

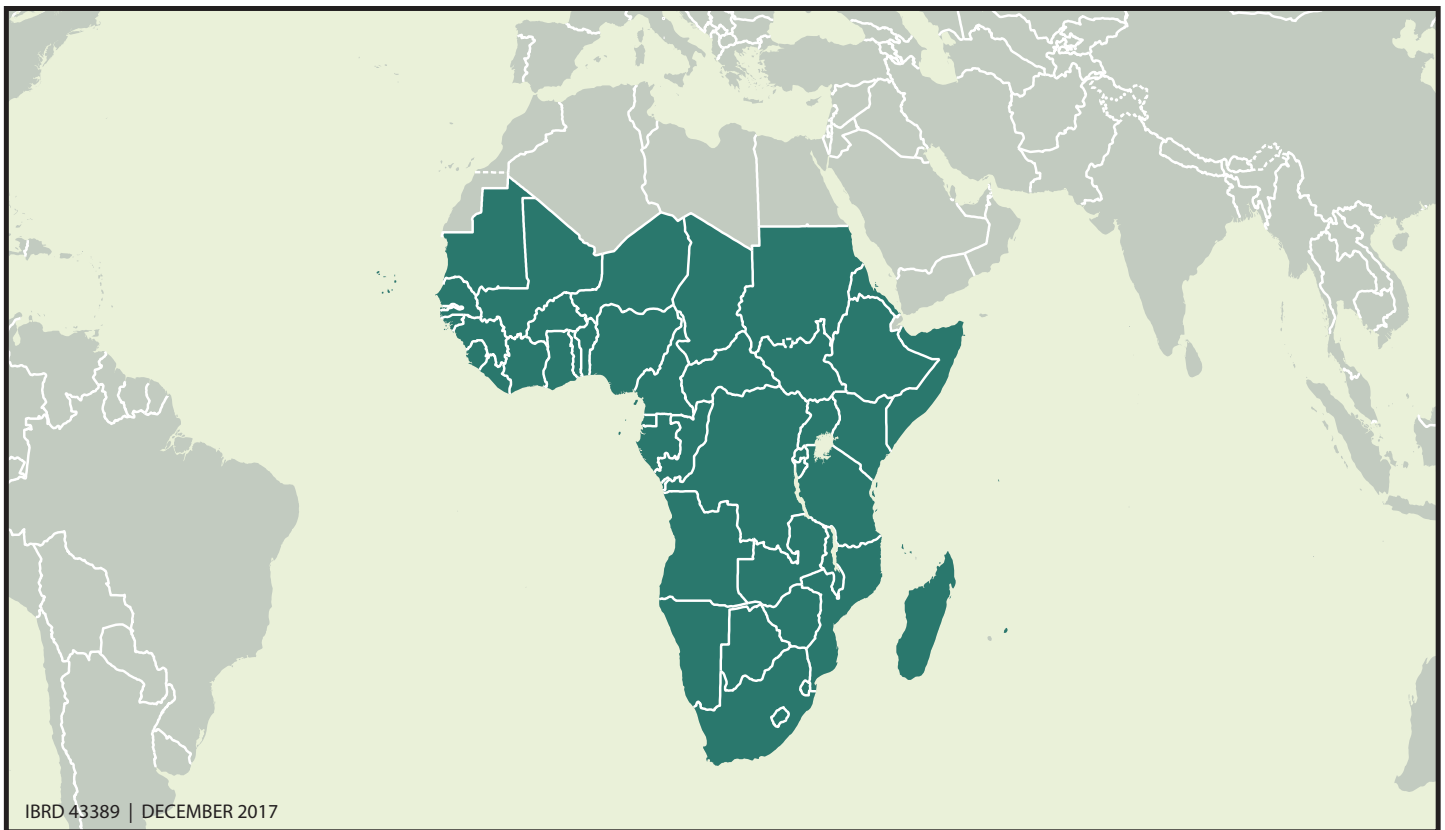


CLIMATE CHANGE AND HEALTH in Sub-Saharan Africa

Climate change is a risk multiplier that threatens to unravel decades of development gains. **Among the most critical risks to humans is the impact of climate change on health.** Disaster-related health impacts are likely to increase with the intensification of cyclones and floods; **heat stress** will worsen as high temperatures become more common and water scarcity increases; **malnutrition**, especially in children, is projected to become more prevalent with an increase in droughts and where livelihoods are threatened by coastal erosion or warming seas; **vector and water-borne diseases** will expand in range as conditions favor mosquitoes, flies and other pathogens.

These threats are greatest in regions where the population is most dense, most vulnerable, and least equipped to adapt, pushing more people into poverty. Sub-Saharan countries, which comprise 48 of some of the world's poorest countries, are at particular risk of negative health impacts, given the climate sensitivity of the region and countries' limited ability to adapt to climate shocks.

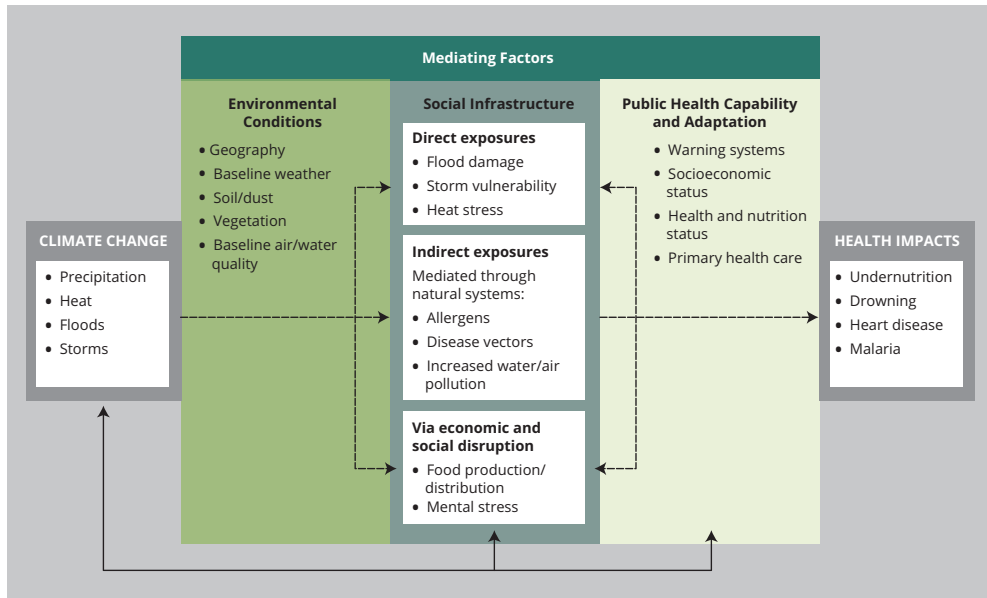
Map of Sub-Saharan Countries by Climate and Health Hotspot



88% (42 of 48) of Sub-Saharan countries rank amongst the most at-risk for negative health outcomes associated with climate change.

There are many ways to categorize the impacts of climate change on human and environmental health. The IPCC suggests that health is impacted by climate in three ways: directly, indirectly and via social or economic disruption (Figure 1).

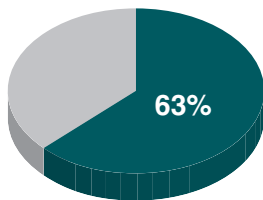
FIGURE 1 Framework Depicting Health Impacts of Climate Change



Source: Smith et al. 2014. Climate Change 2014: Impacts, Adaptation, and Vulnerability IPCC. WG11AR5.

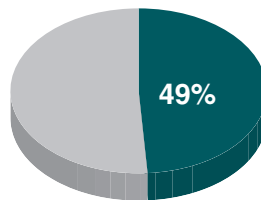
The World Bank Group has established an [Approach and Action Plan for Climate Change and Health](#), delineating targets, geographies, and approaches to mainstreaming climate-smart healthcare to prevent, prepare, and respond to these threats. In the new geographic analysis, countries that are already experiencing—or are likely to experience—a changed burden of disease due to climate change or pollution were mapped.

Countries Most Vulnerable to Health Impacts of Climate Change



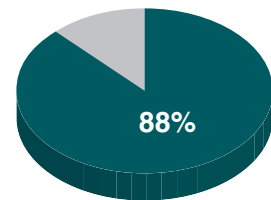
Of the 60 countries identified as most vulnerable to the health impacts of climate change, 38 are in Sub-Saharan Africa (63%). Burundi, Eritrea, Ethiopia, Somalia, Niger, Gabon, and Madagascar are at particularly high risk.

Countries Most Vulnerable to Health Impacts of Air Pollution



Air pollution that is harmful to humans is often co-emitted with greenhouse gases, threatening health while contributing to climate change. Using Global Burden of Disease data for illnesses caused by ambient and/or household air pollution, **81 countries were identified as pollution hotspots. Of these, 40 are in Sub-Saharan Africa.**

Sub-Saharan Countries Highly Vulnerable to Health Impacts of Climate Change or Air Pollution



42 of 48 (88%) Sub-Saharan African countries are amongst the most at-risk countries for negative health outcomes associated with climate change (for either health impacts caused by climate change or emissions, or both). This significant majority underscores an absolute need for further engagement on health and climate and implies a need for prioritization in future climate and health investment.

For more information, please refer to other reports in the World Bank “Investing in Climate Change and Health” series.

1. World Bank Group, 2017. Geographic Hotspots for World Bank Action on Climate Change and Health
2. World Bank Group, 2017. Climate Change and Health Approach and Action Plan
3. World Bank Group, 2017. Climate Smart Health Care: Low Carbon and Resilience Strategies for the Health Sector