

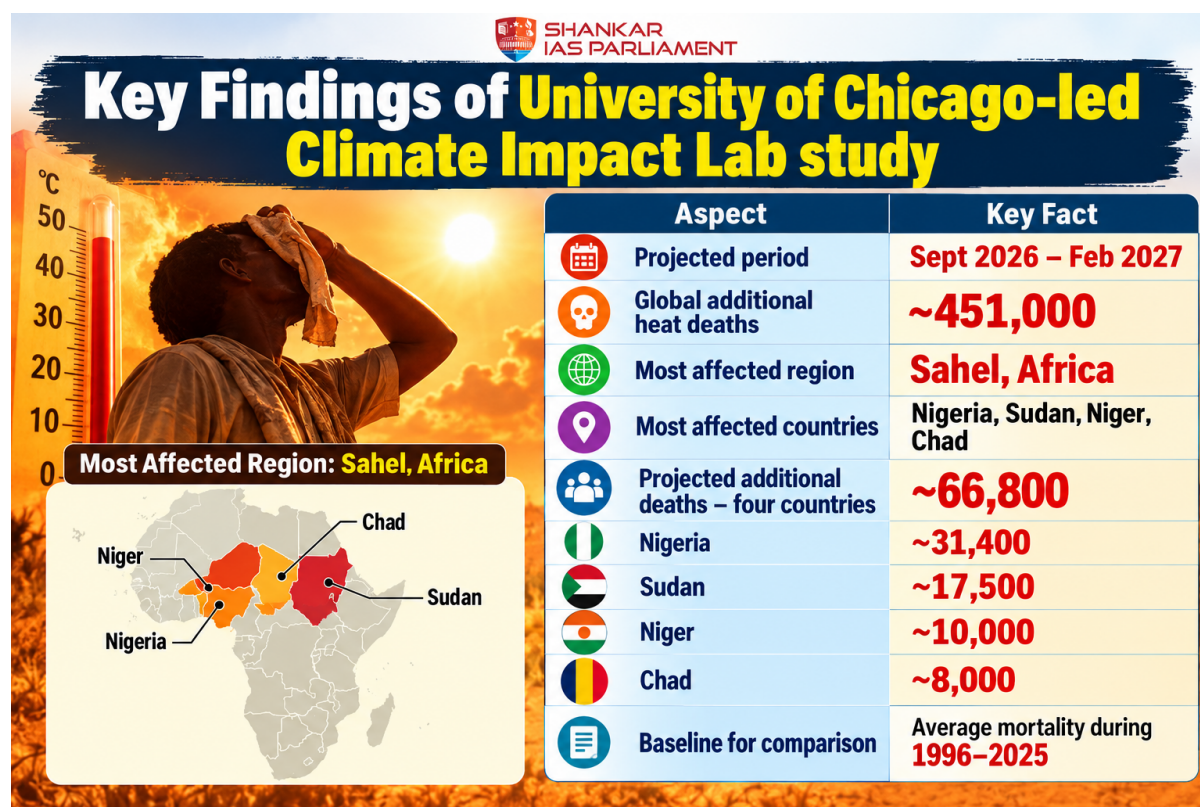
Super El Niño & Heat Mortality

Prelims: Current events of national and international importance | Geography

Why in News?

The University of Chicago-led Climate Impact Lab projects approximately 451,000 additional heat-related deaths worldwide due to a strong El Niño.

- The **Sahel region of Africa** is expected to experience the highest mortality burden.
- **Nigeria** is projected to have the highest heat-related mortality at the country level, with an estimated **31,400 additional deaths**.



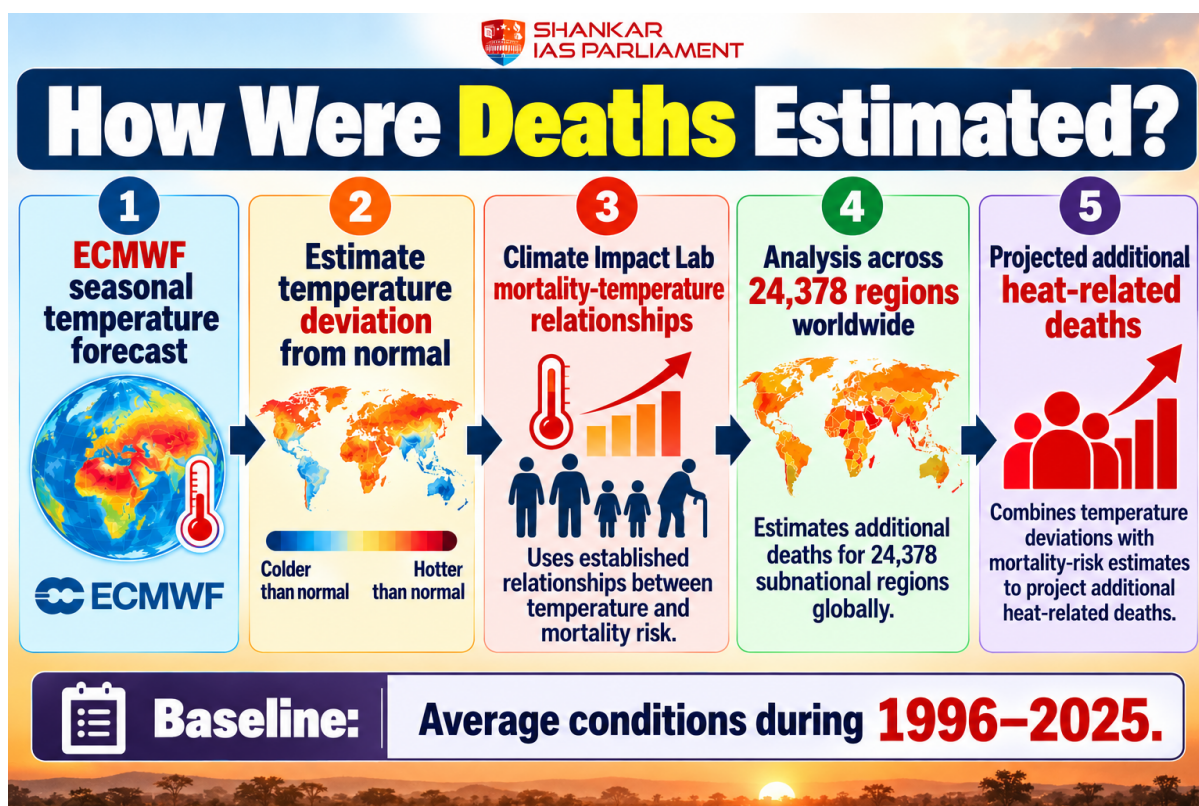
- **Sahel Region**
 - The Sahel is a **semi-arid region of Africa** situated between the Sahara Desert to the north and the tropical savannas to the south.
 - It stretches from the **Atlantic Ocean in the west to the Red Sea in the east**.
 - The Sahel covers parts of several countries, including Mauritania, Mali, Niger, Chad, Nigeria, Sudan, Senegal, and Eritrea.
- **Reason for Highly Vulnerable of Sahel**
 - **Extreme heat, poverty, and limited cooling capacity significantly increase**

mortality risk.

- High poverty levels reduce adaptive capacity.
- **Unreliable electricity access** limits the use of cooling devices.
- A large portion of the population relies on **agriculture**, which increases exposure to heat and drought.
- Outdoor workers face prolonged heat exposure.
- Limited healthcare capacity makes it more difficult to manage illnesses related to heatwaves.

• **Vulnerable Groups**

- Older adults (over 65 years).
- Young children (ages 0 to 4 years).
- Individuals with chronic health conditions.
- Outdoor workers, especially those in agriculture.
- Individuals lacking reliable access to electricity or cooling.



• **Immediate Adaptation Measures**

- **Implement early warning systems** for extreme heat.
- **Develop and maintain Heat Action Plans.**
- **Establish cooling centres and hydration stations.**
- Conduct targeted health outreach for vulnerable populations.
- Ensure protection for **outdoor workers** during peak heat hours.
- Increase hospital staffing levels and medical supplies.
- Prepare healthcare systems for surges in heatstroke and sunstroke cases.

• **El Niño and Increased Heat**

- **El Niño** refers to the abnormal warming of the **central and eastern tropical Pacific Ocean.**
- It alters global atmospheric circulation and can affect **temperature and rainfall**

patterns in regions well beyond the Pacific.

- A strong El Niño can lead to **above-normal temperatures in many areas, although its effects differ by region.**

Reference

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