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## The relationship between climate change, health, and the humanitarian response



The climate emergency is a humanitarian and health crisis. Extreme weather events, heat stress, declining air quality, changes in water quality and quantity, declining food security and safety, and changes in vector distribution and ecology threaten all of us.<sup>1</sup> As the planet heats, climate risks are increasingly complex, frequent, and unpredictable, compounding existing vulnerabilities and inequities within populations and causing emergencies that cascade across different systems and sectors.<sup>2</sup> Humanitarian agencies are now seeing how these problems are putting millions of people across the world at immediate risk of famine and death.<sup>3</sup>

An estimated 274 million people are now in need of humanitarian assistance—which has increased from 235 million in 2021.<sup>4</sup> As the 2022 *Lancet* Countdown on health and climate change<sup>5</sup> has identified, humanitarian needs will increase exponentially as poverty and food insecurity rise, the global supply chain and energy crises intensify, sociopolitical instability worsens, the collateral effects of COVID-19 become more apparent, and the intensity and frequency of climate-related events increase. These increasing needs occur within a shrinking humanitarian space characterised by underfunding and high rates of violence against humanitarian workers.<sup>4</sup>

Climate change is a threat multiplier, increasing the risk of climate-related crises, conflict, and displacement.<sup>6</sup> Climate change is also a major driver of food insecurity, which has been increasing globally for the last 6 years;<sup>7</sup> food insecurity is, in turn, a known catalyst for democratic breakdown and conflict.<sup>8</sup> Worsening environmental conditions also lead to population displacement. In 2020, over 30 million people were displaced due to climate-related factors.<sup>6</sup>

Médecins Sans Frontières is a medical humanitarian organisation providing health care to people affected by war, epidemics, disasters, and social exclusion. We witness first-hand the impacts of climate change on communities and see two emerging trends.

First, we are seeing cascading crises. In Somalia, drought, conflict, and political instability have coalesced to create catastrophic levels of food insecurity and malnutrition.<sup>4</sup> In Mexico, we are assisting individuals and families displaced from their homes by violence,

sociopolitical instability, worsening poverty, and extreme weather events. Our emergency teams are also working in the Middle East, where record-breaking temperatures, compounded by inequitable access to energy, are causing heat-related deaths. In the winter, fuel poverty—exacerbated by the acute energy crisis and a persistent dependence on fossil fuels—will mean the same teams will respond to cold-related illnesses.

Second, we are seeing gross inequities. The burden of climate-related health risks is inequitably and unequally distributed.<sup>1,9</sup> Those low-income countries which are the most exposed to climate-related hazards and have contributed the least to the climate crisis are the worst affected due to structural factors such as poverty, historic and ongoing colonialism, and other forms of marginalisation.<sup>9</sup> These factors intersect to increase population vulnerability to climate-sensitive health risks and reduce the ability of communities to prepare, respond, and recover. Within communities themselves, the people most affected are people already facing barriers to accessing care, such as women, children, older people, and people with disabilities.<sup>9</sup> For example, the Democratic Republic of the Congo has the world's lowest carbon emissions per capita;<sup>10</sup> it is also one of the five

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poorest countries in the world despite possessing a wealth of natural resources, including cobalt, copper, and arable land.<sup>11</sup> Since 2018, the Democratic Republic of the Congo has struggled to manage multiple (often concurrent) threats to public health including three Ebola outbreaks, recurrent outbreaks of measles, endemic cholera, poliomyelitis, and COVID-19 outbreaks. These public health emergencies, alongside massive displacement from conflict, have left 16 million children in need of humanitarian aid.<sup>4</sup> Climate change is both increasing the likelihood and the severity of these threats and simultaneously complicating their containment. These trends have a substantial impact on the infrastructure and supply chains that are crucial to the humanitarian response. In South Sudan, for the third consecutive year, unprecedented flooding has destroyed roads, contaminated water, decimated food supplies, and compromised access to humanitarian assistance for hundreds of thousands of people.<sup>4</sup> Infectious disease outbreaks are expected to become more common as climate change and environmental degradation continue, making disease-control efforts increasingly difficult. Humanitarian workers are also at risk; many live and work in communities at heightened risk of climate-related harms. In addition to providing immediate relief to those affected by crises, humanitarian workers struggle to protect themselves and their communities.

Humanitarian responses must adapt. Saving lives in the face of the climate crisis requires urgent, just, and radical action. The humanitarian sector must deliver flexible responses, embedding high levels of uncertainty into their operating environments, and working to reduce their own environmental footprints. Anticipatory action (including emergency warning and preparedness for multihazard events) should be implemented to reduce the effects and strengthen the management of complex emergencies. These actions have previously been limited by barriers such as: poor coordination between national responses and local communities, a focus on sector (not system) adaptation, funding that is unpredictable and difficult to administer, and limitations in current understandings of how climate-related risks affect health systems.<sup>12</sup> Transdisciplinary collaborations are essential to stem and respond to the cascading effects of crises across societies. Local communities must be engaged in the implementation and tailoring of their own adaptation and mitigation efforts.

Governments that are the most responsible for the climate crisis must bear the biggest burden of repair. Affected communities need investments for adaptation and mitigation. Maladaptive responses (ie, those that reduce climate-related risks in the short term but lead to increased risk in the long term) that harm the people most at risk must be avoided. Adaptation activities with health co-benefits (such as water management processes that prioritise equity of access within communities) must be robustly funded, equipping health-care systems to resist climate-related threats. There must be loss and damage funding for the full scope of damage, including downstream health effects.

Ultimately, the humanitarian community must recognise that adaptations are limited and resilience is finite. Climate mitigation must be an utmost priority to ensure a liveable future. Our global interconnectedness leaves humankind uniquely vulnerable to the cascading and compounding impacts of the climate crisis, yet it also offers us transformative new ways to address its threats.

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