

SANSKRITI IAS DAILY CURRENT AFFAIRS

20-09-2026

WWF Global Conservation Conference



Union Environment Minister inaugurates WWF Global Conservation Conference at Jaipur (Rajasthan)

Union Minister for Environment, Forest and Climate Change, Shri Bhupender Yadav, today inaugurated the Global Conservation Conference of the...



Why in News: The **WWF Global Conservation Conference** was inaugurated in **Jaipur, Rajasthan, on 21 September 2026**, with representatives from over **100 countries**.

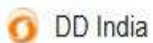
Key Facts

- **World Wide Fund for Nature (WWF)** was founded in **1961** and works on wildlife, habitat and climate conservation.
- India's **protected areas** increased from around **750 to over 1,000** in the last decade.
- **Tiger reserves** increased from **47 to 58**, while **elephant reserves** increased from **30 to 33**.
- India's **Ramsar sites** increased from **24 to 101**.
- India's **cheetah reintroduction programme** aims to restore the species in suitable protected landscapes.

Constitutional and Legal Framework

- **Article 48A** directs the State to protect and improve the environment and safeguard forests and wildlife.
- **Article 51A(g)** makes environmental protection a **Fundamental Duty** of citizens.
- Major laws include the **Wildlife (Protection) Act, 1972**, **Forest (Conservation) Act, 1980**, and **Environment (Protection) Act, 1986**.

7th National Formulary of India 2026



Anupriya Patel launches National Formulary of India 2026, announces Biovigilance Programme

Union Minister of State for Health and Family Welfare and Chemicals and Fertilizers

Anupriya Patel on Monday launched the 7th Edition of the...



Why in News: The **7th National Formulary of India (NFI)** was launched on **21 September 2026** in **New Delhi** during the 6th National Pharmacovigilance Week Campaign.

Key Facts

- **NFI** is a reference publication that promotes the **rational and safe use of medicines** by healthcare professionals.
- The previous **6th edition** was launched in **October 2021**.
- The **Indian Pharmacopoeia Commission (IPC)**, a statutory institution under the **Ministry of Health and Family Welfare**, publishes the NFI.
- IPC has published regular NFI editions since **2008**.

Pharmacovigilance

- The **6th National Pharmacovigilance Week** was observed from **17–23 September 2026**.
- Its theme was **“Promoting Rational Use of Medicines through Pharmacovigilance: A Step Towards Safer Healthcare.”**
- The campaign was coordinated by the **National Coordination Centre–Pharmacovigilance Programme of India (NCC-PvPI)** at IPC, Ghaziabad.\

Battery Energy Storage System (BESS)

BS Business Standard

NTPC terminates 400 MWh BESS contract awarded to G R Infraprojects

NTPC has terminated a ₹413.37 crore contract awarded to G R Infraprojects for a 400 MWh battery energy storage project at its Mouda power...



Why in News: NTPC Ltd terminated a **₹413.37 crore** contract awarded to GR Infraprojects Ltd for a **400 MWh Battery Energy Storage System (BESS)** at Mouda Super Thermal Power Station, Maharashtra.

Technology and Components

- **BESS** stores electrical energy in rechargeable batteries and releases it when required.
- A complete BESS includes **battery cells/modules, Battery Management System (BMS), Power Conversion System (PCS), thermal management and control systems.**
- **BMS** monitors parameters such as cell voltage, temperature and state of charge to ensure safe operation.
- **PCS/inverter** converts stored DC electricity into usable AC electricity and reverses the process during charging.

Key Parameters

- **Energy capacity (kWh/MWh)** indicates how much electricity the system can store.
- **Power rating (kW/MW)** indicates how quickly the stored electricity can be delivered.
- BESS can improve energy economics by shifting electricity consumption to periods of lower demand or favourable prices.

Grid Applications

- BESS can store electricity generated from the **grid, solar, wind and other sources.**
- It can discharge during **power outages, peak demand, renewable-generation dips and periods of high electricity prices.**
- BESS supports **peak shaving, load shifting, backup power, renewable-energy integration and grid reliability.**

Global Business Climate Survey 2026

News On AIR

India ranks first in business climate among 41 global markets: Swedish Chamber survey | Akashvani News

India has been ranked first in business climate among forty plus global markets in the latest Business Climate Survey 2026 by the Swedish...



Why in News: India ranked **first among 41 global markets** in the **Global Business Climate Survey 2026**, reflecting the business perceptions of Swedish companies operating internationally.

Survey Framework

- The survey is jointly produced by **Business Sweden, Swedish Chambers of Commerce (SCI), and Sweden's embassies and consulates.**
- It covers **41 markets** across **Western Europe, Asia-Pacific (APAC), Middle East and Africa (MEA+) and the Americas.**
- The survey was first conducted in **2020** and captures the experiences and views of **Swedish business leaders overseas.**



Key Findings

- **India ranked first**, followed by **Vietnam**, in the 2026 survey.
- Swedish companies remained strongly committed to India as a **long-term market**, with most respondents reporting positive business conditions.
- A clear majority of respondents expected to **increase investments in India** during the following year.
- **India, the Philippines and Poland** recorded the leading market-level growth expectations.

Regional Trends

- **Asia-Pacific** was the most optimistic region in the survey.
- The Middle East and Africa recorded a more cautious business outlook.

- In **Saudi Arabia**, firms reporting a positive outlook declined from **90% in 2025 to 44% in 2026**.
- The Americas and Europe showed relatively improved sentiment compared with 2025.

Bidriware

TH The Hindu

Rising cost of metals, falling demand spell trouble for Bidriware

Bidriware, the centuries-old metal craft unique to Bidar in Karnataka and renowned for its distinctive black-and-silver finish,...



Why in News: The centuries-old **Bidriware** craft of Karnataka is facing pressure from rising prices of **silver, copper and zinc**.

Cultural Origin

- **Bidriware** is a traditional metal handicraft associated with **Bidar district of Karnataka** and has a **Geographical Indications (GI) tag**.
- Its development is associated with the **Bahamani Sultans** who ruled the region during the **14th and 15th centuries**.
- The craft combines **Turkish, Persian, Arabic and local Indian influences**.

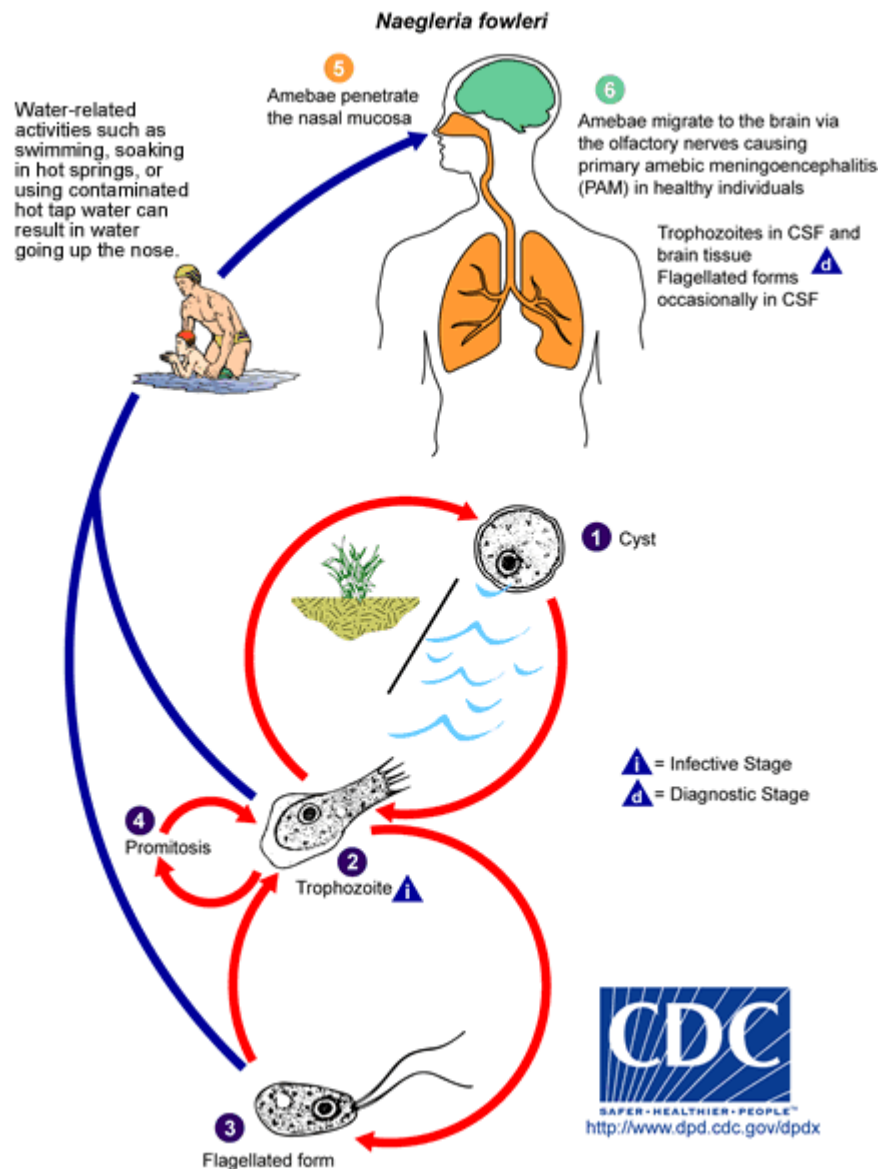


Crafting Technique

- Bidriware primarily uses a **zinc-copper alloy**, with **silver** used for intricate inlay work.
- Artisans engrave **floral and geometric patterns** and hammer pure silver wires or flattened strips into the grooves.
- The characteristic **deep-black lustre** is produced using soil associated with the historic **Bidar Fort**.
- The final product is chemically treated and then **buffed** to obtain a smooth surface.

Naegleria fowleri

Why in News: Scientists studied how *Naegleria fowleri* moves from the nasal passage towards the brain, using *N. gruberi* as a proxy.



Biological Profile

- *Naegleria fowleri*, commonly called the “**brain-eating amoeba**,” is a single-celled organism.
- It thrives mainly in **warm freshwater lakes, ponds and rivers** and can rarely survive in poorly maintained swimming pools.

- **N. fowleri** is the only species of *Naegleria* known to infect humans.

Disease and Transmission

- It causes **Primary Amoebic Meningoencephalitis (PAM)**, a severe infection of the central nervous system.
- Infection generally occurs when contaminated water enters the **nose during swimming or diving**.
- The amoeba can migrate through the **olfactory nerve** to the brain, causing severe inflammation and destruction of brain tissue.
- PAM **does not spread from person to person** and is not acquired by drinking contaminated water.

Clinical Features

- Early symptoms include **headache, fever, nausea and vomiting**, followed by stiff neck, confusion, seizures and coma.
- The disease has a very high fatality rate, with most patients dying within **1–18 days after symptom onset**.
- There is currently **no established effective treatment**, although doctors use combinations of drugs including amphotericin B, azithromycin, fluconazole, rifampin, miltefosine and dexamethasone.

Other Important News of the day

Places in News

Vallur Thermal Power Project

 The New Indian Express

NGT notice to Vallur Thermal Plant over hot effluent discharge

According to the petition, the environmental clearance issued in 2007 stipulated a re-circulating cooling-water system with natural draft...



Why in News: The **National Green Tribunal (NGT)** admitted an application alleging that the Vallur Thermal Power Project is discharging **hot effluent into the Kosasthalaiyar River and its backwaters** in violation of environmental and Coastal Regulation Zone (CRZ) clearances.

Project Profile

- The **Vallur Thermal Power Project** is a **coal-fired power plant** located in **Tiruvallur district, Tamil Nadu**.
- It has an installed capacity of **1,500 MW**, comprising **three 500-MW units**, and has operated at full capacity since **2015**.
- The project was developed by **NTPC Tamil Nadu Energy Company Limited (NTECL)**.

Institutional Structure

- **NTECL** is a **50:50 joint venture between NTPC and Tamil Nadu Power Generation Corporation Ltd. (TNPGL)**.
- Around **70% of its electricity** is supplied to Tamil Nadu, while the remainder goes to neighbouring states and **Puducherry**.

Fuel and Logistics

- The plant consumes approximately **9 million metric tonnes (MMT) of coal annually**.
- Coal is transported from **Mahanadi Coalfields, Central Coalfields and Eastern Coalfields** through a rail-cum-sea route to **Ennore Port**.
- A **4.2-km pipe conveyor** transports coal from the port to the plant across Ennore Creek, reducing dust emissions.

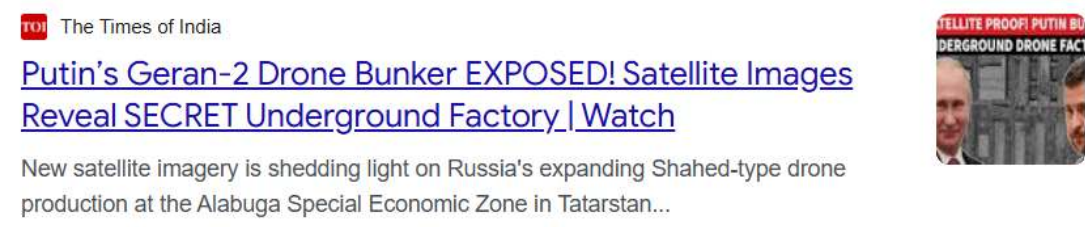
Water and Environmental Features

- The plant meets its total water requirement using **seawater**.
- A **20 MLD seawater desalination unit** supplies the plant's water requirement.

	➤ The case before the NGT highlights the regulatory importance of thermal-effluent management and compliance with environmental and CRZ clearances.
Environment	Giant African Snail
	Why in News: Kerala Agricultural University (KAU) launched a special project to eradicate the invasive Giant African Snail, <i>Lissachatina fulica</i>, following a request from the Agriculture Department.
	Biological Profile ➤ <i>Lissachatina fulica</i> is one of the world's major invasive species and is native to East Africa. ➤ It has spread widely through the pet trade, use as a food resource and accidental introduction. ➤ It thrives in warm, humid tropical environments and occurs in agricultural areas, wetlands, forests, riparian zones and urban areas. Ecological Characteristics ➤ Adult snails commonly feed on decaying organic matter, garbage, fallen fruit and animal manure. ➤ The species is hermaphroditic and has a large, elongated, cone-shaped shell. ➤ Its shell is generally light brown with darker brown vertical stripes. Public Health Concern ➤ The snail can carry the rat lungworm parasite, <i>Angiostrongylus cantonensis</i>.



	➤ Infection with this parasite can cause eosinophilic meningitis in humans.
Defence	INS Trishul
	 PIB <u>INS TRISHUL MAKES PORT CALL AT ALEXANDRIA, EGYPT</u> As part of her deployment, Indian Navy's guided missile frigate INS Trishul made a port call at Alexandria, Egypt from 14 to 17 Sep 2026. 
	Why in News: The Indian Navy's INS Trishul made a port call at Alexandria, Egypt. Naval Profile ➤ INS Trishul is a frontline Talwar-class guided missile frigate of the Indian Navy and was commissioned in 2003. ➤ It is designed for multi-dimensional maritime operations and incorporates stealth features. ➤ The vessel is approximately 125 metres long, has a carrying capacity of about 3,700 tonnes, and can exceed 30 knots. Weapon Systems ➤ INS Trishul was the second Indian warship to incorporate the eight-cell KBSM 3S-14NE Vertical Launcher. ➤ It was the first to upload the BrahMos PJ-10 AShCM, a supersonic anti-ship cruise missile developed through Indian-Russian cooperation. ➤ The vessel has an endurance of approximately 30 days at sea. Talwar-Class Frigates ➤ Talwar-class frigates were built in Russia through Indo-Russian cooperation. ➤ They are modified versions of Russia's Krivak III-class frigates.

	➤ The class is designed for missions including anti-submarine warfare and engagement of large surface vessels.
Science and Technology	Geran-2
	 Why in News: New satellite imagery has provided information on Russia's expanding Geran-2 drone production at the Alabuga Special Economic Zone in Tatarstan. Nature and Origin ➤ Geran-2 is a long-range one-way attack drone commonly described as a kamikaze drone. ➤ It is a domestically manufactured Russian version of the Iranian-designed Shahed-136. ➤ It is used for long-range strikes alongside more sophisticated cruise and ballistic missiles. Technical Features ➤ Geran-2 retains the delta-wing configuration, composite honeycomb structure and rear-mounted piston engine of the Shahed-136. ➤ It has an approximate 2.5-metre wingspan and 3.5-metre fuselage length. ➤ Its 50–90 HP piston engine enables speeds of up to 180 km/h and flight endurance of up to 12 hours. ➤ Its reported operational range is approximately 2,500 km, with a standard 50-kg warhead that can reportedly be increased to 90 kg with reduced fuel load.

Operational Characteristics

- The drones can be launched in **swarms** to increase the probability of striking strategic infrastructure.
- Launch methods include **rocket-assisted take-off and deployment from moving vehicles**.
- Advanced navigation systems include **Controlled Reception Pattern Antennas (CRPA), 3G/LTE modems and improved inertial navigation systems**, providing greater resistance to jamming and spoofing.

Uttar Pradesh in News

Kavach 4.0 in Lucknow Division

DD News

Indian Railways approves ₹252 crore for Kavach 4.0 on 607.7 route km of Lucknow Division

Indian Railways has approved ₹252 crore for the deployment of Kavach Version 4.0 across 607.7 route kilometres of the Lucknow Division of...



Why in News: Indian Railways approved **Kavach Version 4.0** for more than **600 Route Kilometres** of the Lucknow Division of the **North Eastern Railway**.

Institutional Framework

- **Kavach** is an indigenously developed **Automatic Train Protection (ATP)** system providing train protection and collision-prevention capabilities.
- It was adopted as India's **National ATP system in July 2020**.
- The system has been developed by the **Research Design and Standards Organisation (RDSO)**.

Operational Mechanism

- Kavach enables continuous real-time communication between **trackside systems and locomotives** through secure **UHF radio** communication.
- Track-mounted **Radio Frequency Identification (RFID) tags** help determine train location, while wayside units collect signal, track occupancy and route information.

- The system continuously updates the locomotive with relevant movement and safety information.

Safety Capabilities

- It prevents **Signal Passing at Danger (SPAD)** by automatically stopping a train before a dangerous signal.
- **Cab signalling** displays movement authority, target distance, speed and signal aspects.
- It provides protection against **head-on, rear-end and side-on collisions**.
- It provides **level-crossing horn activation, roll-back/roll-forward protection and emergency stop (SoS) messaging**.
- The **Network Management System (NMS)** enables centralised live monitoring of train movements.