

DISADVANTAGED GROUPS

Urban poor more vulnerable to climate change, IIT-H study finds

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WHILE climate change affects everyone, the impact of rising temperatures can be felt more severely in urban areas because of the creation of heat islands and the lack of natural environments such as green spaces and water bodies.

According to a research conducted by IIT-Hyderabad, in collaboration with the Hyderabad Urban Lab, poor people living in the urban localities are more vulnerable to such climatic changes. The IIT-H research team, which has been

exploring such issues by focusing on the impact of and adaptations to rising temperatures among the urban poor in Hyderabad, found that adaptive capacity to rising temperatures are unevenly distributed with some neighbourhoods and social groups in better position than others to shield themselves from harmful thermal exposure.

Speaking to *TNIE*, Dr Aalok Khandekar, Assistant Professor Department of Liberal Arts and Adjunct Professor, Department of Climate Change, said: "The poor inhabit social and

spatial locations that make them more vulnerable to the impacts of climate change. For example, they might be forced to work in occupations or live in spaces that subject them to increased heat risks. They also can't afford or don't have reliable access to resources that might help them to protect themselves better from the impacts of climate change."

Loss of livelihood

Stating that climate change impacts the urban poor both direct-

ly and indirectly, he said: "For example, heat stress could result in new health condition or loss of livelihood. Extreme heat can also exacerbate pre-existing health conditions."

"Indirectly, climate change can act as a stressor that in turn has cascading effects. For example, water scarcity or electricity shortages are felt more acutely during summer months, which then can have health and other effects," he added.

Speaking specifically about

adaptive capacity, he said: "In relation to urban heat, we see a lot of everyday adaptations, including finding relatively shaded spots, seasonal dietary and clothing adjustments, and use of various evaporative cooling techniques to secure some cooling at the personal and the household level."

"Those who can afford these, make adjustments to their living spaces to provide better insulation and ventilation and use cooling appliances. It is important to note, however, that these are largely make-shift arrangements in the absence of

more reliable and formalised solutions that the urban poor typically do not have access to," he said.

"In a city like Hyderabad, which has such a prominent presence of urban water bodies, for example, we might conceive of them as 'cooling infrastructures'. Water bodies have a cooling effect overall which can be experienced over a certain radius from the lake-front and can serve as vibrant social spaces. Developing climate resilient cities in this way will enrich the quality of the urban fabric overall," he added.

