



REVIEW

CLIMATE CHANGE AND HEALTH: AFRICA'S OTHER CRISIS

The African climate is experiencing warming at a faster rate than the global average, generating a rise in infectious diseases, food insecurity, internal migration and inequalities. Strengthening health systems and adaptation strategies is the first line of defense in tackling these worsening social and health crises.

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Climate change is rapidly and drastically transforming the African climate. The average temperature on the continent rose by **+0.3°C** per decade between 1991 and 2023¹, a rate above the global average. Africa is responsible for less than 10% of global greenhouse gas emissions², yet many of its countries – including Uganda – are disproportionately affected by some of the worst consequences of climate change. The Intergovernmental Panel on Climate Change (IPCC) reports that extreme events such as heat waves, droughts and floods are becoming more frequent and intense due to climate change¹, severely impacting populations.

CLIMATE INEQUALITY

Climate risk is not evenly distributed. It depends not only on the intensity of events, but also on the capacity of those affected to prepare for, respond to, and recover from them, which is heavily influenced by income level and access to essential services. Because poor communities are often excluded from safety nets and lack resilient infrastructure, they tend to have limited adaptive capacity to the impacts of climate change.

Among the continent's most vulnerable areas are the Great Lakes region, the Sahel region and the Horn of Africa.¹ In Uganda, the average temperature has climbed by about 1.3°C since 1961, and 2023 – the country's warmest year on record – saw significant rainfall anomalies, with some areas affected by prolonged droughts and others by devastating floods. The climate crisis thus engenders **social and health crises** as well.

RURAL AREAS UNDER PRESSURE

Because it relies almost entirely on seasonal rains, agriculture is among the most heavily-impacted sectors in Uganda.³ In 2023 production of cereals such as sorghum and millet plummeted. The number of Ugandans facing acute food **insecurity** increased by approximately 30% between 2012 and 2022, and today, one-third of the country's under-five children are stunted due to malnutrition. Infectious diseases (ID) are another problem: in Uganda's mountainous areas, record temperatures and rising humidity have fostered the

proliferation of mosquitoes carrying malaria, dengue, and yellow fever.⁴ In addition, rural communities with inadequate access to safe drinking water are facing cholera outbreaks.⁴ These factors are pushing ever greater numbers of rural people to move to urban areas.

URBAN CRISIS AND PUBLIC HEALTH

Over the last two decades, internal migration from rural to urban areas in Uganda has grown by 50%, leading to ever larger slums with very limited access to healthcare, drinking water and sanitation.

Cities are also being impacted by extreme weather events that severely damage infrastructure including roads, schools and hospitals, hindering people's access to essential services. Moreover, flooding contaminates water sources, heightening the risk of cholera, diarrhea and typhoid outbreaks.

Thus Ugandan cities – which are both especially **vulnerable** and **unprepared** to cope with these phenomena – are under mounting pressure, with health systems overwhelmed by a rise in ID and malnutrition. The problem is even more severe among climate-displaced people; Kampala and other cities have seen major upsurges in cases of diarrhea, and cholera outbreaks have more than doubled over the last 15 years.

STRENGTHENING HEALTH SYSTEMS

It is thus imperative to strengthen health systems and make them climate-resilient. According to the WHO and IPCC, this requires infrastructure able to withstand extreme events, operators trained in climate risk management, surveillance systems integrating health and climate data, and access to safe water and sanitation.¹

Uganda's Climate Change Health National Adaptation Plan 2025-2030 supported by partners such as the Rockefeller Foundation⁵, incorporates some of these recommendations. Adopting a One Health approach that **integrates** health, agriculture, the environment and urbanization is essential to address the climate crisis effectively, reducing inequalities and protecting not just vulnerable communities but the very future of the region.

NOTES

¹ IPCC, *Sixth Assessment Report – Working Group II: Impacts, Adaptation and Vulnerability*, Chapter 9 – Africa, 2022. <https://www.ipcc.ch/report/ar6/wg2/>

² WMO, *Africa suffers disproportionately from climate change*, <https://wmo.int/media/news/africa-suffers-disproportionately-from-climate-change>

³ FAO, *Uganda Country Brief – Food Security and Nutrition*, <https://www.fao.org/countryprofiles/index/en/?iso3=UGA>

⁴ WHO, *Climate Change and Health Country Profile – Uganda* <https://www.afro.who.int/countries/uganda>

⁵ Ministry of Health (2024), *Climate Change Health – National Adaptation Plan (H-NAP) 2025-2030*, Government of Uganda <https://www.rockefellerfoundation.org/wp-content/uploads/2024/08/Health-National-Adaptation-Plan-H-NAP-2025-2030-Final.pdf>