



Facilitating the Sustainable Development of Uganda's Potato Sector

Favourable Conditions and Domestic Demand Drive Sector Potential

Highly nutritious and widely grown, potato is produced across Uganda. With approximately 35% of potato crops consumed at home, potato plays a key role in household food security and generates potentially lucrative incomes for farmers.

Uganda's climate is favourable to potato production and domestic demand is increasing, led by a change in consumer habits. The growth in demand for potato in the country has outpaced the sector's development, with a seed potato industry yet to fully emerge and available local varieties not well suited to what is a very young domestic potato processing industry.

The sector is being led by the entrepreneurial response of Ugandan farmers to the opportunity presented by domestic potato demand, despite the high cost of production and the risk of disease. The development of a seed potato industry combined with improved cultivation practices and strengthened supply chains to support the emerging processing industry means the economic growth potential of Uganda's potato sector is strong. This growth will also increase the potential of potato to play an important role in food security and household income generation.

A Sector With Potential

Potatoes are grown throughout Uganda and their production has increased markedly in the past 15 years, with 327,300 MT produced from an estimated 111,100 hectares in 2018, up from 155,000 MT produced in 2005-2006.¹ This increase can be attributed to the conducive agro-climatic conditions and farmer recognition of the crop's value in terms of both household consumption and sales potential.

Local potato varieties such as Victoria, Rwangume and Kinigi are the most commonly grown, although a number of new varieties are in the process of being introduced to the Ugandan market, including the Dutch-developed Taurus, Markies and Panamera varieties. These new varieties are higher yielding and better suited for

processing into products such as crisps and French fries. The introduction of new varieties, a stronger seed potato industry and improved and more intensive cultivation practices could see the potato sector reach its market size potential estimated at USD 30,000,000 per annum.

Uganda's potato processing industry is only just beginning to emerge, but with domestic demand for potato products growing, combined with the fact that hotels and major food chains are importing potato products (around 3,640 MT annually), the economic opportunity for processing is strong and would open up new local markets for Ugandan potato farmers.



Introducing new potato varieties

The below potato varieties have been released by the Ministry of Agriculture, Animal Industry and Fisheries. REACH-Uganda facilitated the trials with the Ministry and the National Agricultural Research Organisation. REACH-Uganda also lobbied for their approval and gazetting with the National Varietal Release Committee. All of the below varieties are Dutch with the exception of Sarpo Mira.

- Sagitta (HZPC)
- Voyager (HZPC)
- Connect (Den Hartig)
- Arizona (Agrico)
- Markies (Agrico)
- El Mundo (STET)
- Sarpo Mira (Danespo)

There are Challenges to Overcome

Quality seed potato is essential to produce quality, disease-free crops but the Ugandan seed potato industry is in its infancy. Many farmers recycle the smaller potatoes from their harvests to use as seed in the next crop, resulting in poor yields and higher disease risks. Seed potato can only be produced in the cooler highland areas and the cost of transporting seed to other areas of Uganda is expensive, sometimes adding 30 percent to the purchase price.

In addition to seed potato, a reliable water source is needed to ensure potato crops are viable. While many Ugandan farmers can produce potatoes in two seasons per year, many fields are not irrigated and farmers are reliant upon good rains. Dry conditions, and particularly drought, place crops at risk increasing household food insecurity and lowering incomes.

While new varieties are being introduced into the market, they are not yet widely available as there is presently no Ugandan-based multiplier of these Dutch-developed varieties. Farmer uptake is therefore low, which means local varieties that are less suitable for supply to the small number of processors continue to be grown. This limits the ability for an organised, profitable supply chain between Ugandan potato farmers and Ugandan processors to be established.

The policy environment surrounding Uganda's potato sector has not yet been formed. Although there is a seed potato certification guideline in place, a clear policy direction for the sector is needed for greater confidence among public and private sector stakeholders.

¹ 2018 UBOS report



REACH Uganda's Work in the Potato Sector



Program investment
(USD)

REACH-Uganda
489,822



Private investment
to be leveraged
(USD)

**Potato Sector
in Uganda**
525,909



Value of
increased sales
(USD)

**Potato Sector
in Uganda**
2,805,488
by 2021
6,986,850
by 2023



Total additional
income for
potato farmers
(USD)

168,171
by 2021
4,270,175
by 2023



Potato sector
FTE jobs
created

44
by 2021



Number of
potato
farmers
benefiting

838
by 2021
7,352
by 2023

Developing the Market Systems

REACH Uganda is supporting the sustainable development of the potato sector in Uganda using a market systems approach - working on a range of interventions in partnership with business that are designed to strengthen the seed potato industry, support the introduction of new varieties and improve production capabilities through better farming practices and intensification. REACH-Uganda also focuses on strengthening linkages between farmers and businesses, which supports better organised supply chains.

REACH-Uganda has identified and facilitated better links in the seed potato supply chain and supported the introduction of Dutch potato varieties that will produce better yields and are more suited to processing than local

varieties. By facilitating better linkages between businesses and farmers, farmers have greater access to technical information, support and quality seed while businesses can now strengthen their potato and/or seed potato supply.

In addition to working directly with businesses and farmers, REACH-Uganda contributes to seed potato policy discussions and has contributed to various research activities into potato pests and disease. REACH-Uganda is also collaborating with the Ministry of Agriculture, Animal Industry and Fisheries, the International Potato Center and the Integrated Seed Sector Development programme in Uganda on the development of full certification guidelines for seed potato.

Facilitating change through partnerships

Through a portfolio of business partnerships within the potato sector, REACH-Uganda is supporting change across a number of areas within the potato market system.

Interventions, partnerships and signs of change



Establish a commercially viable seed potato value chain - from plantlets to basic seed

- Myenga Integrated Farmers Association (MIFA)
- Charles K. Byarugaba
- Kigezi Farmer's Resource Center (KFRC)
- Kapchosome Green Change Farmers' Cooperative (KGCFC)
- Sukutu Multipurpose Women Group
- Bitamba Enterprises
- Maziba Progressive Farmers Resource Center Ltd
- Chemonges Stephen
- Welishe Stephen
- Muyambi William

A once fragmented seed potato value chain has been linked and commercialised. MIFA, Charles K. Byarugaba, KFRC and Maziba have established themselves as integrated seed businesses with the capacity to undertake the full seed multiplication process - from plantlet to certified seed. Muymabi, Bitamba, Chemonges and Welishe have also established screenhouses.

Other business are sourcing clean basic seed from which to produce certified seed. For example, the KGCFC has improved and expanded its infrastructure, such as irrigation and a diffused light store and is now sourcing clean seed from multipliers such as MIFA from which to produce certified seed.

Screenhouses have been established for the first time in the Elgon sub-region (with a focus on local varieties).

Taurus, Panamera, Markies are being produced in new/expansion areas in Central and Rwenzori regions.

Quality Declared Seed production for 10,982 potato farmers by 2021.

Agromax is working on improved packaging of plantlets to prevent damage in transport.



Access to quality inputs and information

- Agromax
- Grain Pulse Ltd

Seed potato plantlets require careful handling and Agromax has identified farmers with the capacity to operate screenhouses. They are supplying plantlets and providing technical assistance to screenhouse owners.

Grain Pulse Ltd established demonstration plots and provided farmer training on the use of potato-specific fertilizer. Also supporting farmers with training to certified standards.



Support for year-round potato cultivation

- MIFA
- Kapchosome Green Change Farmers' Cooperative
- Charles K. Byarugaba

Good irrigation systems are needed for year-round potato cultivation, particularly seed potato. MIFA and the KGCFC have established irrigation systems for their own production and have extended access to farmers outside their associations.



Establish new potato varieties and getting them onto the market

- New Bukumbi Coffee Processors Limited (NBC)
- Highrow Agro (Namakwaland farm)
- Clarke Farm
- KAKIE International
- Farm Inputs Care Centre (FICA) Ltd

Four businesses are actively introducing the following Dutch varieties; Taurus, Panamera and Markies into the Ugandan market. For example, NBC Processors is importing seed potato and working with farmer groups to introduce and grow the Taurus variety and Highrow Agro is working on the production of Taurus and Markies seed potato to be available for the Ugandan market.



Supporting infrastructure

- District Local Governments

REACH-Uganda has supported the construction or rehabilitation of 52kms of road – 25.95km in Uganda's south west and 26.13 km in the east. These roads will benefit more than 110,000 people and better link businesses and farmers to local market centres and to each other.

Building and commercialising the seed potato industry required significant investment from business and farmers. Screenhouses and diffused light stores are two significant investments, and REACH-Uganda partners have established these facilities at the organisation and farmer levels, accompanied with training and support.



Access to finance

- MSC
- DFCU
- Post Bank

Six farmer groups accessed loans in 2019, encouraged by connections and information provided through REACH-Uganda partnerships.



Local value addition (processing)

- Psalms Food Industries Ltd
- Byampa Enterprise

Psalms Food potato crisps are stocked in more than 1,800 Uganda supermarkets and have been exported to four neighbouring countries.

Byampa Enterprise focuses on employment and training for women, with a view to increasing local sourcing (30 farmers by 2023) and processing locally-sourced potatoes into crisps (31 MT by 2023).



Farmer groups improve business functions

REACH-Uganda has trained 11,312 potato farmers (from 885 farmer groups) in Farming as a Business and 32% of farmer groups that have been introduced to micro, small and medium enterprises (MSMEs) are now selling produce to MSMEs.





REACH-Uganda Potato Sector Strategy



Commercially viable seed potato chain

- 12 screenhouses established with 10 partners with capacity to produce 52,400 plantlets per annum.
- 10 diffused light stores with a total capacity of 7,000 MT.
- 610 MT refrigeration capacity for Dutch seed potato installed.
- Quality Declared Seed produced for 10,982 potato farmers by 2021.



Supporting Infrastructure

- 204 acres established under 2 gravitational flow irrigation schemes in Kween and Kapchorwa Districts.
- 52kms of road constructed or rehabilitated.



New potato varieties

- Under the umbrella of NAO, 4 companies trialling new Dutch varieties.
- Agreements in place by 2 companies to import already approved new varieties for multiplication.
- Business linkages made with three buyers for 40 MT per month of new processing varieties.





Contact the Reach-UGANDA project

IFDC UGANDA



Plot 5, Bandali Rise, Studio House,
Bugolobi, Kampala

PO. Box 75391 – Clock Tower,
Kampala, Uganda



+256 312 518 549/599



ifdcuganda@ifdc.org



www.ifdc.org/reach-uganda/



@REACHinUganda



@REACHinUganda