

## Kolkata, Karachi to face increased threat of heatwaves, warns IPCC report

Notebook: office

Created: 12-Oct-18 10:30 AM

URL: <https://www.downtoearth.org.in/news/climate-change/kolkata-karachi-to-face-increased-threat-of-heatwaves-w...>

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# Kolkata, Karachi to face increased threat of heatwaves, warns IPCC report

The report adds that megacities across the globe could become more heat-stressed by 2050

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By **DTE Staff**

Last Updated: Tuesday 09 October 2018



📷 The Howrah Bridge in Kolkata Credit: Getty Images

Kolkata, the capital of West Bengal in India, and Karachi, the capital of Sindh in Pakistan could see increased heat waves in the near future, a pattern that would be replicated across the rest of India and Pakistan respectively, the [IPCC Special Report](#) released on October 8, warned.

“In fact, even if global warming is restricted to below 2°C (degrees Celsius), taking into consideration ‘urban heat island effects’, there could be a

substantial increase in the occurrence of deadly heat waves in cities, with the impacts similar at 1.5°C and 2°C, but substantially larger than under the present climate. At +1.5°C, twice as many megacities as present (such as Lagos, Nigeria, and Shanghai, China) are likely to become heat stressed, potentially exposing more than 350 million more people to deadly heat stress by 2050. At +2°C warming, Karachi (Pakistan) and Kolkata (India) could expect annual conditions equivalent to their deadly 2015 heat waves,” the section, “Heat-waves, unprecedented heat and human health” on page 151 of the 246 page report read.

The warning is a sign that the crisis is acute. It was aptly demonstrated in 2015, [when an estimated 4,000 people in South Asia lost their lives to heat-related illnesses](#). Apart from climate change, rising number of vehicles, decreasing green cover, concretisation, loss of wetlands and air pollutants are causing the heat island effect across India and other countries in the region.

According to a [study](#) by the Indian Institute of Technology (IIT) Gandhinagar, the frequency of severe heat waves in India will increase 30-fold by 2100 under a 2°C warming scenario. Under a business-as-usual scenario, heat-wave frequency might increase 75-fold.

The warning for Kolkata has been delved into previously by environmental journalists, activists and authors. As per [one account](#), Kolkata is now facing more intense and more frequent storms, cyclones, river tides and floods. Its hot, muggy days are getting hotter and muggier. The report cites the destruction of Kolkata’s natural defences as the reason for the unpleasant changes that are occurring. “Many lakes and canals are filled with muck or built over altogether. An area of low-lying fields that once absorbed the runoff is now a suburb of highrises known as New Kolkata. The rapid extraction of groundwater is causing the landscape to sink,” the account reads.

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On the other side of the Subcontinent, the plight of the megapolis of Karachi has also been talked about. An [Op-Ed in leading](#)

[Pakistani daily, "Dawn" this year noted](#): "For a number of years now, development on the coast has centred on the reclamation of land where the elimination of groundwater is the magic recipe for the production of more real estate to be sold at high prices."



*(Sunset at Clifton Beach in Karachi, Pakistan Credit: Getty Images)*

It is not just coastal cities like Kolkata and Karachi. Delhi, a city thousands of miles from either the Bay of Bengal or the Arabian Sea is extremely heat-stressed. According to a recent [study](#) published in Springer Nature's Theoretical and Applied Climatology in October 2017, unbridled urbanisation in the Delhi-National Capital Region in the last five decades has led to rise in surface and air temperatures in the region. Besides, it has started having multiple effects on health of the citizens.

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