

# Lancet Countdown Report on Health and Climate Change -**Heatwaves**

#### What is the issue?

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• The Lancet Countdown report on health and climate change was released recently.

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• Increased exposure to heatwaves needs a policy response, nationally and globally.

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## What are the highlights of the report?

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- It is a global report prepared by 27 leading academic institutions, the United Nations and inter-governmental agencies.
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- Globally, vulnerability to extremes of heat has steadily risen since 1990 in every region.

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- Nearly 157 million more people are exposed to heatwaves in 2017 as compared to the year 2000.
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- The average person experienced an additional 1.4 days of heatwaves per year over the same period.

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• India - Between 1901 and 2007, India's mean temperature increased by more than 0.5 degree Celsius.

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• India saw an increase of 40 million in the number of people exposed to heatwayes from 2012 to 2016.

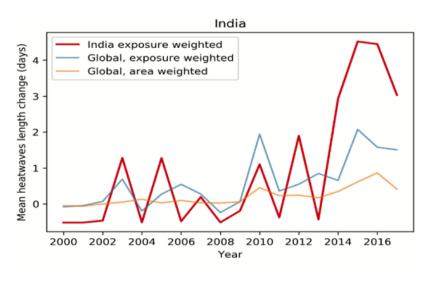
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- Average temperatures in India are projected to rise alarmingly.  $\ensuremath{\sc vn}$
- The world is bracing for an increase of around 2 degrees Celsius over the 21st century.

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- The northern, central and western India may witness further increase averaging 2.2 to 5.5 degrees by the end of the 21st century.  $\n$ 

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## What are the impacts?

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• **Health** - Heatwaves are associated with increased rates of heat stress and heat stroke, exacerbation of heart failure and acute kidney injury from dehydration.

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Children, the elderly and those with pre-existing morbidities are particularly vulnerable.

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- The report warns that rising temperatures will enable the dengue, virus, and malaria to spread farther and faster; true of some other infections as well.  $\n$
- Low and middle-income countries, India included, are likely to be worst affected by climate change.

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- This is exacerbated by weaker health systems and poorer infrastructure.  $\ensuremath{\sc n}$
- This may, additionally, lead to further widening of existing health and economic inequities.

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- **Economy** The report shows that 153 billion hours of labour were lost globally in 2017 due to heat.  $\n$
- $\bullet$  The impacts vary with different sectors, with agriculture being most vulnerable as compared to the industrial and services sector.  $\n$
- Between 2000 and 2017, labour hours lost in agriculture rose from about 40,000 million hours in 2000 to about 60,000 million hours in 2017.  $\n$
- Notably, India's agriculture economy makes up 18% of the country's GDP and employs nearly half the population.  $\n$
- So the above translates into substantial climate-related impacts on the country's workforce and economy.  $\n$
- It has worrying implications for rural employment and well-being of the farming-dependent population.  $\n$
- Overall, India lost nearly 75,000 million hours of labour in 2017, relative to about 43,000 million hours in 2000.

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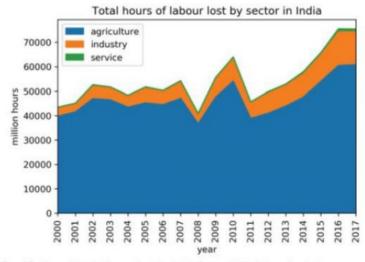


Figure 3: Total hours of labour lost by sector due to heat in India (Data provided by the Lancet Countdown)

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## What lies before India?

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• The report termed the surge in heatwaves in India as an imminent danger to health.

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• It thus called for urgent action to develop and implement local heat action plans.

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• Identifying local heat hot spots through appropriate tracking and modelling of meteorological data is crucial to tackle the crisis.

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- Infrastructure Ahmedabad Municipal Corporation (AMC) has adopted a heat action plan.
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- It necessitates measures such as building heat shelters, ensuring availability of water and removing neonatal ICU from the top floor of hospitals.  $\n$
- It has helped bring down the impact of heatwave of vulnerable population.  $\space{\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\space{1.5}\sp$
- Similar action plan should be adopted and developed by other states too.  $\slash n$
- Carrying out comprehensive city-level traffic surveys to guide urban infrastructure is also needed.  $\gamman{\cite{red}}\end{\cite{red}}$
- Promoting safe walking and cycling to reduce the emission load should be taken up.

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- **Emission** The lost hours of labour calls for the governments to make efforts to significantly curb greenhouse gas emissions.  $\n$
- A further reduction in the share of coal in the energy mix must form the cornerstone of national policy.  $\nlambda{n}$
- This could be through sustained support for renewable energy, particularly solar photovoltaics.

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• This must be matched by a shift away from use of fossil fuels for transport, and the induction of more electric vehicles.

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- Such a policy would yield the parallel benefit of improving air quality as well.  $\slash n$
- Notably, ambient air pollution led to the premature death of an estimated half a million people in India in 2015.

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• **Climate Plan** - India's approach to climate change adaptation should prepare for catastrophes with a well-considered plan to provide relief and rehabilitation.

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• E.g. the strong climate link to the excessive rain in Kerala and Cyclone Gaja in Tamil Nadu

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• The importance of funds for adaptation is underscored by Lancet 's finding that 99% of losses from climate-related events in low-income countries were not insured.

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- So a case could be made for climate funds under the Paris Agreement.  $\slash n$
- Such a claim has to be supported by a perspective plan that identifies vulnerable regions and communities.  $\n$
- It should also incorporate transparent systems for funds utilisation.  $\ensuremath{\sc n}$

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#### Source: Economic Times, The Hindu

