CSA/SuPER - Upscaling CSA with small-scale food producers organised via VSLAs: Financing for adoption, behavioural change and resilience in rural Iringa Region, Tanzania

Summary
in this CSA/SuPER research project CARE, the Centre for Tropical Agriculture (CIAT), Sokoine University of Agriculture, and Wageningen University & Research come together to investigate a new model for upscaling the adoption of climate-smart agriculture practices (CSA) practices by small-scale farmers in developing countries. CSA practices increase agricultural productivity, enhance the resilience of farmers to climate change, and, where possible, mitigate greenhouse gas emissions from agriculture. It is, however, challenging to upscale the adoption of CSA practices by small-scale farmers in developing countries. Farmers often lack agricultural and agri-business knowledge and finance to invest in CSA practices. Many of them are socially disadvantaged, extremely poor, women, and young. They are usually excluded from efforts to improve access to finance and knowledge about CSA practices. We, therefore, need new rural development models that will enhance agricultural and agri-business knowledge, provide access to finance and empower socially disadvantaged groups at the same time to upscale the adoption of CSA practices. The new model implemented by CARE in Iringa, Tanzania, and tested by the CSA-SuPER project bundles villages savings and loan associations (VSLAs), which provide agricultural finance with farmer field business schools (FFBSs), which deliver agricultural knowledge to groups of small-scale women farmers. The model also follows sustainable, productive, profitable, equitable and resilient, so-called SuPER, farming principles. These principles guarantee that women are not excluded and receive equal opportunities to adopt those practices.

Interim research findings
Preliminary findings from the research so far are as follows:
- Climate change impacts are felt along the entire agricultural value chain in Iringa; input acquisition, on-farm activities, post-harvest handling, and marketing. Of these, on-farm production is the most vulnerable to climate variability.
- Adoption rates of CSA practices among small-scale rural farmers are low, particularly among women farmers, mainly due to 3 factors: (i) lack of financial resources, (ii) lack of (information about) markets, and (iii) poor access to reliable information about the cost and benefits of the practices.
- Significant opportunity exists for greater collaboration among institutions and formation of synergies across projects. This has potential to reduce duplicative efforts and increase impact.
- Farmers do not adopt the CSA practices that involve the adoption of new cash crops (e.g., soybean) unless they are confident that there are markets to sell their new produce.
- There is limited involvement of both Tanzanian governmental and non-governmental organizations along the entire value chain, particularly in regards to provision of inputs, training on use of agricultural inputs, access to credit, value addition, and marketing.

Intermediate outcomes achieved
In 2018 CSA-SUPER research revealed only few farmers from FFBSs in Iringa adopted soybean. Farmers considered soybean as a cash crop and believed that there were no markets to sell soybean in Tanzania. CARE took action and had implemented a market study to identify potential markets for soybean.
buyers of soybean produced by farmers in Iringa and introduced some buyers to the farmers. In the project field visit in 2019, it seemed that many farmers started to adopt soybean and convinced that there are markets to sell soybean.

Messages to

A) Actors from private sector:
Increased demand for climate resilient crops, fertilizers, and financial services (insurance) by small scale farmers creates business opportunities for agro-dealers and financial service providers, particularly for the businesses with right models to work with small scale farmers.

B) Civil society and practitioners organizations:
When introducing a new climate-resilient crop to the farmers, they should
(i) link NGOs and agriculture, irrigation and cooperative offices with existing VICOBAs and VSLAs and the input and output markets to upscale the adoption of drought-resistant crops;
(ii) focus your efforts on especially women farmers who have limited decision power on productive resources to adapt the practices.

C) Policy makers:
To support CSA practices among small scale rural farmers, government can help farmers through
(i) increasing investments in VSLAs or other financial institutions that finance adoption of CSA practices to reach large number of farmers;
(ii) investing in connecting farmers with weather information by metrological institutes and providing timely and accurate climate information;
(iii) conducting research on, licensing, spreading early maturing, high yielding, and drought tolerant crop varieties to enhance resilience among farmers.

Knowledge products

- Project info note "Testing a new model combining micro-finance and farmer training to upscale the adoption of climate-smart practices by small-scale farmers in developing countries" (December 2018).

The info notes and climate risk profile have been shared and discussed with local and international stakeholders of the project including Clinton foundation, Heifer international, Iringa Civil Society organization (ICISO), Mazombe Mahenga Development Association (MMADEA), Ministry of Agriculture Livestock and Fisheries (MALF), Ministry of Environment (ME), Rural Urban Development Initiative (RUDI), Transforming Irrigation in Southern Africa (TISA), Tanzania Meteorological Agency (TMA), United States Agency for International Development (USAID), Vision Fund, and World Wide Fund for nature (WWF).

Knowledge networks

- Thabit Masoud (CARE) is part of National Climate-Smart Agriculture (CSA) Alliance in Tanzania that we have shared our results through.
- FEMI Foundation also invited to present our research to their funders in a workshop.

Knowledge co-creation

The project follows a holistic approach in knowledge creation. The project combines focus group discussions with stakeholders, statistical analysis, and modelling. The research team conducts field visits, data collection, stakeholder workshops with farmer groups to understand the challenges in the adoption specific CSA practices (e.g., improved soybean seeds, intercropping and crop-rotation between maize and soybean). The findings from the workshops, visits, and data analysis are shared with the CARE-Tanzania team in Iringa who introduces the practices in the field. Besides, involving major local government offices in agriculture to the upscaling process has helped to gain their support in the research process, identifying major bottlenecks to adopt CSA practices (finance, markets, knowledge, weather information). Now they are willing to support other initiatives on those subjects.

Consortium Partners

- Care International (Tanzania)
- CIAT (Kenya)
- Wageningen Economic Research (the Netherlands)
- Sokoine University of Agriculture (Tanzania)

Contact persons

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Project websites

- F&BKP Research Project page
- CCAFS project page - linked to the CCAFS project “Kukua na Kujifunza (KNK) CARE project in Tanzania”
- WUR project page