

SANSKRITI IAS DAILY CURRENT AFFAIRS

27-09-2026

OneSCD

 News On AIR

India co-hosts launch of global partnership to advance sickle cell care

India co-hosted the launch of OneSCD, a Global Partnership to Advance Equity and Transform Sickle Cell Care, on the sidelines of the 81st...



Why in News: India recently co-hosted the launch of **OneSCD** on the sidelines of the **81st UN General Assembly (UNGA 81)** in New York.

Global Health Partnership

- **OneSCD** is a global partnership aimed at advancing equity and transforming **Sickle Cell Disease (SCD) care**.
- It strengthens existing **country-led SCD programmes** and supports scaling of proven approaches to care.
- It was hosted by **Nigeria** and co-organised with **UNICEF, WHO, Africa CDC, World Coalition on Sickle Cell Disease**, and **St. Jude Children's Research Hospital**.

Treatment and Care

- A **bone marrow/stem cell transplant** can potentially cure SCD.
- **Gene therapy** is also being explored as a potential curative treatment.
- OneSCD focuses on improving access to **prevention, diagnosis, treatment and continuing care**.



Sickle Cell Disease: Key Facts

- **SCD** is a group of inherited blood disorders affecting **haemoglobin** in red blood cells.
- The most common and severe form is **sickle cell anaemia**, caused by a defective **sickle cell gene**.
- Abnormal **haemoglobin S** can distort RBCs into a sickle shape, causing blood-vessel blockage and impaired oxygen supply.
- Symptoms include **anaemia, jaundice, painful swelling, severe pain, infections and organ damage**.

United Nations Convention Against Cybercrime

 DD India

EAM Jaishankar Signs UN Convention Against Cybercrime

External Affairs Minister S. Jaishankar on Friday signed the United Nations Convention against Cybercrime, aimed at strengthening global...



Why in News: India's Union External Affairs Minister recently signed the **United Nations Convention Against Cybercrime**, strengthening international cooperation against cybercrime.

International Legal Framework

- The Convention is the **first comprehensive, legally binding global treaty on cybercrime**, adopted by consensus of **193 UN Member States**.
- It was adopted by the **UN General Assembly in December 2024**.
- The Convention was developed by the **UN Office on Drugs and Crime (UNODC)**.
- **India has signed** the Convention.

Major Provisions

- It establishes legal standards for offences such as **illegal access, cyber fraud and online child exploitation**.
- It facilitates **cross-border sharing of electronic evidence** and establishes a **24/7 cooperation network**.
- It recognises **non-consensual dissemination of intimate images** as an offence.
- It covers **hacking, ransomware, online financial fraud, illegal interception and money laundering**.

Broader Significance

- The Convention applies to both **cyber offences** and the collection and sharing of **electronic evidence in serious crimes**.
- It seeks to strengthen **international cooperation, prevention, enforcement and capacity-building**, particularly in developing countries.
- It also incorporates safeguards concerning **human rights and data privacy**.

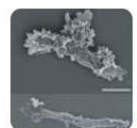
Incendiamoeba cascadenis

Why in News: Scientists discovered **Incendiamoeba cascadenis**, an amoeba capable of reproducing at temperatures up to **63°C**, setting a record among known eukaryotes.

 NASA Science (.gov)

NASA-Funded Research Finds Complex Life Defying Record Heat

Lee esta historia en español aquí. NASA-supported scientists have discovered an organism that lives at extreme temperatures previously...



Discovery and Taxonomy

- **Incendiamoeba cascadiensis** is a newly identified species of **amoeba** discovered in geothermal streams of **Lassen Volcanic National Park, California**.
- Its name refers to a **“fire amoeba from the Cascade mountain range.”**
- It belongs to the **eukaryotes**, whose cells contain a nucleus and specialised cellular structures.

Extreme Heat Tolerance

- It can reproduce at temperatures reaching **145°F (63°C)**, exceeding the previously estimated **60°C** limit for eukaryotic reproduction.
- It can remain mobile around **64°C** and recover after brief exposure to approximately **70°C**.
- It reproduces through **mitosis** and can exhibit both elongated and compact amoeboid forms.

Adaptation to Heat

- The organism appears to possess adaptations that protect **proteins and cell membranes** from extreme heat.
- It can alter its **shape and movement patterns** as temperatures rise.
- At higher temperatures, it forms a **protective structure**, although its precise heat-tolerance mechanisms remain unidentified.

PFOS

TH The Hindu

Science Snapshots: September 27, 2026

Three recent science breakthroughs: dam safety seismic risk, PFOS impairs antiviral defense, and a heat-loving amoeba breaking reproduction...



Why in News: A recent study found that **PFOS**, an industrial “forever chemical”, can weaken the body's ability to fight viral infections.

Chemical Characteristics

- **PFOS (Perfluorooctane Sulfonate/Perfluorooctane Sulfonic Acid)** is a synthetic **perfluorinated compound**.
- It contains an **eight-carbon backbone** and a **sulfonate functional group**.
- PFOS belongs to the **PFAS (Per- and Polyfluoroalkyl Substances)** family, comprising thousands of highly persistent chemicals.

Environmental Persistence

- PFOS is highly stable, difficult to degrade and can readily move through **groundwater**.

- It can **bioaccumulate and biomagnify** through aquatic food chains, reaching high concentrations in predatory fish.
- PFOS is listed under the **Stockholm Convention on Persistent Organic Pollutants (POPs)** with specified restrictions and exemptions.

Uses and Health Concerns

- Since the **1940s**, PFOS has been used in products requiring resistance to **stains, grease, soil and water**.
- Applications have included **carpets, furniture, leather products, non-stick cookware and firefighting foams**.
- Reported health concerns include **cancer, endocrine disruption, liver and immune-system damage and thyroid changes**.

Gulbarga Tur Dal



Gulbarga Tur Dal flagged off from Karnataka to Maldives by APEDA

The Agricultural and Processed Food Products Export Development Authority (APEDA) facilitated the flag-off of a 1 MT consignment of...



Why in News: **APEDA** recently flagged off a **1-metric-tonne shipment** of **GI-tagged Gulbarga Tur Dal** from Karnataka to the Maldives.

GI and Geographical Identity

- **Gulbarga Tur Dal** is associated with the **Kalaburagi region of Karnataka**.
- It received **Geographical Indication (GI) registration in 2019**.
- The product is known for its **distinctive taste and quality** and supports the regional agricultural economy.

Agro-Climatic Requirements

- **Tur dal/pigeon pea** is predominantly cultivated in **tropical and semi-arid regions**.
- It requires around **600–650 mm rainfall**, with moist conditions initially and relatively dry conditions during flowering and pod development.
- Suitable temperatures are **26–30°C** during the rainy season and **17–22°C** during the post-rainy season.
- **Sandy-loam or loam soils** are considered most suitable.

Agricultural Significance

- Tur dal is an important **protein-rich legume crop** and a major dietary pulse in India.
- It is commonly grown as an **intercrop** with other crops.

- Major diseases include **wilt, sterility mosaic disease, Phytophthora blight, Alternaria blight and powdery mildew.**
- Major producing states include **Uttar Pradesh, Madhya Pradesh, West Bengal, Bihar and Jharkhand.**

Vizellopsidites miocenicus

Research Matters

New species of ancient fungus discovered on a 12-Million-Year-Old fossilised leaf from Himachal

Researchers have discovered a new species of ancient, microscopic fungus perfectly preserved on a fossilised plant leaf from up to 12...



Why in News: Researchers discovered **Vizellopsidites miocenicus**, an ancient microscopic fungus preserved on a fossilised leaf in the **western Himalayas**.

Palaeontological Discovery

- **Vizellopsidites miocenicus** was found on a fossilised plant leaf in **Mandi district, Himachal Pradesh**.
- The fossil dates to around **8–12 million years ago**, corresponding to the **Late Miocene**.
- Researchers used **maceration**, involving gentle acids, to isolate the fossilised leaf's transparent outer layer.

Morphological Features

- The fungus had **larger cells** arranged in a loose, net-like pattern with alternating side branches.
- It possessed distinct **circular fruiting bodies** associated with spore release.
- Its structures were revealed using **high-powered light microscopy**.

Palaeoclimatic Significance

- Comparison with modern relatives found in **warm and humid tropical environments** provides evidence about the region's ancient climate.
- The fossil suggests that the **Himachal Himalayan region** once supported a **warm, humid tropical forest ecosystem**.

Cool Leaders Award

Cool Coalition
<https://coolcoalition.org> > media-center > cool-leaders

Cool Leaders

Cool Leaders is a **global recognition engine** that highlights outstanding leadership advancing sustainable cooling across policy, innovation, and delivery. [Read more](#)

Why in News: The inaugural **Cool Leaders Award** was announced at the **Global Cooling Pledge Assembly 2026** in Singapore.

Award and Recipients

- The award was launched by the **UNEP Cool Coalition** to recognise leadership in **sustainable cooling and heat resilience**.
- **Singapore** was recognised for **passive cooling and heat resilience**.
- The **United Arab Emirates** was recognised for **district cooling** and global cooling policy leadership.
- **Dong Mingzhu**, Chairwoman of **Gree Electric Appliances**, was recognised for ultra-efficient and low-carbon cooling technologies.

UNEP Cool Coalition

- The **UNEP Cool Coalition** is a global platform promoting system-level transformation in sustainable cooling.
- It was launched in **2019** as a flagship initiative of the **UN Secretary-General's Climate Action Summit**.
- It brings together **250+ actors**, including governments, businesses, cities and financial institutions.



International Linkages

- Its work aligns with the **Paris Agreement**, **Kigali Amendment** and **2030 Agenda for Sustainable Development**.
- Sustainable cooling is linked to reducing energy demand, greenhouse-gas emissions and risks from **extreme heat**.

Forum for India-Pacific Islands Cooperation (FIPIC)

DD News

India proposes tailored capacity-building programmes for Pacific Island countries: EAM Jaishankar

India has proposed developing customised capacity-building programmes for Pacific Island Countries (PICs) based on their specific priorities...



Why in News: India's External Affairs Minister chaired a **FIPIC Foreign Ministers' meeting** on the sidelines of the **81st UN General Assembly** in New York.

Institutional Framework

- **FIPIC** is an Indian-led multilateral platform for strengthening cooperation with **Pacific Island countries**.
- It was established in **2014** during the Prime Minister's visit to **Fiji**.

- FIPIC complements India's engagement with the Pacific under the broader **Act East Policy**.

Membership

- FIPIC comprises **14 Pacific Island countries**, including **Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu**.
- The membership also includes **Cook Islands and Niue**.

Summit and Economic Linkages

- The **three FIPIC Summits** were held in **2014 (Suva)**, **2015 (Jaipur)** and **2023 (Port Moresby)**.
- India–Pacific Island trade is reported at around **US\$300 million annually**, with exports of about **US\$200 million** and imports of about **US\$100 million**.

Other Important News of the day

Environment

Wayanad Wildlife Sanctuary

THE Hindu

Vulture survey begins in Wayanad Wildlife Sanctuary

Two-day vulture survey begins in Wayanad Wildlife Sanctuary to map species, status and conservation needs ahead of Wildlife Week.



Why in News: A two-day **vulture survey** has commenced in **Wayanad Wildlife Sanctuary, Kerala**, ahead of Wildlife Week celebrations.

Geographical and Protected-Area Profile

- **Wayanad Wildlife Sanctuary**, also known as **Muthanga Wildlife Sanctuary**, is located in the **Western Ghats of Kerala**.
- Established in **1973**, it covers **344 sq km** and forms part of the **Nilgiri Biosphere Reserve**.
- It is bordered by **Nagarhole and Bandipur** in Karnataka and **Mudumalai** in Tamil Nadu.

Ecological Features

- Rivers including the **Kabini, Cherupuzha and Bavali** flow through the sanctuary.
- Vegetation ranges from **moist deciduous and dry deciduous to semi-evergreen forests**.
- About one-third of the sanctuary is covered by plantations of **teak, rosewood, eucalyptus and silver oak**.

Biodiversity and Communities

	• The sanctuary supports significant populations of Asian elephants and tigers, its flagship species. • Other fauna include leopards, gaur, sambar, wild boar, sloth bear and jungle cat. • Indigenous communities include Paniyas, Kattunaikkans, Kurumas, Ooralis, Adiyans and Kurichiyas.
Science and Technology	E-Methanol CNBC TV18 <u>India's ₹2,300-crore e-methanol plant: What is the green fuel and can it decarbonise shipping</u> India launches a 2300-crore e-methanol plant at Kandla, Gujarat, to produce cleaner fuel for ships, aiming to become a global green fuel...  Why in News: The government recently laid the foundation stone for India's first port-based e-methanol production facility at Kandla, involving an investment of ₹2,300 crore. Production Pathway • E-methanol is a low-carbon fuel produced using renewable energy and recycled CO₂. • It is an e-Fuel, meaning its production relies on electricity generated from renewable sources such as solar and wind. • Green hydrogen is produced through renewable-energy-powered electrolysis of water. • CO₂ is captured from industrial sources such as steel and cement plants or directly from the atmosphere. • Hydrogen and CO₂ are combined in a catalytic reactor under pressure to produce methanol. Applications • E-methanol can be used in shipping, heavy industry and chemical manufacturing. • Its production pathway can integrate green hydrogen, renewable electricity and carbon capture. Environmental Benefits • It can reduce lifecycle greenhouse-gas emissions when renewable electricity and captured CO₂ are used. • It produces little to no sulphur emissions compared with many conventional fuels.

- Cleaner combustion can reduce **particulate-matter emissions**.

Uttar Pradesh in News

Yogi Adityanath Lays Foundation Stones of Housing Projects in Lucknow

Hindustan Times

Unplanned development hurt Uttar Pradesh in the past, focus on planned urban expansion now: Yogi Adityanath |

Hindustan Times

CM launches LDA's ₹12000-crore Varun Vihar, Naimish Nagar schemes across 10680 acres, lays foundation stone for five multi-storey housing...



Why in News

Uttar Pradesh Chief Minister Yogi Adityanath laid the foundation stones for **seven residential and apartment projects** in Lucknow, involving a combined investment of approximately **₹14,166 crore**.

Urban Development Initiatives

- Foundation stones were laid for **7 residential projects** in Lucknow.
- The projects involve a combined investment of approximately **₹14,166 crore**.
- The **Lucknow Development Authority (LDA)** is implementing the two major township schemes.

Major Township Schemes

- **Varun Vihar** and **Naimish Nagar** are the two major township projects with a combined investment of **₹12,000 crore**.
- Registration for plots under **Varun Vihar and Naimish Nagar** commenced with the launch of the schemes.

Residential Infrastructure

- Five apartment projects have a combined estimated cost of approximately **₹2,166 crore**.
- **Aishbagh Square** is expected to become **Lucknow's tallest building** after completion.
- The foundation-stone ceremony was held at **Dona village near the Agra Expressway** in Lucknow.