REGIONAL CLIMATE CHANGE PROGRAMME
SOUTHERN AFRICA

RESEARCH BRIEF 8

Climate change impacts and adaptation: human health

Climate change is already having a significant impact on southern Africa, with prolonged drying interspersed with more intense precipitation and altered seasonal patterns. These changes will add to the social, economic and environmental stresses that adversely impact on human health across the region.

Climate Change and Health

Climate change is not just an environmental issue. It is also a *development issue*, particularly with regard to human health, because it will affect, the most basic of human needs — good food, water and air quality as well as individual safety, food, air, water and individual safety. The health impacts of climate change will be borne primarily by low-income, poorly resourced and geographically vulnerable populations (IPCC, 2007), with sub-Saharan Africa identified as especially vulnerable.

The population's vulnerability stems from:

- Widespread poverty;
- High existing burdens of disease. The health sector in southern Africa has little capacity and is strained by health priorities such as the HIV pandemic and malaria. The region is currently home to 11.3 million people living with HIV/AIDS (PLWHA), an increase of nearly one-third (31 percent) compared to the 8.6 million one decade earlier (USAID, 2011). 75% of southern Africa's population is at risk of contracting malaria (WHO, 2010). Serious emerging health problems that will place very significant extra strains on health system resources include the crises of multi-drug tuberculosis and extensively drug resistant tuberculosis (MDRTB and XDRTB respectively);
- Water stress and declining quantity and quality of drinking water, which are likely to increase the incidence of water- and vector-borne diseases;
- Threatened food security and increased malnutrition: 95 million people, or more than 40% of the population are undernourished in SADC (FAO, 2011) and it is expected that the region will suffer an overall decline in agricultural production (de Wit and Midgley, 2012);
- Lack of supporting economic and protective infrastructure ;
- Exposure to the consequences of extreme weather and disasters, particularly floods and powerful tropical storms;
- The SADC health sector is not sufficiently prepared for the adverse public health impacts of climate change. Climate sensitive diseases such as malaria and cholera, and the health effects of malnutrition, are likely to be aggravated. Climate change risks related to health include reductions in the availability of food and fresh water, exposure to temperature and precipitation extremes, disrupted health services following disasters, and enhanced conditions for the transmission of infectious diseases. The most important impacts of climate change on human health in southern Africa are likely to be those related to nutrition and water. Extreme weather will also add to the the burden of acute and chronic diseases and injury. Lack of access to adequate health care and resources underpins the current vulnerability of people, especially migrants from rural to informal urban settlements in hazardous areas, replacing one form of climate vulnerability with another.

"The health sector must add its voice — loud and clear… we must fight to place health issues at the center of the climate agenda. We have compelling reasons for doing so. Climate change will affect, in profoundly adverse ways, some of the most fundamental determinants of health: food, air, water." Margaret Chan, Director General, World Health Organization, 2007.

Policy recommendations from WHO

In 2009, the World Health Assembly endorsed a new WHO work plan on climate change and health. The key recommendations are pertinent to southern Africa. These include:

- **Advocacy:** to raise awareness that climate change is a fundamental threat to human health.
- **Partnerships:** to coordinate with partner agencies within the UN system, and ensure that health is properly represented in the climate change agenda.
- **Science and evidence:** to coordinate reviews of the scientific evidence on the links between climate change and health, and develop a global research agenda.
- **Health system strengthening:** to assist countries to assess their health vulnerabilities and build capacity to reduce health vulnerability to climate change

Weak healthcare systems in many southern African countries are the biggest obstacle to meeting the Millennium Development Goals for health.

Policy recommendations for the region

The health related Millennium Development Goals (MDGs) of providing access to clean and affordable water; food; health services; and energy services for the poor, have fallen short of set targets and will be further compromised by climate change. Weak public healthcare systems in many southern African countries are the biggest reported obstacle to achieving the MDGs for health and therefore point to a key challenge to building resilience and adaptation interventions for health in response to climate change.

Health systems strengthening (HSS) refers to an approach which is increasingly prominent in health development to deliver broad improvement in health services. It is critical that climate change should now be factored in to HSS. The WHO and UNEP are promoting the deployment of an Essential Public Health Package to Enhance Resilience to Climate Change in Developing Countries. The package provides a set of interventions for 'climate-resilient' HSS in least developed countries.

These include:

- comprehensive assessment of the risks posed by climate variability and change in public health and health systems;
- strengthening country capacities for the delivery of preventive and curative interventions for the effective management of identified climate-sensitive public health concerns;
- preparedness for and response to public health consequences of extreme weather events including population displacement;
- research on local-level health effects of climate change and on locally appropriate adaptation measures;
- an integrated environment and health surveillance system, including meteorological surveillance; and
- intersectoral coordination and health representation in national and international and climate policy forums.

A complex web of proximal and distal drivers influences human health. Responses need to be prioritized and carefully evaluated on the basis of the best available evidence to meet 'no regret' criteria. Adaptation strategies must produce health benefits now, and increase resilience to the adverse health effects of climate change in future

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