

Canada's International Development Research Centre (IDRC) and the newly-launched Australian International Food Security Centre of the Australian Centre for International Agriculture Research (ACIAR) are initiating **Cultivating Africa's Future** (CultiAF), a CA\$15 million partnership to support food security in sub-Saharan Africa. Each institution will invest \$7.5 million over four years to support research in areas vital to achieving long-term food security in Africa, with a focus on post-harvest loss, nutrition, product quality, and water use.

## The Challenge of Food Security in East and Southern Africa

Estimates of food insecurity and malnutrition indicate that Africa still has the highest proportion (26.8% or 234 million) of undernourished people in the world (FAO 2012). While food insecurity in some countries of East and Southern Africa has been reduced, others have not progressed as quickly. Research holds considerable potential to improve food security in the region by identifying ways in which concerted interventions can be taken. Investing in small-scale agriculture is one of the most effective ways to meet the food security needs of vulnerable populations – especially women and children – while providing economic livelihoods.

### Post-harvest losses

Farmers throughout sub-Saharan Africa have long suffered serious losses of their harvested crops and livestock. Recent estimates put the annual value from post-harvest losses in sub-Saharan Africa at US\$4 billion per year for grains alone (World Bank, 2010). Considerable scope exists for research to find effective ways to reduce food losses while increasing returns through product quality control, market segmentation, better processing, and other forms of value addition.

### Linking food production to nutrition

Systematic approaches to producing food to meet the nutritional and health needs of farmers and consumers are also under-researched. Research into multi-dimensional nutritional approaches, for instance, is particularly lacking, despite serious under-nutrition among children under five and expectant mothers. The links between agriculture, nutrition and health, and the socio-economic factors that affect food supply and demand require better research and more systematic approaches. Together, these hold the promise of improving health outcomes.

### Water use

Agricultural productivity in sub-Saharan Africa is the lowest in the world. Poor water availability, access, and management are constraining food output. Many small-scale farmers operate with dryland farming systems and experience limited and uncertain rainfall. Major new dams do not provide feasible options for most of these farmers. Instead they rely on shallow groundwater, rivers, lakes, and small reservoirs or they harvest rainwater to irrigate their land. Research to find more effective ways to use rainwater and improved small-scale irrigation could dramatically raise productivity.

## A Strategic Partnership

CultiAF builds on Canada's and Australia's leadership in investing in aid that promotes food security and is consistent with commitments made at the G8 in L'Aquila, Italy in 2009. CultiAF contributes to each country's food security strategies and to their science and innovation agendas. Managed by Canada's International Development Research Centre, CultiAF is made possible with financial support from the Australian International Food Security Centre (ACIAR) and IDRC.

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A key part of Canada's aid program, IDRC supports research in developing countries to promote growth and development.

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