

Researchers urge climate-resilience support for South African maize farmers

Maize yields in parts of South Africa could decline by up to 20% by the 2050s as a result of climate change, research has shown. This could have a dramatic impact on subsistence farmers, with the poorest likely to be hardest hit.

South Africa's Financial and Fiscal Commission tabled the findings for discussion in parliament in early 2015. The IDRC-supported study, conducted by the universities of Cape Town, Venda, and Fort Hare, urges the government to invest in a comprehensive "household vulnerability index" (HVI) to identify households most at risk from the impacts of climate change, and then to support them in becoming more resilient to the changes. The study also suggest that the HVI could be a useful tool to help government allocate funds for poverty and vulnerability reduction.

The study used a household vulnerability index developed by the Food, Agriculture and Natural Resources Policy Analysis Network that measures a household's ability to withstand climate-related shocks, such as drought or flooding.

Researchers studied household vulnerability and future crop scenarios in two rural communities in Eastern Cape and Limpopo, provinces considered among the most vulnerable to natural disasters in South Africa. They found that climate change is likely to hurt livelihoods and food security in both locations by the 2050s, by reducing yields of the staple food crop, maize. In Eastern Cape, maize yields are expected to decline by 8% to 15%. In Limpopo, following an initial increase, yields are expected to decline by almost 20% after 2050.

In addition to the adoption of the vulnerability index for decision making and planning, researchers recommended helping farmers adapt to a changing climate with low-cost, climate-smart options, including drought-resistant crop varieties, small grains, and zero-tillage farming systems.

http://www.idrc.ca/EN/Regions/Sub_Saharan_Africa/Pages/ResultDetails.aspx?ResultID=346&utm_source=rossa-newsletter&utm_medium=email&utm_content=en&utm_campaign=rossa-newsletter-02