



COPERNICUS CLIMATE CENTRE SERVICE - ENVIRONMENT

News: June 2024 is considered as the **warmest month ever recorded compared to the pre-industrial levels** and due to climate change.

- This shows how intense climate conditions such as **heat, drought and water shortage, floods** etc have affected societies globally through human-induced global warming and cyclic states of El Niño.

What's in the news?

Global Context:

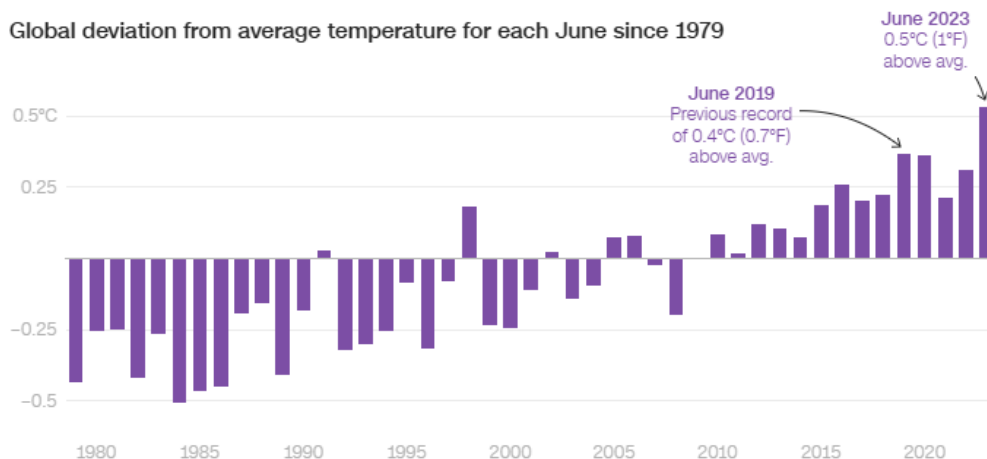
- Highest annual global mean temperature for the last one year, which is **64°C above the pre-industrial** average of 1850-1900.
- North West Europe, Canada, US, Mexico, Asia, east Australia, S.Europe, Turkey, Brazil, N.Siberia, Mid-East, N.Africa, W. Antarctica are the most affected regions.

Impacts of Climate Change:

- Extremes in heat, more frequent and severe drought and floods, and storm intensity.
- More than 40,000 heatstroke cases that are suspected and more than 100 heat related deaths in India.
- Power grids and water supply overburdened particularly in areas like Delhi.

Scientific Analysis:

- Copernicus Climate Change Service (C3S) has provided the data confirming the record temperatures.



Note: Deviation from average is calculated against a baseline of years 1991-2020.

Source: Copernicus Climate Change Service

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- 2023-24 **El Niño** event causing warming up of the trend.
- The frequency of temperature **above 1.5°C threshold** had already occurred twice to the pre-industrial level.

Policy Implications:

- **Paris Agreement:** World's average temperature should be retained at a low of 1.5°C above pre-industrial levels.



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- **Greenhouse Gas Emissions:** The need for a radical reduction to combat long-term warming and its consequences is required.
- **Global Cooperation:** Importance of international treaties and climate change intervention.

India Specific Data:

- **IMD Reports** that **June** was the hottest in the Northwest India in 119 years of records.
- **11 states** had experienced between **20 and 38 heatwave days in April-June 2020**.
- Some parts of Rajasthan recorded temperatures **more than 50°C** during the day and night temperatures of 35°C.

Environmental and Ecological Implications:

- **Marine Ecosystems:** The existence of high seas temperatures makes it hard for marine life to survive as well as affects the biodiversity.
- **Polar Regions:** Less than average sea ice in the Arctic and Antarctic regions, meaning quick shifts in polar regions' weather.

Source: <https://www.thehindubusinessline.com/economy/agri-business/world-went-through-its-warmest-june-in-2024-says-copernicus-climate-centre-service/article68377594.ece>

