

SANSKRITI IAS DAILY CURRENT AFFAIRS

04-08-2026

Rakthamichthys anchi

 Down To Earth

Blind, blood-red eel found inside dug-out wells in Assam's Goalpara

Scientists have discovered Rakthamichthys anchi, a blind, blood-red swamp eel living in dark dug-out wells in Assam's Goalpara district,...



Why in News

- Scientists discovered a new blind, blood-red eel species, **Rakthamichthys anchi**, from dug-out wells in **Goalpara district, Assam**.

Taxonomic Significance

- **Rakthamichthys anchi** is a new **phreatobitic synbranchid swamp eel** belonging to the **Family Synbranchidae**.
- The name "**anchi**" comes from the **Garó** language, meaning "**blood**."
- The genus **Rakthamichthys** is **endemic to India**.
- It is the **second** species of this genus discovered in **Northeast India**.

About Eels

- Eels are elongated fishes with over **500 species** found in **marine and freshwater** habitats.
- They lack scales and possess continuous **dorsal and anal fins**.
- Most species are **carnivorous**, feeding on fish, crustaceans and invertebrates.

Habitat & Characteristics

- It is a **phreatobitic** species living exclusively in **groundwater aquifers (phreatic zone)**.
- The species lacks body pigment and has **transparent skin**, making its blood vessels visible.
- Its distinctive **blood-red colour** is due to visible blood vessels rather than pigmentation.

Lepidoptera

Why in News

- The Zoological Survey of India (ZSI) released the

Catalogue of Lepidoptera (Butterflies & Moths) of India.

The Hindu

India is home to 13,703 species of lepidoptera, about 8.25% of all known species of butterflies and moths

ZSI scientists catalogued 13703 lepidoptera species in India, enhancing global biodiversity research and conservation efforts.



Scientific Features

- Lepidoptera is the insect order comprising butterflies and moths with about 180,000 species worldwide.
- It is the second-largest insect order after Coleoptera.
- The name means "scaly-winged" and refers to microscopic scales on the wings.
- The life cycle includes egg, larva (caterpillar), pupa, and adult stages.



Ecological Importance

- Lepidopterans occur on every continent except Antarctica.
- Adults are mainly nectar feeders, while caterpillars are mostly herbivorous.
- They are important pollinators, though caterpillars are major agricultural pests.
- Silkworm (*Bombyx mori*) is a moth that produces commercial silk.

Catalogue Highlights

- India has 13,703 Lepidoptera species, about 8.25% of global diversity.
- These include 1,417 butterflies and 12,286 moths.

- The catalogue records **2,205 Geometroidea** species, representing **8.8%** of the world's known species in this superfamily.
- **Geometroidea** are important **nocturnal pollinators**.

Amboseli National Park

*** BBC

Amboseli elephant deaths: Kenya Wildlife Service suspects cyanide in tomato pesticide to be the cause

Fifteen elephants found dead in southern Kenya outside the Amboseli National Park are suspected to have been poisoned by eating tomatoes...



Why in News

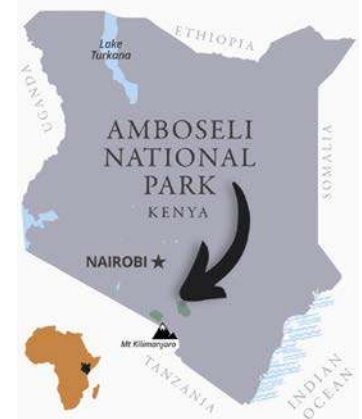
- **Kenyan authorities** are investigating the death of **15 elephants** in **Amboseli National Park**, with preliminary evidence indicating possible toxic contamination.

Geographical Features

- **Amboseli National Park** is located in **southern Kenya** near the **Tanzania** border.
- It covers about **392 sq. km.** and forms part of the **Kenya–Tanzania transboundary ecosystem**.
- **Mount Kilimanjaro**, Africa's highest peak, forms its iconic backdrop.
- The name **Amboseli** is derived from the **Maasai** word "**Empusel**", meaning "**salty, dusty place.**"

Ecology

- The park consists of **dry lakebeds**, **savannas**, **acacia woodlands**, and **wetlands** fed by underground water from **Mount Kilimanjaro**.
- It is globally known for its **large free-ranging African elephant** population.
- It also supports **lions**, **cheetahs**, **hyenas**, **zebras**, **giraffes**, **buffalo**, **pelicans**, **flamingos**, and several **migratory birds**.



Conservation Importance

- The **Amboseli ecosystem** was designated a **UNESCO Biosphere Reserve** in 1991.
- It is one of Africa's most important landscapes for **elephant conservation** and **wetland biodiversity**.

National Roll-out Plan for the Vessel Communication and Support System (VCSS)

DD News

One lakh fishing vessels to be fitted with transponders developed By ISRO soon

Around one lakh marine fishing vessels across India will soon be equipped with indigenously developed transponders under the Vessel...



Why in News

- The **Department of Fisheries** approved the national rollout of the **Vessel Communication and Support System (VCSS)** under the **Pradhan Mantri Matsya Sampada Yojana (PMMSY)**.

Key Features

- The project will install **indigenous transponders** on **1 lakh** mechanized and motorized fishing vessels across **13 coastal States and UTs**.
- It includes **earth stations**, communication infrastructure, and the **Nabhmitra** mobile application in regional languages.
- Eligible fishermen will receive transponders **free of cost**.
- The project follows a **60:40 Centre-State** funding pattern, while **UTs** receive **100% Central assistance**.

Technology & Utility

- **VCSS** is a **satellite-based two-way communication system** implemented with technical support from **ISRO**.

- The **Nabhmitra App** provides **SOS alerts**, **two-way messaging**, **weather advisories**, **Potential Fishing Zone (PFZ)** information, **geo-fencing**, navigation support, and **e-Token/Trip Declaration** facilities.

Strategic Significance

- The system improves **sea safety**, **maritime security**, and real-time communication for fishermen.
- It issues alerts on **cyclones**, **No Fishing Zones**, and the **International Maritime Boundary Line (IMBL)**, reducing accidental border violations.

Important Facts

- **Nodal Ministry:** Ministry of Fisheries, Animal Husbandry & Dairying.
- **Technical Partner:** ISRO.
- **PFZ:** Potential Fishing Zone.
- **IMBL:** International Maritime Boundary Line.

PowerBank-50

BS Business Standard

TakeMe2Space's PowerBank-50 becomes first India-made satellite battery

Hyderabad-based space startup TakeMe2Space on Thursday announced that its PowerBank-50 satellite battery pack has now earned the 'flight...



Why in News

- Hyderabad-based startup **TakeMe2Space** became the first Indian company to earn '**Flight Heritage**' status for its **PowerBank-50** satellite battery pack after its successful space mission.

Technological Significance

- It is India's first **indigenously developed satellite battery** to receive **Flight Heritage** status.
- It successfully flew aboard **Skyroot Aerospace's Vikram-1** during **Mission Aagaman**.
- **Vikram-1** became India's **first privately developed rocket** to reach orbit, making India the **third country** after the **USA** and **China** with private orbital launch capability.
- The battery powered **Cosmoserve Space's** experimental payload at an altitude of **450 km**.

About Flight Heritage status

- **Flight Heritage** certifies that a space component has successfully operated during an actual mission.
- Batteries undergo rigorous testing for **launch vibration, vacuum, radiation, and extreme temperature cycles** before earning this status.

Key Features

- It is a compact **lithium-ion battery** designed for **CubeSats** and **microsatellites**.
- It weighs **380 g**, stores **over 50 Wh** of energy, and includes an intelligent **Battery Management System (BMS)**.
- It also features onboard heaters, an aluminium flight enclosure, and an operational life of **up to 5 years** in **Low Earth Orbit (LEO)**.

Ujh Multipurpose Project

 News On AIR

Union Minister Jitendra Singh reviews status of Ujh Multipurpose Project in Jammu & Kashmir

Union Minister of State for Prime Minister's Office Dr. Jitendra Singh today reviewed the status and phased implementation roadmap of the...



Why in News

- The **Union Minister of State for PMO** reviewed the implementation roadmap of the **Ujh Multipurpose Project** in **Kathua, Jammu & Kashmir**.

Project Features

- The project is being constructed on the **Ujh River**, a major tributary of the **Ravi River**.
- It is a **National Project** declared in **2008**.
- It involves construction of a **116-metre-high Concrete-Faced Rockfill Dam (CFRD)**.
- It is designed for **hydropower, irrigation, and drinking water supply**.

Strategic Significance

- Backed by the **Ministry of Home Affairs**, it will help regulate river flows and reduce **cross-border infiltration** through riverbeds.
- It will improve India's utilization of waters from the **Eastern Rivers** allocated under the **Indus Waters Treaty**.

Developmental Importance

- The project is expected to generate **186–212 MW** of hydroelectric power.
- It will irrigate nearly **90,000 hectares** across **Kathua** and **Samba (J&K)** and **Pathankot** and **Gurdaspur (Punjab)**.
- It will provide drinking water to **Kathua** and support industrial water demand.

Cholanaikkan Tribe

 ThePrint

[Cholanaikkan tribe members in Kerala emerge from forest to receive official documents](#)

Malappuram (Kerala), Aug 2 (PTI) Members of the Cholanaikkan tribe, regarded as one of Asia's last surviving cave-dwelling indigenous...



Why in News

- Members of the **Cholanaikkan Tribe** recently came out of forests in **Kerala** to receive essential government documents.

Tribal Profile

- **Cholanaikkans** are found only in the **Nilambur Valley** of the **Nilgiri Biosphere Reserve** in **Kerala**.
- They are popularly known as the "**Cavemen of Kerala**" and are among **Asia's last surviving cave-dwelling indigenous communities**.
- They call themselves **Malanaikan** or **Sholanaikan**, where **Shola** means deep forest and **Naikan** means king.

Lifestyle & Culture

- They live in natural rock caves called **Kallulai**, generally near streams.
- They are organised into small groups known as **Jenmam** and have no permanent settlements.
- Their language belongs to the **Dravidian language family**.
- Their livelihood mainly depends on collecting **forest produce**.

Conservation Status

- The **Cholanaikkan Tribe** is classified as a **Particularly Vulnerable Tribal Group (PVTG)**.

Other Important News of the day

Persons in News

Varsha Ashok Aglawe Becomes First Woman Director General of GSI

The Hindu

Varsha Ashok Aglawe becomes first woman GSI Director General in 176-year history

The Geological Survey of India on Friday (July 31, 2026) said Varsha Ashok Aglawe has assumed charge as its 54th director general, becoming...

THE HINDU

Why in News

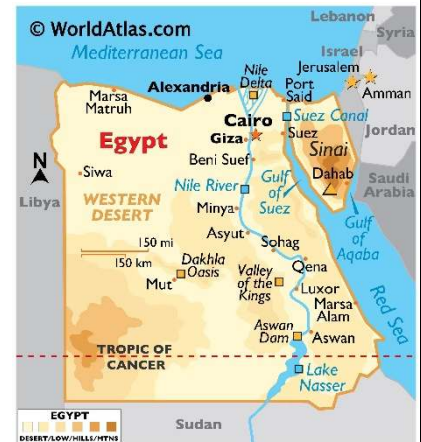
- **Varsha Ashok Aglawe** assumed charge as the **54th Director General of the Geological Survey of India (GSI)**, becoming the **first woman** to head the **176-year-old** organisation.

	Professional Profile • She joined GSI in 1992 after serving in the Indian Bureau of Mines (IBM). • Before becoming Director General, she served as Additional Director General and Head of GSI's Eastern Region at Kolkata. • She succeeded Asit Saha, who completed his two-year tenure. Scientific Contributions • She is an expert in Palaeontology (study of fossils) and Palynology (study of pollen and microscopic organic particles). • She discovered the Salbardi–Ghorpend Dinosaur Nesting Site in Central India. • She established a modern Palynology Laboratory at Lucknow. Strategic Importance of GSI • GSI will accelerate exploration of deep-seated, concealed, and offshore critical mineral deposits. • The focus includes Lithium, Cobalt, Nickel, and other minerals essential for the clean energy transition and critical mineral security. • Established in 1851, GSI functions under the Ministry of Mines and is headquartered at Kolkata.
Places in News	Egypt Why in News

- A **5.4 magnitude earthquake** recently struck off the coast of **Egypt**.

Geographical Location

- **Egypt** lies in **northeastern Africa**, while the **Sinai Peninsula** extends into **southwestern Asia**.
- It shares land borders with **Libya**, **Sudan**, **Israel**, and the **Gaza Strip**.
- It is bordered by the **Mediterranean Sea** to the north and the **Red Sea** and **Gulf of Aqaba** to the east.
- **Capital: Cairo**.



Physical Features

- The **Nile River**, the world's longest river, flows **south to north** through Egypt.
- The country is characterised by **arid deserts** and the fertile **Nile River Valley**.
- **Mount Catherine (2,642 m)** is Egypt's highest peak.
- Major natural resources include **petroleum**, **natural gas**, **phosphates**, and **iron ore**.

Environment

Asiatic Wild Buffalo

 The Indian Express

[A race against extinction: Chhattisgarh's bid to save its last wild buffaloes](#)

With the wild buffalo population in Central India reduced to a handful of animals, Chhattisgarh is turning to Assam in a last-ditch effort...



Why in News

	• Chhattisgarh Forest Department plans to translocate Asiatic Wild Buffaloes from Assam to protected areas in the State. Distribution & Habitat • Asiatic Wild Buffalo (Bubalus arnee) is the largest wild bovine in the world. • It inhabits swamps, wetlands, flooded grasslands, alluvial plains, and river valleys. • It occurs in India, Nepal, Bhutan, and Thailand. • India supports over 90% of the global population (3,500–3,700), mainly in Assam. Conservation Status • Major threats include habitat loss, hunting, diseases, and interbreeding with domestic buffaloes. • IUCN Red List: Endangered. • Wildlife (Protection) Act, 1972: Schedule I. Ecological Features • It is both diurnal and nocturnal. • It is a herbivore, feeding on grasses, aquatic plants, herbs, crops and tree bark. • Males attain maturity at 1.5 years and females at 3 years.
Science and Technology	Leptospirosis The Hindu Why is Kerala facing high leptospirosis mortality? Explained The story so far: Leptospirosis is a tropical zoonotic disease — bacterial systemic infection caused by pathogenic Leptospira — which is...  Why in News • Leptospirosis has emerged as the communicable disease with the highest mortality in Kerala, where it has remained endemic for over three decades.

Disease Profile

- **Leptospirosis** is a zoonotic bacterial disease caused by **Leptospira**.
- The bacteria survive in **contaminated water or soil**, especially after **heavy rainfall** and **flooding**.
- Human-to-human transmission is **rare**.

Transmission & Risk Groups

- Infection occurs through contact with contaminated **animal urine**, body fluids, food, or water.
- The bacteria enter through **cuts**, **abrasions**, or **mucous membranes**.
- It is common in **tropical and subtropical regions**.
- Outdoor workers, animal handlers, and people involved in **water sports** are at higher risk.

Symptoms & Treatment

- Common symptoms include **fever**, **headache**, **muscle pain**, **chills**, and **vomiting**.
- Severe infection may cause **kidney damage**, **meningitis**, **liver failure**, **respiratory distress**, and **death**.
- Treatment involves **doxycycline** or **penicillin**, while severe cases require **intravenous (IV) antibiotics**.

Uttar Pradesh in News

Uttar Pradesh Leads India with 4,226 Operational Jan Aushadhi Kendras

DD News

Over 20,000 Jan Aushadhi Kendras operational across India: govt targets 25,000 by March 2027

A total of 20,149 Pradhan Mantri Bhartiya Janaushadhi Kendras (JAKs) are operational across the country as of June 30, 2026,...



Why in News

- **Uttar Pradesh** has become the leading state with **4,226** operational Jan Aushadhi Kendras (JAKs) under the Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP).

Scheme Highlights

- The Central Government aims to establish **25,000** Jan Aushadhi Kendras across India by **March 2027**.
- The Kendras provide **quality generic medicines** at **50–90% lower prices** than branded medicines.
- The product basket includes **2,110 medicines** and **315 surgical and medical consumables**.

Quality Assurance Framework

- Procurement is undertaken by the **Pharmaceuticals and Medical Devices Bureau of India (PMBI)**.
- Medicines are sourced only from **WHO-GMP certified manufacturers**.
- Every batch is tested in **National Accreditation Board for Testing and Calibration Laboratories (NABL)** accredited laboratories before distribution.

Governance & Monitoring

- Operators maintaining a stock of **200 fast-moving essential medicines** receive financial incentives to prevent stock shortages.
- **PMBI** monitors real-time sales through an **IT-enabled platform**.
- **State Level Marketing Officers (SLMOs)** improve the performance of low-performing Kendras through **health camps** and **doctor-awareness programmes**, particularly in rural areas.