

April - 17

TNPSC BITS

- ❖ In Punjab, Milkfed, the seventh largest Punjab-based milk cooperative of India, has launched its own mascot 'Veera' for its dairy brand 'Verka' to well popularise its products and boost sales across the country.
- ❖ The Saras Mk2, an updated version of an India-designed civilian aircraft, is set to test-fly in December 2027.
- ❖ The Indira Gandhi Cultural Centre, the cultural arm of the High Commission of India in Bangladesh, celebrated the 75th Anniversary of the Indian Council for Cultural Relations (ICCR) at the Indian Cultural Centre, Dhaka.
- ❖ Madhya Pradesh government has officially declared a new wildlife sanctuary at Sagar district in the name of Dr Bhimrao Ambedkar Abhyaran.
- ❖ In the first leg of the International Shooting Sport Federation (ISSF) World Cup 2025 at Buenos Aires, Argentina, India finished second with a total of 8 medals, including 4 gold, 2 silver and 2 bronze after China.
- ❖ The United Kingdom is poised to host the 2035 FIFA Women's World Cup.
- ❖ Volcanic Mount Spurr, situated near Anchorage, Alaska of the USA, has erupted very actively, which hasn't erupted in over 5,000 years.

TAMIL NADU NEWS

TN government school students in Higher Education

- ❖ In three years, the number of government school students pursuing the higher education in Tamil Nadu has increased by nearly 30%.
- ❖ At least 74% of students who took the Class 12 boards enrolling in colleges in the 2023-24 academic year.
- ❖ In 2021-22, this figure was just 45%.
- ❖ It rose to 69% in 2022-23 after the state government introduced the Pudhumai Penn scheme.
- ❖ The initiative provides female government school students enrolled in higher education institutions with a monthly incentive of Rs 1,000.
- ❖ The state rolled out a similar scheme, Tamil Pudhalvan, for male students in 2024.
- ❖ In 2022-23, 2,72,744 of 3,97,809 students who wrote the Class 12 exams from government schools secured college admission.

- ❖ In 2023-24, 2,47,744 students out of 3,34,723 students joined colleges.
- ❖ This includes students who enrolled in ITIs and polytechnic institutions.
- ❖ TN already boasts a high Gross Enrollment Ratio (GER) of 47%, the very highest among larger Indian states.
- ❖ In total, 7.6 lakh students from across TN had appeared for the Class 12 exams in 2023-24 and nearly 45% of them were from government schools.



NATIONAL NEWS

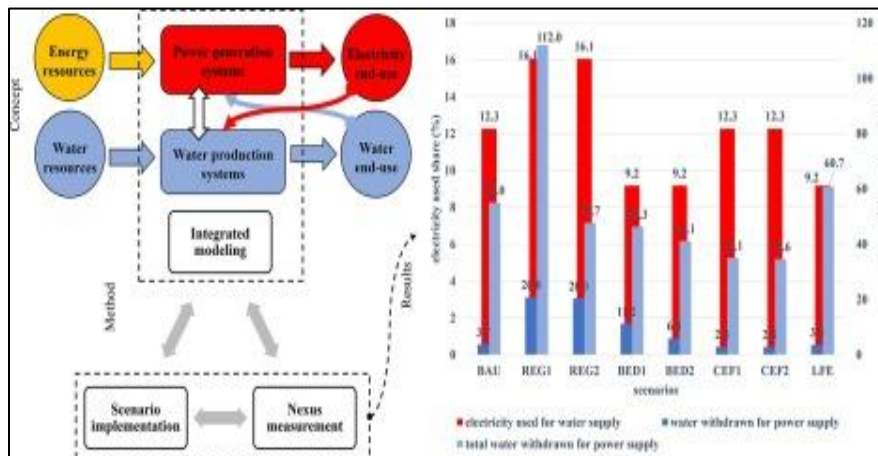
Pediatric Tuberculosis Cases in India 2024

ANTI-TB EXPERIMENT COVERS 22 STATES IN INDIA	
<p>TB burden in India</p> <ul style="list-style-type: none"> ➤ India reports over 20 lakh TB cases annually, with around 60,000 from Mumbai. 3 lakh TB deaths occur in India every year 	<ul style="list-style-type: none"> ➤ The National Strategic Plan (NSP) 2020-2025 aims to eliminate TB by 2025, five years before the global target ➤ Experts believe India may not achieve the 2025 target
<p>BCG vaccine and past studies</p> <ul style="list-style-type: none"> ➤ BCG is routinely administered to infants and provides protection for about a decade ➤ ICMR studies in the 1990s showed BCG is ineffective in adulthood 	<ul style="list-style-type: none"> ➤ Later evaluations in other countries showed only 35% efficacy ➤ WHO mandates at least 50% efficacy for inclusion in public health programmes
<p>Adult BCG experiment</p> <ul style="list-style-type: none"> ➤ BCG, originally for infants, is now being tested in adults of 22 states, including Maharashtra ➤ Health workers like ASHAs and dispensary staff mobilise eligible groups—those with a family history of TB, diabetes, smokers and senior citizens—for vaccination with consent ➤ Eligible groups are identified, listed, and vaccinated if they consent 	<p>Consent concerns</p> <ul style="list-style-type: none"> ➤ There is a register book with most pages that only include columns for names, age, Aadhar number, & consent confirmation ➤ The consent document is placed as first two pages of this register book ➤ It states that the Centre is conducting a study and mentions no compensation for adverse effects ➤ TOI found that health staff in Mumbai and parts of Maharashtra often omit informing beneficiaries that this is a research study and the vaccine may or may not work

- ❖ The number of the notified paediatric tuberculosis (TB) cases has increased by 38 per cent in children aged up to 14 years in the last five years.

- ❖ The cases rose from 102,090 in 2020 to 141,182 in 2024.
- ❖ According to the WHO, Paediatric TB refers to the notification of the disease in children aged up to 14 years.
- ❖ India's National TB Elimination Programme (NTEP) indicate that children below the age of 15 years account for about 10 to 12 per cent of India's overall TB burden.
- ❖ This number equates to about 300,000 to 350,000 cases per year.

Integrated Power Planning Model 2025



- ❖ India has unveiled a new Integrated Generation, Transmission and Storage Expansion Planning Model.
- ❖ This tool aims to enhance resource adequacy in the power sector.
- ❖ The model will be distributed free of charge to all states and the distribution companies (DISCOMS).

INTERNATIONAL NEWS

WMO Retired Hurricane Names for 2024

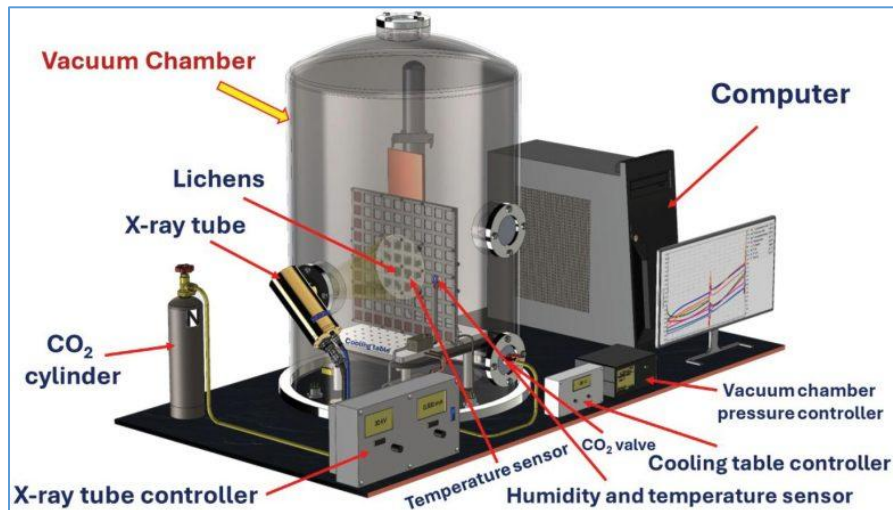
- ❖ The Hurricane names Beryl, Helene and Milton have been from its Atlantic basin name list and John from the eastern Pacific basin name list because of death and destruction caused by them in 2024.
- ❖ The annual hurricane season in the Atlantic runs from June to November.
- ❖ Beryl was earliest Category-5 hurricane on record last year, with major impacts in the Caribbean.

- ❖ Helene and Milton caused catastrophic damage in US while John triggered deadly flooding in Mexican state of Guerrero.
- ❖ Record for number of storm names retired from a single Atlantic season is five, in 2005 season.
- ❖ The most names retired for a decade was 24 in 2000s, followed by 16 retirements in 2010s.

Atlantic basin hurricane names		
2025		
Andrea	Humberto	Olga
Barry	Imelda	Pablo
Chantal	Jerry	Rebekah
Dexter	Karen	Sebastien
Erin	Lorenzo	Tanya
Fernand	Melissa	Van
Gabrielle	Nestor	Wendy

SCIENCE AND TECHNOLOGY NEWS

Lichens Survive Mars-Like Conditions



- ❖ For the first time the scientists have shown that certain lichen species can survive Mars-like conditions.
- ❖ It is including the exposure to ionizing radiation, while remaining metabolically active.

- ❖ The study has tested two species of lichen, *Diploschistes muscorum* and *Cetraria aculeata*, chosen for their contrasting traits.
- ❖ Both were exposed for five hours to a Mars simulation chamber that replicated the planet's atmosphere, pressure, temperature shifts, and radiation.

Sunbird - Nuclear Fusion-Powered Rocket

- ❖ British startup named Pulsar Fusion is working on an ambitious nuclear fusion powered rocket called Sunbird.
- ❖ The nuclear fusion powered rocket could help spacecrafts reach speeds of up to 805,000 kms per hour, which is much faster than the Parker Solar Probe.
- ❖ Parker is the fastest object ever built that peak out at 692,000 kms per hour.
- ❖ If the nuclear fusion powered rocket becomes operational, it would cut the time required to reach Mars by half and reach Pluto in just four years.



Type 5 diabetes

- ❖ A lesser-known malnutrition-related form of diabetes is designated as the Type-5 diabetes.
- ❖ The condition, occurring often in young and thin adults, was first reported in Jamaica in 1955, and then defined as J-type diabetes.
- ❖ In the 1960s, the condition was reported in undernourished populations across India, Pakistan, and parts of sub-Saharan Africa.
- ❖ While in 1985, WHO recognised the condition as a distinct form of diabetes but it removed the designation in 1999.

- ❖ Type 5 diabetes is a malnutrition-related diabetes, typically affecting the lean and malnourished teenagers and young adults in low- and middle-income countries.
- ❖ Insulin injections, as in Type 1 diabetes patients, will not benefit these patients.
- ❖ It is estimated to affect 20-to-25 million people worldwide, mainly in Asia and Africa.

Symptoms of Diabetes Insipidus


Symptoms of diabetes insipidus are characterised by excessive thirst and urination.

In Children

- Nocturnal enuresis (involuntary urination at sleep)
- Difficulty to sleep
- Increased body temperature or fever
- Difficulty in passing stools
- Decrease in weight
- Slow growth
- Vomiting

In Adults

- Polydipsia (feeling extremely thirsty)
- Nocturia (waking up middle of the night to urinate frequently)
- Excessive production of pale urine



ENVIRONMENT NEWS

UNESCO's BIOCUM program



- ❖ This program will be implemented in Madagascar to empowering local youth with vocational skills.
- ❖ It is offering sustainable livelihoods and reducing pressure on forest ecosystems such as the Montagne des Français Reserve.

- ❖ BIOCOP stands for Biodiversity Conservation and Sustainable Natural Resource Management for Integrated Community Development.
- ❖ For this program UNESCO join hands with the Korea International Cooperation Agency (KOICA).

New Species of Scarab Beetles

- ❖ Researchers have discovered six new beetle species in northeast India.
- ❖ These six are previously unknown species belonging to the genera Maladera, Neoserica and Serica.
- ❖ Newly Discovered Species:
 - Maladera champhaiensis — Mizoram,
 - Neoserica churachandpurensis — Manipur,
 - Maladera barasingha — Named after the Indian swamp deer,
 - Maladera lumlaensis — Arunachal Pradesh,
 - Serica subansiriensis — Arunachal Pradesh,
 - Maladera onam — Kerala



Woolly Flying Squirrel

- ❖ The first-ever photographic evidence of elusive Woolly Flying Squirrel captured at Miyar Valley in Lahaul and Spiti district, Himachal Pradesh.

- ❖ The Woolly Flying Squirrel (*Eupetaurus cinereus*) is endemic to the north-western Himalayas.
- ❖ It was long believed to be extinct until it was rediscovered in 1994 after a gap of nearly 70 years.
- ❖ It is the largest flying squirrel, the longest squirrel and the heaviest of all gliding mammals.
- ❖ The IUCN Conservation Status is Endangered.



STATES' NEWS

Telangana SC Sub-Categorization

HOW IS SC SUB-CATEGORIZATION DONE IN TELANGANA?	HOW IS SC SUB-CATEGORIZATION DONE IN TELANGANA?
<p>1. Total SC Reservation: 15%</p> <p>2. SC communities categorized into three groups:</p> <p>Group-I (Most Disadvantaged)</p> <ul style="list-style-type: none">• 15 SC communities• 3.288% of SC population• 1% reservation	<p>Group-II (Moderately Disadvantaged)</p> <ul style="list-style-type: none">• 18 SC communities• 62.748% of SC population• 9% reservation <p>Group-III (Relatively Benefitted SCs)</p> <ul style="list-style-type: none">• 26 SC communities• 33.963% of SC population• 5% reservation

- ❖ The Telangana state government has officially implemented the Scheduled Caste (SC) Categorisation of Reservations Act 2025.

- ❖ As per the GO, the 56 Scheduled Caste communities in Telangana have now been divided into three groups.
- ❖ It will ensure equitable distribution of benefits among the SC sub-groups.
- ❖ This classification is expected to guide the future policies on reservations in the education, employment, and political representation.
- ❖ Telangana becomes first State to notify categorisation of Scheduled Castes after the last year Supreme Court's verdict (2024).

