

NEWS TODAY

Gharial and Sloth Bear recommended for inclusion under Species Recovery Programme of Centrally Sponsored Scheme for Integrated Development of Wildlife Habitats (CSS-IDWH)

Species were recommended by **Standing Committee of National Board for Wildlife (SC-NBWL)**, which has been constituted by NBWL under the **Wildlife (Protection) Act (WPA) 1972** to make recommendations for conservation and protection of wildlife and forests.

About Gharial

- ▶ **Habitat:** Freshwater rivers with major population occurring in tributaries of Ganga River – **Chambal and Girwa Rivers in India** and Rapti-Naryani River in Nepal.
- ▶ **Conservation status:**
 - ⊗ **IUCN:** Critically Endangered.
 - ⊗ **WPA, 1972:** Schedule I.
 - ⊗ **CITES:** Appendix I.
- ▶ **Characteristics:**
 - ⊗ Their **snout is uniquely the thinnest and most elongated** among all the crocodilians.
 - ⊗ Adult males sport a large bulb at the tip of their snout, called the '**ghara**'.
 - ⊗ **Most aquatic** of all crocodilians.

About Sloth Bear

- ▶ **Habitat:** Native to India, Sri Lanka and Nepal.
 - ⊗ Five Biogeographic zones in India viz. Peninsular India, Western Ghats, Deccan Plateau, Gangetic Plain and North East.
- ▶ **Conservation status:**
 - ⊗ **IUCN:** Vulnerable
 - ⊗ **WPA, 1972:** Schedule I
 - ⊗ **CITES:** Appendix I
- ▶ **Characteristics:**
 - ⊗ **Sloth bear** is small bear with a **shaggy coat**.
 - ⊗ Sloth bears feed **predominantly on termites and ants**.
 - ⊗ **Solitary creatures** and generally nocturnal.

About CSS-IDWH

- ▶ **Objective:** It provides financial and technical assistance to the State/UT Governments for activities aimed at wildlife conservation.
- ▶ **Components of IDWH:**
 - ⊗ **Support to protected areas** (national parks, wildlife sanctuaries, conservation reserves, and community reserves).
 - ⊗ **Protection of wildlife** outside protected areas and mitigation of Human Wildlife Conflict.
 - ⊗ **Recovery programmes** for saving **critically endangered species and habitats**.
 - ◆ So far, **22 species** including Snow Leopard, Asiatic Lion, Great Indian Bustard etc. have been identified under the **Species recovery programme**.

'Maratha Military Landscapes' added to UNESCO World Heritage List

They are added because they show a **living cultural tradition**, have **unique architecture and technology**, and are strongly connected to important **historical events and traditions**.

- ▶ They have become **India's 44th site** in UNESCO World Heritage List.
- ▶ India ranks **6th globally and 2nd in Asia Pacific Region** for the most number of World Heritage Sites.
- ▶ **Archaeological Survey of India** is the nodal agency of all the World Heritage related matters in the country.

About Maratha Military Landscape

- ▶ **Strategic Military Heritage (17th–19th Centuries CE):** The network of twelve forts demonstrates the strategic military vision, innovation, regional adaptation and architectural ingenuity.
 - ⊗ These forts reflect understanding of **geography and strategic defence planning**.
- ▶ **Geographical Spread:** Across the states of **Maharashtra and Tamil Nadu**,
 - ⊗ The selected sites, include Salher, Shivneri, Lohgad, Khanderi, Raigad, Rajgad, Pratapgad, Suvarnadurg, Panhala, Vijaydurg, and Sindhudurg in **Maharashtra**, along with **Gingee Fort in Tamil Nadu**.
- ▶ **Diverse and Strategic Locations:** Located across a **range of diverse terrains**, from coastal outposts to hilltop strongholds.

Criteria for Selection of World Heritage Sites

- ▶ To be included on the World Heritage List, sites must be of **outstanding universal value and meet at least one out of ten selection criteria**.
- ▶ Only countries that have signed the **World Heritage Convention**, can submit nomination proposals for sites on their territory to be considered for inclusion.
- ▶ The nominated site is independently evaluated by the **International Council on Monuments and Sites (ICOMOS)** and the **International Union for Conservation of Nature (IUCN)**.
- ▶ Final decision on its inscription is made by the **World Heritage Committee (India is a member from 2021-25)**.

First-Ever e-Truck Incentive Scheme Launched in India

It is launched to provide financial incentives for **electric trucks (e-trucks)** under the **PM E-DRIVE initiative**.

About e-Truck Incentive Scheme

- **Aim:** To support the **deployment of e-trucks**, promoting indigenous manufacturing and reducing logistics costs and carbon footprint.
 - ⊕ Diesel trucks, constituting **only 3% of the total vehicle population**, contribute to **42% of transport-related greenhouse gas emissions**.
- **Features:**
 - ⊕ The scheme provides **financial incentives** for N2(Gross Vehicle Weight (GVW) above 3.5 tonnes and up to 12 tonnes) and N3(GVW 12 tonnes and up to 55 tonnes) category e-trucks.
 - ⊕ The maximum incentive is set at **₹9.6 lakh per vehicle** and will be offered as an upfront reduction.

About PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE)

- **Ministry Responsible:** Ministry of Heavy Industries (MHI).
- **Focus:** e-2 Wheelers (e-2Ws), e-3 Wheelers (e-3Ws), e-ambulances, e-trucks, e-buses, charging infra, EV testing (**Category-wise Incentives**)
- **Objective:** Accelerate adoption of Electric Vehicles (EVs), Develop EV charging infrastructure, Strengthen domestic EV manufacturing ecosystem, Promote sustainable, clean, and efficient public transport.
- **PM E- DRIVE is different from FAME:**
 - ⊕ **Expands the scope beyond FAME-II:** As it includes **e-trucks, e-ambulances**, and public **charging infrastructure** development.
 - ⊕ **Scrapping-Linked Incentives:** **Mandatory** for e-trucks and **preference** for e-bus deployment.
 - ⊕ **Testing Agencies:** It has provision for testing agencies to upgrade.

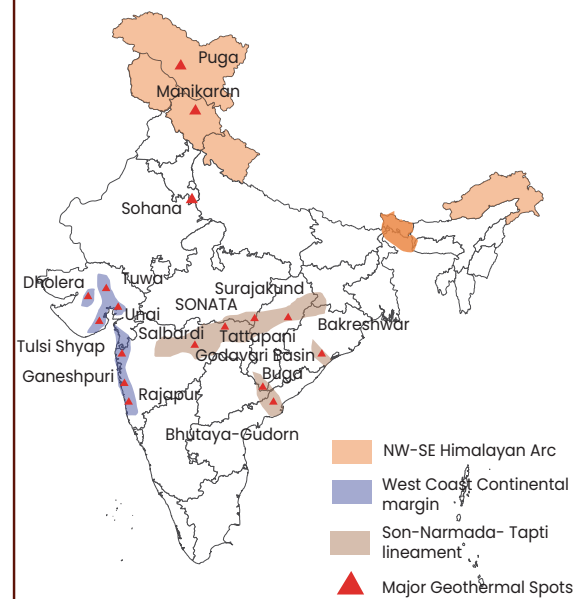
Uttarakhand cabinet approved the Uttarakhand Geo-Thermal Energy Policy 2025

The policy aims to promote scientific and technological research to explore and develop economically and environmentally viable geothermal resources.

Geothermal Energy

- It refers to the thermal (heat) energy **derived from the Earth's subsurface**.
 - ⊕ This energy is partly **residual heat generated during Earth's formation** and partly from **continuous and spontaneous radioactive decay of naturally occurring isotopes** within the Earth's core and mantle.
- This energy can be **extracted using geothermal technology** for heating and cooling, electricity generation and energy storage.
 - ⊕ **Conventional Geothermal Technologies** exploit hydrothermal reservoirs where geothermal heat is carried to the surface by **naturally occurring subsurface fluids**.
 - ⊕ **Next-Generation Geothermal Technologies** harvest heat at greater depths by circulating a fluid from the surface through engineered systems and are **hydrothermal reservoir independent**.
 - ◆ These Include Enhanced Geothermal Systems (EGSs) and Closed-Loop Geothermal Systems (CLGSs).
- **Potential in India:** Geothermal Atlas of India, 2022, estimates a potential of about **10,600 MW**.
 - ⊕ **Puga and Chumathang in Ladakh** are most promising geothermal fields in India.
- **Benefits:** Around the clock electricity generation, high utilization rate (over 75% in 2023), low emissions etc.
- **Challenges:** Relatively high technology cost, limited R&D, environmental concerns, licensing processes etc.

Geothermal Map of India



India's initiatives

- **Geothermal Atlas of India, 2022** mapping geothermal potential.
- **Constitution of Task Force** to harness Geothermal Energy in India.
- **Renewable Energy Research and Technology Development Programme (RE-RTD)** for research in new geothermal technologies.
- **International Cooperation:** With Iceland, Saudi Arabia, and RETAP (Renewable Energy Technology Action Platform) with USA.

UN Environment Programme released **Frontiers 2025: The Weight of Time Report**

The Frontiers Report spotlights emerging environmental issues before they escalate into global or regional crises.

Major Environmental Issues highlighted in the Report

- **Reactivation of Microbes in a Warming Cryosphere:** Climate warming could reactivate and **remobilize dormant microbes** into new environments, potentially **altering microbial communities**, introducing pathogens, or causing biodiversity loss as some might fail to survive thawing.
 - ⊕ Microbes that thrive under extremely challenging habitats like frozen environments are generally referred to as **psychrophiles**.
- **River Barriers:** All barriers (dams, weir or low-head dam, barrage, culverts, sluices etc.) affect the river ecosystem.
 - ⊕ **Impact of River Barriers:** Modify water flow and temperature, habitat quality and quantity, downstream sediment transport, displace indigenous community and fish movement.
 - ⊕ **Report recognizes Barrier Removals** as an accepted strategy to restore river health.
 - ◆ **Barrier removals** reduce river fragmentation (which will affect 89% of global river volume) and restore connectivity in river ecosystems.
- **Demographic Challenge:** Climate change is exacerbating **environmental risks** such as heatwaves, air pollution, and floods, which **disproportionately threaten increasing population of older adults**.
- **Remobilization of legacy pollutants by flood events:** **Persistent contaminants** (Heavy metal, organic compounds etc.) in water and sediment can enter and accumulate in plants and animals (bioaccumulation), and subsequently contaminate food chains with increased concentrations (biomagnification).

Also In News



AI Alliance Network (AIANET)

The Digital India Foundation (DIF), a founding member of the AIANET, has objected to the membership application of Pakistan's AI Technology Centre (AITeC) to AIANET.

About AIANET

- **About:** It is an **informal voluntary network and community** for its Members to exchange views, share information and expertise.
- **Aim:** Accelerate the development and deployment of AI technologies to enhance sustainable long-term prosperity, social and economic development
- **Members: 17**
- **Administered by:** AI Alliance Russia



Trade and Economic Partnership Agreement (TEPA)

Switzerland completed the ratification process of the trade agreement signed between India and four-nation **European Free Trade Association (EFTA)**.

- It clears the way for implementation of the **Trade and Economic Partnership Agreement (TEPA)** between India and EFTA.
- EFTA includes **Switzerland, Liechtenstein, Norway and Iceland**.

About TEPA

- Signed by India with **four developed nations of EFTA**.
- **Binding commitment:** \$100 bn investment and 1 million direct jobs in the next 15 years.
- Commitments related to **Intellectual Property Rights** are at TRIPS level.



WHO Pandemic Agreement

World Health Organisation (WHO) member states held their first meeting of the **Intergovernmental Working Group (IGWG)** on the WHO Pandemic Agreement.

About WHO Pandemic Agreement

- It sets out the **principles, approaches and tools** for better **international coordination** across a range of areas, in order to strengthen the **global health architecture** for pandemic prevention, preparedness and response.
 - ⊕ This **includes** equitable and timely access to vaccines, therapeutics and diagnostics.
- **Main Principles:** Guided by respect for international humanitarian law, equity, solidarity, full respect for the dignity, human rights and fundamental freedoms of all persons.



RhoDIS (Rhino DNA Index System) India programme

Assam Forest Department has started DNA profiling of Rhino horns and add it to RhoDIS India DNA data library.

About Rhino DNA Index System (RhoDIS) India Programme

- **Launched** in 2016, by **Ministry of Environment, Forests and Climate Change (MoEFCC)** in partnership with **WII, forest departments of Assam, West Bengal and Uttar Pradesh**, and **WWF India**.
- RhoDIS is a **wildlife forensics tool** that was specially developed for investigating wildlife crime cases.
 - ⊕ RhODIS uses a DNA indexing system whereby genetic sequences are created to get a **signature unique to each individual rhino**.



Fentanyl

The fentanyl crisis was cited by the US President Donald Trump to justify 35% tariffs on Canada.

- Fentanyl fuelled **over 112,000 US overdose deaths in 2024 alone**.

About Fentanyl

- Fentanyl is a **potent synthetic opioid**, approved for use as an analgesic (pain relief) and anaesthetic.
 - ⊕ It is approximately **100 times more potent than morphine and 50 times more potent than heroin as an analgesic**.
- **Common street names include:** Apache, China Girl, China Town, Dance Fever, Goodfellas, Jackpot, King Ivory, etc.
- **Overdose** results in cold and clammy skin, cyanosis, coma, and respiratory failure **leading to death**.



Astra Missile

DRDO & Indian Air Force (IAF) successfully conducted the flight-test of '**Astra**' equipped with **indigenous Radio Frequency (RF) Seeker from Su-30 Mk-I platform**.

About Astra Missile

- It is Indigenous **Beyond Visual Range Air-to-Air missile (BVRAAM)**.
- The missile is designed to **engage and destroy highly manoeuvring supersonic aircraft**.
- **Developed by** Defence Research and Development Organisation (DRDO).
- The missile has **all weather day and night capability**.
- Its **range exceeds 100 kms** and is equipped with state-of-the art **guidance and navigation systems**.



Trans fat

Experts warn the UN over **blanket trans fat ban** that could undermine nutrition in developing countries.

About Trans fats (Trans-fatty acids, TFA)

- **Definition:** Are **unsaturated fatty acids** that can be **industrially produced** (via hydrogenation) or **naturally found in animal-source foods** (meat, milk).
- **Health Impacts:**
 - ⊕ **Raises the level of the bad cholesterol** [Very low density lipoprotein (VLDL) and **low density lipoprotein-cholesterol (LDL-c)**].
 - ◆ Bad cholesterol can build up in the walls of arteries, making them hard and narrow, it increases the **risk of heart attack or stroke**.
 - ⊕ They have been also linked to **inflammation, overweight/obesity, high blood pressure, diabetes and some types of cancers**.



Inter-State River Water Disputes (ISRWD) Act, 1956

Central government grants extension to the Ravi and Beas Waters Tribunal, constituted to adjudicate the water-sharing issue among Punjab, Haryana and Rajasthan.

- Tribunal was constituted in 1986 under the Inter-State River Water Disputes (ISRWD) Act, 1956.

About ISRWD Act, 1956

- ISRWD Act was enacted by the Parliament for **adjudication of disputes relating to waters of inter-State rivers** and river valleys.
 - ⊕ **Article 262 of the Constitution empowers Parliament** to make laws for the adjudication of disputes concerning inter-state river waters.
- Act bars Supreme Court or any other Court from exercising jurisdiction in respect of any water dispute referred to a tribunal.



Pir Panjal Range

Security forces are conducting intensive search operations in the Pir Panjal Range to track fugitive terrorists.

Pir Panjal Range

- Located in **Jammu and Kashmir** and valley of Kashmir lies between Pir Panjal and Zaskar Range.
- A part of Lesser Himalayas, it extends from the **Jhelum River to the upper Beas River**.
- It rises to **5,000 metres** and **contains mostly volcanic rocks**.
- **Important passes:** Pir Panjal Pass, Bidil, Golabghar Pass and Banihal Pass.
- **Rivers:** Kishanganga, the **Jhelum** and the **Chenab** cut through the range.

