

January - 24

## TNPSC BITS

- ❖ The sixth ASEAN-India Digital Ministers' Meeting (ADGMIN) was held virtually.
- ❖ China unveiled its most advanced ballistic missile submarine, the Type 096 Tang-Class.
- ❖ The World Economic Forum's Annual Meeting was held in Davos, Switzerland.
- ❖ The Global Democracy Conference (GDC) is going to be held in USA with a theme of Confronting Public Support for Anti-Democratic Leaders.
- ❖ Scientists have discovered a 5,200-year-old wooden boat beneath Lake Mendota in the United States, revealing details of early human life and advanced woodworking skills.
  - A total of 16 ancient dugout canoes were found, with the oldest dating back to around 3000 BC, indicating organised fishing activities.
- ❖ The United States Food and Drug Administration (FDA) approved Zycubo for the treatment of children with Menkes disease.
  - Menkes disease is a rare X-linked genetic disorder that affects copper metabolism in the body.

## TAMIL NADU NEWS

### End of Northeast Monsoon Season

துமிழக்த்தில் கிருந்து வடக்கிழக்கு பருவமழை விலகியதாக சென்னை வாணிலை மையம் குறிப்பு

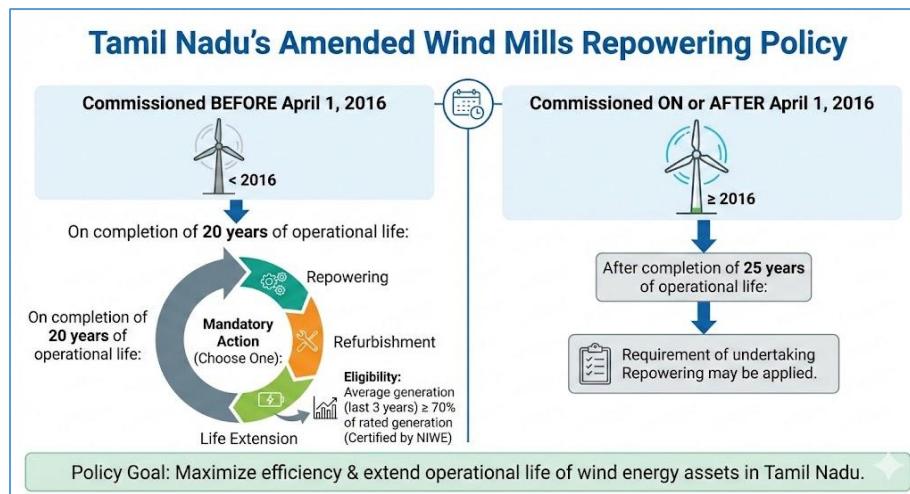
அடுத்த 4 நாட்களுக்கு வறண்ட வாணிலையே ரிலவுக்கூடும் எனவும் கணிப்பு



- ❖ The Northeast monsoon retreated from Tamil Nadu on 19 January 2026, as confirmed by the Regional Meteorological Centre (RMC), Chennai.

- ❖ The NE monsoon was the main rainy season for Tamil Nadu and generally occurred from October to December every year.
- ❖ The withdrawal led to misty mornings and chilly nights, with minimum temperatures falling 2–3°C below normal in many places.
- ❖ On 20 January 2026, Tiruttani recorded the lowest plain-area temperature at 15.2°C, while Kodaikanal recorded 6°C among hill stations.
- ❖ Dry weather and clear skies are expected to continue till 22 January 2026, with cooler nights over Tamil Nadu and Puducherry.
- ❖ An upper air circulation over the Southeast Bay of Bengal is likely to bring light to moderate rainfall from 23 January, starting from coastal areas.
- ❖ Tamil Nadu has recorded a winter rainfall surplus of 25.8 mm since 1 January 2026, with several districts reporting excess rain.

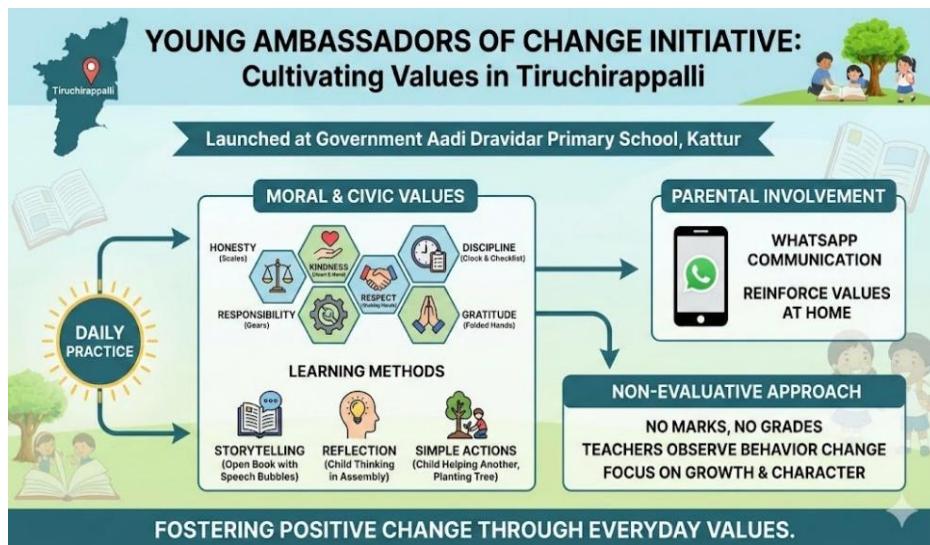
### Amended wind mills repowering policy



- ❖ The Tamil Nadu government has announced an amended Repowering Policy for wind mills in the State.
- ❖ For the wind energy generators commissioned before April 1, 2016, its owners should mandatorily opt for repowering or refurbishment or life extension on completion of 20 years of operational life.
- ❖ In respect of wind energy generators commissioned on or after April 1, 2016, the requirement of undertaking repowering may be applied after the completion of 25 years of operational life.
- ❖ After the life period of 20 years and those with average generation for the last three financial years not less than 70 % of the rated generation certified by independent agency like NIWE are eligible for life extension.

## Young Ambassadors of Change Initiative

- ❖ A government school in Tiruchirappalli, Tamil Nadu has launched the Young Ambassadors of Change initiative.
- ❖ The programme was introduced at the Government Aadi Dravidar Primary School, Kattur, to teach moral and civic values through daily practice.
- ❖ It focused on values such as honesty, kindness, respect, responsibility, discipline, and gratitude.
- ❖ Students learned through storytelling, reflection during morning assemblies, and simple value-based actions at school and home.
- ❖ Parents were involved through WhatsApp communication to reinforce values outside the classroom.
- ❖ The initiative followed a non-evaluative approach, with teachers observing behaviour change instead of giving marks.

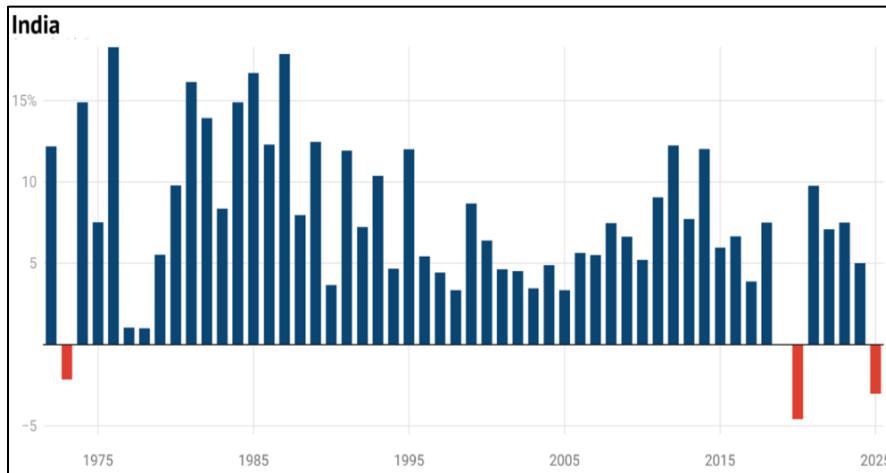


## NATIONAL NEWS

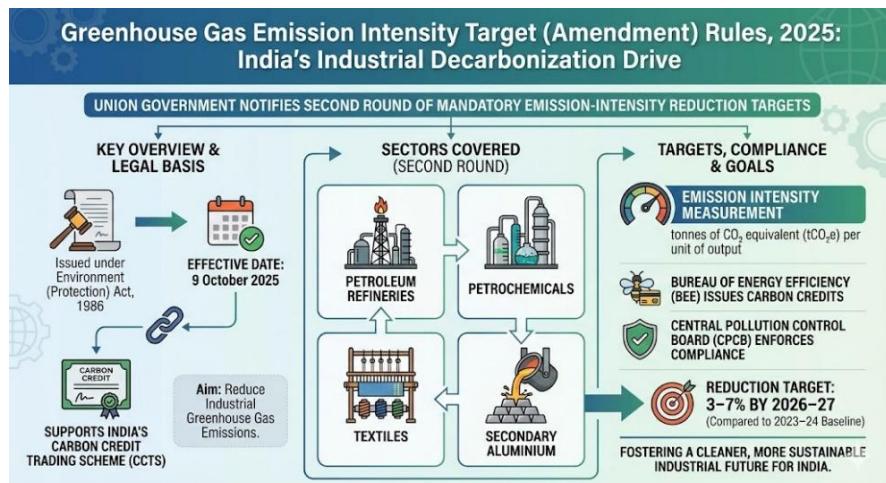
### India's Coal-Fired Generation

- ❖ India's coal-fired power generation declined year-on-year in 2025 for the first time in about 50 years.
- ❖ Electricity from coal fell by nearly 3 % in 2025 compared with 2024.
- ❖ This drop is only the second full-year annual decline in at least half a century, the first being in 2020 during the COVID-19 pandemic.
- ❖ The decline was mainly due to record growth in clean energy (solar, wind, hydro, nuclear) meeting more of India's electricity demand.

- ❖ Milder weather and slower demand growth also contributed to the reduced coal generation.
- ❖ This change reflects a broader shift in India's electricity mix toward non-fossil sources.



## Greenhouse Gas Emission Intensity Target Rules, 2025



- ❖ The Union Government notified the second round of mandatory emission-intensity reduction targets under the Greenhouse Gases Emission Intensity (GEI) Target (Amendment) Rules, 2025.
- ❖ These rules are issued under the Environment (Protection) Act, 1986, to reduce industrial greenhouse gas emissions.
- ❖ They came into force on 9 October 2025 and support India's Carbon Credit Trading Scheme (CCTS).
- ❖ Petroleum refineries, petrochemicals, textiles and secondary aluminium sectors are covered in the second round.

- ❖ Targets are based on emission intensity measured as tonnes of CO<sub>2</sub> equivalent (tCO<sub>2</sub>e) per unit of output.
- ❖ Bureau of Energy Efficiency (BEE) issues carbon credits, while the Central Pollution Control Board (CPCB) enforces compliance.
- ❖ The rules aim to cut emission intensity by about 3–7% by 2026–27 compared to the 2023–24 baseline.

### Rabi Crop Area 2025–26



- ❖ The Ministry of Agriculture and Farmers' Welfare released data on rabi crop area coverage as of 16 January 2026.
- ❖ Total rabi crop area reached 652.33 lakh hectare, which is 20.88 lakh hectare higher than the same period last year.
- ❖ Wheat area increased by 6.13 lakh hectares, showing strong sowing progress.
- ❖ Pulse area rose by 3.82 lakh hectare, with gram recording the highest rise of 4.66 lakh hectare.
- ❖ Oilseeds coverage increased by 3.53 lakh hectare, mainly due to rapeseed and mustard.
- ❖ Shri Anna and coarse cereals area increased by 2.79 lakh hectare, supported by maize and barley.

### Ocean Research Mission: Sagar Maitri-5

- ❖ INS Sagardhwani, India's oceanographic research vessel, was flagged off from Kochi for the Sagar Maitri-5 initiative.

- ❖ INS Sagardhwani was commissioned in July 1994 and collects oceanographic and acoustic data for the Indian Navy.
- ❖ Sagar Maitri-5 stands for Marine & Allied Interdisciplinary Training and Research Initiative, promoting ocean research cooperation.
- ❖ The program involves eight Indian Ocean Rim (IOR) countries, including Oman, the Maldives, Sri Lanka, Thailand, Malaysia, Singapore, Indonesia, and Myanmar.
- ❖ It aims to strengthen scientific collaboration, socio-economic cooperation, and joint oceanographic studies with the Maldives.

## **INS Sagardhwani Flagged Off for Fifth Edition of Sagar Maitri Initiative**



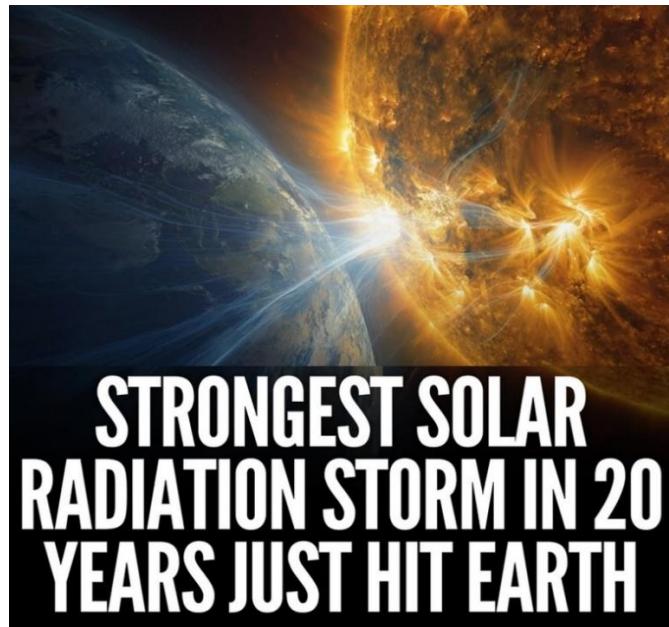
### **India's 2nd LNG Supplier – UAE**



- ❖ India and the United Arab Emirates (UAE) signed a long-term agreement for Liquefied Natural Gas (LNG) supply.
- ❖ Under this deal, the UAE will supply 0.5 million metric tonnes of LNG per year to India.
- ❖ This makes the UAE India's second-largest LNG supplier after Qatar.
- ❖ LNG is a cleaner fossil fuel used for power generation, industry, and cooking gas.
- ❖ The agreement strengthens energy security and diversifies India's energy sources.
- ❖ The countries also plan to expand cooperation in trade, defence, food security, and nuclear energy.

## SCIENCE AND TECHNOLOGY NEWS

### Strongest Solar Radiation Storm

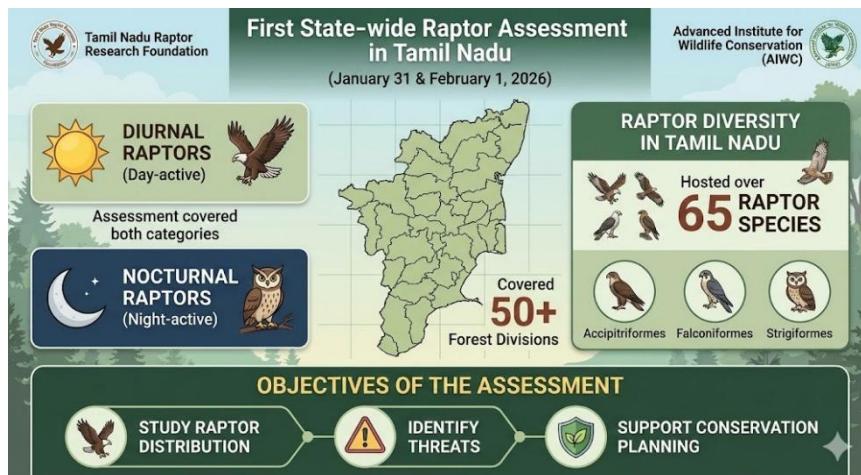


- ❖ The Sun released its most powerful solar radiation storm in over two decades, reaching Earth in January 2026.
- ❖ Scientists classified it as a Level-4 storm, triggered by an X-class solar flare and a coronal mass ejection (CME).
- ❖ The storm caused bright auroras across Europe and temporary GPS disruptions.
- ❖ Solar radiation storms occur when highly energetic charged particles from the Sun reach Earth, affecting satellites, aviation, and astronauts.

## ENVIRONMENT NEWS

### First State-wide Raptor Assessment in Tamil Nadu

- ❖ Tamil Nadu scheduled its first State-wide raptor assessment on January 31 and February 1, 2026.
- ❖ The assessment was conducted under the Tamil Nadu Raptor Research Foundation initiative by the Advanced Institute for Wildlife Conservation (AIWC).
- ❖ The survey covered both diurnal (day-active) and nocturnal (night-active) raptors across more than 50 forest divisions.
- ❖ Tamil Nadu hosted over 65 raptor species belonging to the orders Accipitriformes, Falconiformes, and Strigiformes.
- ❖ The assessment aimed to study raptor distribution, identify threats, and support future conservation planning.



### New Copepod Species

- ❖ Scientists discovered a new tiny crustacean species in the Kavaratti lagoon of Lakshadweep.
- ❖ The species belongs to the family Laophontidae under the class Copepoda.
- ❖ It has been named Indiaphonte bijoyi to honour India and the scientist S. Bijoy Nandan.
- ❖ The organism is very small, less than 1 millimetre, and is part of the meiofauna (tiny invertebrates living in sediments).
- ❖ Harpacticoid copepods like this help in nutrient cycling and act as indicators of marine environmental changes.



### Brandt's Hedgehog Recorded in India for First Time



- ❖ Brandt's hedgehog (*Paraechinus hypomelas*) has been discovered in Jammu and Kashmir.
- ❖ It was first sighted in 2024 in the Rajouri–Poonch region and confirmed through DNA analysis and morphometric studies.
- ❖ The species was previously known in Afghanistan, Iran, Pakistan, Saudi Arabia, and parts of Central Asia.
- ❖ The discovery suggests possible range expansion due to climate change, habitat connectivity, and food availability.

- ❖ It was found in ecotone zones between forests and agricultural fields and feeds on rodents.

### **Kumbhalgarh Wildlife Sanctuary - Rajasthan**



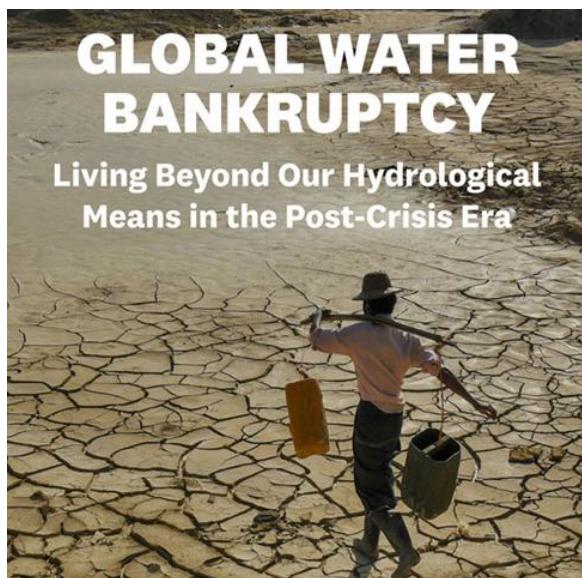
- ❖ The Ministry of Environment, Forest and Climate Change declared Kumbhalgarh Wildlife Sanctuary in Rajasthan as an Eco-Sensitive Zone (ESZ).
- ❖ The ESZ covers 0-1 km around the sanctuary in the Aravalli mountain range to protect fragile ecosystems.
- ❖ The ESZ status helps control unplanned development, mining, and industrial expansion, ensuring balanced conservation and human activity.
- ❖ Local communities will benefit from sustainable livelihood initiatives like organic farming, agroforestry, and eco-friendly practices.
- ❖ Eco-Sensitive Zones act as transition zones around protected areas to preserve biodiversity without hampering daily life.

## **REPORTS AND INDICES**

### **Global Water Bankruptcy Report 2026**

- ❖ The United Nations University Institute for Water, Environment and Health (UNU-INWEH) says the world has entered a Global Water Bankruptcy era.

- ❖ Water Bankruptcy means humans are using more water than can be safely replenished, causing long-term damage to rivers, lakes, aquifers, wetlands, soils, and glaciers.
- ❖ This is different from water stress (high demand, mostly reversible) and water crisis (temporary shock, fixable with emergency measures).
- ❖ Causes include slow depletion of water, infrastructure-driven overshoot like big dams, ecological liquidation of wetlands and forests, and climate-amplified overshoot.
- ❖ The report warns that many water systems may be irreversibly damaged, affecting ecosystems, food security, and livelihoods.



## PERSONALITIES, AWARDS, AND EVENTS

### Sunita Williams retirement

- ❖ Sunita Williams retired from NASA on 27th December 2025.
- ❖ She worked for 27 years and completed three space missions aboard the International Space Station (ISS).
- ❖ Williams spent a total of 608 days in space, including nine spacewalks lasting 62 hours and 6 minutes.
- ❖ She was the first person to run a marathon in space and also commanded Expedition 33 on the ISS.
- ❖ Williams participated in NASA training programs like NEEMO and helped prepare astronauts for Moon missions.



## IMPORTANT DAYS

### **Tripura, Manipur and Meghalaya Foundation Day – January 21**

- ❖ Tripura, Manipur and Meghalaya are observing their Foundation Day on 21 January 2026, completing 54 years of statehood.
- ❖ These three states became full-fledged states on 21 January 1972 under the North Eastern Areas Reorganisation Act, 1971.
- ❖ Before statehood, Tripura and Manipur were Union Territories, and Meghalaya was part of Assam.
- ❖ The Act reorganised the North-Eastern region to provide administrative autonomy and legislative powers.
- ❖ The Foundation Day marks the states' journey in self-governance, cultural identity and regional development.

