UN Secretary-General's Special Report

Prelims: *Current events of national and international importance | Environment*

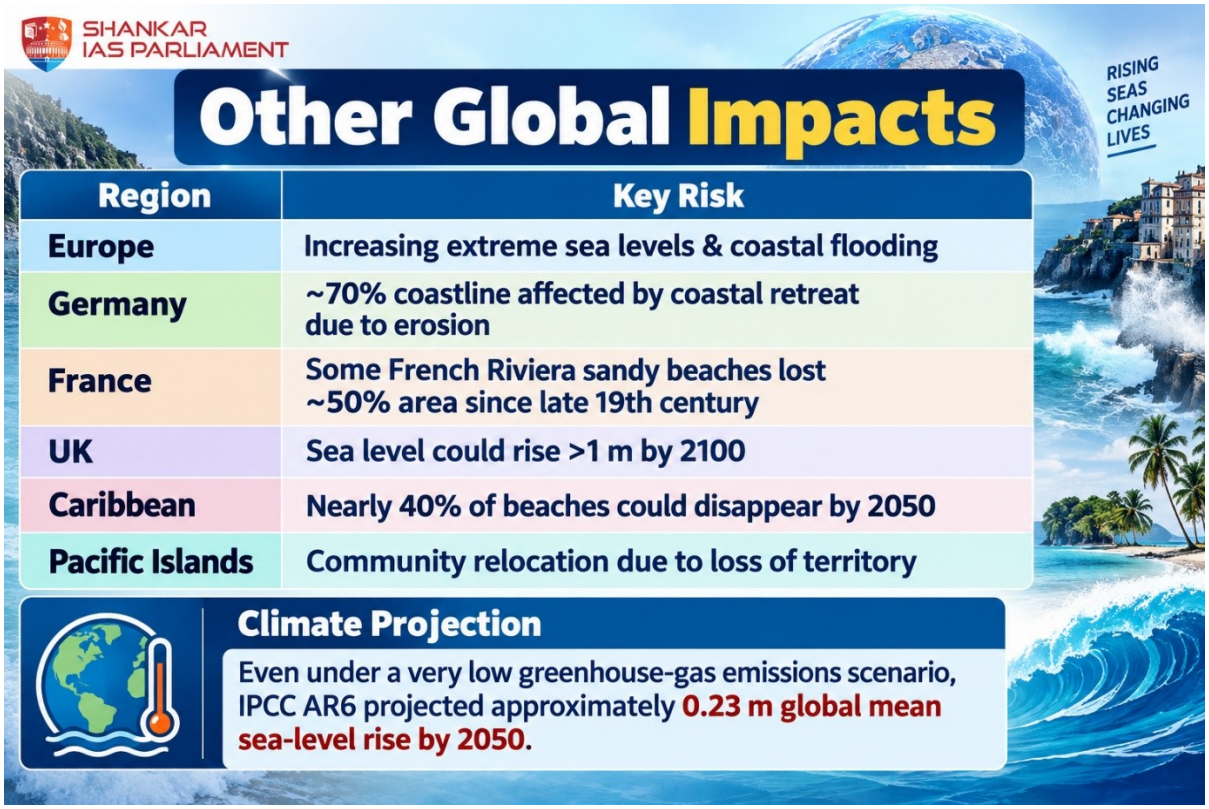
Why in News?

Recent UN SG's Special Report warns of accelerating sea-level rise endangering coasts, islands, livelihoods, rights, and statehood.

Report

- **Title –** "Challenges related to sea-level rise and ways and approaches to address it".
- **Presented at** – **55th Pacific Islands Forum Leaders Meeting in Palau**.
- **Key Findings**
  - **In 2024,** the global sea level rose by **5.9 mm** per year, representing the highest annual increase on record.
  - Approximately 770 million individuals, or about 10% of the global population, reside in coastal regions less than 5 meters **above the high-tide line**.
  - Without urgent adaptation measures, as many as **1.2 billion people** may be displaced by **2050**.
  - Current damage to coastal infrastructure exceeds **$1.8 trillion**.
  - By 2100, potential annual global losses could range from $1.2 trillion to $4 trillion in the absence of adequate adaptation.
- **Causes of Sea Level Rise –** Global warming is a primary driver.
  - **Thermal expansion** of seawater due to increased temperatures.
  - **Melting of glaciers and polar ice sheets**.
  - These processes collectively contribute to the rise in **Global Mean Sea Level (GMSL)**.
- **Impacts on the Indian Subcontinent**
- **Regions at Elevated Risk –** Low-lying coastal and deltaic regions are especially susceptible to sea-level rise.
- In **India,** major urban centers at risk include:
  - Mumbai
  - Kolkata
- In **Bangladesh,** vulnerable areas include:
  - Dhaka
- Over **14 million individuals in these South Asian regions face imminent risk of displacement due** to permanent inundation.
- **Land Subsidence: A Critical Factor**
- **The combination of sea-level rise and land subsidence results in an increased relative sea-level rise.**

- Land subsidence refers to the downward movement **of land relative to sea level**.
- This phenomenon can intensify the following impacts:
    - Coastal flooding
    - Permanent inundation
    - Displacement of populations
    - Saltwater intrusion
- **Saltwater Intrusion –** The encroachment of seawater into freshwater systems can adversely impact the following:
    - **Drinking water supplies**
    - **Agricultural production and irrigation systems**
    - **Groundwater-dependent ecosystems**
    - **Soil quality and fertility**
- **Human Rights Implications –** Sea-level rise poses significant threats to the following human rights:
    - Right to adequate housing.
    - Right to safe drinking water and sanitation.
    - Right to food and health.
    - Right to education.
    - Right to livelihood.
    - Right to culture and community identity.
- **Small Island Developing States (SIDS), Indigenous Peoples, and low-lying coastal communities** are particularly vulnerable to these threats.



55th Pacific Islands Forum (PIF)

• **Theme -** 'Building Economies: Life. Action. Unity'.
• It meets annually to develop collective responses to regional issues and deliver on a vision for a resilient Pacific Region of peace, harmony, security, social inclusion, and prosperity that ensures all Pacific people can lead free, healthy, and productive lives.
• It comprises **18 members –** Australia, the Cook Islands, the Federated States of Micronesia (FSM), Fiji, French Polynesia, Kiribati, Nauru, New Caledonia, New Zealand, Niue, Palau, Papua New Guinea (PNG), the Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu.

Reference

Down to Earth | UN Special Report

SHANKAR IAS PARLIAMENT
Information is Empowering