



July - 03

## TNPSC BITS

- ❖ A new IFPRI (International Food Policy Research Institute) study highlights that innovative sustainable agricultural intensification in Senegal has boosted food security and conserved land.
- ❖ Patna is set to launch its Water Metro to promote sustainability, tourism, and local jobs.
- ❖ In Basantgarh (Kashmir), the Indian Army and J&K Police neutralised a terrorist in a joint operation named Operation Bihali.
- ❖ Adani Green Energy Ltd has become the first Indian renewable energy firm to surpass 15 GW of operational capacity by reaching 15,539.9 MW.
- ❖ The Kuppadam silk sarees of Chirala, Bapatla district, Andhra Pradesh have won a national award under the Centre's "One District One Product" (ODOP) initiative.
- ❖ The National Insurance Awareness Day is observed on June 28 every year as a reminder of the critical role insurance plays in our lives.
- ❖ The Hockey Association of Odisha (Women) and Hockey Unit of Tamil Nadu (Men) were crowned the champions of the 1st Hockey India Masters Cup 2025, held at Chennai.
  - They made history by defeating the Punjab (Women) and the Maharashtra (Men) respectively.
- ❖ Chennai has received its first fleet of 120 low-floor electric buses, a first for Tamil Nadu.
  - The project is part of the Chennai City Partnership and the Sustainable Urban Services Programme, supported by the World Bank and the Asian Infrastructure Investment Bank.
- ❖ This year's National Electrical Safety Week is observed between 26th June – 2<sup>nd</sup> July, and National Electrical Safety Day is observed annually on 26th June.
  - This year's theme is "Smart Energy, Safe Nation".

## TAMIL NADU NEWS

### Valparai Assembly Seat 2025

- ❖ The Valparai (SC) Assembly seat has been declared vacant.
- ❖ This follows the death of AIADMK MLA T.K. Amul Kandasamy.

- ❖ The notification was issued by the Tamil Nadu Legislative Assembly Secretariat last week.
- ❖ This is the fifth vacant seat in the 16<sup>th</sup> Tamil Nadu Assembly, elected in May 2021.
- ❖ Due to the short remaining term, it is unclear if a by-election will be held.



## Water Bell Scheme



**பள்ளிக் கல்வித் துறை**

**மாண்புமிகு பள்ளிக் கல்வித் துறை அமைச்சர் அவர்கள்**  
**மாணவர்களின் உடல்நலனில் அக்கறையோடு**  
**அறிமுகப்படுத்தியுள்ள திட்டம்**

**குடிநீர் மணி**

தினந்தோறும் பள்ளி நேரத்தில் மாணவர்கள் தண்ணீர் அருந்துவதற்காக  
ஒரு நாளைக்கு 3 முறை 5 நிமிட இடைவெளியை வழங்க  
அரசு மற்றும் அரசு உதவி பெறும் பள்ளிகளுக்கு வழிகாட்டுதல்கள் வெளியீடு

பள்ளி வசதிக்கேற்ப காலை 11.00 மணிக்கும் (இடைவெளி),  
மதியம் 1 மணிக்கும் (மதிய உணவு இடைவேளை) மற்றும்  
பிற்பகல் 3.00 மணிக்கும் (இடைவெளி) "குடிநீர் மணி" அடிக்கலாம்.  
(வழக்கமான இடைவேளை நேரங்களுடன்  
சேர்த்துக் கொள்ளலாம்)



- ❖ The TN Education Minister launched the Water Bell Scheme in schools.
- ❖ It aims to encourage students to drink water regularly and stay healthy.
- ❖ The scheme was implemented on June 28, 2025.
- ❖ All government and aided schools have been asked to follow it.

- ❖ A special water bell will ring three times a day – at 11 AM, 1 PM, and 3 PM.
- ❖ The bell sound will be different from regular school bells.
- ❖ Students will get 2–3 minutes to drink water inside the classrooms.
- ❖ No going outside will be allowed during water break time.
- ❖ Students must bring their water bottles.
- ❖ Kerala implemented this scheme last year.

### **CM's Breakfast Scheme – Update in 2025**

- ❖ The Tamil Nadu government will expand the Chief Minister's Breakfast Scheme to government-aided schools in urban areas.
- ❖ With this, all the government and government-aided schools in the state will be covered.
- ❖ The rollout will begin on July 15, marking K Kamaraj's birth anniversary.
- ❖ The elementary education directorate has listed 1,416 schools, mostly urban aided schools, for inclusion.
- ❖ Currently, 17.53 lakh students in 34,987 schools benefit from the scheme.
- ❖ The scheme was launched in September 2022 and extended to all government schools by March 2023.
- ❖ In the 2024–25 academic year, it included rural aided schools as well.



**Breakfast scheme in all aided schools in  
Tamil Nadu from July 15**

### **Education Schemes for Transgender and Intersex Persons**

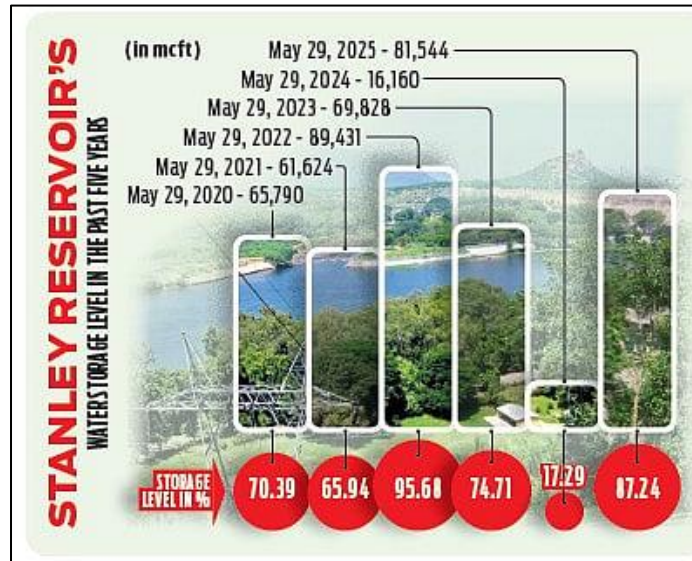
- ❖ The Tamil Nadu government has expanded the following two education support schemes to include transgender and intersex persons.
  - Pudhumai Penn Scheme
  - Tamil Pudhalvan Scheme
- ❖ Both schemes give ₹1,000 per month to the students from the government / government-aided schools (Class 6–12) who go on to higher education.
- ❖ Now, transgender and intersex persons are eligible for both schemes.
- ❖ Relaxation has been given for transgender and intersex individuals, as they are not required to have studied from Class 6 to 12 in the Tamil medium.
- ❖ They must have a valid ID card from the Tamil Nadu Transgender Welfare Board.
- ❖ The move aims to promote equal access to higher education and support marginalised communities.



### **Mettur Dam Water Level – June 2025**

- ❖ The Mettur Dam (Stanley Reservoir) reached its full level of 120 feet again in June 2025.
- ❖ This is the second time in June that the dam has reached full level this year.
- ❖ Also, this is the 44th time in its 92-year history that the dam has reached full capacity.
- ❖ The last time Mettur Dam hit full level in June was in 1957, 68 years ago.





## Ancient Keeladi Faces

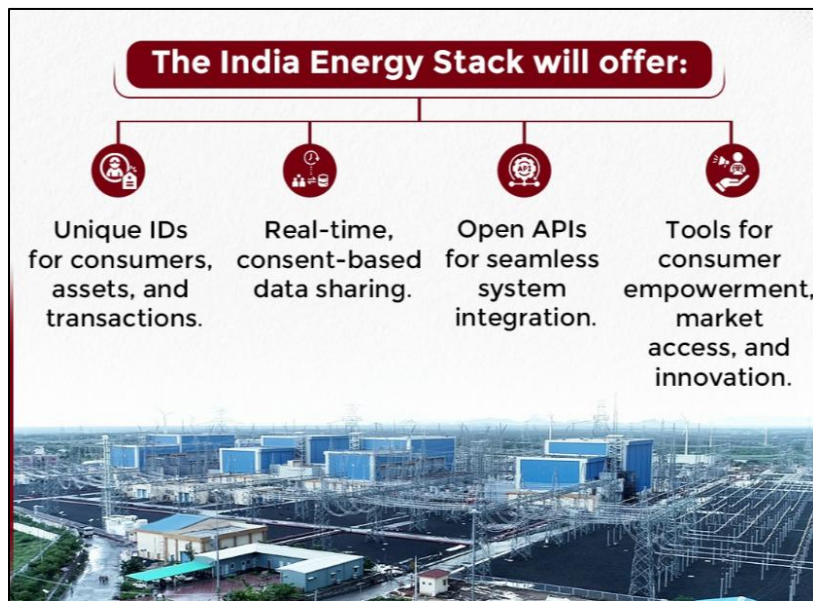


- ❖ For the first time in South India, the researchers have reconstructed faces from 2,500-year-old skulls found near Keeladi, Sivagangai District.
- ❖ The effort was led by the Madurai Kamaraj University and Liverpool John Moores University.
- ❖ The skulls were excavated from the Kondagai burial site, around 800 metres from Keeladi.

- ❖ CT scans were used to digitally rebuild the upper parts of the skulls; the missing jawbones were estimated using standard orthodontic methods.
- ❖ The facial features reflect South Indian, West Eurasian, and Austro-Asiatic traits.
- ❖ Tissue depth data from modern South Indians helped recreate muscles, skin, and fat layers.
- ❖ A photo database was used to estimate skin, hair, and eye colours.
- ❖ The DNA from burial urns is now being studied with Harvard University to trace genetic ancestry and migration patterns.
- ❖ Keeladi's timeline is dated from the 6th century BCE to the 2nd century CE.
- ❖ This timeline remains under discussion between the Tamil Nadu archaeology department and the Archaeological Survey of India (ASI).

## NATIONAL NEWS

### India Energy Stack



- ❖ The Ministry of Power launched a task force to develop the India Energy Stack (IES) on July 1, 2025.
- ❖ IES will be a secure, unified digital system for the energy sector.
- ❖ It aims to improve the renewable energy use, power distribution efficiency, and consumer services.
- ❖ The system will include unique identification for consumers, energy assets, and transactions.

- ❖ It allows real-time, consent-based data sharing across platforms.
- ❖ This will be implemented as a 12-month pilot project with power distribution companies (DISCOMs) in Mumbai, Gujarat, and Delhi.

### **GoIStats App**

- ❖ The National Sample Survey Office (NSO) launched the GoIStats mobile app on Statistics Day 2025.
- ❖ The app aims to make official statistics easy to access, understand, and use for all citizens.
- ❖ It features a "Key Trends" dashboard with visuals on the GDP, inflation, and employment.
- ❖ Users receive real-time updates based on NSO's publishing schedule.



## **SCIENCE AND TECHNOLOGY NEWS**

### **Extreme Heat Speeding Up Ageing**

- ❖ New research shows that the extreme heat may silently speed up ageing at the molecular level.
- ❖ The Scientists compared the impact of heat to major risk factors like smoking and heavy alcohol use.

- ❖ The study used “epigenetic clocks” – tools that measure changes in DNA.
- ❖ These clocks track DNA methylation.
- ❖ It is a process that can turn genes on or off and is affected by the environment.
- ❖ People living in areas with 140+ hot days a year (over 90°F or 32.3°C) showed up to 14 months of extra biological ageing.
- ❖ This ageing effect remained even after considering the lifestyle and economic differences.
- ❖ The Animals also show that the heat causes the long-term changes in DNA, called maladaptive epigenetic memory.
- ❖ The findings raise concerns about how climate change may harm long-term health through faster biological ageing.



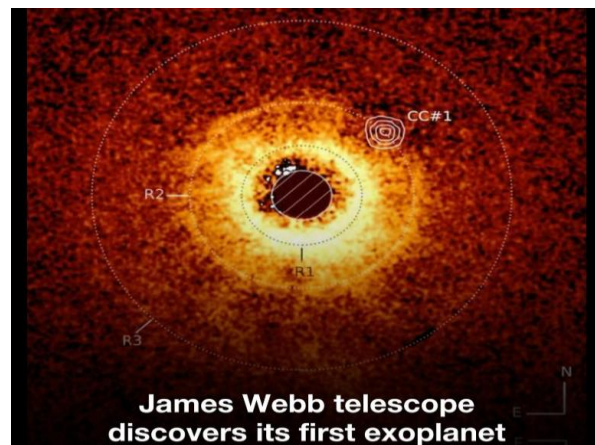
### **SatSure and Dhruva Space Team**

- ❖ SatSure, an Earth observation (EO) startup from Bengaluru, and Dhruva Space, a Hyderabad-based company, have partnered to offer the Earth Observation-as-a-Service (EOaaS) solutions.
- ❖ They will develop space-based solutions for commercial use in defence, agriculture, urban planning, and environmental monitoring.
- ❖ SatSure’s subsidiary, KaleidEO, will also provide the EO payloads and analytics platforms.
- ❖ Dhruva Space will contribute expertise in small satellites, launches, and ground station infrastructure.
- ❖ Together, they aim to deliver reliable and fast sovereign EO services with quicker mission timelines.





### **Distant Exoplanet TWA 7b**



- ❖ NASA has discovered a new exoplanet named TWA 7b, orbiting the young star TWA 7.
- ❖ The planet was detected using the heat signals through a method called high-contrast imaging.
- ❖ TWA 7b is located about 111 light-years from Earth.
- ❖ It is estimated to have a mass similar to Saturn, around 0.3 times the mass of Jupiter (about 100 Earth masses).
- ❖ The exoplanet is roughly 50 times farther from its star than Earth is from the Sun.

- ❖ It is likely a young and cold planet, difficult to detect with usual methods.

## ENVIRONMENT NEWS

### New Begonia Species

- ❖ A new species of Begonia, *Begonia nyishiorum*, has been discovered in Arunachal Pradesh.
- ❖ It is named after the Nyishi community for their vital role in forest conservation.
- ❖ It features unique red, fleshy, fringed (lacinate) petiole scales.
- ❖ These features have never been seen before in Asian begonias of its group.
- ❖ The species is morphologically distinct from its closest relative, *Begonia kekarmonyingsensis*.
- ❖ The plant is currently listed as “Data Deficient” under IUCN guidelines.



»» *New flowering plant* ««

**SPECIES DISCOVERED IN ARUNACHAL'S EAST KAMENG; NAMED AFTER STATE'S LARGEST TRIBE**

**BEGONIA NYISHIORUM:**

Forest officials in Arunachal Pradesh have discovered a new flowering plant species, *Begonia nyishiorum*, endemic to East Kameng district. Named in honour of the state's largest tribe, the Nyishis, the plant is distinguished by its unique crimson-fringed petioles—unseen in any other Asian begonia. Documented during a challenging expedition by the Seppa Forest Division, the discovery was published in the prestigious journal *Novon* on June 23. The find highlights Arunachal's rich biodiversity and reinforces the Eastern Himalaya's global significance for conservation and research.

