About this grant

Grant-holding organisation: Wageningen University, Netherlands

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Award: $495,237

Does a multifaceted market-based approach to food crops stimulate food security and agricultural development in Tanzania’s breadbasket?

Programme overview

Tanzania struggles with low agricultural productivity. Farmers’ lack of access to resources and the limited capacity of agribusiness to support agricultural production and marketing farm produce explain much of the problem. The Integrated Project to Increase Agriculture Productivity, implemented by SNV-Tanzania and funded by the Alliance for a Green Revolution Africa, targets 45,000 smallholder farmers, of which 27,000 are women, in Kyela, Mbalar, Mbeya, Mbozi, Momba and Sumbwanga districts of Mbeya and Rukwa regions. It aims to enable male and female smallholder farmers to benefit from improved technologies, agronomy and efficient markets to stimulate agriculture, improve food security and increase household incomes. This change is likely to be achieved by increasing the production of selected commodities – beans, maize, rice, and soy – and creating competitive local, national and regional markets. The programme is based on two sets of assumptions: (1) better access to markets and technology will lead to increased agricultural productivity of food crops; and (2) improvements in food crop productivity will lead to higher incomes and improved food security.

Impact evaluation overview

This impact evaluation is funded as part of 3ie’s Agricultural Innovation Thematic Window. 3ie conducted a scoping exercise that identified existing evidence and where there are gaps in the evidence base. The analysis and consultations during the exercise identified the need for more evidence on the effectiveness of interventions in four areas: (1) interventions that promote communicating effectively with farmers; (2) ones that promote adopting more productive technologies; (3) ones creating markets, and (4) ones strengthening value chains. All funded studies in this thematic window focus on programmes in at least one of these four areas and address one or more associated priority questions, of which this study will address two of them:

- What types of contractual arrangements increase smallholder farmers’ market power, food security, marketed surplus and net returns?

Primary evaluation questions

1. Does a market-based approach targeted at food crop production stimulate agricultural productivity?
2. To what extent does the programme contribute towards obtaining the targets of food and nutrition security?
• What are cost-effective mechanisms to incentivise smallholder farmers to adopt improved seeds, and better practices and technologies?

The study intends to provide robust evidence about the impact of this programme and provide information about the validity of a market-based approach to food crops. It is expected that the study will help policymakers and the international donor community gain new insights about the constraints and possibilities of farmer organisations (FOs), resulting in better and more focused policies.

**Methodology and identification strategy**

The evaluation will use a combined randomised and difference-in-difference design. A total of 90 FOs in the six districts will be allocated to treatment and control groups. Within each group, the research team will randomly draw households clustered by village or FOs, using membership lists of these FOs. The sample size of each group will be 500 farmers.

**Heterogeneity analysis**

Within many African households, men predominantly control cash crops and income from production, while women exercise control of staple food crops and provide food for the household. Thus, both the quantitative and qualitative analysis will be sex-disaggregated and consider gendered roles.

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**Timeline**

- **Start:** June 2014
- **Baseline report:** October 2015
- **Midline report:** April 2017
- **Draft final report:** February 2018
- **End:** May 2018

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3ie’s Agricultural Innovation Thematic Window is supported by the Alliance for Green Revolution in Africa, the Bill & Melinda Gates Foundation, the International Fund for Agricultural Development and UK aid.

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