

October - 13

TNPSC BITS

- ❖ India's first commercial electric truck battery swapping and charging station was inaugurated in Sonipat, Haryana.
- ❖ Mumbai One, India's first integrated mobility app that enables booking across 11 public transport systems with real-time updates, mobile ticketing, and a single digital pass for metro, rail, and buses.
- ❖ India secured its first win at the 48th edition of the Mrs Universe pageant as Sherry Singh was crowned Mrs Universe 2025 in Manila, Philippines.

TAMIL NADU NEWS

Renaming caste-based public places

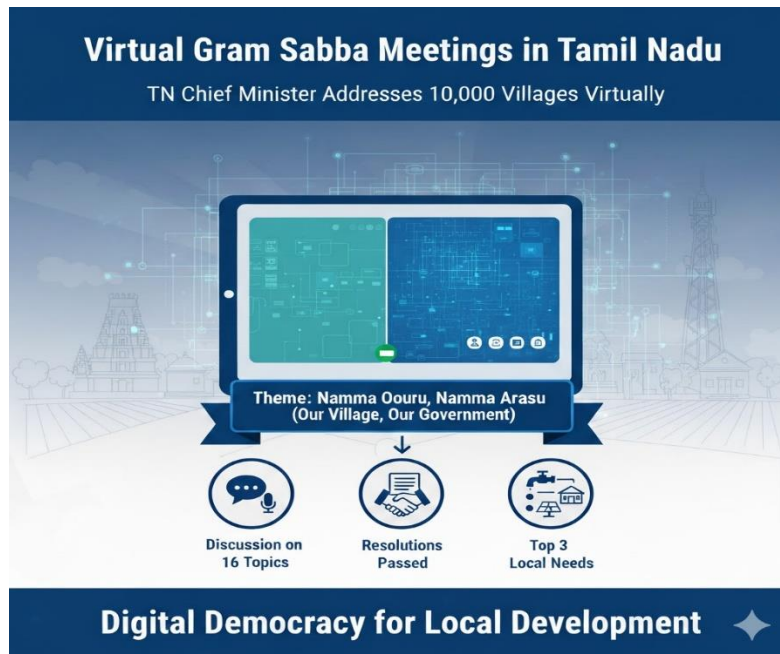


- ❖ The Tamil Nadu government has issued guidelines to identify and rename places with caste-based or discriminatory names.
- ❖ The move follows the Chief Minister's Assembly announcement to remove the term "Colony" from official records.
- ❖ Names like Adidraavidar Colony, Harijan Colony, Vannankulam, Parayar Street, and Chakkiliar Salai are to be renamed with neutral alternatives.
- ❖ Approvals from Grama Sabha and Area Sabha are required before changes; valid reasons must be recorded if names are retained.

- ❖ Final decisions will be taken by the State government as per the Tamil Nadu Panchayats Act, 1994, and the Tamil Nadu Urban Local Bodies Act, 1998.
- ❖ Similar steps are directed for removing caste names from revenue villages under the Revenue and Disaster Management Department.

Virtual gram sabha meetings

- ❖ TN Chief Minister addressed around 10,000-gram sabha meetings virtually.
- ❖ The meetings were held under the theme "Namma Ooru, Namma Arasu" (Our Village, Our Government).
- ❖ After the address, the gram sabhas discussed 16 listed topics and passed resolutions on the top three local needs.
- ❖ On the other hand, a total of 12,838 wards is in 25 municipal corporations, 145 municipalities and 490 town panchayats in Tamilnadu.



NATIONAL NEWS

AI Development Plan

- ❖ NITI Aayog released a roadmap titled "AI for Inclusive Societal Development" in New Delhi.
- ❖ The study focuses on how artificial intelligence (AI) and frontier technologies can support India's 490 million informal workers.

- ❖ The informal sector contributes nearly 50 percent of India's GDP but lacks formal protection and opportunity.
- ❖ NITI Aayog also proposed a national mission called Digital ShramSetu to build an inclusive AI ecosystem for informal workers.
- ❖ The mission will use AI, blockchain, and immersive technologies to address challenges like financial insecurity and lack of skilling.
- ❖ Without intervention, the average annual income of informal workers may remain at \$6,000 by 2047, below the \$14,500 high-income threshold.



Draft Labour Policy 2025



- ❖ The Ministry of Labour released the draft National Labour and Employment Policy (Shram Shakti Niti 2025).



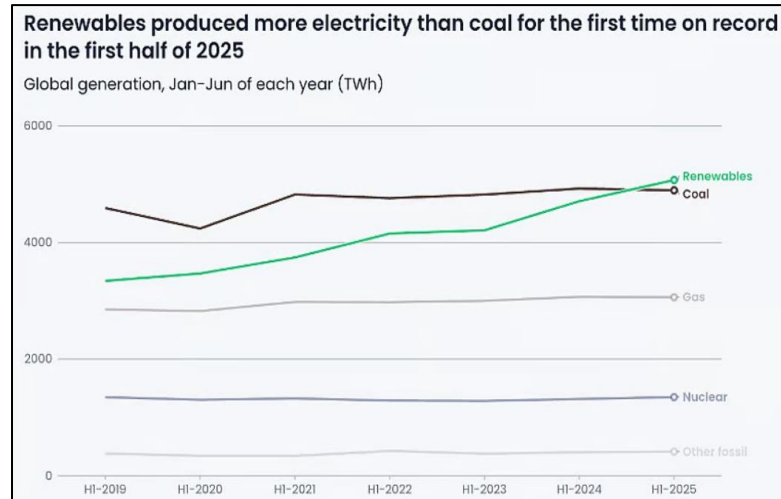
- ❖ It aims to create universal, portable social security accounts for all workers by 2030.
- ❖ It proposes integration of EPFO, ESIC, PM-JAY (Pradhan Mantri Jan Arogya Yojana), e-SHRAM, and State welfare boards.
- ❖ It targets raising female labour-force participation to 35 percent by 2030.
- ❖ The policy introduces a single-window digital compliance platform with simplified returns and self-certification for MSMEs.
- ❖ It focuses on AI-driven labour governance, risk-based inspections, and gender-sensitive safety standards.
- ❖ Implementation is planned in three phases from 2025 to beyond 2030, covering rollout, monitoring, and policy renewal.
- ❖ Progress will be tracked via dashboards, a Labour and Employment Policy Evaluation Index (LPEI), and annual reports to Parliament.

INTERNATIONAL NEWS

World's Largest Electricity Source

- ❖ In the first half of 2025, renewable energy became the world's leading source of electricity, overtaking coal for the first time.
- ❖ Solar and wind power met 100% of global electricity demand growth, even causing a slight drop in coal and gas usage.
- ❖ China led the clean energy expansion, adding more solar and wind capacity than the rest of the world combined, reducing its fossil fuel generation by 2%.
- ❖ India also added significant solar and wind capacity, offsetting slower demand growth and cutting back on coal and gas use.
- ❖ In contrast, the US and EU increased fossil fuel reliance due to weaker clean energy growth and poor wind and hydro output.
- ❖ The International Energy Agency (IEA) halved its US renewable capacity forecast for 2030 from 500 GW to 250 GW due to policy changes.
- ❖ Solar prices have dropped 99.9% since 1975, driving rapid adoption in developing countries, especially in Africa and South Asia.
- ❖ Pakistan doubled solar imports in 2024.
- ❖ Nigeria overtook Egypt in solar capacity, and countries like Zambia and Algeria saw exponential growth.
- ❖ Rapid solar expansion is causing new challenges; in Afghanistan, widespread solar-powered water pumps are depleting groundwater levels.

- ❖ China remains the dominant global player in clean tech exports, hitting a record \$20 billion in August 2025, led by electric vehicles and batteries.



End of Russia's Plutonium Deal with U.S.



- ❖ Russia's lower house of parliament approved the withdrawal from the Plutonium Management and Disposition Agreement (PMDA) signed with the United States in 2000.
- ❖ The PMDA required both countries to dispose of 34 tonnes of weapons-grade plutonium each, enough for about 17,000 nuclear warheads.
- ❖ The agreement came into force in 2011.
- ❖ It aimed to reduce proliferation risks by converting plutonium into mixed oxide (MOX) fuel or irradiating it in reactors.



- ❖ Russia suspended implementation in 2016, citing U.S. sanctions, NATO expansion, and unilateral changes in U.S. plutonium disposal methods.
- ❖ Russia and the U.S. still hold around 8,000 nuclear warheads, down from 73,000 in 1986.

ECONOMY NEWS

Retail sandbox for digital currency

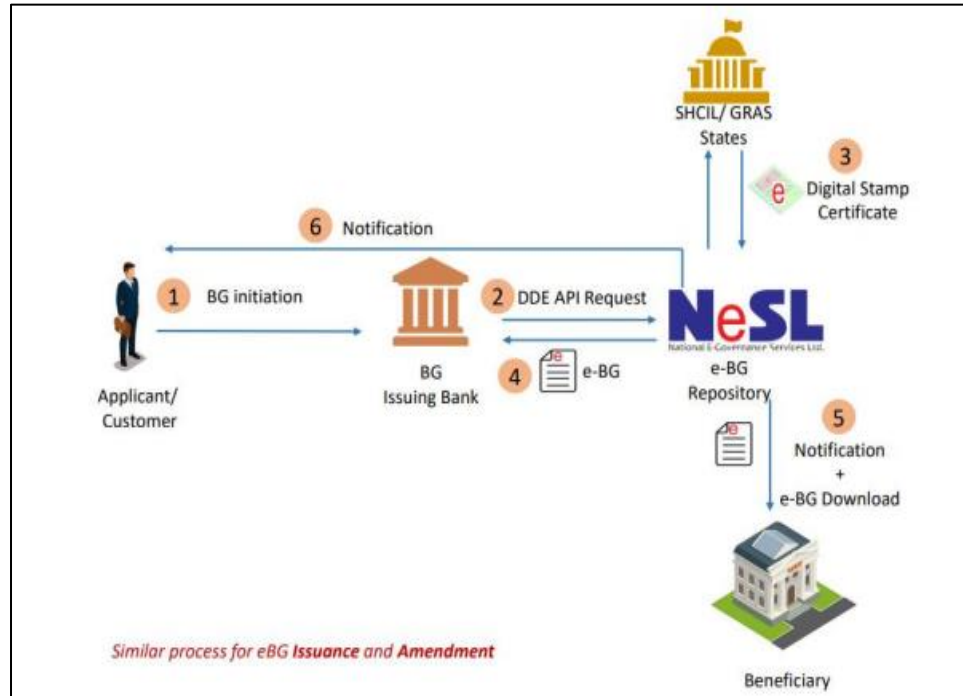
- ❖ The RBI launched a retail sandbox for its central bank digital currency.
- ❖ The digital currency is called the e-rupee and is part of the central bank digital currency (CBDC) pilot project.
- ❖ The retail CBDC pilot started on December 1, 2022, and has reached around 7 million users in India.
- ❖ The sandbox allows financial technology (fintech) firms to build and test solutions using the e-rupee.
- ❖ Tokenisation is being used to convert real bank deposits into digital tokens for secure and efficient transactions.



Digital bank guarantees

- ❖ India signed an agreement to enable real-time digital execution of electronic bank guarantees (e-BGs).
- ❖ NeGD's Entity Locker, part of the DigiLocker platform, will integrate with NeSL's Digital Document Execution system.
- ❖ The system allows applicants and beneficiaries to access bank guarantees digitally through a central repository.

- ❖ e-BGs will be tamper-proof, legally valid, and issued within minutes instead of several days.
- ❖ The system supports full digital processing, including issuance, renewal, and invocation of bank guarantees.



Foreign Currency Settlement System

- India has stepped decisively in the global AI
- Pleased to launch foreign currency settlement system in the GIFT City
- FCSS will be a payment system within IFSC
- FCSS designed for near real-time settlement of foreign currency transactions

- ❖ The finance minister launched a foreign currency settlement system (FCSS) in GIFT City, Gujarat.

- ❖ The system enables real-time or near real-time settlement of foreign currency transactions within the IFSC (International Financial Services Centre).
- ❖ FCSS eliminates reliance on multiple intermediaries in cross-border payments currently handled through correspondent banking.
- ❖ Standard Chartered Bank's India unit was selected to handle US dollar clearance under the new system.
- ❖ FCSS is regulated under the Payment and Settlement Systems Act to ensure compliance and operational oversight.

SCIENCE AND TECHNOLOGY NEWS

Saksham Anti-Drone System

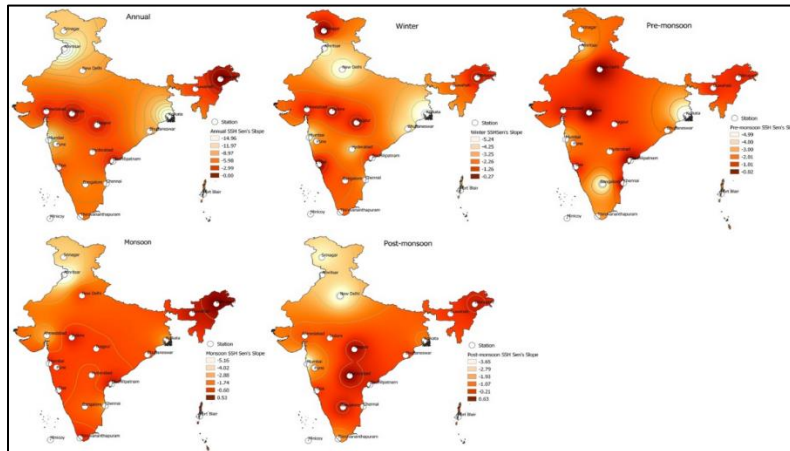


- ❖ The Indian Army has inducted the indigenous Saksham Counter-Unmanned Aerial System (CUAS) Grid System for real-time drone threat neutralisation.
- ❖ Saksham was developed in collaboration with Bharat Electronics Limited (BEL), Ghaziabad, and operates on the secure Army Data Network (ADN).
- ❖ The system detects, tracks, identifies, and neutralises hostile drones and unmanned aerial systems in real time across the Tactical Battlefield Space (TBS).
- ❖ It provides real-time threat detection, AI (artificial intelligence)-based predictive analysis, and automated decision support for commanders.

- ❖ It integrates CUAS sensors and weapons, enables 3D battlefield visualisation, and synchronises inputs with the Akashteer air defence system.

ENVIRONMENT NEWS

Sunshine Hours Decline



- ❖ Recent study has found a steady decline in India's annual sunshine hours since 1988.
- ❖ The study was conducted by scientists from Banaras Hindu University (BHU), Indian Institute of Tropical Meteorology (IITM), and the India Meteorological Department (IMD).
- ❖ Data from 1988 to 2018 across 20 meteorological stations in 9 regions showed a consistent drop in sunshine hours.
- ❖ The decline is linked to rising aerosol levels caused by urbanization, industrialization, and increased fossil fuel use since the 1990s.
- ❖ The northeastern region showed some seasonal levelling, but other regions saw significant sunshine drops, especially from June to July.
- ❖ Aerosols increase cloud cover by forming smaller, longer-living droplets, reducing solar radiation reaching the ground.
- ❖ Weather factors like cloudiness, intensified by aerosols, are also contributing to reduced sunlight over India.

Giant Fungus Species

- ❖ A new fungus species named *Bridgeoporus kanadai* has been discovered in Arunachal Pradesh.

- ❖ The fungus has massive fruiting bodies, with the largest measuring over 3 metres in radius.
- ❖ It was found growing on old, dead fir trees during a mushroom survey by the Botanical Survey of India.
- ❖ These fungi play a key role in forest health by decomposing wood and aiding carbon and nutrient cycling.



India's National Red List Assessment initiative

- ❖ India participated in the IUCN World Conservation Congress held in Abu Dhabi, Capital of the United Arab Emirates.
- ❖ A National Red List Assessment initiative was launched to meet obligations under the Convention on Biological Diversity (CBD) and the Kunming–Montreal Global Biodiversity Framework (KMGBF).
- ❖ A framework was developed to assess the conservation status of species through a nationally coordinated, science-based system.
- ❖ The goal is to publish National Red Data Books for flora and fauna by 2030, following IUCN global standards.
- ❖ The initiative supports conservation planning, threat mitigation, and informed policy development based on accurate species assessment.
- ❖ India hosts four global biodiversity hotspots and supports 8% of global flora and 7.5% of fauna, with a high percentage of endemic species.



REPORTS AND INDICES

THE World University Rankings 2026



- ❖ The University of Oxford in the United Kingdom ranked first in the world for the tenth year.
- ❖ The United States has seven universities in the top ten but fewer in the top 100 compared to last year.
- ❖ Princeton University in the United States moved up to joint third place, its best-ever rank.
- ❖ Tsinghua University (12), Peking University (13), and the National University of Singapore (17) kept nearly the same ranks as last year.

PERSONALITIES, AWARDS, AND EVENTS

T.T. Jagannathan's demise

- ❖ T.T. Jagannathan, chairman emeritus of T.T.K. Prestige, passed away in Bengaluru.
- ❖ He invented the gasket release system, which prevented pressure cooker accidents and revived the company.
- ❖ He authored the book Disrupt and Conquer, documenting the company's journey from near bankruptcy to success.

