

November - 13

TNPSC BITS

- ❖ President Droupadi Murmu begins India's first-ever state visit to Angola and Botswana to strengthen ties in energy, trade, health, and defence, marking 40 years of India-Angola relations.
- ❖ The Ministry of New and Renewable Energy will host the International Conference on Green Hydrogen 2025 in New Delhi.
 - It aims to share knowledge on scaling up green hydrogen production, enabling infrastructure, building demand, and promoting global collaboration.
- ❖ Exercise Malabar 2025, a multilateral naval drill, is underway at Guam in the Northern Pacific Ocean.
 - India is represented by INS Sahyadri, a stealth guided missile frigate.
- ❖ The Egyptian Ministry of Petroleum and Mineral Resources announced a new natural gas discovery in the Badr-15 area of the Western Desert.
 - The discovery is expected to contribute approximately 15 billion cubic feet to Egypt's gas reserves, sourced from the Lower Bahariya reservoir.

TAMIL NADU NEWS

Scintillometer at TRRI Aduthurai

Scintillometer at
Rice Research Institute (TRRI), Aduthurai



- **Scintillometer** to measure land-air exchanges to inform irrigation, forecasting and climate resilience

How it works: A light beam is transmitted between a transmitter and receiver; atmospheric turbulence causes tiny rapid fluctuations called scintillations, which are recorded and converted into sensible heat-flux estimates

Total value of instrument at the site: approximately **₹1.71 crore**

Why it matters: Direct measurements of heat and moisture exchange between land and atmosphere improve estimates of evapotranspiration and soil moisture used for precise irrigation decisions and improved local forecasts

Main instruments on site:

- Scintillometer
- Automatic weather station
- COSMOS soil-moisture sensor
- Eddy-covariance flux tower —measures carbon dioxide, water vapour and energy fluxes
- Pan evaporimeter—measures open-water evaporation



- ❖ A scintillometer is an optical instrument that measures heat and moisture exchange between the land and the air.

- ❖ It was installed at the Tamil Nadu Rice Research Institute (TRRI), Aduthurai.
- ❖ The instrument is part of the Critical Zone Observatory (CZO) under the Tamil Nadu Agricultural University (TNAU) with support from the National Centre for Earth Science Studies (NCESS).
- ❖ The observatory has been fully operational since 2022 and is the only one of its kind in Tamil Nadu.
- ❖ The data helps improve irrigation planning, climate forecasting, and research on water cycles and climate-smart farming in the Cauvery delta.

NATIONAL NEWS

New Aadhaar App



- ❖ UIDAI has launched a new Aadhaar app for smartphones, available on Google Play Store and Apple App Store.
- ❖ The app allows citizens to securely carry their digital Aadhaar card, eliminating the need for physical copies.
- ❖ Features include multi-profile management (up to 5 family members per device), facial recognition, biometric locks, QR code sharing, offline access, and usage history tracking.
- ❖ The new Aadhaar app differs from the mAadhaar app:

- New Aadhaar App: For daily digital ID use, family management, and controlled data sharing.
- mAadhaar App: For downloading e-Aadhaar PDFs, ordering physical cards, creating virtual IDs, and updating account details.

Deep-Sea Fishing Norms in India



- ❖ The "Sustainable Harnessing of Fisheries in the Exclusive Economic Zone of India Rules, 2025" were notified by the Ministry of Fisheries, Animal Husbandry and Dairying.
- ❖ The rules apply to all fishing and fishing-related activities by Indian vessels in the EEZ (~2.3 million sq km) beyond territorial waters.
- ❖ Mechanised and large-size motorised vessels in the EEZ must obtain an Access Pass online via the ReALCRaft Portal.
- ❖ Traditional and small-scale fishers are not required to have the Access Pass.
- ❖ Foreign fishing vessels are banned from operating in India's EEZ, giving priority to Indian fishermen's cooperatives and Fish Farmer Producer Organisations (FFPOs).
- ❖ The rules promote deep-sea fishing using advanced vessels and the "mother-and-child vessel" model.

- ❖ Harmful fishing practices such as LED light fishing, pair trawling, and bull trawling are prohibited, and fish caught in the EEZ will be recognised as “Indian origin” under customs norms.

INTERNATIONAL NEWS

Hanimaadhoo Airport in Maldives

- ❖ Maldives inaugurates Hanimaadhoo International Airport built with India’s support to boost connectivity and regional growth.
- ❖ The project is funded by an \$800 million EXIM Bank of India credit line and built by India’s JMC Projects at a cost of \$136.6 million.
- ❖ It marks 60 years of Maldives–India diplomatic ties under India’s Neighbourhood First and MAHASAGAR visions.

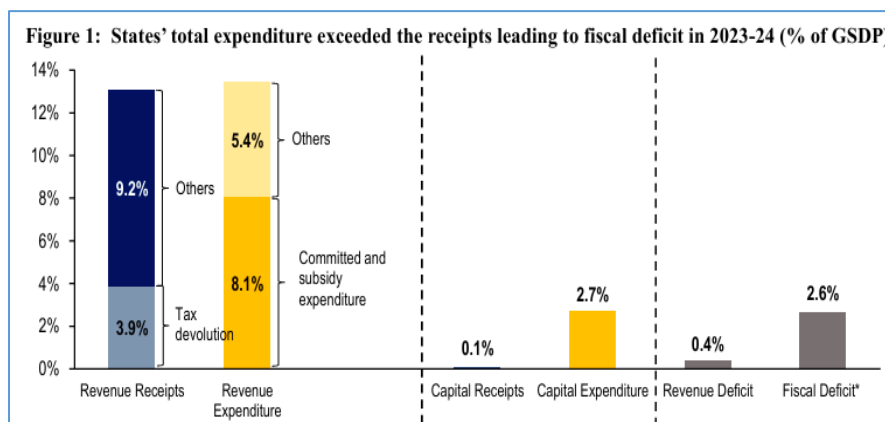


ECONOMY NEWS

State of state Finances 2025 Report

- ❖ States collectively maintained their Gross Fiscal Deficit (GFD) close to the FRBM (Fiscal Responsibility and Budget Management) target of 3% of GDP.
- ❖ For FY 2024-25, the GFD is estimated at 3.2% of GDP, which is within a manageable range.

- ❖ In 2024-25, Capital expenditure by states has reached 3.1% of GDP.
- ❖ In 2023-24, states collectively spent 62% of their revenue receipts on interest payments, salaries, pensions, and subsidies.
- ❖ The outstanding debt level of states (28.5% of GDP) remains significantly above the FRBM target of 20%.
- ❖ Except for Gujarat, Maharashtra, and Odisha, most states exceed this limit.
- ❖ States like Punjab, Kerala, and West Bengal have significantly high debt levels.
- ❖ As of 2025–26, 12 states have launched unconditional cash transfer schemes for women.
- ❖ On aggregate, states have estimated to raise 58% of revenue receipts from own-tax and own non-tax sources in 2025-26.
- ❖ In 2025-26, own-tax revenue is estimated to be higher than 50% of revenue receipts in 10 states.
- ❖ These include Andhra Pradesh, Gujarat, Haryana, Karnataka, Kerala, Maharashtra, Punjab, Telangana, Tamil Nadu, and Delhi.
- ❖ States with a higher share of subsidy expenditure include Punjab (21% of revenue receipts), Tamil Nadu (14%), Rajasthan (14%), Karnataka (14%), and Gujarat (13%).
- ❖ Tamil Nadu spent 60% of its total subsidy budget on bus transport (12%), subsidised electricity tariff (20%), and support under the PDS scheme (28%).
- ❖ It was released by PRS Legislative research.



ENVIRONMENT NEWS

COP30 - Climate Summit

- ❖ The 30th Conference of Parties (COP30) to the United Nations Framework Convention on Climate Change (UNFCCC) is being held in Belém, Brazil.



- ❖ It marks ten years since the Paris Agreement, which aimed to limit global temperature rise to below 2°C and strive for 1.5°C above pre-industrial levels.
- ❖ COP30 is called the “Implementation COP” because it focuses on converting global climate commitments into real, measurable actions guided by the Global Stocktake (GST).
- ❖ The summit covers six priority areas — clean energy, industry, and transport transitions; forest, ocean, and biodiversity protection; transformation of food systems; and resilience in cities and water systems.
- ❖ The ‘Baku-to-Belém Roadmap’ aims to scale up climate finance for developing nations to \$1.3 trillion per year by 2035, building on the \$300-billion New Collective Quantified Goal (NCQG) from COP29.
- ❖ COP30 aims to strengthen global unity, accelerate emission cuts, and ensure that the Amazon — and ecosystems like it — continue to support a stable, sustainable planet.



UN-Backed Climate Integrity Checklist

- ❖ The Global Reporting Initiative (GRI) launched the United Nations (UN)-endorsed “Integrity Matters Checklist”.
- ❖ The tool helps companies and investors align their climate disclosures with UN standards for credible net-zero targets and transition plans.
- ❖ Developed with the UN, it builds on recommendations from the UN High-Level Expert Group (HLEG) on Net Zero Commitments and links them to GRI sustainability reporting standards.
- ❖ The checklist complements the updated “GRI 102: Climate Change 2025 Standard”.

- ❖ It also supports the Paris Agreement and the 2030 Agenda for Sustainable Development.



Mercury Fillings Ban 2034



- ❖ Countries around the world have agreed under the Minamata Convention on Mercury to completely stop using mercury-based dental amalgam by the year 2034.



- ❖ This important decision was made at a conference held in Geneva to protect human health and the environment from mercury pollution.
- ❖ The Minamata Convention on Mercury was adopted in 2013 and came into force in 2017.
- ❖ More than 150 countries are members of this convention.
- ❖ The World Health Organization (WHO) lists mercury among the top ten chemicals that pose serious risks to human health.
- ❖ The agreement also aims to end the use of mercury in skin-lightening cosmetics and small-scale gold mining.

Montreal Protocol – MOP 37



- ❖ The 37th Meeting of the Parties (MOP-37) to the Montreal Protocol was held in Nairobi, Kenya.
- ❖ The meeting reviewed global progress under the Montreal Protocol on Substances that Deplete the Ozone Layer.
- ❖ It was adopted in 1987 to phase out ozone-depleting substances (ODS).
- ❖ The session emphasized the implementation of the Kigali Amendment (2016), which seeks to phase down hydrofluorocarbons (HFCs) that contribute to global warming.

- ❖ Parties reaffirmed their commitment to the complete recovery of the ozone layer and to maintaining the Protocol's role as a model for global environmental cooperation.

WHO-FCTC COP11



- ❖ The Federation of All India Farmer Associations (FAIFA) criticised WHO Framework Convention on Tobacco Control (WHO-FCTC) 11th Conference of the Parties (COP11) for excluding tobacco farmers.
- ❖ COP11 is scheduled to be held in Geneva from November 17–22, 2025.
- ❖ FAIFA's request for farmer participation at WHO-FCTC COP11 was rejected, citing misalignment with FCTC objectives.
- ❖ FAIFA stated that FCTC Articles 17 and 18 call for protecting farmers' livelihoods and promoting sustainable alternatives.
- ❖ India is the world's second-largest tobacco producer and ranks fourth in Flue-Cured Virginia (FCV) tobacco production.
- ❖ India is the second-largest exporter of unmanufactured tobacco, with exports of ₹12,006 crore in 2023–24.
- ❖ Over 36 million people in India depend on tobacco cultivation, processing, and trade for their livelihood.
- ❖ FAIFA warned that excluding farmers from policy discussions could destabilise rural economies and affect livelihoods.

REPORTS AND INDICES

World's Top 10 Billionaire Cities - Mumbai and Delhi

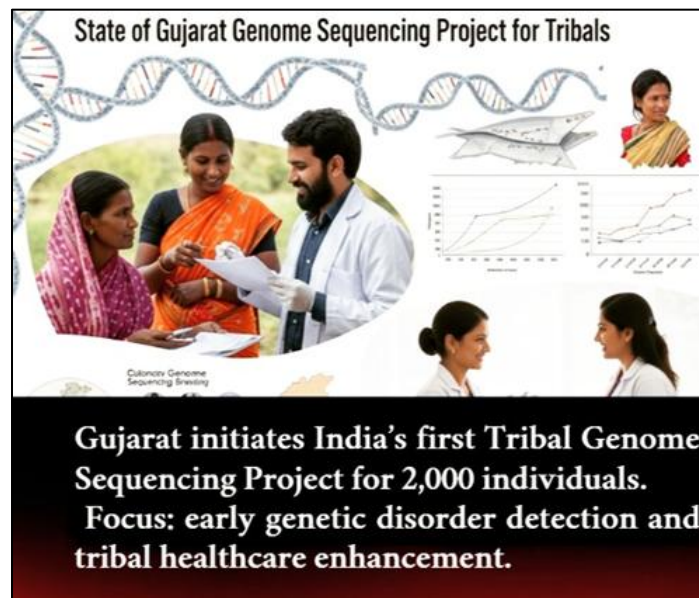
- ❖ According to the "Hurun Global Rich List" (2025), New York tops the world with 119 billionaires, followed by London with 97.
- ❖ Mumbai ranks third with 92 billionaires.

- ❖ New Delhi, ranks ninth globally with 57 billionaires.



STATES' NEWS

Tribal Genome Sequencing Project - Gujarat



- ❖ Gujarat becomes the first Indian state to launch a genome sequencing initiative exclusively for tribal communities.

- ❖ The Tribal Genome Sequencing Project will sequence the genomes of 2,000 individuals from tribal populations across 17 districts.
- ❖ The project was titled “Creation of Reference Genome Database for Tribal Population in Gujarat”.
- ❖ It is implemented by the Gujarat Biotechnology Research Centre (GBRC).
- ❖ It is funded under the 2025–26 state budget.
- ❖ The initiative aims to detect genetic disorders like sickle cell anaemia, thalassaemia, and hereditary cancers, enabling early intervention and precision healthcare.
- ❖ Collected genetic data will help identify markers for natural immunity and support personalized healthcare solutions, while empowering tribal communities through advanced technology.

PERSONALITIES, AWARDS, AND EVENTS

Earthshot Prize 2025



- ❖ Earthshot Prize ceremony held in Rio de Janeiro, Brazil, to promote global climate solutions.
- ❖ The 2025 winners are ‘re.green’ (Brazil) for protecting nature, Bogotá (Colombia) for clean air, the High Seas Treaty (Global) for ocean revival, Lagos Fashion Week (Nigeria) for a waste-free world, and Friendship (Bangladesh) for climate action.
- ❖ The Earthshot Prize, launched in 2020, awards £1 million each to five winners developing innovative environmental projects.



- ❖ The initiative aims to encourage international cooperation in combating climate change and highlights the importance of aligning climate advocacy with sustainable practices.

IMPORTANT DAYS

World Science Day for Peace and Development 2025 - November 10

- ❖ The United Nations Educational, Scientific and Cultural Organisation (UNESCO) proclaimed this day in 2001.
- ❖ The idea for the day was first proposed at the World Conference on Science held in Budapest in 1999.
- ❖ The day aims to highlight the importance of science in society and promote public engagement in scientific issues.
- ❖ The theme for 2025 is “Trust, Transformation, and Tomorrow: The Science We Need for 2050”.

