

State of the Climate in Asia 2024 report

Prelims : Current events of national and international importance

Why in News?

The state of the climate in Asia report, 2024, says that Asia's faster warming is fuelling more extreme weather and wreaking havoc on the region's economies, ecosystems, and societies.

- **Released by** - The World Meteorological Organisation (WMO).
- **Recent Findings** - 2024 was the warmest year on record in Asia, with widespread and prolonged heat waves.
- **Global Mean Temperature** - The global mean temperature in 2024 was the **highest on record** for the period 1850-2024, according to all 6 datasets of WMO.
- It beat the previous record of **1.45 °C** set in 2023.
- Each of the years from 2015 to 2024 was one of the 10 warmest years on record.
- The warming trend between 1991-2024 was almost double that during the 1961-1990 period.
- Monthly average temperature records were broken in Japan, Republic of Korea, and in China.
- The national mean summer temperature in Japan equalled the hottest on record, matching the 2023 record at **1.76 °C** above the 1991-2020 average.
- **Sea surface temperatures** - It were the highest on record, with Asia's sea surface decadal warming rate **nearly double the global average**.
- Sea level rise on the **Pacific and Indian Ocean sides of Asia** exceeded the global average.
 - It will heighten risks for low-lying coastal areas.
- **Glacier loss** - Out of the 24 glaciers in the central Himalayas and Tian Shan, 23 suffered mass loss.
 - It leads to an increase in hazards, including **glacial lake outburst floods (GLOF)**, landslides, and long-term risks to water security.
- **Extreme weather** - It is already exacting an unacceptably high toll.
 - It wreaked havoc and heavy casualties in many countries in the region, and tropical cyclones left a trail of destruction, drought caused heavy economic and agricultural losses.
- In late September 2024, record-breaking rainfall in Nepal triggered severe floods, killing at least 246 people; the damages exceeded Nepali rupees 12.85 billion.
- **Marine Heatwaves** - In 2024, most of the ocean areas of Asia were affected by marine heatwaves of strong, severe, or extreme intensity, the largest extent since records began in 1993.
- The northern Indian Ocean and the ocean area adjacent to Japan, the Yellow Sea, and the East China Sea were especially affected.

- **Cyclonic activity** - During 2024, three out of four cyclones formed over the **Bay of Bengal (Remal, Dana, Fengal)**, and one formed over the **Arabian Sea (Asna)**.
- Severe cyclonic storm Remal made landfall near the Mongla and Khepupara coasts in Bangladesh and West Bengal, India.
- In Bangladesh, the highest recorded wind speed was 111 km/h , and the storm surge, accompanied by extremely heavy rainfall, caused flooding of up to 2.5 m in the coastal districts.
- Cyclonic storm Asna developed in August over the Arabian Sea, which is a rare occurrence as it has only happened three times since 1891. The storm's impact on Oman included rough wave heights ranging from three to five metres.
- Cyclonic storm Fengal tracked close to Sri Lanka before making landfall in India.

Reference

[The Hindu | State of the Climate in Asia 2024 report](#)



SHANKAR
IAS PARLIAMENT
Information is Empowering