Kapchesombe Green Change Farmers’ Cooperative (KGCFC) has expanded their irrigation system for all-year-round seed potato production. The expansion involved establishment of a gravity fed irrigation system which draws water from the existing Rural Water Supply line through a transmission pipeline into a 50,000 liter reservoir situated at over 2,000 meters altitude. The water reaches the farmers gardens through transmission pipelines from the reservoir.

The gravity fed irrigation system was constructed in partnership with the Resilient and Efficient Agribusiness Chains in Uganda (REACH-Uganda) project, implemented by the International Fertilizer Development Center (IFDC) and funded by the Embassy of the Kingdom of the Netherlands.

With this irrigation intervention, KGCFC aims to produce seed potato in line with the local cropping calendar to ensure a timely supply of seed within Eastern Uganda.

THE CHALLENGE

In Uganda, potato is an important crop for food and income generation and contributes to rural incomes and livelihoods for food and nutrition security. However, access to seed potato has been a challenge due to the fact that most potato seed in the country has been supplied from South Western Uganda at a high cost to farmers due to the cost of transporting the long distance of 700 kilometers (km). Furthermore, unpredictable rainfall and dry spells brought on by climate change have affected production schedules and productivity levels.

STRATEGIC POSITIONING

KGCFC started seed potato production in 2007 but experienced production challenges. The cooperative, located in Mutyoru Village in Kapchorwa District, is...
comprised of 30 members (16 women and 14 men) with over 100 acres of land and aims to increase the household income of its members through production and marketing of potato. KGCFC produced over 600 metric tons (mt) of ware potato in 2018, and due to increased demand for seed potato in the region, the cooperative has ventured into production of Quality Declared Seed (QDS) from basic seed.

Under this partnership, the cost-share investment by the REACH Project and KGCFC (67% and 33%, respectively) totaled US $67,457 and included investment in gravity-fed irrigation infrastructure development. This partnership will ensure increased production of seed potato on average at three acres per farmer (30 acres in total) to produce approximately 210 mt of clean seed per year. The seed will be sold at approximately UGX 1,500 per kilogram, thus yielding an income of UGX 315,000,000 or US $85,000 per annum.

**IMPROVED IRRIGATION MEANS BETTER PRODUCTION OF CROPS AND SEED**

REACH interventions led to several positive changes for KGCFC members:

- Improved access to irrigation water through a gravity-fed system to enable seed potato production all-year-round. In the move from rudimentary irrigation methods to a 50,000 liter reservoir of well-piped water distribution directly to over 30 farmers, the 75 mm distribution pipe is delivering water to 20 sprinklers and 10 hydrants laid at intervals of 100-200 meters with 500 mm connection points.

- Over 100 farmers outside KGCFC are expected to benefit from the irrigation system in the production of potatoes and vegetables.

- Potato seed production is expected to increase to 455 mt on an estimated 60 acres of land by 2022.

“With this irrigation infrastructure, we are now prepared for the climate change issues. We shall produce seed potato all-year-round and have it stored in the diffused light store for easy marketing. Surely this will make us billionaires three years from now.”

— Joseph Muneriya, Treasurer KGCFC, Kapchorwa District