

## **Climate Change Impacts in Africa - Today and Tomorrow**

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### **Abstract**

Climate change poses challenges to growth and development in Africa. According to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) even at relatively low levels of warming of 1 to 20C, several unique and natural systems are threatened. The implications are that climate change will interact with non-climate drivers and stressors to exacerbate vulnerability of agricultural systems, particularly in semi-arid areas. It will also amplify the existing stress on water availability in Africa. Climate change and climate variability have the potential to exacerbate or multiply existing threats to human security including food, health and economic insecurity in Africa.

Climate change is already causing harm upon rural and urban Africans already living in poverty. Therefore, climate change will intensify existing poverty and exacerbate inequalities, leading to new vulnerabilities. Climate-resilient development pathways will have only marginal effects on poverty reduction, unless structural inequalities are addressed and needs for equity among poor and non-poor people are met.

Modern economic development has been fuelled primarily by carbon-intensive energy led growth. Thus the central importance of energy in development cannot be overstated. However, there is recognition that not all the energy needed to pursue Africa's development can be clean. While a low carbon led development is being seen as a panacea to the impacts of climate change, a lot of work still remains. For instance, current policy responses for climate change mitigation or adaptation will result in mixed, and in some cases even detrimental, outcomes for poor and marginalized people, despite numerous potential synergies between climate policies and poverty reduction. Coupled with this is the issue of 'successful' adaptation and mitigation projects that need to be up-scaled for any tangible impacts to be felt.

Effective and inclusive climate change adaptation can help build a richer more resilient African continent in the near term and beyond. Climate change adaptation is beginning to occur in Africa. Community based adaptation pilot projects are increasingly informing policy from a bottom-up approach. Progress has been achieved on managing risks to food production from current climate variability and near-term climate change but this will not be sufficient to address long-term impacts of climate change. African governments are initiating governance systems for adaptation and responding to climate change, but evolving institutional frameworks cannot yet effectively co-ordinate the range of adaptation initiatives being implemented.