



Balalatha's



CSB IAS ACADEMY

The Road Map to Mussoorie...

PRELIMS EDGE – 2025 – 02/11/2024

UN Convention on Biological Diversity :

Context: The 16th COP (Conference of Parties) to the UNCBD is currently being held in Colombia.

About UN Convention on Biological Diversity (UNCBD):

- It is an legally binding convention which entered into force in 1993 and **recognized for the first time, the need for conservation of biological diversity** for the welfare of mankind.
- The agreement covers all **ecosystems, species as well as genetic resources**.
- It was opened for signature at the **Earth Summit** (Rio Conference),1992.
- Its secretariat is based in Montreal, Canada.
- It operates under the UN Environment Programme (UNEP).
- **All UN member states, with the exception of the United States**, have ratified the treaty.



COP16
COLOMBIA
Paz con la Naturaleza

It has 3 main objectives:

- Conservation of biological diversity
- Sustainable use of the components of biological diversity
- Fair and equitable sharing of benefits arising from use of genetic resources

Supplementary agreements to the UNCBD:

- **Cartegena Protocol:**
 - The Cartagena Protocol on Biosafety is an international agreement which **aims to ensure the safe handling, transport and use of living modified organisms (LMOs)** resulting from modern biotechnology that may have adverse effects on biological diversity, taking also into account risks to human health.

- It was adopted in 2000 and entered into force in 2003.
- **Nagoya Protocol:**
 - The Nagoya Protocol on **Access to Genetic Resources and the Fair and Equitable Sharing of Benefits** Arising from their Use.
 - It was adopted in 2010 and entered into force in 2014.
 - The **Access and Benefit-sharing Clearing-House** (ABS Clearing-House) is a platform for exchanging information on access and benefit-sharing.
 - ABS Clearing-House will offer opportunities for connecting users and providers of genetic resources and associated traditional knowledge.
 - It **enhances legal certainty and transparency on procedures for access and benefit-sharing**, and for monitoring the utilization of genetic resources along the value chain.
- **Nagoya-Kuala Lumpur Protocol:**
 - The Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol entered into force on 5 March 2018.
 - It provides international rules and procedures in the field of **liability and redress relating to living modified organisms**.

Source: India spells out finance needs for biodiversity, conservation (The Hindu)

Global TB Report :

Context: The Global Tuberculosis (TB) Report 2023 was recently released by the World Health Organization.

Findings of Global TB Report 2023:

- Globally, **8.2 million people were newly diagnosed** with TB in 2023 – the highest number recorded since WHO began TB monitoring in 1995.
- It also marks a significant increase from the 7.5 million new TB cases reported in 2022.
- The estimated number of **1.25 million TB deaths in 2023** is down from the 1.32 million recorded in 2022 and continues a **declining trend from its height during the COVID-19 pandemic**.
- In addition, the total number of people who contracted TB last year—a number that includes those not officially diagnosed - rose to an estimated 10.8 million in 2023, up from 10.7 million in 2022.
- But the **gap between the estimated number of new cases and notified cases fell to 2.7 million**, down from the 4 million seen during the COVID-19 pandemic, when access to TB diagnosis and treatment was limited.

- WHO officials say the decline in TB deaths and a narrowing of the gap between incident and notified TB cases suggest that **TB preventive, diagnostic, and treatment services have largely recovered from COVID-related disruptions.**
- But persistent challenges remain, and countries are well off track of targets for reducing the global TB burden.
- The report also **highlights a massive funding gap**, stating that only \$5.7 billion of the \$22 billion funding target was available in 2023.

India-specific Findings:

- India reported 2.8 million estimated TB cases in 2023, accounting for **26% of global TB cases and 29% of global TB deaths** (315,000 deaths).
- India has **reduced TB cases by 18% and deaths by 24% since 2015**, short of the 2025 targets of 50% reduction in cases and 75% reduction in deaths.
- **Reported TB cases rose to 2.51 million in 2023**, signalling improvement in diagnostic reach, with 85% of diagnosed patients receiving treatment.
- India accounts for **27% of global multi-drug-resistant TB cases**, highlighting the need for targeted treatment strategies.
- **India's TB funding dropped** from \$432.6 million in 2019 to \$302.8 million in 2023, with domestic funding falling to \$253 million.
- The report estimates that **many households face huge health costs**, spending more than 20% of their income on TB-related healthcare.

Indian Initiatives regarding TB:

- **India's National TB Elimination Programme (TB Mukht Bharat Abhiyan)** aims to meet the goal of ending the TB epidemic by 2025 from the country, five years ahead of the SDG for 2030.
- **National Strategic Plan (NSP) for TB Elimination (2017-2025)**
- **The Nikshay Ecosystem** (National TB information system)
- **Nikshay Mitras:** Ensure additional diagnostic, nutritional, and vocational support to TB patients
- **TB Harega Desh Jeetega Campaign** to generate public awareness.
- Currently, two vaccines **VPM (Vakzine Projekt Management) 1002** and **MIP (Mycobacterium Indicus Pranii)** have been developed and identified for TB, and are under Phase-3 clinical trial.
- **Ni-kshay Poshan Yojana:** Rs 500 support through DBT to the patients.

- **Ayushman Bharat Digital Health Mission:** Creating digital health IDs for TB patients to ensure that proper diagnostics & treatment are available.

About TB:

- It is an infectious disease **caused by Mycobacterium tuberculosis** and it spreads among persons via the air.
- It commonly affects the lungs, but can also affect other parts of the body.
- It is a treatable and curable disease.
- **Bacille Calmette-Guérin (BCG)** is a vaccine for TB disease.

Source: Global TB report shows India continues to have highest disease burden (Indian Express)

Places in News

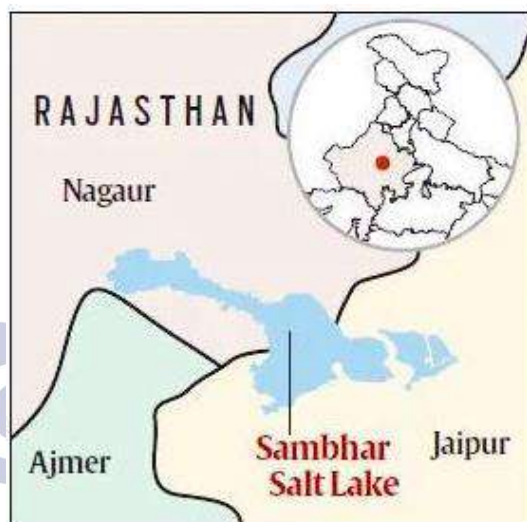
Mhadei Wildlife Sanctuary :

- Recently, an adult tigress and three cubs were spotted in the Mhadei Wildlife Sanctuary (WLS), Goa for the first time since 2020.
- Mhadei WLS is located near the **Chorla Ghat, situated between North Goa and Belagavi**. It borders both Maharashtra and Karnataka.
- The **Mhadei River** flows through this sanctuary.
- Mhadei WLS, along with other protected areas in Goa like Mollem National Park, forms **part of the Western Ghats**.
- The sanctuary plays a vital role in a network of wildlife corridors that **connect tiger populations across the Sahyadri (Maharashtra) and the Kali Tiger Reserves (Karnataka)**.
- Mhadei WLS serves as a nesting ground for the **critically endangered Indian Vulture**, underscoring the sanctuary's importance for avian conservation.
- The National Tiger Conservation Authority (NTCA) has **recommended the designation of Mhadei WLS as a tiger reserve** under the Wildlife Protection Act, 1972.



Sambhar Lake :

- More than 150 migratory birds were recently found dead at Sambhar Lake in Rajasthan, raising concerns about a **possible recurrence of avian botulism** (a bacterial illness).
- It is situated in Nagaur and Jaipur districts, Rajasthan, 80 km southwest of Jaipur.
- It is **India's biggest inland saline lake**, spanning over 200 sq. km.
- It is elliptical in shape, and is fed by ephemeral streams like Mendha and Runpangarh.
- It was **designated as a Ramsar site in 1990**, marking it as a wetland of international importance.
- It is a **key habitat for flamingos, pelicans, and various migratory birds**, especially during the winter.



Terms in News

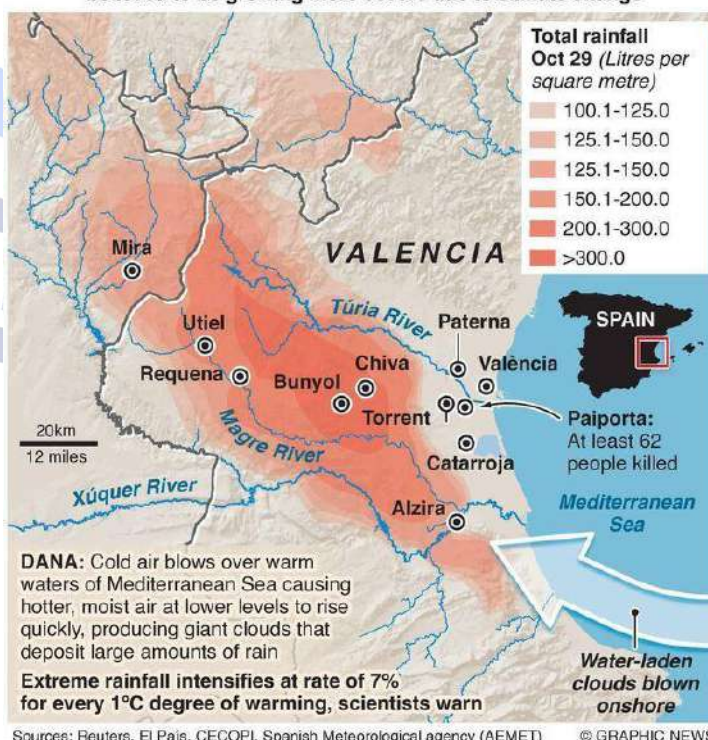
DANA :

The **extreme weather conditions in Spain** which saw Valencia get a year's worth of rain in just 8 hours is due to an event **locally known as Depresion Aislada en Niveles Altos (DANA)**.

- DANA is commonly referred to as the **"cold drop"** in English.
- It is a meteorological phenomenon in the **western Mediterranean region that brings intense rain and flooding**.
- DANA occurs when **cold air from the Polar Regions separates from the polar jet stream and descends over the warmer Mediterranean Sea**.
- The contrast between cold air aloft and warm, moist air near the surface causes

Climate change made Spanish floods worse

Catastrophic flash floods that have killed more than 150 people are the result of a meteorological phenomenon known as DANA, which is believed to be growing more severe due to climate change



atmospheric instability, leading to the rapid **formation of cumulonimbus clouds and intense thunderstorms.**

- It **primarily affects Spain and Portugal** but can also impact Italy, France, and other areas around the Mediterranean Sea.
- This **occurs in autumn and spring**, as temperature variations are more pronounced during these seasons.

Black Hole Triple System :

- A new scientific study says that scientists have discovered a “black hole triple” in space for the first time.
- A black hole triple system is a rare setup in space where **three black holes are close enough to be gravitationally bound, meaning they orbit each other** due to their strong gravitational pull.
- Two of these three black holes may be very close, forming a smaller, tight pair, while the third orbits farther away.
- The gravitational forces between these black holes create **complex, sometimes chaotic orbits**. This interplay is extremely powerful and can even **send out gravitational waves** — ripples in space-time that we can sometimes detect on Earth.
- Black hole triple systems are **hard to find because black holes tend to form from massive stars, which are not often found in groups of three**. Even when they do, their intense gravitational interactions can make them fling each other away or merge into one larger black hole.



Practice Questions

Q1. Consider the following statements regarding Tuberculosis (TB):

1. India aims to eliminate all new TB cases by 2030.
2. India accounts for more than a quarter of global TB cases.
3. The Bacille Calmette-Guérin (BCG) vaccine is used to prevent TB.

Which of the above statements are correct?

- a) 1 and 2

- b) 1 and 3
- c) 2 and 3
- d) 1, 2 and 3

Q2. Consider the following statements regarding the UN Convention on Biological Diversity (UNCBD):

1. The UNCBD is the only international treaty that has been ratified by all UN member states.
2. The Cartagena Protocol under the UNCBD aims to regulate living modified organisms (LMOs).
3. The Montreal Protocol under the UNCBD aims to ensure equitable sharing of benefits arising from use of genetic resources.

How many of the above statements are correct?

- a) None
- b) Only one
- c) Only two
- d) All three

Q3. This protected area lies within the Western Ghats. It is a nesting ground of the critically endangered Indian Vulture. It helps to connect tiger populations across the Sahyadri and the Kali Tiger Reserves. The National Tiger Conservation Authority recently recommended that this protected area be notified as a Tiger Reserve.

Identify the protected area described above.

- a) Kudremukh National Park
- b) Eturnagaram Wildlife Sanctuary
- c) Blackbuck National Park
- d) Mhadei Wildlife Sanctuary

Q4. Consider the following lakes located in India:

1. Sambhar Lake
2. Roopkund Lake
3. Lonar Lake

4. Pangong Tso
5. Umiam Lake
6. Kanwar Taal
7. Kolleru Lake

How many of the afore mentioned lakes are saline in nature?

- a) Only three
- b) Only four
- c) Only five
- d) Only six

Q5. The meteorological phenomenon of Depresion Aislada en Niveles Altos (DANA), recently seen in the news, is found in which of the following regions?

- a) Mediterranean Sea
- b) Gulf of Mexico
- c) Hudson Bay
- d) South China Sea

Answers:

1. C
2. B
3. D
4. A
5. A