Potato is a growing cash crop in Uganda due to a favourable climate and increasing domestic demand. However, the sector’s growth is held back by a small and highly fragmented seed potato industry, with only 34% of national demand for seed potato met and potato yields averaging 5 MT per acre, well below the recognised potential for the country to produce up to 17 MT per acre.

Located in Eastern Uganda, where the altitude and climate are favourable for seed potato production, the Mengya Integrated Farmers Association (MIFA) is looking to establish itself as the first Integrated Seed Business in the region with the capability to undertake the full seed multiplication process – from plantlet to Quality Declared Seed (or certified seed).

Business Innovation for Resilient and Efficient Farming

Mengya Integrated Farmers Association

Establishing a seed potato industry in Eastern Uganda

Context

Planting the seeds for a new industry
While farmers are typically aware of the need for clean seed potato for healthy crops, they are not always able to distinguish seed potato from the small, regular potatoes sold as seed potato in local markets. Without knowing the difference, there is little incentive for farmers to seek out and pay for Quality Declared Seed.

Seed potato production itself offers farmers an alternate, reliable income source as demand for clean seed in the country is growing. However, farmers interested in producing seed potato must weigh up the opportunity gained or lost in allocating tracts of land to seed multiplication rather than for cash crops. Seed potato requires land that is relatively clean and not recently cropped, which could result in a temporary loss of income between cash cropping cycles and pre-basic and basic seed being sown and multiplied. Farmers have little access to reliable information that would inform this decision.

The ability to produce seed potato all year-round requires a constant water supply. This is an obstacle for farmers who are unable to tap into local water sources.
As a first step toward establishing a seed potato industry in Eastern Uganda, MIFA has partnered with REACH-Uganda to put in place the industry connections, infrastructure, equipment and expertise needed to successfully transition to an Integrated Seed Business.

REACH-Uganda will link MIFA to plantlet suppliers, such as the government’s Kachwekano Zonal Agricultural Research and Development Institute (KaZARDI) and privately owned AGROMAX. A plantlet sourcing plan will be developed and screenhouses built on the land of selected MIFA members who will be trained in their operation and in the handling of the plantlets.

To prevent early sprouting and limit loss, diffused light storage facilities will be established next to each screenhouse, increasing MIFA’s ability to produce and keep seed potatoes ready for sale in line with cropping cycles.

Year-round production will be further supported by a gravity-fed irrigation system. The main water pipe (2.75km) has been completed and the next step is to connect farmers to the water supply. The irrigation system will offer 50 farmers, including 30 MIFA members, the option of year-round water supply.

To build farmer trust in MIFA’s Quality Declared Seed, packaging will include certification and traceability details, such as the producer, date of production and quantity.

While outside of this partnership, REACH-Uganda and the Kween District Local Government have invested in the reconstruction of a 26 km road between the highland potato production areas and local market centres. This will support the transportation of locally grown seed potato to markets and vice versa.

To address the significant amount of land required to increase the amount of Quality Declared Seed produced, MIFA will adopt a mixed business model that involves selling basic seed to at least three other Local Seed Businesses, such as Kapchesombe Green Change Farmer Cooperative (KGCF) and the Sukutu Multipurpose Women’s Group, who will then produce Quality Declared Seed. This approach builds on the work of the Integrated Seed Sector Development Programme support for Local Seed Businesses to produce Quality Declared Seed.
Results
Achieved and expected

Program investment
REACH-Uganda USD 96,665

Private investment to be leveraged
MIFA USD 42,650

Value of increased sales
USD 353,921 by 2024

Total additional income for farmers
USD 260,418 by 2024

15 MIFA members are producing basic seed and an additional 15 members are producing Quality Declared Seed.

MIFA supplies basic seed to three Local Seed Businesses by 2023 for Quality Declared Seed Production.

Mini-tubers produced and supplied to 15 MIFA members to multiply into pre-basic seed and then basic seed.

Three screen houses to be built in 2019 and three MIFA members trained in their use.

Three diffused light stores to be built in 2019.

Increased income from improved yields and additional production of seed potato leads to improved household resilience.

Mini-tubers produced and supplied to 15 MIFA members to multiply into pre-basic seed and then basic seed.

Relationships with commercial plantlet suppliers being forged.

15 MIFA members are producing basic seed and an additional 15 members are producing Quality Declared Seed.

374 farmers record better yields after planting Quality Declared Seed sourced from MIFA and/or other Local Seed Businesses. This will increase over time as it is assumed that farmers will not immediately purchase clean seed each season.

50 farmers utilise irrigation system, increasing potential for year-round production.

Value of increased sales USD 353,921 by 2024

Total additional income for farmers USD 260,418 by 2024

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