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Book Part — Published Version
Africa and climate change: Can Africa manage on its own?

Provided in Cooperation with:

Kiel Institute for the World Economy – Leibniz Center for Research on Global Economic Challenges

Suggested Citation: Wiebelt, Manfred (2011): Africa and climate change: Can Africa manage on its own?, In: Natalia Trofimenko (Ed.): Climate Change: Current Issues, Kiel Institute for the World Economy, Kiel, pp. 22-23

This Version is available at: https://hdl.handle.net/10419/60985

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AFRICA AND CLIMATE CHANGE: CAN AFRICA MANAGE ON ITS OWN?

Africa, ironically the smallest offender in terms of CO₂ emissions, is predicted to be the region that will be the worst affected by global warming and climate change. And, unlike some other regions with their concerns about the more or less distant future, Africa has already experienced the detrimental effects of climate change. The Sahel droughts in 1970s and 1980s killed over a million of people in West Africa and resulted in the loss of valuable grassland, savanna, and other resources crucial for the livelihoods of the people. Cyclones that hit Mozambique in 2000 displaced 500,000 people and left 950,000 people dependent on humanitarian assistance. The 2002-2003 drought left an estimated 14 million people in need of food aid. A flood in Uganda in 2007 left 400 thousand people homeless, diminished food supplies, and displaced the wildlife in the area. Such occurrences can only be expected to increase, both in frequency and in intensity, as the world becomes warmer. Will Africa be able to handle climate-related disasters on its own?



Manfred Wiebelt

Africa is expected to be hit by climate change on multiple fronts. The most visible consequences of climate change - more frequent and more violent natural disasters, such as droughts, floods, landslides, and earthquakes - combine with Africa's dependence of rain-fed agriculture, fast growing population, poverty and poor governance to affect more than the economic livelihoods of its people. By redrawing the maps of water availability, food security, prevalence of diseases like malaria, cholera and typhoid, and flows of forced migration, climate change has the potential of raising tensions and triggering conflicts. Reduced water supply will lead to increasing competition between different social groups, local communities, and countries. Reductions in crop yields will lead to higher food prices and increase the stakes for control over the increasingly scarce agricultural land. Changes in sea levels and natural disasters will cause large-scale destabilizing movements of population. The cumulative effect of these challenges will increase poverty in the states where the governments already struggle to provide adequate services to their citizens and could tip fragile states towards armed conflict and we already have examples of such tendency. For example, depleted water and land resources are believed by many to be at the source of the Darfur conflict in Sudan. As such, the effects of global warming on Africa will be more catastrophic than on any other region in the world, as they are exacerbated by wide-spread

poverty and poor governance.

Although climate change presents daunting challenges to governments around the world, African governments are faced with a set of additional challenges: how to meet the water and food needs of a growing population; how to increase communities' resilience to drought and floods; how to expand economies heavily dependent of rain-fed agriculture and few cash crops when faced with more adverse and unpredictable weather; and how to share increasingly scarce resources between different social groups, communities and countries. Can Africa handle these challenges on its own? Very unlikely.

First of all, given their relatively low level of carbon emissions, there is little African countries can do to reduce the scale of the problems they are likely to face — emission reductions must be primarily the responsibility of the developed world. Secondly, Africa is in a unique position in that, in spite of the rhetoric, the need for food, fuel and cash are more immediate than the threat of climate change. Therefore, any action aimed at reducing poverty in the region will have beneficial effects on Africa's ability to cope with climate change and to avoid economic and social calamities. Although there is a lot of debate as to which actions are uniformly effective in reducing poverty, some of them are less controversial than others. Thus, the provision of financial, technological,

information, marketing and other support services in agriculture has been shown to be effective in reducing poverty. Conditional cash transfers to poor households, in exchange for enrollment of children into schooling, is a way to mitigate poverty while simultaneously investing in future human capital.

Access to new varieties of plants that produces higheryielding disease-resistant crops and allows farmers to produce more food than their families need so they can sell surplus crops at local markets is another measure that can help the poor in the regions where subsistence agriculture is prevalent. As of today, it is unrealistic to expect African countries to be able to finance these initiatives on their own. Even more involvement from the international community will be needed in order to deal with the direct consequences of climate change lest low-emission and climateresilient development fall low on Africa's priorities list. International agencies can and should provide support in collecting meteorological and other data and in training African researchers to analyze the data and interpret its significance to policy-makers. Finally, Western countries can take upon themselves the task of providing incentives for pharmaceutical companies to invest in the health of African countries.

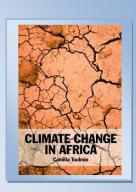
BACKGROUND FACTS

- Africa is home to 15% of the world population, but emits less than 3% of global pollutant emissions.
- There is already evidence that Africa is warming faster than the global average, with more warm spells and fewer extremely cold days. Northern and southern Africa are likely to become as much as 4 degrees C hotter over the next 100 years and will be much drier.
- Projected reductions in crop yields could be as much as 50% by 2020 and 90% by 2100.
- Academics have modelled the effects of global warming on civil war - finding that, by 2030, climate change will lead to a 54% increase in the incidence of civil conflict - leading to an additional 393,000 battle deaths.
- · The crop model indicates that in 2050 in Sub-

Saharan Africa, average rice, wheat and maize yields will decline by up to 14%, 22% and 5%, as a result of climate change.

- With climate change, food availability in the region will average 500 calories less per person in 2050, a 21% decline.
- As temperatures rise above 2°C, scientists predict that an estimated two billion people worldwide will be affected by water shortages.

CLIMATE CHANGE IN AFRICA By Camilla Toulmin



What is the price that African countries will pay for the events for which they are the least responsible?

How will climate change affect access to water, production and availability of food, forests, and the occurrence of conflict?

What does climate change have to do with female emancipation or access to education?

What is the potential that the carbon markets might hold for Africa?

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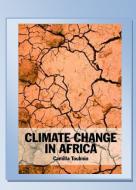
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