

SANSKRITI IAS DAILY CURRENT AFFAIRS

14-09-2026

Moth Bean

DH Deccan Herald

ICAR-CAZRI's moth bean varieties survive 35-day dry spell in Rajasthan

ICAR-CAZRI's four new moth bean varieties endured a 35-day dry spell in Rajasthan's arid Kharif 2026 season. Seed multiplication is underway...



Why in News: ICAR's **Central Arid Zone Research Institute (CAZRI)**, Jodhpur has developed new-generation moth bean varieties capable of tolerating highly variable weather, including **prolonged drought and excessive rainfall**.

Agricultural and Ecological Significance

- **Moth bean (*Vigna aconitifolia*)**, also called **dew bean or matki**, is a hardy pulse crop belonging to the **Fabaceae** family.
- Its fast-penetrating **taproot system** allows it to access moisture from deeper soil layers, aiding survival in arid regions.
- It provides **protein-rich dal, livestock fodder and green manure**, which improves soil fertility.

Climate-Resilient Agriculture

- The new varieties developed by **CAZRI** are particularly relevant for farming systems exposed to **drought and rainfall variability**.
- The development strengthens the role of climate-resilient pulses in India's **dryland agriculture**.

Climatic and Soil Adaptation

- The crop grows best at **24–32°C** but can tolerate daytime temperatures up to **45°C**.
- It requires ideally **500–750 mm annual rainfall** but can survive with only **200–300 mm**.
- It prefers **well-drained sandy loam soils** and tolerates a wide **pH range of 3.5–10**, along with slight salinity.
- Major cultivation occurs in the arid and semi-arid regions of **Rajasthan, Maharashtra, Gujarat and Haryana**.

Tso Kar Lake

Why in News: The **Ladakh administration** has initiated a restoration

Deccan Chronicle

Ladakh Launches Major Tso Kar Lake Revival Project

Ladakh has launched an ambitious ecological restoration project to revive the shrinking Tso Kar Lake by channelising glacier meltwater from...



project for the shrinking **Tso Kar Lake** by diverting nearly **320 million litres of untapped glacier water daily** from the glacial stream **Rupsho Kharnak**.

Geographical and Physical Features

- **Tso Kar**, meaning “White Lake” in Ladakhi, is a high-altitude **salt lake** situated in the **Rupshu Valley of Ladakh**.
- At about **15,280 feet (4,660 m)**, it is the smallest of the three prominent regional lakes, along with **Pangong Tso** and **Tso Moriri**.
- Its name refers to the **white salt deposits** surrounding its shores.
- The basin also includes **Startsapuk Tso**, a nearby freshwater lake, forming a distinctive wetland system.

People and Livelihoods

- The **Khampas**, a nomadic community inhabiting the region, traditionally collect salt from the lake’s banks and sell it in nearby areas.
- The lake experiences extreme climatic conditions, with winter temperatures falling below **−40°C** and summer temperatures reaching up to **30°C**.

Ecological Significance

- The surrounding marshlands support birds such as **bar-headed geese**, **great crested grebe** and **black-necked cranes**.
- The area also supports **Kiang (wild ass)**, **ibex**, **snow leopard** and **snow fox**.
- **Tso Kar was designated a Ramsar Site in 2020** as a **Wetland of International Importance**.

Meenakshi Sundareswarar Temple

TNIE The New Indian Express

Eviction ahead of consecration leaves street vendors around Meenakshi Sundareswarar temple in lurch

The Madurai corporation cleared the vending shops from the streets on August 31 ahead of the consecration ceremony. Meenakshi Sundareswarar...



Why in News: Street vendors around the **Meenakshi Sundareswarar Temple, Madurai**, were recently evicted as authorities sought to regulate traffic and pedestrian movement ahead of the temple’s **Maha Kumbabishekam**.

Historical and Religious Significance

- The temple is located on the **southern bank of the Vaigai River in Madurai, Tamil Nadu**.
- It is dedicated to **Meenakshi (Parvati)**, **Sundareswarar (Shiva)** and her brother **Alagar (Vishnu)**.

- The temple represents a confluence of **Shaivism, Shaktism and Vaishnavism**.
- Its origins are associated with the **Pandya ruler Kulasekarer Pandya**, while its present structure was significantly expanded under **Thirumalai Nayak (1623–1655 AD)**.

Architectural Features

- It is a major example of **Dravidian architecture** and covers approximately **45 acres**.
- The complex has **14 towers (gopurams)**, with the Southern Tower rising more than **170 feet** and dating to **1559**.
- The **Eastern Gopuram** is the oldest and was built under **Maravarman Sundara Pandyan (1216–1238)**.
- The **Western Gopuram** served as the model for the **Tamil Nadu State Emblem**.

Artistic and Cultural Features

- The complex contains structures such as the **Aayirankaal (Thousand-Pillared) Hall, Kilikoondu Mandapam, Golu Mandapam and Pudu Mandapam**.
- The so-called **Thousand-Pillar Hall** contains **985 carved pillars** and was built by **Ariyanatha Mudaliar in 1569**.
- The temple has **musical pillars**, each producing a different musical note when struck, and contains an estimated **33,000 sculptures**.

Java Sea

 India Today

Indonesia ferry overturns in Java Sea, 129 missing as rescue widens

Rescuers are searching the Java Sea after the Virgo Transport 8 overturned in rough weather. The accident has intensified scrutiny of ferry...



Why in News: An Indonesian passenger ship carrying **243 people** was reported missing after losing contact in the **Java Sea** during bad weather.

Geographical Location

- The **Java Sea** is part of the **western Pacific Ocean** and lies between the islands of **Java and Borneo**.
- It is bounded by **Borneo/Kalimantan to the north, Java to the south, Sumatra to the west**, and the **Makassar Strait, Celebes Sea, Flores Sea, Bali Sea and Sunda Strait** in surrounding directions.
- It forms part of the **Sunda Shelf**, a shallow continental-shelf region of Southeast Asia.

Economic and Ecological Importance

- The Java Sea experiences a **monsoon climate** and supports rich marine biodiversity.

- Important protected areas associated with the region include **Ujung Kulon and Karimunjawa**.
- The sea contains **petroleum and natural gas deposits**, which contribute significantly to Indonesia's export economy.



Melanoma

THE Hindu

Melanoma in India: why the messaging needs to change to catch it early

Thousands of patients in India are diagnosed with melanoma, a type of skin cancer, each year. While melanoma is far less common here than in...



Why in News: In India, **melanoma** is reported to commonly present on the **soles of the feet and beneath the nails**, areas that may receive less attention during routine examination.

Medical Basis

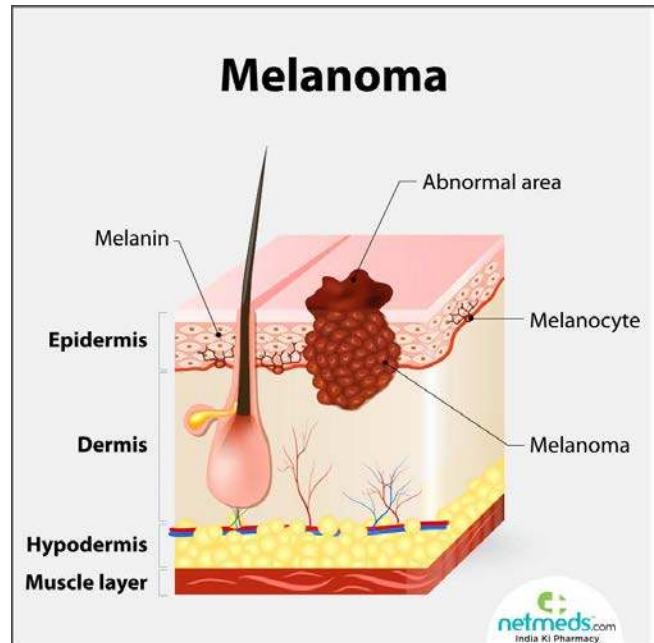
- **Melanoma** is a type of skin cancer originating in **melanocytes**, the cells responsible for producing the pigment **melanin**.
- It commonly develops on sun-exposed skin such as the **arms, back, face and legs**, although it can rarely occur inside the nose or throat.
- **Ultraviolet (UV) radiation** from sunlight and artificial tanning sources is a major cause of melanoma.

Clinical Indicators

- Important warning signs include a **change in an existing mole** or development of a **new pigmented or unusual-looking growth**.
- Melanoma does not necessarily begin as a mole and can develop on otherwise normal-looking skin.

Treatment and Disease Management

- **Surgery** has a high probability of curing melanoma when the disease is detected at an early stage.
- **Lymphadenectomy** may be required when melanoma has spread to nearby lymph nodes.
- **Metastasectomy** may be used to remove small melanoma deposits from affected organs.



Celiac Disease

The Tribune

Celiac disease may trigger anaemia, infertility, nerve issue: Rohtak PGIMS study

Celiac disease, traditionally regarded as a childhood disorder, is increasingly being diagnosed among adults and the elderly, with doctors...



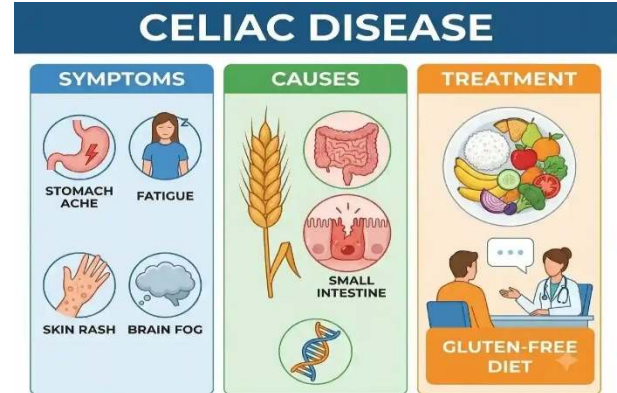
Why in News: Doctors at **PGIMS, Rohtak** have reported increasing diagnosis of **celiac disease among adults and elderly people**, challenging its traditional perception as primarily a childhood disorder.

Pathophysiology

- **Celiac disease** is an **autoimmune disease** in which the immune system reacts abnormally to **gluten**.
- Gluten is a protein found mainly in **wheat, barley and rye** and may also occur in certain processed products.
- The immune response causes inflammation and damages the lining of the **small intestine**, impairing nutrient absorption.
- Untreated disease can result in **malabsorption, malnutrition and growth delays in children**.

Clinical Presentation

- Symptoms can occur at any age, with prominent diagnosis windows in **early childhood (8–12 months)** and **midlife (40–60 years)**.
- Gastrointestinal symptoms include **stomach pain, bloating, gas and diarrhoea**, while non-GI manifestations can include fatigue, weight loss, dental enamel defects and growth failure.
- **Dermatitis herpetiformis**, an itchy rash consisting of clusters of bumps or blisters, can also occur in some patients.



Treatment and Public-Health Significance

- The only established treatment specified in the source is **strict lifelong adherence to a gluten-free diet**.
- A gluten-free diet can control symptoms, prevent further intestinal damage and, in most cases, allow the damaged small intestine to heal.
- Untreated celiac disease can cause serious complications and increases the risk of certain **cancers**.

Other Important News of the day

Places
News

in

Willingdon Island

The New Indian Express

'Revival of Willingdon Island key to Cochin Port's growth'

The seminar also called for immediate steps to provide cargo-handling equipment, including wharf cranes, and maximise the capacity of the...



Why in News: A recent seminar highlighted the need to **diversify operations and comprehensively revitalise Willingdon Island** to unlock the potential of **Cochin Port** and generate greater revenue and employment.

Geographical and Infrastructure Significance

- **Willingdon Island** is a major **man-made island in Kochi, Kerala** and is among India's largest artificial islands.

	➤ It was created in 1936 by dredging soil from Vembanad Lake, Kerala's largest lake, primarily to facilitate a deep-water port and strengthen Kochi's trade. ➤ The project was initiated by Lord Willingdon and designed by harbour engineer Sir Robert Bristow. Strategic and Institutional Importance ➤ The island houses the headquarters of the Southern Naval Command of the Indian Navy. ➤ It is also home to the Central Institute of Fisheries Technology and the Port of Kochi. ➤ It is connected to mainland Kochi by the Venduruthy Bridge. About Lord Willingdon ➤ He served as Viceroy and Governor-General of India from 1931–1936, after serving as Governor of Bombay and Governor of Madras. ➤ His tenure coincided with the Civil Disobedience Movement, the Second Round Table Conference (1931), the Communal Award (1932) and the Poona Pact (1932). ➤ The Government of India Act, 1935, which introduced provincial autonomy, was enacted during his tenure.
Environment	Malabari Goat TH The Hindu <u>Ancient spice route may have shaped Kerala's Malabari goat's genetic legacy, study shows</u> A study reveals ancient spice trade may have influenced the genetic legacy of Kerala's Malabari goat breed.  Why in News: A study suggests that ancient spice-route networks may have influenced the maternal genetic history of the Malabari goat. Breed Characteristics and Distribution ➤ Malabari goat, also called Tellicherry or Cutch, is native to Kerala. ➤ It is a medium-sized goat with variable coat colours ranging from white to black, and males and some females are bearded. ➤ The breed is reared primarily for milk and meat, while its skin is used in the tanning industry. ➤ It shows strong adaptability to humid tropical conditions.

	Genetic Significance ➤ The study placed Malabari goats in mitochondrial haplogroup B1, a relatively uncommon maternal lineage among domestic goats. ➤ Their rare maternal genetic group occurs in only about 3% of domestic goats globally. ➤ Close maternal genetic relationships were identified with goats from Oman, Arabia and Gujarat, suggesting historical links through animal movement and trade networks. Livestock Management Concerns ➤ The breed produces approximately 0.5–1.5 litres of milk per day, with an average lactation period of 178 days. ➤ Boer goats and goats introduced from other regions pose a threat by causing genetic dilution within the Malabari breeding tract.
Defence	INS Kulish  DD India <u>INS Kulish arrives at Cambodia's Ream Naval Base as part of Eastern Fleet deployment</u> Indian Navy's guided missile corvette INS Kulish arrived at Ream Naval Base in Cambodia on September 12 as part of the Eastern Fleet's...  Why in News: Indian Navy's guided-missile corvette INS Kulish reached Ream Naval Base, Cambodia, during the operational deployment of the Eastern Fleet. Naval Identity and Indigenous Construction ➤ INS Kulish is a Kora-class corvette of the Indian Navy, with "Kulish" meaning thunderbolt in Sanskrit. ➤ The vessel was built during 1995–2001 and commissioned into the Indian Navy in 2001. ➤ It was designed and built indigenously by Garden Reach Shipbuilders and Engineers (GRSE).  Combat and Operational Capabilities ➤ Its primary weapon is the Russian-origin Kh-35 anti-ship cruise missile.

	➤ The ship carries surface-to-surface missiles, long-range guns and surface-to-air missiles for self-defence. ➤ It can operate a Chetak helicopter, enhancing its operational flexibility. ➤ It has a displacement of approximately 1,500 tonnes, twin diesel engines and a maximum speed of 25 knots. ➤ Its stated operational range is up to 2,500 nautical miles without replenishment.
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Science and Technology

Planet Mercury

 The New York Times

Mercury Is Shrinking, and Faster Than We Thought

New estimates using the planet's surface wrinkles show that our smallest planet is growing even smaller, at a faster clip than expected.



Why in News: A recent study suggests that **Mercury may have shrunk by as much as 23 km in diameter**, indicating greater contraction than previously estimated.

Planetary Characteristics

- **Mercury** is the **smallest planet** and the **closest planet to the Sun**, and it is one of the four **terrestrial planets**.
- Its surface temperature varies from about **+450°C during the day to -180°C at night** because of its proximity to the Sun and extremely thin atmosphere.
- Despite being closest to the Sun, Mercury is **not the hottest planet**; **Venus** has the highest average surface temperature because of its thick atmosphere and strong greenhouse effect.
- Mercury has **no natural satellites** and possesses a large **iron-rich core**.

Space Missions and Geological Features

- **NASA's MESSENGER** became the first spacecraft to orbit Mercury in **2011** and studied the planet until **2015**.
- **BepiColombo**, a joint **ESA-JAXA** mission, is studying Mercury and is expected to enter orbit in **2026**.
- Mercury has a heavily cratered surface, evidence of ancient **volcanic and tectonic activity**, and major impact features such as the **Caloris Basin**.

Important Facts

- Mercury has a diameter of approximately **4,879 km**, surface area of **74.8 million sq km**, and surface gravity of **3.7 m/s²**.
- It completes one rotation in about **58 Earth days**, while its **solar day lasts 176 Earth days**.
- Its orbital period is only **88 Earth days**, the shortest among the planets.
- Mercury has an axial tilt of approximately **0.01°**, making its equator almost coincide with its orbital plane.
- Its extremely thin atmosphere contains **oxygen, sodium, hydrogen and helium**, among other trace gases.

Uttar Pradesh in News

Neeb Karori Baba Spiritual Circuit, Uttar Pradesh

 The Indian Express

UP government launches spiritual circuit linked to Neeb Karori Baba

The move comes a day after Uttar Pradesh Chief Minister Yogi Adityanath met the cast of 'Hanuman Ansh', a movie based on the saint.



Why in News: The **Uttar Pradesh government** announced the **Neeb Karori Baba Circuit** and five special tour packages on his **Mahasamadhi Day (11 September)** to promote spiritual tourism.

Spiritual and Historical Linkages

- **Neeb Karori Baba**, born **Lakshman Narayan Sharma**, was a Hindu spiritual teacher and devotee of **Lord Hanuman**.
- He was born around **1900 in Akbarpur, Uttar Pradesh**, and died on **11 September 1973 in Vrindavan**.
- **Kainchi Dham, Uttarakhand**, remains most closely associated with him.

Circuit and Geographical Focus

- The circuit will connect **Akbarpur (Firozabad), Neeb Karori Baba Ashram Dham (Farrukhabad), Hanuman Setu Temple (Lucknow)** and the **Samadhi Temple at Vrindavan**.
- The Farrukhabad ashram is associated with his **about 12 years of meditation in an underground cave**.

Tourism Initiatives

- **UPSTDC** has launched **five tour packages** of **2, 3 and 5 days**, operating from **Delhi and Lucknow** according to tourist demand.

- ₹12.93 crore has been allocated for tourism infrastructure in Firozabad and Farrukhabad, with ₹8.65 crore already spent under Phase 1.
- A ₹55.44 lakh rural tourism project is planned in Akbarpur, while the ₹1.51-crore Neeb Karori Ashram development project in Farrukhabad has been completed.

Governance Significance

- The initiative integrates religious heritage, rural tourism and tourism infrastructure to strengthen Uttar Pradesh's spiritual tourism network and facilitate pilgrimage to sites associated with the saint.