

FOOD & BUSINESS APPLIED RESEARCH FUND

ENHANCING RICE MARKETS IN UGANDA THROUGH SMART MICRONUTRIENT FERTILIZATION (ENRICH)

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Project Description

Rice has become an important food staple and a major source of income for many smallholder farmers in Uganda yet yields remain low at 1.5-2.5 t/ha. The goal of this project is to increase food and nutrition security and income of smallholder farmers producing lowland rice with the main objective to significantly increase lowland rice productivity in Eastern and Northern Uganda. The project aims to fine-tune the composition of micro-macro-nutrient fertilizer combinations and their mode of application for optimum rice yields and improved nutritional quality.

Objectives

1. Understand the current situation and rice fertility challenges in the region.
2. Evaluate and identify the appropriate composition and mode of application of micronutrients (SmartFert) for optimum yield of lowland rice
3. Integrate and out-scale SmartFert into ongoing development programs and production practices.

Research Methodology

A number of activities are being and will be undertaken including stakeholders' analysis and planning workshops; focus group discussions (FGDs) and key informant interviews; household surveys; replicated field experiments with participation of Farmers' Research Groups (FRG); participatory on-farm trials with communities and, demonstrations of SmartFert innovations to compare SmartFert innovations with the current local practices.

Expected Impact

It is anticipated that the project impact will be high and more stable yields and production of good quality rice as a result of adoption and use of smart fertilizer innovations and other packages; increased income and food security from rice production, milling and trade and; increased sustainability of rice production systems in Uganda.

Activities Completed or Ongoing

- Stakeholders' analysis and planning workshop conducted with participation of all stakeholders along the rice value chain.
- Farmers' research group (FRG) identified and trained. FRG members now actively involved in trial set-up and monitoring.
- Micronutrient fertilizer trials set-up in two different agro-ecological zones with the involvement of FRG.

Opportunities and challenges

- Micronutrients are proven to be beneficial on increasing yield, improving grain quality, increasing uptake efficiency of NPK and economic returns.
- Developing technologies aimed at enhancing production and commercialization of rice by smallholder farmers would have full government support as this is in line with the Multi-Annual Strategic Development Plan of the government of Uganda.
- However, adoption of the new technologies by smallholder farmers may take a long time as farmers are always conservative and unwilling to change from their traditional production and management practices.



Stakeholders' Analysis and Planning Workshop, Mbale, Eastern Uganda



FRG Planting Micronutrient Fertilizer Trial at Doho Rice Scheme



FRG members involved in soil and foliar application of micronutrient fertilizers under close supervision of technical staffs