## One in three will live in dangerously hot areas by 2080

## If emissions are reduced enough to limit global warming, it will bring down the number of people affected to 90 mn in India

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A third of the global population will be living in dangerously hot conditions by 2080 if the world continues on its current trajectory and entire countries in West Africa and the Persian Gulf will fall into the extreme heat zone, a new study has found.

Average global temperatures are on track to rise 2.7°C in the last two decades of the century, according to researchers from Exeter University's Global Systems Institute. They defined dangerously hot areas, or areas falling

outside the so-called human niche, as having a mean annual temperature above 29°C.

"The lifetime emissions of 3.5 global average citizens today (or 1.2 average US citizens) expose one future person to unprecedented heat by end-of-century," the researchers wrote in the study Quantifying the Human Cost of Global Warming.

The higher temperatures will lead to more heat-related deaths, reduce productivity and result in lower crop yields, increased migration and the spread of infectious diseases.

The land masses of Burkina Faso, Mali, Qatar, Aruba, and the United Arab Emirates will almost entirely fall outside the human niche, the study found.

In terms of the absolute number of people affected, India, Nigeria and Indonesia will suffer the worst impact, with 600 million, 300 million and 100 million inhabitants respectively falling out of the niche later this century.

The ability of countries and their citizens to with stand extreme heat will largely depend on their wealth.

"It depends on your resources to protect yourself in the prevailing climate and that depends on how well off you are," Timothy Lenton, director of the Global Systems Institute, said in an interview.

The UAE and Qatar are among the world's richest countries per capita while Burkina Faso and Mali are among the poorest.

If the world reduces greenhouse gas emissions enough to limit global warming to 1.5°C, it would reduce the number of people affected by dangerous heat to 90 million in India, 40 million in Nigeria and 5 million in Indonesia.