



September - 19

TNPSC BITS

- ❖ Automotive Research Association of India (ARAI)'s facility in Takwe, Pune, received National Accreditation Board for Testing and Calibration Laboratories (NABL) accreditation for high-pressure cylinder testing.
 - ARAI was established in 1966, while NABL is India's national accreditation body for testing and calibration laboratories.
- ❖ UK, the US and the Netherlands issued a joint advisory on CHOSEN BRICK, spyware linked to Iranian state actors and used through spear-phishing campaigns on WhatsApp and Telegram.
 - The spyware can steal emails, messages and contact lists, capture screens, access social media accounts and use a device's microphone.
- ❖ Ophiopogon japonicus was recorded in India for the first time from West Kameng district, Arunachal Pradesh; it is commonly called dwarf lilyturf or mondo grass and is an evergreen perennial.
 - Its tuberous roots, known as Ophiopogonis Radix (Maidong), are used in traditional Chinese medicine.
- ❖ Schizopygopsis waddellii was recorded in India for the first time from Pangkang Teng Tso Lake, Tawang, Arunachal Pradesh.
 - It is a cold-adapted freshwater fish of the Cyprinidae family, belonging to the snowtrout group.
- ❖ MG Hector Tomahawk is India's first mainstream Plug-in Hybrid Electric Vehicle (PHEV) SUV.
 - A PHEV combines a petrol engine and electric motor with an externally chargeable battery, allowing it to run on electric power alone for longer distances than conventional hybrids.

TAMIL NADU NEWS

Reforming Local Body Finances

- ❖ Tamil Nadu's Seventh State Finance Commission (SSFC) Chairman K. Allaudin called for greater authority, financial autonomy and resources for local bodies at a seminar in Chennai.
- ❖ Local bodies depend heavily on financial transfers from the Union and State governments.

- ❖ Rural local bodies in many States raise only 1%–8% of their revenue from their own sources.
- ❖ Property tax collection in India is about 0.2% of GDP, compared with about 1.1% in OECD countries.
- ❖ Tamil Nadu has 50% reservation for women in local bodies, but spouses of some elected women representatives sometimes try to exercise their roles informally.
- ❖ TN-VETRI (Tamil Nadu Village Empowerment, Transformation and Rejuvenation Initiative) aims to strengthen rural local bodies.
- ❖ The Rural Development Department has sought an increase in devolution funds from 10% to 12%.

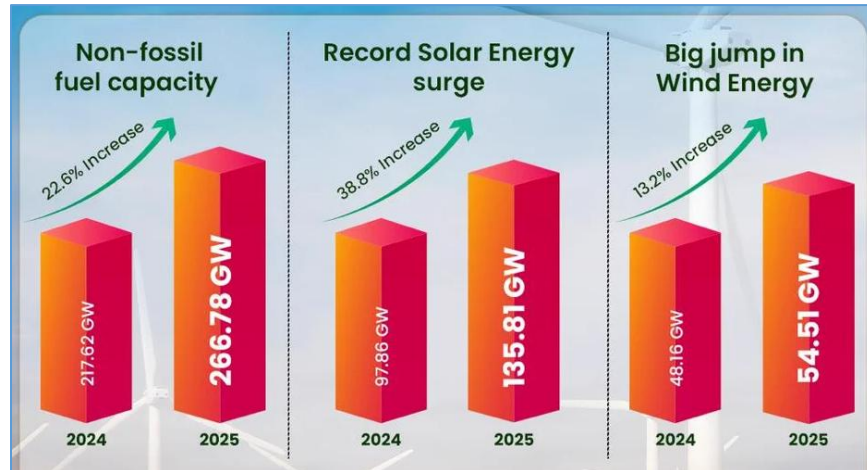


NATIONAL NEWS

Clean Energy Milestone of India

- ❖ India's coal-power generation recorded no growth for two years for the first time in more than 50 years, as clean-energy sources met the rise in electricity demand.
- ❖ Between H1 2024 (January–June 2024) and H1 2026 (January–June 2026), electricity generation increased by 7%, or about 63 terawatt-hours (TWh).
- ❖ The entire increase was met by non-fossil sources such as solar, wind, hydropower and nuclear power.
- ❖ India added about 77 GW of solar, 11 GW of wind, 5 GW of hydropower and 0.6 GW of nuclear capacity during this period.
- ❖ Power-sector carbon dioxide (CO₂) emissions in H1 2026 remained broadly at the same level as H1 2024 despite higher electricity demand.

- ❖ However, overall Indian emissions increased by 3.7% in H1 2026, mainly due to industries such as steel and cement.



INTERNATIONAL NEWS

India-Oman Port Cooperation



- ❖ Oman has invited Indian businesses to invest in Sohar Port, offering access to Gulf energy resources away from the Strait of Hormuz.
- ❖ Sohar Port is on Oman's Gulf of Oman coast, away from the Strait of Hormuz.
- ❖ It is close to major energy pipelines of the United Arab Emirates (UAE) and eastern Saudi Arabia.
- ❖ The port has received over \$30 billion in investments and handles 72 million tonnes of cargo annually.

- ❖ Oman is promoting Sohar Port and its Free zone to increase Indian investment, trade and exports.
- ❖ Earlier, Oman had offered Duqm and Salalah ports to India.
- ❖ The upcoming Oman-UAE rail link is expected to connect Sohar with the UAE railway network.

Djibouti in Artemis Accords

- ❖ Djibouti joined the Artemis Accords, becoming the 72nd country globally and 8th African country to sign the U.S.-led space cooperation framework.
- ❖ Djibouti is located in the Horn of Africa, bordering Eritrea, Ethiopia and Somalia.
- ❖ It lies near the Bab el-Mandeb Strait, connecting the Red Sea, Gulf of Aden and Indian Ocean.
- ❖ Lake Assal, at 155 m below sea level, is the lowest point in Africa and one of the world's saltiest inland water bodies.
- ❖ Djibouti has no permanent surface rivers and lies at the junction of the Red Sea, Gulf of Aden and East African Rift systems.
- ❖ Its space programme began in 2020, and it has placed two environmental-monitoring nanosatellites in low-Earth orbit.



US Drug Transit List 2027

- ❖ The United States included India, China and Pakistan in its FY2027 list of major drug transit or illicit drug-producing countries.

- ❖ Inclusion in the list does not automatically mean failure to control drug trafficking, as geography, trade and economic factors are also considered.
- ❖ The U.S. noted India's efforts against illicit opium cultivation, stronger supply-chain controls and cooperation under the U.S.-India Drug Policy Framework.
- ❖ China was identified as a major source of precursor chemicals used to manufacture fentanyl, methamphetamine and other synthetic drugs.
- ❖ Afghanistan, Bolivia, Burma (Myanmar) and Colombia were designated as countries that had "failed demonstrably" to meet counternarcotics obligations.



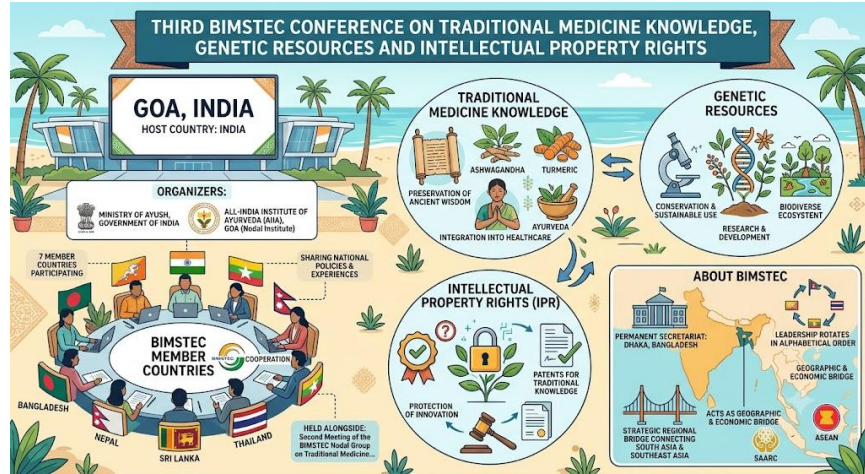
Third BIMSTEC Conference on Traditional Medicine Knowledge, Genetic Resources and Intellectual Property Rights

- ❖ The Third BIMSTEC Conference on Traditional Medicine Knowledge, Genetic Resources and Intellectual Property Rights commenced in Goa.
- ❖ The conference is being organized by the Ministry of Ayush, Government of India, with the All-India Institute of Ayurveda (AIIA), Goa, serving as the nodal institute.
- ❖ It is being held alongside the Second Meeting of the BIMSTEC Nodal Group on Traditional Medicine Knowledge, Genetic Resources and Intellectual Property Rights.
- ❖ Representatives from BIMSTEC member countries — Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka and Thailand — shared their respective national policies, legal frameworks and experiences.

About BIMSTEC

- ❖ Leadership is rotated in alphabetical order of country names.
- ❖ The permanent secretariat is in Dhaka, Bangladesh.
- ❖ It serves as a strategic regional bridge connecting South Asia and Southeast Asia.

- ❖ BIMSTEC acts as a strategic geographic and economic bridge connecting the regional blocs of SAARC and ASEAN.



Year of India and Vietnam Friendship – 2027



- ❖ India and Vietnam have agreed to observe next year as the "Year of India-Vietnam Friendship" to mark the 55th anniversary of their bilateral diplomatic relations.
- ❖ Vietnam for India is a key partner in India's Act East Policy, in India's Vision MAHASAGAR (Mutual and Holistic Advancement for Security and Growth Across Regions) in outlook of the Indo-Pacific.
- ❖ Vietnam is equally an important partner in the framework of our Comprehensive Strategic Partnership with ASEAN (Association of Southeast Asian Nations).
- ❖ Both countries elevated their relationship to an Enhanced Comprehensive Strategic Partnership.
- ❖ Vietnam is the first country in the region with which we have bilateral ties at that level.

- ❖ India announced that it had signed a deal with Vietnam to supply BrahMos supersonic cruise missiles.
- ❖ The bilateral joint military exercise between India and Vietnam is named Exercise VINBAX.

SCIENCE AND TECHNOLOGY NEWS

Artificial Sun Project - India

- ❖ India's fusion research advanced with the installation of a new 82.6 GHz, 400 kW gyrotron in the SST-1 tokamak at the Institute for Plasma Research (IPR), Gujarat.
- ❖ SST-1 (Steady State Superconducting Tokamak-1) is an experimental machine that studies magnetically confined hot plasma for fusion research.
- ❖ The new gyrotron provides up to 400 kW radio-frequency (RF) power for electron cyclotron resonance heating (ECRH) experiments.
- ❖ SST-1 has already achieved plasma temperatures above 200 million°C, much hotter than the Sun's core.
- ❖ The system works with an existing 42 GHz, 500 kW ECRH system, helping scientists study plasma heating, control and stability.



New Study on Mercury

- ❖ A new study suggests that Mercury may have contracted 10–30% more than earlier estimates, as its interior cooled over billions of years.

- ❖ Researchers estimate that Mercury's radius may have decreased by about 7.2 miles (11.6 km) due to the cooling and contraction of its interior.
- ❖ The study used data from NASA's MESSENGER mission to map Mercury's surface roughness.
- ❖ Impact debris from asteroids and comets may have hidden some cliffs, wrinkles and ridges caused by Mercury's contraction.
- ❖ Mercury's shrinkage could provide clues about its metallic core, interior structure, geological history and magnetic field.

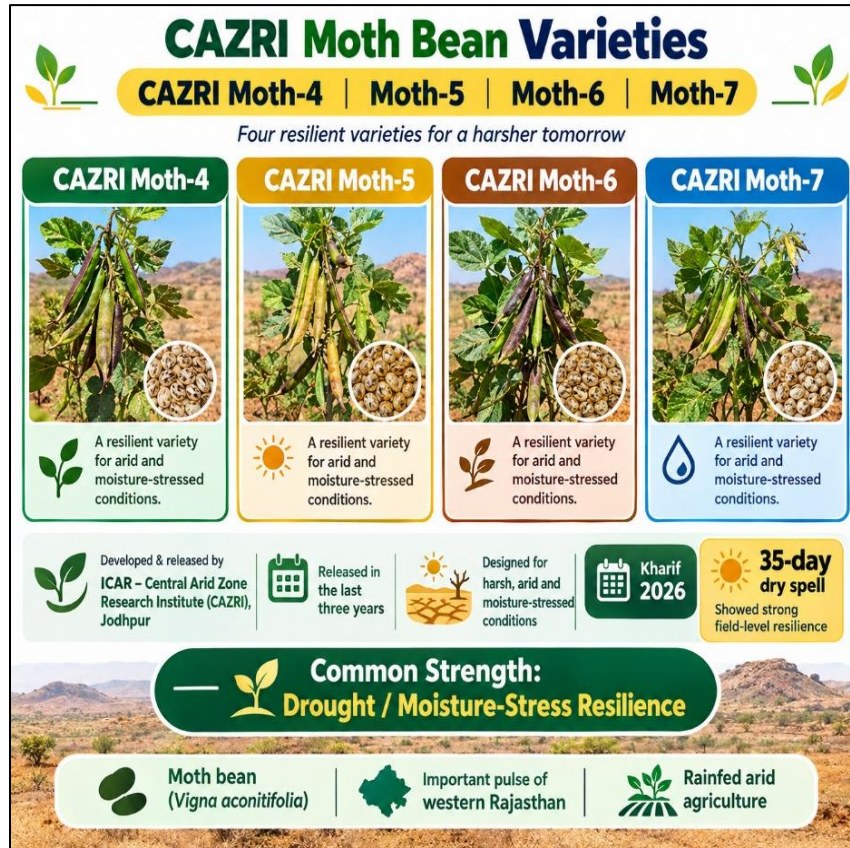


ENVIRONMENT NEWS

Climate-Resilient Moth Bean

- ❖ Four CAZRI moth bean varieties withstood a prolonged 35-day dry spell during Kharif 2026 in western Rajasthan.
- ❖ ICAR-Central Arid Zone Research Institute (CAZRI), Jodhpur, developed CAZRI Moth-4, 5, 6 and 7 for arid conditions.
- ❖ The varieties maintained green growth and profuse pod development despite low soil moisture during flowering and pod formation.
- ❖ Their developmental plasticity allows flowering from around 30 days after sowing and adjustment of growth and maturity according to soil-moisture availability.

- ❖ Timely sowing, optimum plant spacing, weed management and moisture-conservation practices supported their performance.



CAZRI Moth Bean Varieties

CAZRI Moth-4 | Moth-5 | Moth-6 | Moth-7

Four resilient varieties for a harsher tomorrow

CAZRI Moth-4
A resilient variety for arid and moisture-stressed conditions.

CAZRI Moth-5
A resilient variety for arid and moisture-stressed conditions.

CAZRI Moth-6
A resilient variety for arid and moisture-stressed conditions.

CAZRI Moth-7
A resilient variety for arid and moisture-stressed conditions.

Developed & released by ICAR - Central Arid Zone Research Institute (CAZRI), Jodhpur

Released in the last three years

Designed for harsh, arid and moisture-stressed conditions

Kharif 2026

35-day dry spell
Showed strong field-level resilience

Common Strength:
Drought / Moisture-Stress Resilience

Moth bean (Vigna aconitifolia)

Important pulse of western Rajasthan

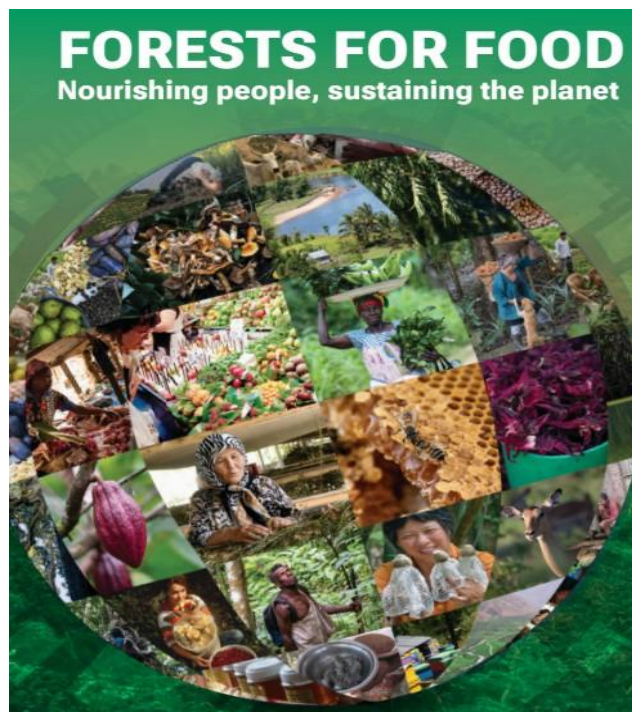
Rainfed arid agriculture

REPORTS AND INDICES

Forests for food: Nourishing people, sustaining the planet

- ❖ The report, Forests for food: Nourishing people, sustaining the planet, was published by the Food and Agriculture Organization of the United Nations (FAO).
- ❖ It was developed jointly with the Landscape Alliance.
- ❖ It highlights the importance of forests in reducing hunger and poverty and calls on countries to include them into agri food system policies.
- ❖ The report highlighted regional differences in the contribution of forest foods to food security and nutrition (FSN).
- ❖ In parts of Africa, some communities obtain up to 80 per cent of their daily protein from wild meat.
- ❖ In the Amazon, fish account for 44 per cent of total food consumed by weight, alongside wild meat, Brazil nuts and acai berries.

- ❖ In Europe, a survey covering 28 countries found that 90 percent of respondents consume at least one forest food each year, while more than one-third eat game meat annually.
- ❖ In North America, wild meat is used more for recreation than subsistence.
- ❖ India's Indigenous communities are major users of wild forest foods.
- ❖ While studies have found that children living in areas with greater forest cover can have more diverse diets and lower rates of stunting.
- ❖ Another study in eastern India found that the consumption of wild foods (mostly from forests) was associated with higher dietary diversity scores among women, particularly during the lean season.



STATE NEWS

Ladakh's First Heritage Village – Kumik

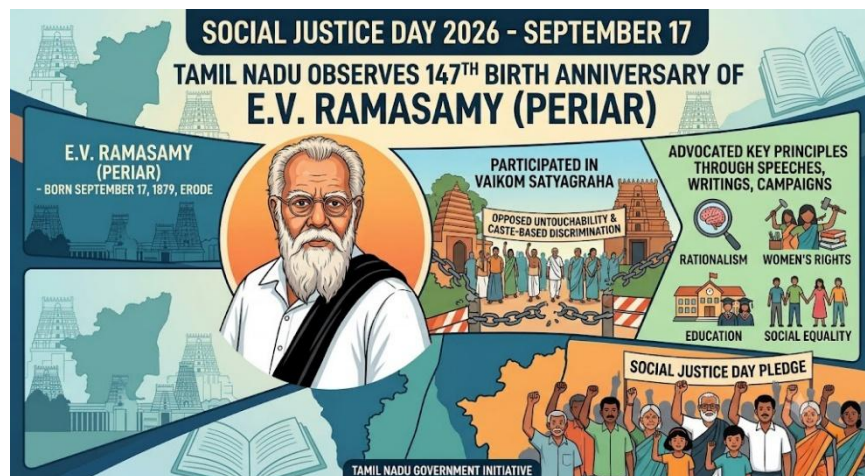
- ❖ Kumik village in Zaskar was declared Ladakh's first Heritage Village on 15 September 2026.
- ❖ Kumik is known for traditional mud houses, sacred spaces, agricultural practices and Buddhist traditions.
- ❖ The village has Kanjur manuscripts, a collection of canonical Buddhist texts in the Tibetan tradition.

- ❖ Zaskar is a high-altitude Himalayan region known for Tibetan Buddhist monasteries, manuscripts and oral traditions.
- ❖ Heritage Village status supports the conservation of traditional architecture, cultural practices and local heritage.



IMPORTANT DAYS

Social Justice Day 2026 - September 17



- ❖ Tamil Nadu observed Social Justice Day on September 17, marking the birth anniversary of social reformer E.V. Ramasamy (Periyar).
- ❖ E.V. Ramasamy, popularly known as Periyar, was born on September 17, 1879, in Erode.

- ❖ He started the Self-Respect Movement in 1925, focusing on social equality, dignity and self-respect.
- ❖ Periyar participated in the Vaikom Satyagraha, which opposed untouchability and caste-based discrimination.
- ❖ He advocated rationalism, women's rights, education and social equality through speeches, writings and public campaigns.
- ❖ In 2026, Tamil Nadu observed his 147th birth anniversary, with the Social Justice Day pledge.

MISCELLANEOUS NEWS

Academic Freedom in India



- ❖ The Free to Think 2026 report by Scholars at Risk said India's academic freedom remained in the "severely restricted" category.
- ❖ India was placed in the "severely restricted" group along with Hong Kong, Indonesia, Pakistan, the West Bank and Ukraine.
- ❖ India's Academic Freedom Index (AFI) score fell from 0.41 in 2015 to 0.14 in 2026.
- ❖ The AFI measures factors such as campus integrity, academic expression, research and teaching freedom, and institutional autonomy.
- ❖ The report recorded 382 attacks in 59 countries and territories between July 1, 2025 and June 30, 2026.



- ❖ India recorded the highest number of attacks, with 42 cases involving violence, imprisonment or loss of academic positions.
- ❖ The report said 50 of 179 countries experienced a significant decline in academic freedom over the past decade.

