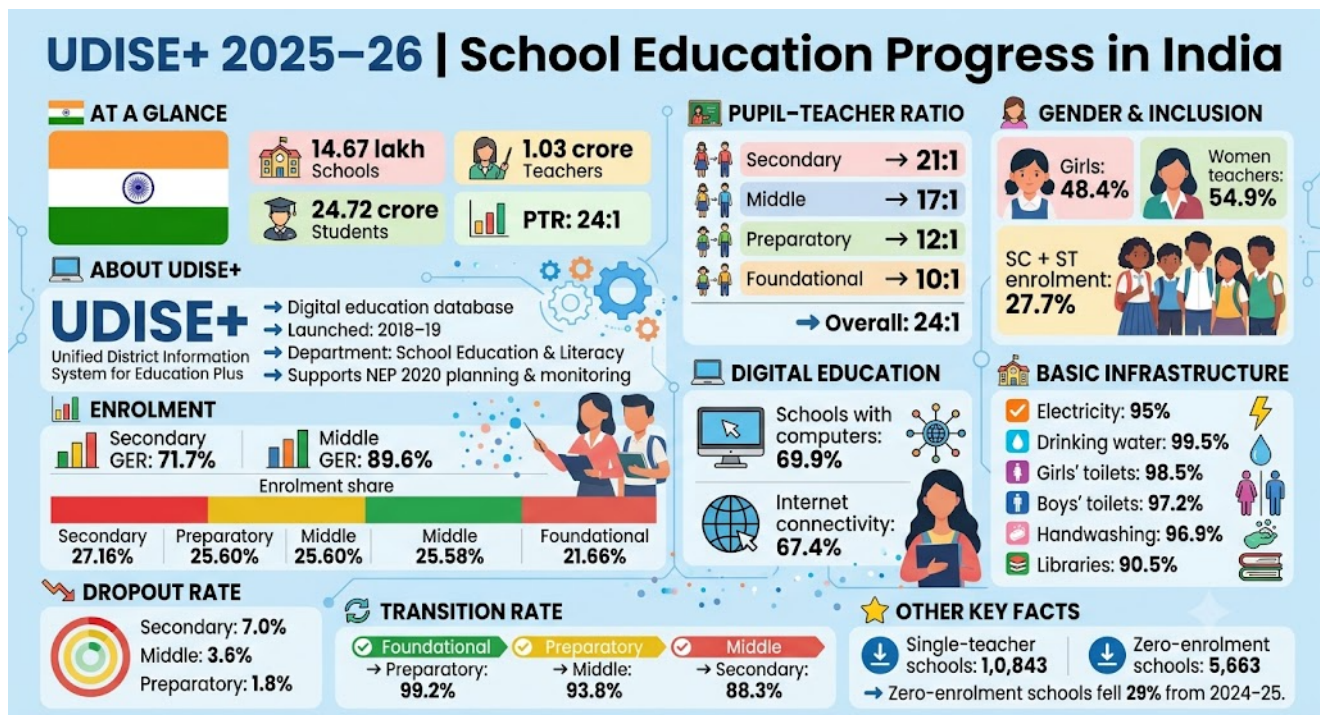
- Schools with computers: **69.9%**
- Schools with internet connectivity: **67.4%**
- Indicates increasing adoption of technology-enabled education.

Basic School Infrastructure

- Electricity: **95%**
- Safe drinking water: **99.5%**
- Girls' toilets: **98.5%**
- Boys' toilets: **97.2%**
- Handwashing facilities: **96.9%**
- Libraries: **90.5%**
- Rainwater harvesting: **29.9%**
- Ramps with handrails: **58.2%**

Key Takeaway

- **UDISE+ 2025–26** indicates progress in access, teacher availability, retention, gender participation, social inclusion, digital connectivity and school infrastructure.
- As a national education database, **UDISE+** supports evidence-based planning and monitoring and contributes to the implementation of the **National Education Policy 2020**.



Topic: History

Sri Aurobindo

Context

- Prime Minister **Narendra Modi** paid tribute to **Sri Aurobindo** (15 August 1872–5 December 1950) on his birth anniversary.

Early Life

- Received his education in England at **St. Paul's School, London**, and **King's College, Cambridge**.
- Returned to India in **1893**.
- Worked for around 13 years in the Princely State of **Baroda** and served as a professor at **Baroda College**.

Role in Freedom Struggle

- Helped establish youth organisations, including the **Anushilan Samiti** of **Calcutta** in **1902**.
- In **1906**, became the first principal of **National College, Calcutta** (**Bengal National College**) and promoted national education among Indian youth.
- One of the earliest political leaders to openly advocate complete independence for India through his newspaper **Bande Mataram**.

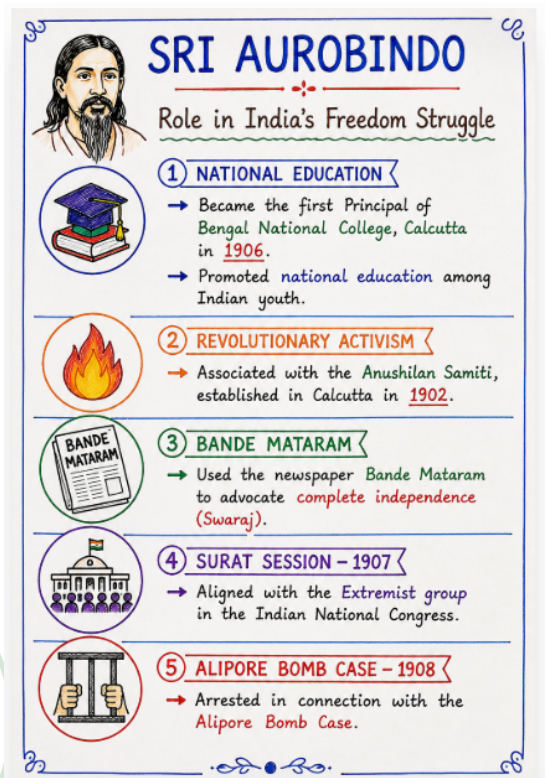
- At the **Surat Session** of the **Indian National Congress** in **1907**, he aligned with the Extremist group.
- Arrested in **1908** in connection with the **Alipore Bomb Case**.

Spiritual Journey

- Began practising Yoga in **1905** while in **Baroda**.
- In **1910**, withdrew from active politics and moved to **Pondicherry** to devote himself to spiritual work.
- During his four decades in **Pondicherry**, developed **Integral Yoga**, a distinct method of spiritual practice.
- Founded the **Sri Aurobindo Ashram** in **1926**.

Major Literary Works

- **The Life Divine** – philosophical aspects of **Integral Yoga**.
- **The Synthesis of Yoga** – principles and methods of **Integral Yoga**.
- **Savitri: A Legend and a Symbol** – epic poem.
- Started two weeklies:
 - **Karmayogin** – English
 - **Dharma** – Bengali



Royal Indian Navy Mutiny, 1946

Context

- The **Royal Indian Navy Mutiny** of **1946** was a major anti-colonial uprising that challenged British authority and contributed to the growing pressure for British withdrawal from India.

Background

- The mutiny began in **February 1946** in **Bombay** and spread rapidly to naval establishments across British India.
- It involved around **20,000** personnel, 78 ships and 20 shore establishments.
- It is regarded as one of the last major challenges to British rule before independence.

Causes of the Mutiny

- The Royal Indian Navy had expanded rapidly during **World War II**, from fewer than **2,000** personnel to around **30,000**.
- Post-war plans for demobilisation and reduction of personnel created dissatisfaction among sailors.

- Major grievances included:
 - Poor food and housing
 - Low pay and allowances
 - Racial discrimination
 - Poor employment prospects
 - Brutal treatment by British officers
- The **Indian National Army** trials strengthened nationalist sentiment among Indian sailors.
- At **HMIS Talwar, Bombay**, anti-British sentiment had been growing from **November 1945**.
- Tensions intensified following alleged insult and mistreatment of sailors by Commander **Arthur Frederick King**.

Beginning of the Mutiny

- On **18 February 1946**, sailors at **HMIS Talwar** launched a walkout.
- The revolt quickly spread through wireless communication to other naval establishments.

Demands of the Sailors

- Better food and housing conditions.
- Pay and allowances comparable to the Royal Navy.
- Fair demobilisation and employment opportunities.
- Access to NAAFI facilities.
- Protection from victimisation.
- Release and fair trial of **Indian National Army** prisoners.
- Withdrawal of British troops from Indonesia.
- End to deployment of Indian troops for British imperial interests.

Spread of the Revolt

- Spread from **Bombay** to **Karachi, Calcutta, Visakhapatnam, Madras, Jamnagar** and other naval centres.
- Sailors formed a **Naval Strike Committee**.
- They identified themselves with nationalist causes and replaced British flags with **Congress** and **Muslim League** flags, symbolising Hindu-Muslim unity.
- The rebels also occupied **Butcher Island (Jawahar Dweep)** and turned guns towards symbols of colonial authority in **Bombay**.

Popular Support & British Response

- The revolt received substantial popular support, particularly in **Bombay**.

- Around three lakh workers, dockworkers, railway employees and students participated in strikes and protests.
- Local people also supplied food to the sailors.
- The British responded with force, including police firing on **22 February**, which reportedly killed at least 400 people, largely civilians, and injured around **1,500–2,000**.
- Unrest in parts of the **Royal Indian Air Force** and **Indian Army** further concerned the British authorities.

Historical Significance

- Undermined the coercive foundations of British colonial rule.
- Demonstrated that British authorities could no longer assume the unquestioning loyalty of Indian armed forces.
- Along with the **Indian National Army** movement, weakened British confidence in continuing colonial rule.
- Highlighted the possibility of Hindu-Muslim cooperation in the anti-colonial struggle.
- Connected economic and service grievances with the wider nationalist movement.



Topic: Geography

The Mahadayi (Mandovi) River

Context

- The **Environment Ministry** informed the **Lok Sabha** that no proposal from **Karnataka** seeking environmental clearance for the **Mahadayi** diversion is currently under consideration.

- The **National Board for Wildlife** has also not approved forest diversion for the **Kalasa Nala** scheme in the **Kali–Sahyadri** tiger corridor.

About the River

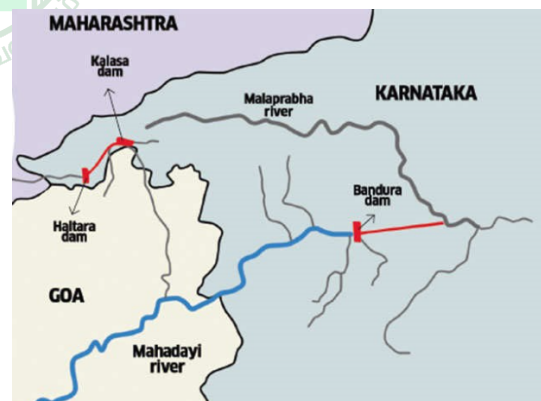
- The **Mahadayi** River, known as the **Mandovi River** in **Goa**, is a west-flowing inter-State river of peninsular India.
- It flows through the **Western Ghats** and drains into the **Arabian Sea**.
- It is considered a major lifeline of **Goa**.

Origin & Course

- Origin: A cluster of around 30 springs in the **Bhimgad Wildlife Sanctuary**, near **Degao/Khanapur** in **Belagavi district, Karnataka**.
- Length: Approximately **117 km**.
 - Around **35 km** in **Karnataka**
 - Around **81 km** in **Goa**
 - A small catchment stretch in **Maharashtra**
- It ultimately drains into the **Arabian Sea** at **Panaji, North Goa**, through the **Mormugao** and **Aguada** bays.

States & Tributaries

- States: **Karnataka, Maharashtra and Goa**.
- Important tributaries/streams include:
 - **Kalasa Nala**
 - **Banduri Nala**
 - **Bail Nala**
 - **Pansheer Nala**
 - **Andher Nala**
 - **Khandepar River**
 - **Ragada River**
 - **Mapusa River**
- **Kalasa Nala** and **Banduri Nala** are particularly important in **Karnataka's Kalasa-Banduri** drinking water project.



Basin & Rainfall

- Basin area: Approximately **2,032 sq km**.
- Receives heavy orographic rainfall due to the **Western Ghats**.

- Rainfall ranges from around **1,918** mm in the plains at **Khanapur** to more than **5,425** mm in the Ghats at Gavalli.
- The basin generates substantial water yield of around **3,164–5,703** million cubic metres.

Western Ghats & Waterfalls

- The river basin has steep gradients, with elevations falling from over **980 m** in the **Western Ghats** to sea level.
- Steep slopes contribute to prominent waterfalls including:
 - **Dudhsagar Falls**
 - **Vajra-Poha Falls**

Forest & Mineral Resources

- More than **36%** of the basin is covered by evergreen, semi-evergreen and moist deciduous forests.
- The region contains granite, schists and quartzite formations.
- Mineral resources include iron ore, bauxite, limestone and manganese.

Ecological Significance

- The **Mahadayi** landscape forms an important wildlife corridor connecting:
 - **Kali Tiger Reserve – Karnataka**
 - **Bhagwan Mahaveer Sanctuary/Mhadei Wildlife Sanctuary – Goa**
 - **Sahyadri Tiger Reserve – Maharashtra**
- The corridor supports species such as tigers, black panthers and King Cobras.
- It also provides habitat for the endangered and endemic **Wroughton's Free-tailed Bat**.

The Earthquake Swarms

Context

- **Maharashtra** recorded 29 low-intensity, shallow earthquakes within two weeks, mainly in **Nashik**, with tremors also reported in **Palghar** and **Nagpur**.
- Seismologists have classified this cluster as an **earthquake swarm**.

What is an Earthquake Swarm?

- An **earthquake swarm** is a sequence of numerous, closely clustered earthquakes occurring in a localized area over days, weeks or months.
- Unlike a conventional earthquake sequence, it does not have a clearly identifiable single mainshock followed by aftershocks.

How Earthquake Swarms Occur

- Intraplate stress: Tectonic stresses deform interior rocks, including the basaltic **Deccan Traps**, concentrating stress along ancient fractures and shear zones.
- Fluid migration: Heavy rainfall infiltration or reservoir filling can increase pore-fluid pressure within underground rock systems.
- Frictional failure: Increased pore pressure reduces effective rock friction, causing repeated movement along fractures and producing multiple low-to-moderate magnitude tremors.

Key Features

- No dominant mainshock: Multiple earthquakes of comparable magnitude may occur instead of one major earthquake followed by aftershocks.
- Shallow focal depth: Tremors often originate around **5–10 km** deep, making even low-magnitude earthquakes locally noticeable.
- Hydro-geological influence: Swarms may be associated with rainfall-triggered seismicity or reservoir-triggered seismicity, such as in the **Koyna–Warna** region.
- Long duration: Activity may continue intermittently for weeks, months or even years without necessarily resulting in a catastrophic earthquake.



EARTHQUAKE SWARM



29 Tremors Reported in Maharashtra



WHAT IS AN EARTHQUAKE SWARM?

A series of many earthquakes clustered in one area over days, weeks or months.

Key difference:



✗ No single dominant mainshock

VS



→ Multiple earthquakes of similar magnitude may occur.

HOW DOES IT HAPPEN?

- INTRAPLATE STRESS**


ancient fractures
repeated movement
- FLUID MIGRATION**


Heavy rainfall / reservoir filling
Increased underground pore pressure
- FRictional FAILURE**


Higher pore pressure → reduced rock friction
Repeated movement along fractures
Multiple tremors

KEY FEATURES

- 
Shallow Depth: Usually around 5–10 km
- 
No Mainshock: Multiple comparable tremors
- 
Hydro-geological Influence: Rainfall or reservoirs can contribute
- 
Long Duration: May continue for weeks, months or even years

IMPORTANT EXAMPLE




Koyna–Warna Region, Maharashtra



→ Known for reservoir-triggered seismicity