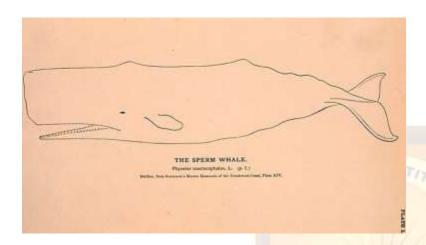
TODAY'S ANALYSIS

(06 February 2025)

TOPICS TO BE COVERED

- WHY IS WHALE VOMIT WORTH MILLIONS?
- NGT RESTRAINS INFRA PROJECTS IN KOLLERU LAKE
- ADAPTATION FUND IN INDIA
- MCQs

WHY IS WHALE VOMIT WORTH MILLIONS?





- Ambergris, a waxy substance produced by sperm whales, is a highly expensive natural material.
- Often referred to as "floating gold," it's a substance that goes from being a byproduct of whale digestion to an ingredient in high-end perfumes.
- This unique journey and its rarity contribute to its multi-million dollar value.

WHAT IS AMBERGRIS AND WHERE DOES IT COME FROM?

Ambergris: The 'Floating Gold'

Ambergris, meaning "grey amber" in French, is a waxy substance that originates
in the digestive system of protected sperm whales.



- It is often wrongly referred to as whale vomit, though it is not the result of vomiting.
- Sperm whales consume large quantities of squid and cuttlefish, much of which cannot be digested.
- While some of this indigestible matter is expelled through vomiting, a portion binds together in the whale's intestines, eventually forming ambergris.
- Occasionally, ambergris is excreted and found floating in the sea.
- However, it can sometimes grow so large that it ruptures the whale's intestines,
 leading to the whale's death

FROM SOFT WAXY TO ROCK LIKE TREASURE

- Freshly expelled ambergris: Soft, waxy, and greasy consistency.
- Transformation over time: Exposed to sunlight, saltwater, and air, it undergoes
 weathering and oxidation.
- **Hardened form:** Outer layers become crusty and rock-like, while the inside may retain some of its softer, waxier texture. This is the form typically found washed ashore.

WHY IS AMBERGRIS SO EXPENSIVE?

Ambergris is a rare substance that is highly sought after in the perfume industry.

ADDRESS:

- It is used as a fixative, which means that it helps to make fragrances last longer on the skin.
- This ability to enhance and prolong scent makes it a highly desirable ingredient in high-end perfumes, which drives its price up significantly.
- Depending on its quality, ambergris can fetch prices up to \$40,000 per kilogram.

LEGAL COMPLICATIONS

- Legal Status:
 - Legal in some countries (e.g., United Kingdom, New Zealand, France,
 Switzerland, and Maldives).
 - Illegal in others, including India.
- India: Sale and trade of ambergris are strictly prohibited under the Wildlife
 Protection Act, 1972.
- Reason for prohibition: Sperm whales, the source of ambergris, are an endangered species protected by law. They were declared endangered in 1970 due to hunting and environmental threats.
- Purpose of the ban: To protect sperm whales and discourage any activity that could harm or endanger the whale population.

ABOUT SPERM WHALES

- Sperm whales, also known as cachalots, are the largest of the toothed whale species.
- The name "sperm whale" derives from spermaceti, a waxy substance found in their heads that helps them to focus sound waves, playing a key role in their deepsea hunting strategies.
- Distribution: found in almost all marine regions.
- Habitat: They inhabit deep marine waters (generally deeper than 1000 meters).
- Threats: Major threats to sperm whales include fishing activities and marine pollution.

CONSERVATION STATUS

- IUCN Red List: Vulnerable
- CITES: Appendix I (prohibits international trade)
- Indian Wildlife Protection Act, 1972: Schedule II (protected species)
- CMS: Appendix I (listed under the Convention on Migratory Species)

NGT RESTRAINS INFRA PROJECTS IN

KOLLERU LAKE

Background of the Issue:

- Recently, The Southern Zonal Bench of the National Green Tribunal (NGT) issued a
 directive restraining the Andhra Pradesh Government from proceeding with six
 major infrastructure projects in the Kolleru wetland.
- The decision came after the projects were proposed in the region under the A.P.
 Krishna Kolleru Salinity Mitigation Projects Corporation Limited, with an estimated total capital outlay of ₹2,952 crore.

ABOUT KOLLERU LAKE

- Kolleru Lake is a large, shallow, freshwater lake in Andhra Pradesh.
- It's between the Krishna and Godavari rivers, near Eluru. It's the biggest shallow
 freshwater lake in Asia, covering 308 sq km.
- The lake helps to control flooding from those rivers and drains into the Bay of Bengal.



- It's a wildlife sanctuary and a Ramsar site, home to many migratory birds, including Siberian cranes, pelicans, and painted storks.
- It's on the Central Asian Flyway, a route many birds use.
- Over 50,000 water birds live there, making it an Important Bird Area.

NGT'S DIRECTIVE

- The Andhra Pradesh government is prohibited from continuing with the 6 infrastructure projects unless they are conducted in compliance with legal requirements.
- The Water Resources Department (WRD) must first secure necessary environmental clearances from:
 - Ministry of Environment, Forest and Climate Change (MoEF&CC)
 - A.P. Coastal Zone Management Authority (CZMA)
 - A.P. Pollution Control Board (PCB)
 - National Board for Wildlife (NBWL)

NATURE OF THE PROJECTS

The projects, which include the construction of barrages, regulators, and sluices, are
planned to impact Kolleru Lake, a protected eco-sensitive zone.

 Specifically, the projects involve 3 regulators-cum-roads across the tidal water channel Upputeru, which is part of the Kolleru ecosystem and falls under the Coastal Regulation Zone (CRZ).

ENVIRONMENTAL CONCERNS RAISED

- A well-known environmental activist challenged the projects on multiple grounds:
 - o The projects were initiated without conducting a scientific or ecological study.
 - No expert consultation from wetland conservationists, wildlife specialists, and hydrologists was undertaken.
 - Statutory clearances were not obtained before launching the projects.
 - There were concerns about the potential destruction of the lake's biodiversity and aquatic habitats.

NGT'S RULING

After hearing both parties, the NGT emphasized the importance of evaluating the
 ecological and hydrological implications of the proposed projects thoroughly,
 especially due to their potential adverse impacts on the lake.



- The Kolleru Lake holds immense ecological significance, and any destruction could harm its hydrology and biodiversity.
- The NGT stressed the need to comply with domestic environmental laws and the Ramsar Convention, which underscores the importance of maintaining the integrity of vital ecosystems.

ABOUT NGT

Establishment:

Established on October 18, 2010, under the National Green Tribunal Act 2010.

Purpose:

- Effective and expeditious disposal of cases relating to:
 - Environmental protection
 - Conservation of forests and other natural resources
 - o Enforcement of any legal right relating to the environment
 - o Providing relief and compensation for damages to persons and property.

KEY FEATURES

• **Specialized Body:** Equipped with the necessary expertise to handle environmental disputes involving multi-disciplinary issues.



- Procedure: Not bound by the Code of Civil Procedure, 1908, but guided by principles of natural justice.
- Objective: To provide speedy environmental justice and reduce the burden of litigation in higher courts.
- **Timeframe:** Mandated to endeavor for disposal of applications or appeals finally within 6 months of filing.

LOCATION

- Principal Place of Sitting: New Delhi
- Other Places of Sitting: Bhopal, Pune, Kolkata, and Chennai.
- Accessibility: Will follow a circuit procedure to make itself more accessible.

ADAPTATION IN INDIA

- Adaptation refers to the process of adjusting systems, practices, and policies to mitigate the adverse effects of climate change.
- This is critical for nations like India, which is highly vulnerable to the impacts of climate change, including floods, droughts, and extreme weather events.
- The Economic Survey 2024-25 of India emphasized the importance of climate adaptation, yet it highlighted the lack of international climate finance for adaptation actions.
- It calls for **stronger national support but,** ironically, the **2025-26 Union Budget** provides little focus on this.

UNION BUDGET 2025-26 & CLIMATE ADAPTATION

- In the **Budget 2025-26**, climate change and adaptation were given limited attention:
 - The term 'climate' was mentioned only 3 times, but 'adaptation' was not mentioned once.
 - Other critical terms like 'global warming' and 'climate change' were absent, despite India's ranking as the 7th most vulnerable country to climate impacts globally.

- The speech only mentioned 'resilience' in a vague context, without specific measures tied to addressing climate change impacts.
- This raises concerns about the adequacy of India's national efforts, given the severe and growing risks posed by climate change to the country's economy, society, and livelihoods.

CHALLENGES IN FINANCING ADAPTATION

- Adaptation is not simply a sector-specific issue; it affects agriculture, water resources, health, and livelihoods.
- However, adaptation policies are often mistakenly treated as part of general development rather than a focused effort on climate resilience.
- Under the Ministry of Environment, Forests and Climate Change (MoEFCC), several adaptation schemes, such as the National Adaptation Fund (NAF), National Mission on Himalayan Studies (NMHS), and Climate Change Action Plan (CCAP), were significantly underfunded in the 2025-26 budget.
 - These schemes were shifted from 'scheme' to 'non-scheme' status and placed under the secretariat budget without specific allocations, signaling a lack of dedicated funding for these crucial areas.

NATIONAL ADAPTATION FUND & ITS IMPACT

- NAF was designed to fund adaptation projects in vulnerable states, with a
 particular focus on agriculture and animal husbandry. However:
 - Since 2022-23, there has been no budget allocation for the fund, undermining its critical role in addressing adaptation needs.
 - that the NAFCC (National Adaptation Fund for Climate Change) has been reduced to a non-scheme without clear reasons.
 - This raises questions about the commitment to adaptation in India.
 - A notable project under NAFCC, Climate Resilient Interventions in Dairy Sector
 in Andhra Pradesh, faced multiple implementation challenges, such as delays in
 land acquisition and resource management, undermining its potential impact.

REVISED MISSIONS & DECREASED ALLOCATIONS

The National Coastal Mission, aimed at sustainable coastline management, had its
budget drastically cut from Rs 8 crore to Rs 2 crore, demonstrating reduced priority
for coastal adaptation.

- Similarly, the O-SMART scheme under the Ministry of Earth Sciences, crucial for studying the Indian Ocean's changes and improving weather forecasting models, received no allocation in 2024-25 and 2025-26.
- This is concerning as better data is needed for climate change predictions and disaster management.

A POSITIVE DEVELOPMENT: MISSION MAUSAM

- Mission Mausam launched in September 2024, is a significant step toward climate resilience.
- With a budget allocation of Rs 2,000 crore (2024-2026), it aims to make India a 'Weather-ready and Climate-smart' nation. The key elements of Mission Mausam are:
 - 50 Doppler Weather Radars (DWR) and 100 disdrometers to improve weather forecasting and climate resilience.
 - Establishment of research stations for continuous monitoring of weather patterns and extreme weather events across the nation.
- This initiative aims to improve early warning systems and strengthen community resilience to the increasingly erratic weather patterns caused by global warming.

NATIONAL MISSION FOR GREEN INDIA: AN UPTICK IN FUNDING

- The National Mission for Green India (NMGI) received an increase in allocation to Rs
 220 crore for 2025-26 (up from Rs 160 crore in 2024-25). The mission focuses on:
 - Afforestation and fire prevention efforts across India.

This increase signals a **positive shift** in recognizing the need for natural **carbon** sequestration and ecosystem-based adaptation, which are essential for climate resilience.

THE NEED FOR FURTHER ACTION

- Despite some positive steps like Mission Mausam and increased funding for NMGI,
 India's adaptation strategy still lacks sufficient focus, funds, and a comprehensive approach to tackle the challenges posed by climate change.
- The National Action Plan on Climate Change (NAPCC), which was introduced in 2008, has not been updated to reflect the new climate realities, especially as the impacts of climate change intensify across sectors.
- Dedicated funding for programs such as NAFCC, O-SMART, and National Coastal
 Mission is needed to ensure that adaptation is not an afterthought but a core priority in
 India's development framework.

MCQs

| 1. | Consider the following Assertion and Reasoning statements and mark the correct ones: |
|----|--|
| | Assertion (A): Whale Vomit is extremely expensive. |

Reasoning (R): It is a rare substance excreted by sperm whales used as a fixative in perfume industry.

- (A) Both A & R are true and R is the correct explanation of A
- (B) Both A & R are true and R is not the correct explanation of A.
- (C) A is true R is false.
- (D) A is false & R is true.

Ans. (A)

- 2. The Kolleru Lake lies between which two rivers?
 - (A) Krishna & Kaveri
 - (B) Krishna & Bhima
 - (C) Godavari & Sabari
 - (D) Krishna & Godavari

Ans. (D)

- 3. Consider the following statements wrt National Green Tribunal & mark the correct one:
 - 1. It is a statutory body established to handle environment related cases.
 - 2. It is bound by the Code of Civil Procedure, 1908.
 - (A) Only 1
 - (B) Only 2
 - (C) Both 1 & 2
 - (D) Neither 1 nor 2

Ans. (A)

- 4. Which of these sectors/domains can be affected by adaptation to climate change?
 - 1. Water Systems
 - 2. Agriculture
 - 3. Healthcare
 - 4. Livelihoods
 - (A) Only 1 & 2
 - (B) Only 1,2 & 3
 - (C) Only 2 & 3
 - (D) All of the above

Ans. (D)



- 5. The O SMART scheme is under which ministry?
 - (A) Ministry of Environment Forest & Climate Change
 - (B) Ministry of Earth Science
 - (C) Ministry of Science & Technology
 - (D) None of the above

Ans. (B)

