

## Climate Change and Agriculture

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Climate change threatens to undermine agriculture which is one of the most important sectors in many developing countries. In many parts of Africa, agriculture employs 80 per cent of the population and food security is a major concern. In addition, population increases, especially in Africa, means that by 2050, 70 percent more food will have to be produced to feed a growing population. As climate change cause temperatures to increase and precipitation patterns to change, more weather extremes will potentially reduce global food productions. The need to reduce the environmental impact of agriculture while, at the same time, increasing productivity requires significant changes in the way agriculture is currently carried out.

It is against this background of the importance of agriculture and its vulnerability, that the National Adaption Plan (NAP) was established in 2010 within the Cancun Adaptation Framework by the United Nations Framework Convention on Climate Change (UNFCCC). NAPs were designed to help countries reduce their vulnerability to the impacts of climate change by building adaptive capacity and resilience.

In 2012 and 2013, 12 countries in West, East and South Africa were studied to assess the robustness of the adaptation planning for agriculture. The title of the study is *Planning Climate Change Adaptation in agriculture: Meta-synthesis of national adaptation plans in West, East and South Africa*. The study found that most of the countries surveyed conducted their impact assessment on a purely sectoral basis, because many of these countries lacked consistent, comprehensive and coordinated approaches to their vulnerability and risk assessments. It was discovered that different regions and sectors used different methodologies for the their assessments, This made it impossible to compare and prioritize risk and adaptation activities across sectors and regions.

Furthermore, most countries did not assess the economic implications of climate risks, which, of course, compromised the design of adaptation strategies and measures. In spite of these shortcomings, the 12 countries in the study did opt for a number of common priorities. These included: 1. Adopting measure to protect the most vulnerable and poor mainly rural populatios. 2. Ensuring the strategies adopted will be cost effective. 3. Adopting policies that support

sustainable development and the sustainable use of natural resources. 4. Ensuring that adaptive strategies improve the livelihoods for poor people.

Another weakness which the report identified in the countries studied was the lack of institutional framework and governance structure to effectively coordinate and implement adaptive activities. Many of these activities operate on a cross-sectoral basis. Some of the countries which were reviewed are in the process of setting up institutions to promote cross-sectoral cooperation. The report even found that the funding requirements of adaptive strategies were overlooked. The report pointed out that, when adaptive programmes are aligned with mainstream activities in the national or sectoral development plans, this can help identify and procure appropriate funds for adaptive agriculture. To date, however, many adaptation and food security programmes are not well integrated into the broader national strategies but are driven by bilateral or multilateral funding sources.

In conclusion, NAPs provide a critical process for countries to mainstream their climate change interventions across all relevant sectors. Linking adaptation strategies to wider planned development projects can safeguard development investments from climate change impacts which will result in significant savings.

*(Much of the data for this article is taken from a Policy Briefing Paper entitled, Climate adaptation and agriculture; Solutions to successful national adaptation plans, produced by Climate Change Agriculture and Food Security CCAFS – June 2014).*