

# Climate change and health

November 12, 2022

## Manifest Pedagogy:

The Lancet report this year reveals we are at a critical juncture. Climate change is driving severe health impacts all around the world, while the persistent global fossil fuel dependence compounds these health harms amidst multiple global crises, keeping households vulnerable to volatile fossil fuel markets, exposed to energy poverty, and dangerous levels of air pollution. Governments and companies continue to follow strategies that increasingly threaten the health and survival of all people alive today, and of future generations. Global warming and climate change is intricately related to human health and India needs to do something seriously in this space.

In News: Recently a report was released titled Lancet countdown on health and climate change: health at the mercy of fossil fuels, showing that from 2000-2004 to 2017-2021, heat-related deaths increased by 55% in India.

Placing it in the Syllabus: Environment and Social Justice

## Static Dimensions

- What is Lancet Countdown on Health and Climate Change Report?

## Current Dimensions

- More on news
- Findings of the report related to India
- Challenges in India
- Recommendations

## Content

According to a fact sheet on the specific impacts on India which uses data from the report but is not itself a part of the report climate change is affecting almost every pillar of food security.

### **More on news**

- Ahead of this year's United Nations climate change conference (COP27), a major new report has said that the continued dependence on fossil fuels is compounding the health impacts of the multiple crises the world is facing – including the fallouts of the Covid-19 pandemic, the war in Ukraine, the cost of living crisis, and climate change.
- This report comes ahead of this year's United Nations climate change conference (COP27), to be held in Sharm El Sheikh, Egypt.
- The report represents the work of 99 experts from 51 institutions, including the World Health Organisation (WHO) and the World Meteorological Organisation (WMO).

### **What is Lancet Countdown on Health and Climate Change Report?**

- The Lancet Countdown on Health and Climate Change, published annually, is an international, multidisciplinary collaboration, dedicated to monitoring the evolving health profile of climate change, and providing an independent assessment of the delivery of commitments made by governments worldwide under the Paris Agreement.
- The countries considered in the modelling study represent 50% of the world's population and 70% of the world's emissions – Brazil, China, Germany, India, Indonesia, Nigeria, South Africa, the UK and the US.
- The Lancet Countdown report was established following the 2015 Lancet Commission on Health and Climate Change.
- It tracks 43 indicators across five key domains:
  - Climate Change impacts, Exposures and

Vulnerability; adaptation, Planning, and resilience for health; mitigation actions and health co-benefits; economics and finance and public and political engagement.

### **Findings of the report related to India**

- **Food Security**-The duration of the growth season for maize has decreased by 2%, compared to a 1981-2010 baseline, while rice and winter wheat have each decreased by 1%.
- **Health of Infants and old age**-From 2012-2021, infants under one year old experienced an average of **72 million more person-days** of heatwaves per year, compared to 1985-2005.
  - For the same period, adults over 65 experienced 301 million more person-days.
  - On average, from 2012-2021, each infant experienced an additional 0.9 heatwave days per year while adults over 65 experienced an additional **3.7 per person, compared to 1986-2021**.
- **Heat related deaths**-From 2000-2004 to 2017-2021, heat-related deaths **increased by 55%** in India.
- **Pollution**-An estimated over **3,30,000 people died** in India due to exposure to particulate matter from fossil fuel combustion in 2020, says the 2022 report.
- **Productivity**-In 2021, Indians lost **167.2 billion potential labour hours** due to heat exposure with income losses equivalent to about **5.4% of national GDP**.
- **Diseases**– From 1951-1960 to 2012-2021, the number of months suitable for dengue transmission by *Aedes aegypti* **rose by 1.69%, reaching 5.6 months each year**.

### **Challenges in India**

- India had a net negative carbon price, indicating that the government was effectively subsidising fossil fuels.

- India allocated a net 34 billion USD [around ₹2,80,000 crore] to this in 2019 alone, equivalent to **37.5% of the country's national health** spending that year.
- **Biomass accounted for 61% of household energy** in 2019, while fossil fuels accounted for another 20%.
- With this high reliance on these fuels, average household concentrations of particulate matter exceeded the World Health Organisation (WHO) recommendation by 27-fold nationally and 35-fold in rural homes.

### **Recommendations**

- These are early warnings and we need to take mitigation measures like adapting heat action plans in each city.
  - For instance, the **Ahmedabad heat action plan** that has shown mortality can be reduced, should be adapted everywhere.
- The burning of dirty fuels needs to be minimised as soon as possible to reduce the accompanying health impacts.
  - Improvement in air quality will help to prevent deaths resulting from exposure to fossil fuel-derived particulate matter.
- Develop climate solutions that are proportionate to the scale of the problem. The climate crisis is endangering not only the health of the planet, but also the health of people everywhere, through toxic air pollution, decreased food security, increased risks of infectious disease outbreaks, extreme heat, drought, floods, etc.
- Therefore, governments should pay more attention to and invest more resources in environmental protection.

### **Wayforward**

- Focus on Preventive measures like enhancement of green spaces (strategic planting and less pruning of trees to provide more shade).
- All the efforts must be made to achieve the targets of

the Paris climate treaty.

- Accelerating the transition to clean energy and energy efficiency will help prevent further increases in climate change-related death and disease and deliver immediate health benefits through improved energy access and security, cleaner air, healthier diets and lifestyles, and more liveable cities..
- In India, **45% of urban centres** are classified as moderately green or above. An urban redesign that puts health first can provide increased green spaces that reduce urban heat, improve air quality, and benefit physical and mental health.