Dangerous heatwaves in West Africa exacerbated by climate change

Mark Wilson 4 April 2024

A heatwave in the West African region of Guinea has reached extraordinary levels in the early months of 2024, affecting millions of people living in Nigeria, Côte d'Ivoire, Sierra Leone, Togo, Liberia, Ghana, Benin and Guinea-Bissau.

The heatwave has produced dangerously high Heat Index (HI) levels, which calculate the combined effects of actual temperatures with relative humidity. High humidity increases the risk of heat-related morbidity because it reduces the body's ability to cool itself down through sweat. It can make "40C feel like 50C."

Compounding the danger is that this event has occurred early in the year. Heat warnings for the Guinea region are not often issued to the population until March-April, when the hottest season usually occurs.

Public health experts from Nigeria have warned that these hot humid conditions increase the risk of death and serious adverse health outcomes such as strokes and respiratory issues, especially for outdoor workers.

Systematic under-reporting of the effects of such a heatwave makes it difficult to assess the full impact on people's lives. One of the authors of a World Weather Attribution (WWA) study of the extreme heat event, Maja Vahlberg, described heatwaves as a "silent killer." They do not leave an "evident trail of destruction" but they are "incredibly deadly," especially for vulnerable people with existing chronic health conditions.

In some media reports, people report that the heat has made it "very difficult to work." They "feel like there's no air," faint from the heat and feel "dehydrated all day." Doctors reported increases in patients "presenting for heat-related illness" in recent weeks.

One Nigerian man said enduring this heat without air

conditioning or fans was "like being trapped in an oven."

The livelihoods of workers as well as their health is being impacted. An Uber driver in Lagos who has been forced to bear the heat without air conditioning in his car to save on fuel costs said: "I am concerned about my health, but I am willing to go to any length to pay off my car and put food on the table".

An Ivory Coast cocoa farmer described the heat as "unbearable" and worried that the heat and corresponding lack of soil moisture would damage the mid-year harvest.

The link between heatwaves and increased mortality/morbidity has been well substantiated scientifically. A 2022 systematic review of 32 studies found that "cardiopulmonary-related diseases" were the main causes of heat-related impacts globally, especially affecting children, the elderly, and people with underlying cardiovascular or respiratory conditions.

These serious and debilitating impacts are the result of an increasingly warming world, caused by decades of fossil fuel emissions from corporations with no regard for the impact on millions of ordinary people around the world.

The WSWS recently reported on record global temperatures observed by the Copernicus Climate Change Service. 2023 was the first year in recorded human history of average global temperatures exceeding 1.5C above pre-industrial levels. January and February of 2024 were also above this threshold.

However, it is not immediately clear if a specific extreme weather event can be linked to climate change. To determine this, researchers in the field turn to the peer-reviewed methodology of attribution science.

Previous studies by WWA, an international team of climate scientists, demonstrated that for a number of extreme events, climate change has been largely responsible for their exceptionality, such as the ongoing Amazon River Basin drought.

A new report published by the WWA on March 21 concluded that the humid heat in southern West Africa was about 4°C hotter due to human-induced climate change.

The report found that not only the severity but also the frequency of such an event is exacerbated by climate change. The analysis found that on the lower end of estimates, this type of heatwave has become at least 10 times more likely because of climate change.

The study warned that if the Earth warmed an additional 0.8C, these events could become a further 3 to 10 times more frequent and a further 2.3 C hotter. That would expose the population of West Africa to dangerous levels of humid heat every two years.

The report outlined some strategies and adaptation measures to combat these rising dangers. First, better reporting was necessary to measure how heatwaves affect the population. The impacts of heatwaves in southern West Africa were severely undercounted, which "does not mean there were no impacts but suggests limited awareness about heat risks."

The researchers recommended that to limit the magnitude of death and poor health from extreme heat events, there should be a focused effort to improve the monitoring and research on the effects they have on human health.

Better adaptation was also needed, especially in impoverished regions where people have limited access to basic needs like water and energy. (In Nigeria, for example, at least half of its 200 million people have no access to a stable energy source to power their homes.)

As temperatures rise, consistent access to energy will be even more important for basic services like air conditioning to keep people from overheating. Solar energy has been identified by researchers as the best solution to Nigeria's energy crisis.

Such a commitment to renewable energy, however, would require significant up-front financial resources. The WWA study noted that "rich countries haven't yet met the promises they have made to help developing countries become more resilient to the growing risks of climate change."

Imperialist countries such as the United States certainly have the money to pour into military spending

to support genocides and build up nuclear arsenals.

As well as climate adaptation, additional warming must be limited by drastically cutting greenhouse gas emissions. The major capitalist powers, driven by insatiable corporate profit demands, are those most responsible for these emissions, and for the failure of any global agreements to slash them.



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