

# Strategies to Counter Climate-Related Threats to Kenya's Economy

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*In Kenya, as in many other African countries, economic survival depends on vigorous action to address climate-linked environmental conditions, which range from severe drought to flooding. Odingo examines some of the problems and suggests remedies.*



Richard Odingo at a November 2007 IPCC plenary session.

Like many small African countries, Kenya is vulnerable to the impacts of climate variability in the short term and to climate change in the long term. Virtually all sectors of the Kenyan economy are vulnerable to climate change. The energy sector is over-reliant on hydropower for the modern sector and biomass for the rural sector. Agriculture and food production are plagued by frequent, climate-linked food insecurity crises, and the water sector faces serious shortages in rural and

urban areas. Early-warning systems are in place, but the lack of timely response has led to frequent problems: crises in energy supply, marked by power rationing; famines leading to international appeals for food aid; and rural insecurity because of inadequate water and grazing for nomadic pastoralist populations. Consequently, the government has always resorted to crisis management to respond to climatic threats in these critical sectors. A bad drought and food shortage associated with El Niño-linked high rainfall accompanied by flooding, such as occurred in 1997-1998, often leads to a fall in the gross domestic product by up to 20 percent in affected years. Such obvious vulnerability calls for serious planning efforts to forestall drought and flood-induced disasters, but this has not happened.

The greatest concern is that over the years, despite the availability of climate information, including early warning provided by USAID's (U.S. Agency for International Development's) FEWSNET, the economic planners have been slow to recognize the dangers posed and the need to shift gears away from traditional crisis management. The most telling evidence of this reluctance to plan with climate change in mind can be seen from the economic development planning paper Vision 2030, wherein climate change has been given short shrift and virtually ignored. Similarly, agricultural planners are yet to advance beyond responding to information about annual rainfall variability and start thinking of the impacts of slowly advancing climate change. Climate change and global warming are mentioned as future challenges to the economy but not factored in the 2030 scenarios.

Yet according to the Fourth Assessment Report issued by the IPCC in 2007, by 2030 the first strains of global warming will already be felt in most sub-Saharan African countries. Kenya and most countries in the Great Horn of Africa are highly sensitive to climate change. Under the ravages of climate variability and climate change, it will be well-nigh impossible to maintain a sustained economic growth of 10 percent per annum over 25 years,



Children collect dirty water from this drying river in Nyariginu village, Kenya. A prolonged dry spell wiped out 2009 harvests throughout the country, severely compromising food security.

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as projected in Kenya's Vision 2030. Kenya depends on hydropower for electricity, yet hydropower is extremely vulnerable to climate fluctuations. As rivers dry up because of drought and glaciers disappear on Mt. Kenya, water for hydropower production will no longer be guaranteed. Another major worry is the drop in agricultural yields attributable to droughts. As warming accelerates, crisis conditions will arise. Water stress will increase geometrically in most arid and semi-arid areas.

Government is not serious enough in addressing the consequences of climate change — or, indeed, factoring climate change impacts in the development process. Hence, food security is threatened, as are the prospects for self-sufficient food production. The economy is always buffeted by climatic considerations, and the nation has yet to graduate to carefully calculated fallback adaptation action plans. Kenya is considered a leader among the developing economies of sub-Saharan Africa, but extensive production of tea and coffee for export has come at the expense of food production; self-sufficiency in food-related crops and livestock production have been neglected.

The current drought in Kenya, the second in two years, is a small symptom of what is clearly one of the worst on record. More than 4 million persons at risk

from food shortage is an indication of the vulnerability of the food production system. The drought has been compounded by acute water shortages for agricultural and urban populations and for livestock, which in addition have no grazing. Livestock mortality is at its highest in the last 20 years, and economic growth is bound to be depressed down to 2 percent or less.

Kenya needs the developed world to help with improved agricultural planning and energy development that relies less on hydropower and more on renewable sources. More sober economic planning and adequate funding to help agricultural and pastoral communities weather bad droughts are necessary. Safety nets for food, agriculture, and livestock should be promoted. Looking to food imports as a way out is unwise. The economic importance of climate change must be factored into all development and financial planning.

Water requires urgent attention. Investment in water harvesting at all levels can provide better environmental

management to stop deforestation and devegetation, which will slow down the progress of climate change. In the international arena, Kenya can benefit by working with other nations. Technology transfer and adequate funding at national and international levels to help reduce

vulnerability to climate change can make adaptation a working reality. Making pastoral areas more productive and integrating pastoral populations more fully into the national economy will strengthen self-sufficiency. In good years Kenya has the capacity to produce enough food for its population, now over 35 million. As time passes, the challenges posed by climate change will be harder to bear. There is no shortcut to finding solutions to all these problems other than sound economic planning that gives governments alternative ways of responding to the climate crisis. ■

*The opinions expressed in this article do not necessarily reflect the views or policies of the U.S. government.*