

Africa is particularly vulnerable to the expected impacts of global warming

Africa is the continent most vulnerable to the impacts of climate change. Already experiencing temperature increases of approximately 0.7°C over much of the continent, and with predictions that temperatures will rise further, Africa is facing a wide range of impacts, including increased drought and floods. In the near future, climate change will contribute to decreases in food production, floods and inundation of its coastal zones and deltas, spread of waterborne diseases and risk of malaria, and changes in natural ecosystems and loss of biodiversity.

- According to the 2001 Third Assessment Report of the WMO/UNEP Intergovernmental Panel on Climate Change (IPCC), the frequency and intensity of drought seems to have already worsened in parts of Africa. Total available water in the large basins of the Niger, Lake Chad and Senegal has decreased by 40–60 per cent and many climate models project declining mean precipitation in the already-dry regions of southern Africa.
- Africa is not a significant source of greenhouse gas emissions. Africa accounts for only 2–3 per cent of the world's carbon dioxide emissions from energy and industrial sources. According to the World Resources Institute, Africa's per capita emissions of carbon dioxide in the year 2000 were 0.8 metric tons per person, compared with a global figure of 3.9 tons per person. Nevertheless, African countries can and are pursuing win-win policies that can minimize their greenhouse emissions while tackling urban pollution (with its high health costs) and introducing solar energy and other innovative and cost-effective technologies.
- Climate change threatens sustainable development. Settlements in regions that are today water-deficient including much of North Africa can be expected to face still-higher demands for water as the climate warms. Beset by poverty, AIDS and other challenges, African countries may lack the resources to address these emerging and expected climate change impacts.
- African governments work through a number of regional and global institutions to strengthen their response to climate change. They coordinate their regional positions and national policies on climate change through the African Ministerial Conference on the Environment (AMCEN), whose secretariat is provided by the Nairobi-based UN Environment Programme. Another important regional forum is the New Partnership for Africa's Development (NEPAD), which promotes projects and action plans relevant to climate change. At the global level, African countries can tap a variety of funds and institutions for support, including the Special Climate Change Fund and the Least Developed Country Fund created under the United Nations Framework Convention on Climate Change (UNFCCC), the Adaptation Fund under the Kyoto Protocol, the Global Environment Facility, the World Bank, and other UN and intergovernmental organizations and programmes. African countries can also participate in the Clean Development Mechanism (CDM), an innovative market-based instrument of the Kyoto Protocol that finances sustainable development projects in developing countries, which reduce greenhouse gas emissions.

- A number of adaptation projects have been started in Africa to address a range of climate change impacts. These include projects on incorporating climate change in water resources management in Tanzanian, improving food security in Mozambique, and coping with coastal flooding and drought in East and Southern Africa.
- UN agencies have embarked on a wide array of projects throughout the continent to improve energy efficiency that reduce greenhouse gas emissions, such as through the solar power, hydropower, alternative fuels and sustainable construction.
- Observing and monitoring Africa's weather and climate is vital to understanding global trends. According to the World Meteorological Organization, greater investment is needed in Africa's meteorological and hydrological services and weather tracking stations, both to ensure complete global coverage of weather and climate and to provide local data to plan for climate risks. Other regional indicators of climate change that need to be monitored include the shrinking of glaciers on Mount Kilimanjaro, Africa's highest peak, from an estimated 12 sq. km. in 1900 to some 2 sq. km. today. The IPCC's Fourth Assessment Report, to be released in 2007, will provide a more detailed review than ever before of how the African region (and other regions) will be affected by climate change.
- This is the first time that the Parties to the United Nations Climate Change Convention are meeting in sub-Saharan Africa. The conference takes place in Nairobi from 6 to 17 November.



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