

# Improving Food Security and Livelihoods in Eastern Africa through Improved Community Based Low Cost Tissue Culture Innovations

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## Crops

- Banana
- Cassava
- Sweet potato and
- Potato



## **Objectives**

- 1. To validate low cost protocols and tools for production of virus free TC planting materials.
- 2. To develop and operationalise pilot community based platform for production of virus free planting material of farmer preferred varieties of banana, potato, cassava and sweetpotato.
- 3. To enhance knowledge and skills of seed value chain actors on production, management and marketing of TC seedlings.
- To develop mechanism for packaging, disseminating and sharing information and technologies.



### Partners

- Mikocheni Agricultural Research Institute, Tanzania
- Department of Crop Science, Makerere University, Uganda
- Agricultural Research Corporation, Sudan
- Ethiopian Institute for Agricultural Research, Ethiopia
- National Agricultural Research Institute, Eritrea
- INERA-Mulungu, DR Congo
- ISAR, Rwanda
- FIFAMANOR , Madagascar
- International Service for the Acquisition of Agrobiotech Applications
- Agro-Genetic Technologies Ltd, Uganda
- Agrobiotec Ltd, Burundi
- MAAIF, Uganda

Result 1: Enhance utilization of high quality TC planting materials

- 1. Establish and maintain clean community TC mother gardens
- 2. Optimize and make available low cost protocols for TC technologies in all regional NARS
- 3. Support establishment of TC incubation centers among identified communities
- 4. Develop community based guidelines for handling TC materials in the incubators, TC labs and satellite nurseries



Result 2: Strengthen capacity for production and distribution TC planting materials

- 1. Support establishment of community based TC multiplication and hardening nurseries and use them as demonstration/learning sites
- 2. Train TC laboratory actors in the NARS (including regulatory bodies) on transboundary certification requirements, disease indexing etc
- 3. Create stakeholders innovation platforms focusing on youth and women and potential entrepreneurs and deliver training in technical, business and market skills along the value chain



Result 3: Enhance availability of information on low cost TC innovations and products

- 1. Conduct a baseline survey to establish TC needs, capacities and state of TC knowledge
- 2. Develop a communication strategy to address TC needs across value chain
- 3. Create awareness on TC technologies among farming communities policy makers, and community entrepreneurs
- 4. Develop a user friendly simple community information database for low cost TC technologies
- 5. Develop TC information materials for communities

 Transforming Agriculture for Improved Livelihoods



#### **BUDGET FRAMEWORK**

Budget line item	Amount (US\$)
Establish incubation centres	195000
Produce TC seedlings	100000
Protocol for low cost TC	38000
Mother gardens	66000
Guidelines for handling TC materials	54000
Community based nurseries	88000
Training for entrepreneurs & technicians	81000
Training on quality assurance/control	65000
Establish demo/learning sites	48000
Creation of innovation platforms	81000
Baseline survey	18000
Develop Communication Strategy	5000
Create awareness on TC	63000
Create awareness on certification and MTA	20000
Manage database on low cost TC	15000
Coordination & Monitoring costs	15380.96
Institutional costs	47619
Total	1,000,000

### Thank you



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