



Enhancing Sustainable Productivity and Utilization of Potato in the Kigezi Highlands, South Western Uganda

Final Evaluation Report

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All opinions expressed, and any mistakes, remain the responsibility of the authors.

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ACRONYMS

AFFSEM	Agro Forestry for improved Food Security, Income and Ecosystem Management
AO	Agricultural Officer
CBFs	Community Based Facilitators
CDD	Community Driven Development
CDOs	Community Development Officers
DAC	Development Assistance Committee
DCED	Donor Committee for Enterprise Development
DiD	Difference-in-Difference
FGDs	Focus Group Discussions
KAZARDI	Kachwekano Zonal Agricultural Development Institute
M&E	Monitoring and Evaluation
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MoFPED	Ministry of Finance Planning and Economic Development
MoTTC	Ministry of Trade, Tourism and Cooperatives
NAADS	National Agriculture Advisory Services
NGO	Non-Governmental Organization
OWC	Operation Wealth Creation
SAAO	Senior Assistant Administrative Officer
SACCOS	Savings Credit Cooperative Organizations
SSA	Sub Saharan Africa
UGX	Uganda Shillings
USD	United States Dollar
VSLAs	Village Savings and Lending Associations
YLP	Youth Livelihood Programme

EXECUTIVE SUMMARY

Enhancing Sustainable Productivity and Utilization of Potato project was a three-year Potato smallholder household poverty reduction project. The project covered 8 parishes within 4 sub-counties in Kabale and Rubanda district local governments in the South Western Uganda. It was implemented by Excel Hort Consult Limited with funding and technical support from Gorta Self Help Africa Uganda programme. The project aimed at promoting organized seed production for increased productivity of seed and ware Potato and enhancing market access through diversified value addition options. The final evaluation measured how effective the project was in reducing poverty among seed and ware Potato smallholder households through increased yield and volumes of seed and ware potato marketed by associations, and individual farmer driven value additions practices. The objectives were to;

- a) Measure the extent to which the project contributed to the reduction in poverty among Potato smallholder households in 8 parishes from 4 sub-counties in Kabale and Rubanda district local governments;
- b) Measure the extent to which the project achieved its original planned inputs, outputs, and outcomes targets as well as the factors that positively contributed to the achievements;
- c) Identify the situational context and challenges that affected achievement of project objectives;
- d) Document lessons learnt and good practices to inform future programming;
- e) Document case studies involving project beneficiaries and their cooperatives and ;
- f) Provide recommendations for up-scaling of current project and future similar projects.

A simplified theory of change for performance measurement and reconstruction of the project baseline status was done. Data was collected from 172 individuals consisting of beneficiary and non-beneficiary smallholders, 20 members of cooperatives and 3 institutional stakeholders. This involved individual survey, focus group discussions, key informant interviews, participant observations and cases studies, in addition to the review of relevant project documents.

The relevance of the project is undisputed because it addressed smallholder input, marketing and value addition needs. Smallholder households were mobilized and supported to form groups which were registered with the Lower Local Governments. The groups were trained in seed and ware potato production technologies, provided with farm inputs (improved seeds, irrigation facilities and storage facilities) and value addition equipment, and supported to form farmer cooperative in order to link them to better markets and increase their income. The Cooperatives linkages with financial institutions, and processors and traders provided opportunity for ready market. In addition was a sustainable framework for smallholder production for increased volumes and better quality Potato that fetched higher prices thus increased income.

The project objectives fitted very well in the aspirations and plans of Local Governments of increased income of farm households through better production and productivity. The alignment was also within the Self Help Africa strategies, Uganda Government National Development Plan 2 (NDP II) and Agriculture Sector Strategic Plan (ASSP). Overall, the project filled in the gaps that were identified during AFFSEM project. Therefore, there was significance in combining the gains of AFFSEM component into the Enhancing Sustainable Productivity and Utilization of Potato project.

The smallholder groups were effectively mobilized and facilitated to form 4 cooperatives that have been registered with the Registrar of Cooperatives. The project increased the yields of 480 individual smallholder household group members in Kabale district and provided them with the selling prices for seed and ware potato. Estimated 14% of the project beneficiaries were selling as a cooperative. An average yield of seed potato and ware Potato increased by 3260 Kgs and 5260 Kgs respectively per cropping season. The selling price of seed potato and ware potato improved by UGX 4580 and UGX 1854 respectively. Therefore, resulting

into increased average income and savings from potato. The average income of seed potato were greater than before the project (from UGX 351,384 to UGX 3,257,030) and that of ware Potato from UGX 655,826 to UGX 3,436,564. The beneficiaries saving culture was at the banks/SACCOs was at 51% and 16% were in savings groups. A number of beneficiaries also diversified their enterprise by rearing small livestock (goats, sheep and pigs). All these resulted into adequate clothing (94%), adequate food (65%), school fees payment in private schools (73%), medical bills coverage in private health facilities (62%), relatively adequate financial support to families (70%), and women participation in household decision making (40%) and reduction in gender violence (1%).

Compared to the AFFSEM, that was worth Uganda shillings 825,000,000 million only (Euro 250,000), Enhancing Sustainable Productivity and Utilization of Potato project that had 776,050,000 million only (Euro 227,620) spent more Uganda shillings 1,616,771 than that of AFFSEM (1,045, 627 only) per beneficiary. The expenditure on coordination and monitoring, personnel, administration and local travels contributed 31% of the total project cost, making the project expensive.

Relative to the baseline values, the land size under seed potato increased by 13%, from 2.11 acres to 2.38 acres. There was a decrease (12%) in land ownership (57.14 - 45.11%) and a similar trend of 1.5% in land rentals (8.3 - 6.8%). Higher percentage (48.1%) were owning land compared to those renting (34.59%). This is attributed to the increase in income from potato. In addition, with the increase in land size under seed potato and percentage of smallholders owning and renting land, the average yield of both seed and ware potato also increased by 3.3 bags and 5.3 bags. The higher volumes of seed and ware potato coupled with the practice of cooperative marketing, average price per kilogram of seed potato also increased from UGX 1138 to UGX 5718 (4580 UGX increase) and ware potato from UGX 922 to UGX 2776 (UGX 1854 increase) respectively. The higher prices and sales volumes led to increased income from seed and ware potato by UGX 2,906, 646 and UGX 2,780,738. Ultimately, the higher income from seed and ware potato combined with income from alternative sources increased total average smallholder household income by UGX 5,765,263 from UGX 1,238,358 to UGX 7,003,622. With more income, average savings of beneficiary smallholder group members in banks/SACCOs has increased by UGX 68,569 and average amount of cash with beneficiary smallholder group members is now UGX 491,121.

The Local government and private sector linkages established with beneficiary smallholder groups is sustainable as it is based on service delivery principles of the technical aspect and business value for the private sector other than political interest of local leadership. The combination of service delivery value for local government, financial value for the business and social value for the community is very powerful as it secures the continued commitment of all parties to continue the partnership. In addition, the private sector networks established with smallholder groups and cooperatives has promoted a sustainable business relationship. This provides incentives to individual smallholder group members to continue producing for the assured, accessible and high demand markets available and also encourages continued business relationship with the buyers. The formulation of a by-law on counterfeit agricultural inputs, cooperatives signing of MoU with private sectors and opening accounts with SACCOs could potentially lead to the increased access to improved agriculture input qualities. There is potential contribution to increased seed and ware potato production and promotion of better markets. Overall, the approach can easily be taken up to other sub-counties within the project districts and other regions in the country.

There were clear lessons of the best approaches of the Enhancing Sustainable Productivity and Utilization of Potato project and recommendations were also given for some of the inadequacies.

1 INTRODUCTION

1.1 Agriculture in Uganda

Agriculture is the main backbone of Uganda's growth and poverty reduction. The sector contributes 24.8% of Uganda's GDP and employs 66% of the working population with 80% being women. This demonstrates the importance of the sector to the poor, especially women who derive their livelihood from the sector. The sector is largely private sector led, with government left with expenditure in research, seed multiplication and certification, extension services and disease control.

The government's mandate is tailored towards enhancing production and productivity; improving access to markets and value addition; creating and enabling environment for investments in the sector, and institutional strengthening. These are in line with key sector objectives in the Development Strategic Investment Plan (DSIP) in order to ensure efficient and effective provision of critical agricultural public goods and services.

In Uganda, agricultural extension service delivery is the primary mechanism that is used to assist farmers in expanding their ability to adopt and implement new methods and to relay information to producers concerning new technologies and increase productivity. Improving farming technologies such as high yield crop varieties and irrigation techniques among others, have been critical to raising crop yields. However, farmers have been much slower in adopting these new methods which is attributed to the inadequate reliable information regarding how to apply them. In addition, the rate of subsistence farming is high and therefore, yields are far too low.

To guide the sector, the Uganda National Agricultural Extension Policy (NAEP) have been developed to harmonize and regulate the provision of agricultural extension services to farmers, farmers' groups, and other actors in agriculture value chains. This policy is in response to government's commitment to realize an agricultural revolution with regard to the National Agriculture Policy (2013). ALL these are intended to address past shortcomings in agricultural extension service delivery and cause sustained progression of smallholder farmers from subsistence agriculture to market oriented and commercial farming. The optimal effects would be contributing to ending hunger, achieving food and income security, and improving nutrition as well as promoting sustainable agriculture. Therefore, Agricultural extension needs to be provided through a more pluralistic, inclusive, equitable, decentralized, integrated and harmonious system that links all categories of extension users along the value chain with appropriate services, innovative technologies and the market.

The agricultural sector has great potential to contribute to GDP growth, exports, employment and poverty reduction. For integration into the system, Gorta Self Help Africa in Uganda focuses on implementing agriculture and rural development projects. The organization works with the local community-based organizations, government agencies, international NGOs, private sector partners and emerging social enterprises to address the country's hunger and poverty. It is a bridge in the development collaborative approaches to meet specific local needs through effective, integrated and sustainable solutions to project benefiting communities. All their programmes are clearly link with the national agricultural strategies produced under the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) Development Strategy and Investment Plan.

1.2 About the enhancing sustainable productivity and utilization of Potato project

Gorta Self Help Africa programme and its partner EXCEL HORT CONSULT implemented a three year Enhancing Sustainable Productivity and Utilization of Potato (*Solanum tuberosum L*) in the Kigezi Highlands, South Western Uganda in Kabale District Local Government from January 2014 to December 2016. The aim of the project was to promote and organize seed production for increased productivity of seed and ware Potato and enhance market access through diversified value addition options. The specific objectives were:

- a) Increasing the availability and accessibility of clean Potato seed among smallholder farmers.
- b) Enhancing production and productivity of Potatoes for food and income security among smallholder farmers.
- c) Enhancing smallholder farmer's income through value addition options.
- d) Facilitating markets and market linkage options for Potatoes.

The Enhancing Sustainable Productivity and Utilization of Potato project was to directly benefit 480 households to produce high quality and quantity seed and ware potato with also over 1,000 indirect beneficiaries. It was implemented in Kabale district in Muko, Bubare, Ikumba & Kamuganguzi sub-counties. The implementing partner were EXCEL HORT Consult and Lower Local Governments.

The project was envisaged to result broadly into reduction of poverty among seed and the ware potato producing Households. This would be achieved through increased yield and volumes of seed and ware potato markets through associations and individual farmer driven value additions practices. Smallholder seed and ware potato women, men and the youth were supported to improve the quality of seed potato and increase quantities of both seed and ware potato, in addition to forming seed and ware potato marketing associations that provided opportunities for increased incomes.

1.3 The project concept

It is clear that increases in agriculture production and productivity are linked to poverty reduction including real income changes, employment generation, rural non-farm multiplier effects, and food prices effects. Uganda has made impressive economic progress with poverty headcount reducing from 56% in 1992 to 19% in 2013 and 33% of the total population is middle class (World Bank, 2016). A total of 92% of the poor live in rural areas where agriculture is the dominant economic activity (World Bank, 2016). However, barriers to technology adoption, initial asset endowments, and constraints to market access continue to inhibit the ability of the poor to participate in the gains from agricultural productivity growth. With the current limited access to improved seed production technology and exclusion of smallholders in the marketing, it is evident that smallholder agricultural productivity growth will continue to remain low and thus poverty reduction efforts will not achieve its goals in the near future.

Agricultural productivity and poverty reduction are a global concern. In South Western Uganda, Gorta Self Help Africa has over the years initiated a number of projects to address the issues of smallholder agricultural production and productivity for increased farm household income. At the inception of Enhancing Sustainable Productivity and Utilization of Potato project, Gorta Self Help Africa together with its partner Excel Hort Consult built on the lessons and experiences from the Agro forestry for improved food security, income and ecosystem management in the Kigezi highlands (AFFSEM) project. However, the project focused on food and nutritional security, income diversification, biodiversity conservation and ecosystem management. There was limited emphasis on seed and ware potato production and productivity which is the main income and food security enterprise of the region. The minimal effects of the project on poverty reduction among potato smallholders

compelled Gorta Self Help Africa together with its partner Excel Hort Consult to address the issues of: soil fertility degeneration, limited value addition options, un-defined market access options and the use of poor quality seed potato.

1.4 The project activities

To increase smallholder access to quality seed potato and increase quantities of seed and ware potato for value addition and sale, the project based on Excel Hort Consult long experience adopted farmer institutional development approach. The producer groups provided the platform for easy access to agricultural inputs and extension services for faster improved production technology adoption and group marketing. The key focus of Enhancing Sustainable Productivity and Utilization of Potato project was to support 480 smallholder households with foundation seeds, value addition equipment and Diffused Life Store construction, train the members in improved seed potato production technologies, train the members in crisp and chips making and facilitate the groups to form and register four (4) potato farmer cooperatives with Ministry of Trade and Cooperatives. The 4 farmer cooperatives and its 480 members were to produce good quality seed potato and increased quantities of both seed and ware potato and sell together. The reconstructed results chain of the project is shown in Figure 1.

1.5 Evaluation purpose and strategy

1.5.1 Purpose of evaluation

The main purpose of this final evaluation was to measure the contribution of the project towards improving smallholder quality of life in terms of incomes, food access, crop productivity, market access and returns on enterprises. This assessment focused on both the implementation process/approach, adherence to the project design and outcomes of key project inputs and activities, and to draw critical aspects for learning and accountability. The Final Evaluation also reviewed the project's relevance, efficiency, effectiveness, and its sustainability and identified challenges faced, key learning and proposes recommendations for future performance.

The final evaluation specifically:

- a) Assessed the extent to which project original targets – inputs, outputs, and outcomes - have been achieved.
- b) Clarified program situational context and identified barriers/challenges that affected the project progress.
- c) Documented lessons learnt and good practices to inform future programming.
- d) Documented case studies/stories involving beneficiaries, partners and other stakeholders.
- e) Clarified on challenges faced by smallholders and also reasons for poor quality of life under the project.

The final evaluation was therefore conducted to inform project stakeholders on local context responsiveness such as smallholder access to quality and quantity of seed and ware potato, meeting local seed and ware potato market demands, programming robustness that ensures efficient delivery mechanisms and progress tracking, farmer institutional development and growth, value addition for improved smallholder household economic resilience building, and synergy building in ways that enhance relationships at inter-programme level and stakeholder partnership development among others.

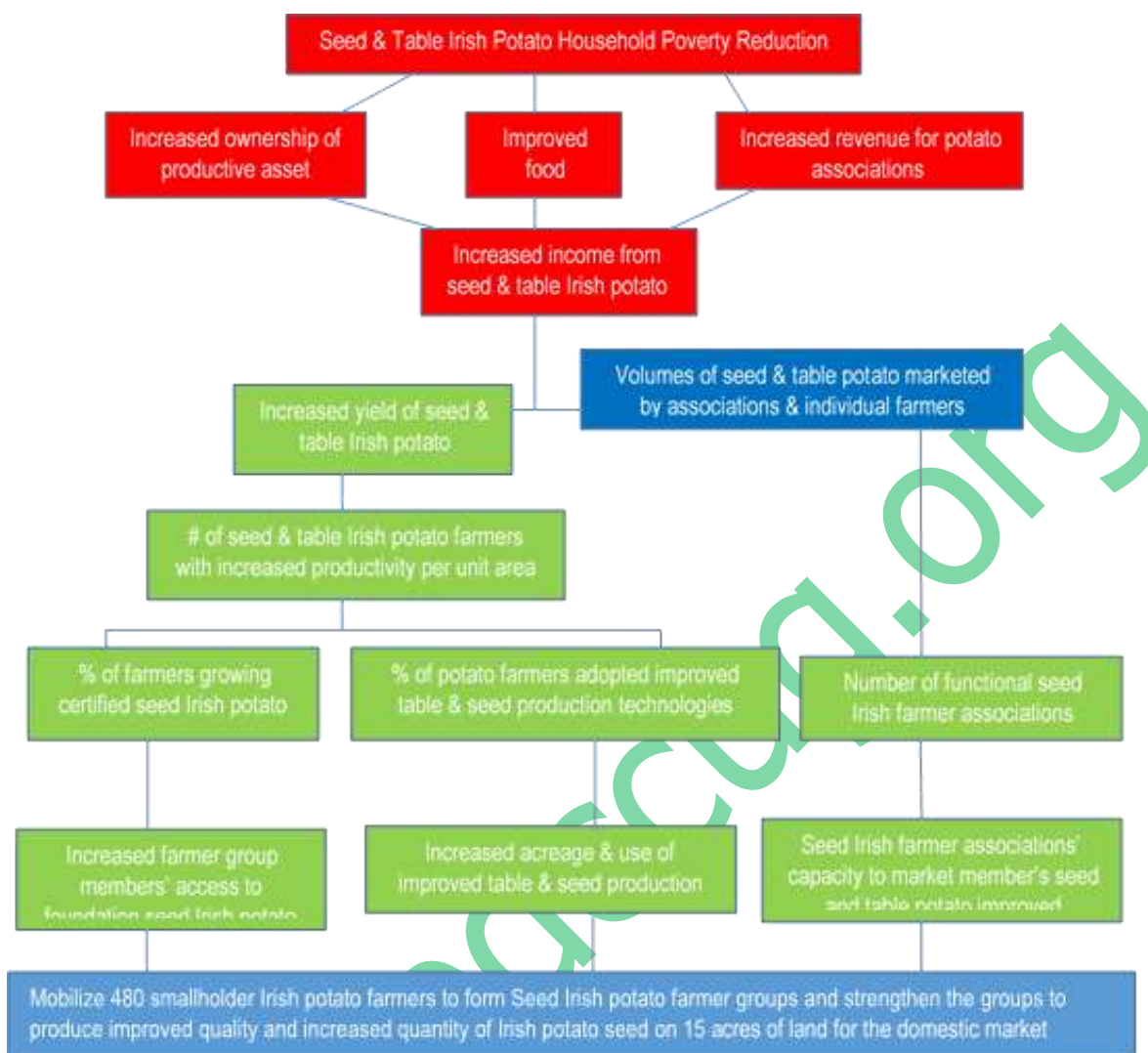


Figure 1: Result chain of enhancing sustainable productivity and utilization of potato (*Solanum tuberosum L*) in the Kigezi Highlands, South Western Uganda.

1.5.2 Evaluation focus and approach

Synergy was built on the guidelines of Development Assistance Committee (DAC) for evaluating development programmes and Donor Committee for Enterprise Development (DCED) on enterprise evaluation. In addition, the limited time frame allowed for the final evaluation to be incisively carried out in near mature project areas - where all the project components have been implemented for at least 36 months. This decision led to focusing on all the 4 sub counties (Kamuganguzi and Bubare in Kabale and Muko and Ikumba in Rubanda).

Although the project design was based on the gaps identified, lessons learned, achievement and best practices of AFFSEM, there was no theory of change and baseline information upon which performance measurement could be based and assessed overtime. The evaluation team together with Self Help Africa Uganda management team therefore developed a simplified theory of change that targeted the project production and productivity of seed and ware potato goal for smallholder poverty reduction (Figure 1). This necessitated reconstructing the baseline status on the project indicators that were not captured at inception of the project.

1.5.3 Evaluation methodology

The methodology used for this evaluation was based on the Development Assistance Committee (DAC) guidelines for evaluating development programs (OECD, 2016) and the reconstructed results chain (Figure 1)

1.5.3.1 Data collection method

The following data collection methods were used for the evaluation:

Desk reviews: Secondary research included reviewing project documentations and other external relevant documents that have been referenced in this report.

Individual smallholder Potato group member survey: A total of 172 individuals consisting of 133 beneficiaries as treatment group and 39 non-beneficiaries as the control group were surveyed across two sub-counties in Kabale district. The survey asked respondents key questions to assess their access to improved Potato seed, seed and ware potato production and productivity, agronomic practices, marketing and value addition practices. Questions also covered the group member net worth and quality of life, and female group member empowerment.

Focus Group Discussions (FGDs): Two FGDs were conducted. These involved the VSLAs and a group of Potato value addition. The approach allowed for the triangulation of information generated from the beneficiary surveys.

Key Informant Interviews (KII): There were 4 key informant interviews and a standard interview guide was used conducted during the interviews. The project stakeholders included the district local government, lower local governments and Excel Hort Consult Limited. The interviews were thereafter transcribed and analyzed in the qualitative research tool Dedoose.

Participant observations: Beneficiaries were observed in their respective locations to witness their knowledge and practices changes, and determine successes that could be replicated.

Cases studies: Two case studies were completed to depict the changes that occurred in the lives of the beneficiaries.

Reflexive comparisons was used to measure impact of the project. The Difference-in-Difference (DiD) method was also looked at to attribute change to project (Appendix 1): Beneficiary v. Non-Beneficiary Impact Analysis. Baseline data was recreated for the comparison groups and current status data was collected to effectively assess the difference amongst the beneficiaries and non-beneficiaries.

1.5.3.2 Respondents

Data was collected in the two project districts of Kabale and Rubanda and 212 people participated in the exercise. Overall, discussions were held with one district official and two Sub-county officials (District Commercial Officer Kabale district, Agricultural Officer, Kamuganguzi Sub-county and Senior Assistant Administrative Officer Muko Sub-county in Rubanda district). In addition, there were two focus group discussions that were held with smallholder members (22 in Muko Sub County and 18 in Bubare Sub County). Individual surveys were conducted in the sub-counties of Muko in Rubanda district and Kamuganguzi Sub-county in Kabale district. The study respondents included: 2 Sub-county officials, 1 district official, 1 Excel Hort Consult staff, 40 cooperative members and 172 individual smallholders.

A total of 172 individual smallholders were surveyed. This included 48.3% males and 51.7% females. Some of the respondents were married (77.9%), others were widows (11%) and singles (10.5%). An average age of the respondents was 42.5 years. Majority (53.5%) had primary education, 22.2% without formal education, 18% had secondary education, 5.8% tertiary education and only 0.6% with vocational education. The mean household size was 5.3 people.

1.5.3.2 Data management: Quality control and analysis methods

Self Help Africa management team (especially the M+E unit) reviewed the evaluation instruments. Pre-testing of the instruments to ensure reliability, acceptability, feasibility, question flow, and the duration of the interview was done. Besides training of data collectors of individual survey on the ethics, design, and management of the survey questionnaire, they had their fill questionnaires reviewed on daily basis to ensure compliance.

The evaluation team also used both quantitative and qualitative data analysis methods. Data was entered in a simple template designed in excel spreadsheet and later exported to SPSS (IBM V23). It was (re)coded, cleaned, and analyzed in line with the evaluation questions and result chain. Qualitative information were transcribed and exported to Atlas.ti computer software for coding and analysis in order to provide verbatim statements under each of the themes identified in the evaluation objectives.

1.5.3.3 Ethical considerations

The consultant ensured that the International research ethics were adhered to. The data collectors sought and confirmed consent from all the respondents. Statements of confidentiality were also sought from the respondents.

1.6 Limitations

The following lists the issues encountered during the evaluation process.

1. Absence of critical project implementation reports (quarterly, annual and end of project reports) delayed the analysis and presentation of information in the final report.
2. The adequately quantitative information provided on project activity outputs in the annual reports made analysis of output achievement in the final report difficult.
3. Lack of an integrated Monitoring and Evaluation (M&E) system affected access to project output data - data was not adequately availed to consultant.

4. The Key Performance Indicators (KPIs) that were not explicitly outlined in the log frame, but proved relevant for analysis, were not adequately captured.
5. Due to timing issues, an interview was not conducted with the District Production Officer a representative from Kabale District Local Government, a partner in the program.

2 FINDINGS

2.2 Project relevance

Project relevance aims at aligning the objectives of the project to the needs of the beneficiaries, Excel Hort Consult Limited and the goals of Self Help Africa, Local Government and Businesses.

2.2.1 Access of improved seed and ware potato production and marketing needs in a holistic and multi-sectorial approach

The project was spot on in increasing production, productivity and income to its beneficiaries. Sarah Tusingwire, Project Coordinator, Excel Hort Consult Limited said;

The project fitted very well in the aspirations and plans of Lower Local Governments in increasing production and productivity as well as income of farm households. This meant farm households were mobilized and supported to form groups and the groups have been registered with Lower Local Governments. Group member were also trained in seed and ware potato production technologies, provided with farm inputs (improved seeds, and storage facilities and value addition equipment. Furthermore, they were supported to form farmer cooperatives to link them to better markets and increase their income. This is in contrast to what the Lower Local Governments do - only provide seed potato to the farm households. The potato smallholders were able to meet the challenges of marketing their potato and grasp the opportunities of utilizing the linkages and technologies of production to their advantage. These reportedly were the concerns and emphasis of both Self Help Africa and Excel Hort Consult Limited.

Although in the last 5 years, Self Help Africa together with Excel Hort Consult Limited initiated projects to improve food and nutritional security, diversify income, enhancing biodiversity conservation and ecosystem management and provided agricultural inputs for smallholders in Kigezi sub region, the Enhancing Sustainable Productivity and Utilization of Potato project was the first holistic project where all these components and aspects of group development and marketing were addressed. The significance of this lies in the focus on Potato as a food and income security crop and the value of integrating the gains of each component of previous projects into one project for enhanced benefit.

The project has proven to be the solution to the inadequate access of improved seed potato. Before, own saved seed from previous harvest produced under poor seed production technologies accounted for 70% and also there was limited improved seed potato market opportunities. Overall, 480 farm households were targeted for the project, and 602 were recruited into cooperatives. Now, 68% beneficiaries use certified seeds and the average amount of seed potato produced increased from 3.9 bags to 7.1 bags. On average the beneficiaries were selling 1 Kg of seed potato at Uganda shillings (UGX) 2,842 as compared to their old price of UGX 731. With increased quantity and selling price, the average income from seed potato increased from UGX 351,384 to UGX 3,257,030.

2.3 Project effectiveness

The project effectiveness were assessed by the extent to which the specific objectives and set targets were achieved.

2.3.1 Increased availability and accessibility of clean Potato seed among smallholder farmers

The project planned to provide 4,800 Kilograms (48 Bags) of basic seed Potato to 480 Households and 602 smallholders. The project achieved 8,700 Kilograms that is, 181 percent of the quantities of seed potato and supplied 480 smallholder Households and 602 individual smallholder received 15 Kilograms of seed potato each. It provided 87 bags of seed potato across the four sub counties. On average each smallholder was producing 3.86 bags of Seed potato. Therefore, a total of 3418 bags of seed potato were available to smallholder beneficiaries and non-beneficiaries in the 4 participating sub counties. The average seed potato production per household before 2014 was low (3.86 bags) compared to 7.12 bags per household in a cropping season (Table 1). In addition, the average land size under seed potato also increased from 2.11 acres to 2.38 acres. The performance indicators show the overall knowledge and practices of improved seed technology impacted the on the project beneficiary.

Table 1: Potato seed production and availability to smallholders.

Performance indicators	2014	2017	Success rate
Land size and yield			
Land size under seed Potato (acres)	2.1	2.4	113%
Seed Potato yield	3.9	7.1	184%
Production technology			
Attended seed plot technology training	26%	96%	363%
Attended seed potato multiplication training	23%	74%	329%
Practice seed plot technology	32%	94%	298%
Practice seed potato multiplication	19%	63%	336%
Use basic seed from research station	7%	55%	807%
Use stem cutting	20%	53%	273%
Use certified seed	17%	68%	391%
Use identification and selection of good plants in the field	25%	84%	337%
Peg vigorous and healthy plants in the garden	22%	80%	366%
Use tuber indexing technology	21%	48%	228%
Do routine field inspection	42%	96%	227%
Use chemicals to control pest and diseases	71%	78%	111%
Late blight a common disease in smallholder farm	43%	37%	86%

2.3.2 Enhanced production and productivity of Potatoes for food and income security among smallholder farmers

With the provision of basic potato seed and trainings, the percentage of smallholders practicing improved agronomic practices, pest and disease control and using improved soil and water conservation measures had increased (Table 2). These also led to increased access to land and yield per farmer in a cropping season.

2.3.3 Enhanced smallholder farmer's income through value addition options

The project provided basic Potato value addition equipment and trained 79% of the beneficiaries on their use.

Therefore, the percentage of smallholders who added values to ware potato increased from 20.3% to 66.9%. The individual group members that cleaned and washed ware potato before selling picked up from 0% to 4.5%. Ware potato processing into crisps also increased from 2.3% to 29.3%. The individual group members that labelled packaging materials for the crisps increased from 0.8% to 25% respectively.

Table 2: Ware potato production and productivity outcomes.

Performance indicators	2014 (%)	2017 (%)	Success rate (%)
Land access (acres) by smallholders	35	48	139
Ware Potato yield (bags)	7.1	12.4	174
Attended improved agronomic practices training	35	96	276
Attended pre and post-harvest handling training	37	96	259
Attended soil & water conservation training	41	95	233
Attended potato value addition training	20	79	389
Practice improved agronomic practices	36	92	254
Practice improved pre and post-harvest handling	29	81	281
Practice soil & water conservation	41	94	231
Use chemicals to control pest and diseases	71	78	111
Late blight a common disease in smallholder farm	43	37	86
Use Diffuse Light Store (DLS)	19	37	196
Curing ware potato in DLS shelves	13	29	229

Although the provision of value addition equipment and facilities promoted processing of ware Potato in to crisps, majority of the small holders were selling potato tubers (Figure 2). No crisps were made by 2014.

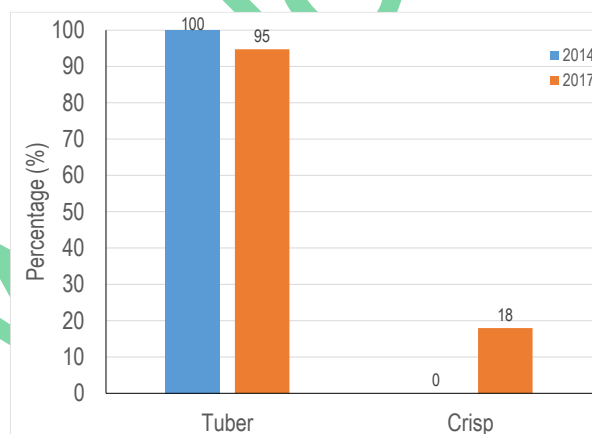


Figure 2: Forms of ware Potato sold by the small holders.

2.3.4 Facilitated marketing and market linkage options for Potatoes

The project achieved 100% in facilitating marketing. Potato farmer cooperatives were formed in each sub-county of the project area which resulted into 4 cooperatives. The farmer groups that formed the cooperatives in each sub-county were identified and selected by the Lower Local Government. A total of 480 smallholder Potato farm households across Kabale district and Kigezi sub region were involved. They were facilitated with increased access to improved storage facilities (Figure 3), better market and market linkages. In a FGD, members of Ikumba Multipurpose Cooperative boasted to have bulked 110 bags each weighing 140 kilograms and searching for a buyer now.

Small holders that were bulking and selling in groups increased from 5.3% to 14.3%. This is attributed to the provision of DLS, market information boards and the training in marketing. The average selling price per Kilogram of the seed Potato also increased from UGX 1138 to UGX 5,718 and that of ware Potato was from UGX 922 to UGX 2,776 (Table 3). Group members also reported that they no longer sell from the gardens and in basins but in Kilograms. In addition, they said, the non-members were still being cheated by middlemen who prefer selling in basins.



Figure 3: Improved storage facility (DLS).

Table 3: Small holder marketing aspects.

Performance indicators	2014	2017	Success rate
Attended marketing training	40%	91%	228%
Practice marketing	28%	83%	297%
Market as a group	5%	14%	270%
Sell to middlemen	71%	71%	101%
Sell in the local market	11%	11%	93%
Average selling price per Kilogram of seed Potato in UGX	1138	5718	503%
Average selling price per Kilogram of ware Potato in UGX	922	2776	301%

The survey found out that majority smallholders get market information from buyers and fellow farmers in 2014 (Figure 4). However, with the training in marketing, the percentage of smallholders who got market information from buyers reduced in 2017 and there was percentage increase of those that obtained information from fellow farmers. This indicates improvement in cooperative marketing as many smallholders belong to the cooperative societies in the project area.

2.3.5 Key success factors for achievement of project objectives

A number of factors that contributed to the success of project objectives were basically in the networking of the various stakeholders.

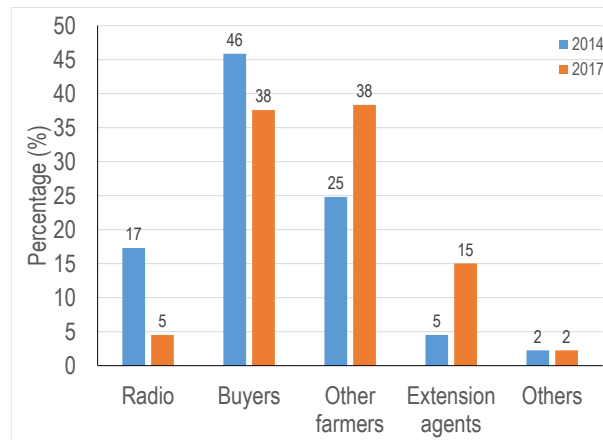


Figure 4: Sources of market information.

The main market challenges in 2014 and 2017 was low price followed by untimely market information (Figure 5).

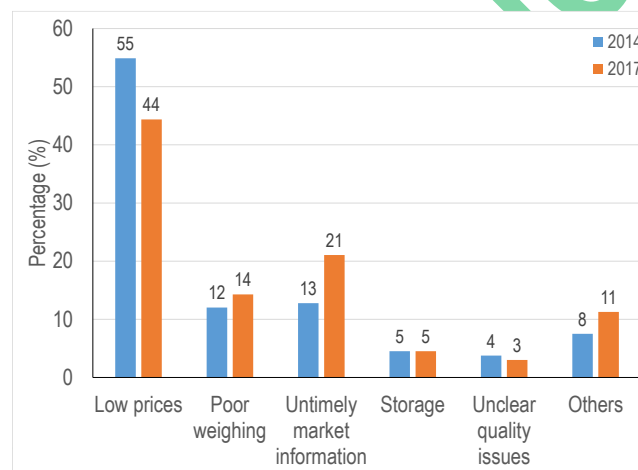


Figure 5: Marketing challenges.

2.3.5.1 Lower local government involvement

Excel Hort Consult built on the experiences and lessons learnt from a similar project; Agroforestry for improved food and livelihood security in Kigezi region (AFFSEM). This project actively involved local government authorities from inception and throughout the project management cycle. This therefore enabled the ownership, and promotion and sustainability of local enterprises which include the Potato production that addressed the economic needs of smallholder households. The lower local government officials participated in the identification and selection of beneficiary farmer groups, planning meetings, monitoring activities and training and monitoring of farmer group activities. All these provided opportunity for other support for the farmer groups through linkage and networking with other development agencies. The KII with the Edison Twinomugusha, Senior Assistant Administrative Officer, Muko Sub County said that;

Working together with Excel Hort Consult staffs has enabled us in Lower Local Government frequently associate with the groups and we are waiting for them to hand-over the groups to the Lower Local Government so that we continue supporting and following them up for continued better performance.

To enable the smallholder groups and cooperatives leverage support, Excel Hort Consult Limited linked the small holder groups to Community Development Officers (CDOs) and Agricultural Officers (AOs). Such arrange enhanced the group development support, group registration, agro-input support, technical training and supervision of group activities. The registration of the smallholder groups with lower local government has positioned the groups to access Community Driven Development (CDD) fund, Youth Livelihood Program fund and funding from other agencies through the lower local government. Mr. Loydah Akankunda, the Agricultural Officer, Kamuganguzi sub-county said that;

Excel Hort Consult facilitated me and the CDO to train Community Based Facilitators (CBFs) and provide technical backstopping to the groups. This initiative has enabled two of the Farmer Field Schools (FFS) of Katenga and Kashere groups to upgrade into Kamuganguzi Multipurpose Cooperative.

2.3.5.2 Private sector linkage

Excel Hort Consult dealt with private sectors before, therefore it was easy for them to link the smallholder cooperatives to private companies. Farmers were linked to Micro-Finance Support Centre, commercial banks and Savings Credit Cooperative Organizations (SACCOS) to easy access to credit and private companies dealing in Potato products for markets. Loydah Akankunda, Agricultural Officer, Kamuganguzi Sub County said;

Before the project, Potato farmers were packing their tuber potato in huge bags of 140 kilograms and could be paid for 100 kilograms by the middlemen. The have been informed to weigh and sell in kilograms. In addition, the groups do financial analysis of the potato business, determine the appropriate prices and sell directly to Kabale Central Market Traders Association with whom the groups have signed Memorandum of Understanding (MoU). The complaint about marketing has slightly gone down.

2.4 Case studies of the project

Case study 1: Bubaare Multipurpose Cooperative - Potato value addition and rural marketing

Bubaare Multipurpose Cooperative was formed in April 2014 and comprises of 3 farmer groups of Kibujigye Tukolore, Mukyigwa and Gagarama. It has a total membership of 103. The members were trained in ware potato production technologies, crisp making and also provided with crisp making machine, weighing scale, packaging materials, spray pumps, record books, washing basin, charcoal stoves and 480 kilograms (6 bags) of Potato seed (Rwangume variety).

The group members divided the Potato seed to promote individual production. The average production of each member was 34 bags of ware potato each weighing 140 kilograms. The amount of the bulk ware

potato by the group was 3,502 bags and was stored in the DLS (Figure 6). The members said it was possible because of the knowledge and skills they acquired from the training. Some of the bulk ware potato (3,502 bags) were sold as seed and tubers while 700 kilograms was kept for crisp production. In the season of May 2017, the cooperative sold 45 bags of seed Potato at UGX 150,000 per bag and realized UGX 6,750,000. The crisps were being made are made every Thursday. The cooperative members usually select 10 kilograms of clean and big size tuber Potato the processing. 200 packets of crisp are always produced and supplied to Kabale Super Market at a cost UGX 500 per packet. This means the

Cooperative is realising a total cash of UGX 100,000 every week. Therefore, cooperative members were

boasting of having saved UGX 1,000,000 with their SACCO. There is a high potential of saving with increased production of the crisps. The members said;

There is high demand for crisp and there is opportunity to expand our production. However, we are constrained by use of labour intensive equipment and the knives usually cut our hands. We hope to buy modern crisps making machine.



Figure 6: Members of Bubaare Multipurpose Cooperatives in front of the DLS.

Case study 2: Potato enterprise creating wealth among cooperative members – Mr. Gideon Twesigye of Bubaare Sub-county in Kabale District in south western Uganda.

Mr. Gideon Twesigye a 42 year old teacher at Kagarama primary school (Figure 8), was one of the smallholder household member who said,



Figure 8: Mr. Gideon Twesigye in one of the potato gardens.

As a grade 3 primary teacher, I earn Uganda shillings 350,000. I have 5 children and I am also enrolled for diploma program in order to up-grade to grade 5.

Therefore, I have been struggling to provide for my family and could only afford to educate my children in Universal Primary Education (UPE) public schools, although the performance of the schools is poor.

Due to the small income from salary, many times my children were on and off from school due to incomplete school fees payment and inadequate provision of scholastic materials. I have always been indebted in order to help bridge the gap.

The financial challenges compelled Mr. Gideon and his other village members to form a smallholder group, Kagarama group in 2010. They started by growing Potato, apples and keeping pigs to increase on their income. All these were at a small scale. With inadequate knowledge and skill in potato production and productivity, he did not spray the crops against pest and diseases. However, he applied fertilizer and this resulted into small yield of 5 bags per season. He also experienced high loss during storage due to rotting. His sales were measured in 15 kilogram basket at UGX 5,000 per basket. The total amount that he earned from the production was UGX 50,000 only.

In 2014, when Bubaare sub-county selected their group to be supported by Excel Hort Consult Limited, Mr. Gideon knew his dream of getting a university degree and educating his children in good private schools would be met. The group was provided with improved seed Potato, and trained in seed and ware Potato technologies, marketing, value addition and construction of improved Diffused Light Store. During the FGD, Mr. Gideon boasted of increased yield of Potato from 5 bags to 100 bags. His loss also reduced to only 1 bag per season.

As a member of a group, Mr. Gideon enjoys the benefits of selling in standardised measures of 100 kilogram bag, bulking and negotiating for better prices. He said 100 kilogram bag was selling at UGX 275,000. His earning per growing season was estimated at UGX 2,750,000. He also confidently added that;

My potato business is growing very well because I grow both seed and ware Potato 3 times a year and earn good money.

With money all time in my pocket and in the bank, I enrolled for a degree program in education in 2014 and have graduated. I paid the university tuition fees with ease.

I am also comfortably paying UGX 980,000 for my children at St. Mary's Rushoroza Secondary School in Kabale municipality and UGX 1,360,000 at Mbarara High School in Mbarara municipality per term.

The community now admires me and I also feel happy that I can associate with the rich when I visit my children at their schools.

In addition, I have a commercial house under construction in the nearby trading centre.

2.5 Challenges of the project

2.5.1 Poor coordination with district local government

The relevant departments (Agriculture and Commercial offices) in the district local government were not involved at the initial stage of the project inception. The project plan and budget were also not shared with the departments. These made follow up of the groups very difficult as echoed by Robert Kamugisha, the Commercial Officer, Kabale district local government. Therefore, there was limited preparation for support provision which might have negatively affected the quality of services provided to the groups and cooperatives. Mr. Kamugisha added,

The district commercial office came in when the cooperatives were already informally formed. We were asked to formalize the registration of the cooperatives with registrar of cooperatives. The planning of activities was poor since they were always called at short notice without prior activity schedules, monitoring reports and participating in the project review meetings. This could have affected the delivery of adequate services to the clients. Therefore, the capacities of the cooperatives still needs strengthening for their sustainability.

2.5.2 Inappropriate borrowing conditions by financial institutions

There was contact made with the commercial banks and micro finance support centre by cooperatives for loan acquisition. Some of the institutions encouraged them to fill their forms and submit with all the requirements. Although, these were done, financial institutions did not respond to the borrowing needs of the cooperatives. The fear was that cooperatives do not have collateral. Therefore, the cooperative members have limited access to agro-inputs which directly affect production and productivity of Potato.

2.5.3 Seasonal variability

The erratic rainfall manifested as heavy or low amounts negatively affected the yields of Potato. This lowered the potential of the smallholders' production. With the heavy rains and steep slopes, smallholder's potato crops were washed away. The incidence of late blight disease also increased during the wet season. In addition, the dry spell and absence of use of drip irrigation equally destroyed potato crops. This resulted into loss on income.

2.5.4 Limited infrastructure

There was inadequate number and types of value addition equipment (Figure 7), weighing and the marketing infrastructure.

The lack of modern crisp processing machine, sealing machine and transport hindered the performance of the cooperatives. For example, Bubaare Multipurpose Cooperative projected to process 100 Kilograms of potato into crisp but ended up producing 10 kilograms per week. This is attributed to the use of rudimentary facilities and technicality involved in crisp making. The chairperson of the cooperative, Mr Joseph Tulindwa said;

The members prefer processing crisp to selling tubers because of the profit. However, the cooperative is affected by labour intensive nature and also the people piling and cutting the potato into slices demand UGX 5000 per person per day.



Figure 7: Equipment provided to the farmers.

2.5.5 Poor weighing

The cooperatives members were cleaning, washing and weighing seed and ware potato. Packing of potato for sales were being done in 80 kilograms and 100 kilograms bags. The middlemen and traders who used to buy from them in bags of 140 kilograms were now fearing as they are not comfortable with measurements in kilograms.

2.5.6 Pest and disease damages

The high incidence of Bacterial wilt disease and leaf miners continued to reduce the yield of Potato.

2.5.7 Limited cooperative development process

The limited time and financial support provided to district commercial department could allow for ineffective development of the cooperatives. Unfortunately, the cooperatives did not show evidence of any sustainable plan for their growth.

2.6 Project efficiency

The extent to which the cost of the project have been justified by the benefits were assessed. This involved the project key result areas and comparison was also made with other smallholder economic empowerment approaches supported by Gorta-Self Help Africa in the Kigezi sub region. Of the total sum of UGX 776,050,000 million only (Euro 227,620), the project spent UGX 1,616,771 per smallholder household. Total sum of money was slightly lower to that of AFFSEM - UGX 825,000,000 million (Euro 250,000) that spent slightly lower amount (UGX 1,045, 627) per beneficiary. The high cost of the project per beneficiary is attributed to the provision of seed Potato, construction of collection centres, supply of value addition and processing equipment, and the establishment of nucleus Irish production farm using drip irrigation technology. These

were not part of the AFFSEM project that Gorta-Self Help Africa collaborated with Excel Hort Consult. Although, more than half (54%) of the total project expenditure was on enterprise development, administrative costs (coordination and monitoring, personnel, office running and capital items) and capacity building constituted 46% of the total project costs (Figure 8). This made the project expensive from Self Help Africa Uganda's perspective.

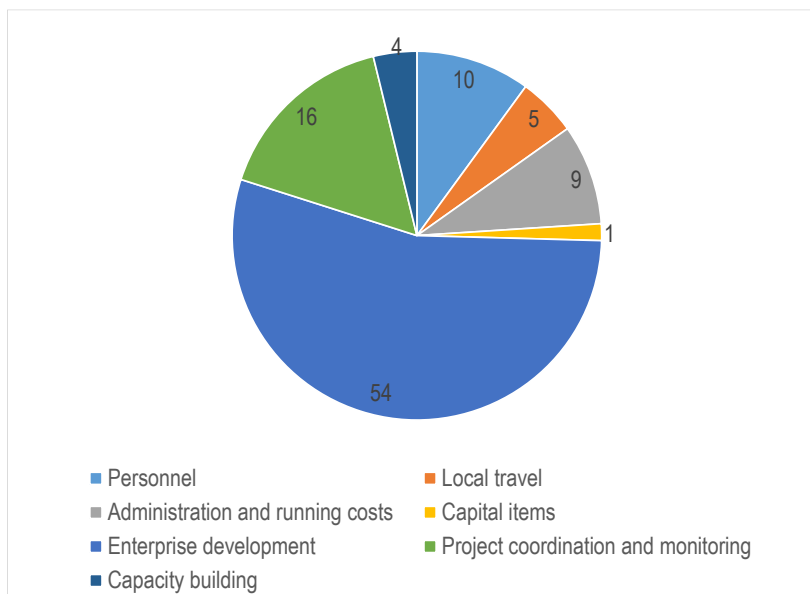


Figure 8: Project cost analysis in percentages.

Cost inefficiencies was exhibited in the high project coordination and monitoring, personnel, administration and local travel costs with Excel Hort Consult. Personnel, capital items, administration and running costs and local travels only took 31% of the total project budget. The high administrative cost could be attributed to the early registration of cooperatives without focusing on their growth and development process thus exposing them to the danger of early collapse due to non-functionality and inadequate capacity building initiatives. The impact of the cost inefficiencies is reflected in the return to potato productivity and utilization explained in table 4 below.

Table 4: Return on potato productivity and utilization.

Output indicators	# of beneficiaries	Cost per beneficiary (UGX)	36 month return (UGX)
Enterprise development (seed Potato)	480	250,845*	3,230,086
Production and productivity (ware Potato)	602	158, 125*	2,787,212
Value addition and processing	602	154, 485**	-

*Including trainings and ** No clear information on crisps production per cooperative

2.7 Project outcomes

2.7.1 Poverty reduction among beneficiaries

The four (4) targeted smallholder cooperatives were formed. This enabled bulking of sales with improved system of weighing and decision on pricing. Therefore, more money was earned by the small holders resulting into increased ownership of land size from an average of 1.71 acres. The average land size owned by a

smallholder increased by 65% to 2.36 acres. There was an increase of 13.6% of those owning and also renting land (48.1%), although a decrease of 9.6% and 1.5% was observed in land ownership (45.1%) and renting land (6.8%) respectively in 2017. However, in 2014, 57.1% owned land, a few (8.3%) rented land while 34.6% owned and were also renting. Land size under seed Potato had also increased by 13% - from 2.11 acres to 2.38 acres. Overall, more smallholder group members were owning and renting land. Coupled with the training in seed and ware Potato production technologies, crisp making, marketing and group dynamics, improved DLS and value addition equipment and materials, some of the small holders initiated alternative income sources and increased quantity and quality of seed and ware Potato.

The average yield of seed potato increased from 3.86 bags of 80 Kilograms to 7.12 bags. That of ware potato also increased from 7.11 bags to 12.38 bags. The average price per kilogram of seed potato increased from UGX 1,137.9 to UGX 5,718.1 while ware potato price raised from UGX 922.4 to UGX 2,775.9 per kilogram. The increase in quantity of seed and ware potato together with the increase in price and in addition with income from alternative sources of income has ultimately increased average total smallholder household income (Figure 9).

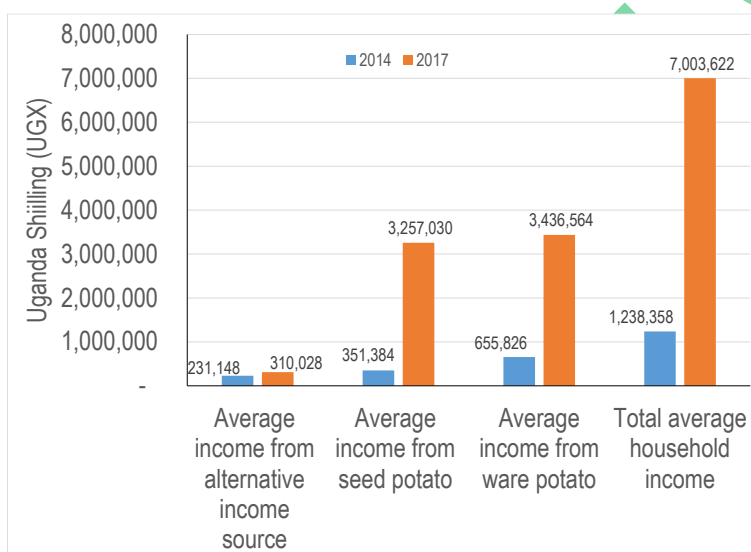


Figure 9: Average smallholder household income (UGX).

The increase household income resulted into more smallholders saving with the banks /SACCOs and VSLAs (Figure 10). These corresponding to the raise from 48.1% to 51.1% and 10.5% to 15.8% respectively. The individuals that were keeping their own money dropped from 21.1% to 18.8%.

The survey also found that average savings of beneficiary smallholder group members in banks/SACCOs increased from UGX 223, 966 to UGX 292,535 and an average amount of cash with beneficiary smallholder group members was UGX 491,121. The beneficiary smallholder group members were able to lend and borrow money. There was an increase from UGX 226,569 to UGX 530,604 of borrowed money by smallholder group members. This means the member had capacity for sustaining their debts which increased from more UGX 125, 379 to UGX 204,448.

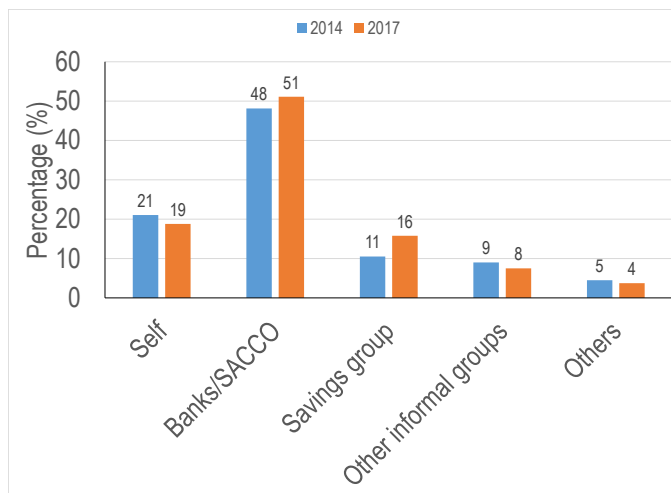


Figure 10: Categories of savings of the beneficiary.

The presence of cash, savings and having the ability to access credit enabled the smallholder group members acquire productive household assets (Figure 11). The average total land size owned by a smallholder increased from 1 acre to 2 acres. In addition, the average number of small animals (sheep, goats and pigs) and mattresses increased from 5 to 6 and 3 to 5 respectively. An indication that many smallholders were putting the money generated from sale of seed and ware potato in the accumulating of essential household assets.

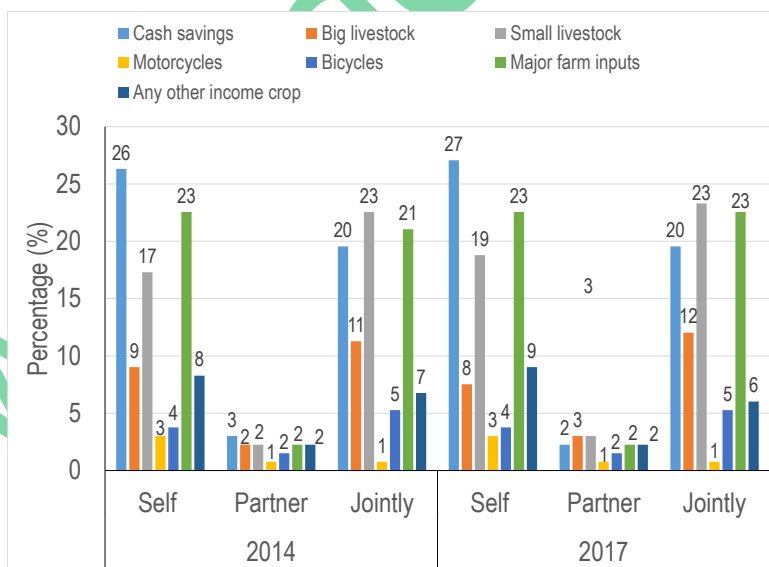


Figure 11: Smallholder asset ownership.

Having all the required household assets and cash provided beneficiary smallholders the opportunity to live a decent life. All the different aspects of quality of life of beneficiary smallholders improved. For example, they had adequate clothing, adequate food, able to pay for children's education and medical bills in private health facilities, and the ability to provide financial support to their family increased (Figure 12).

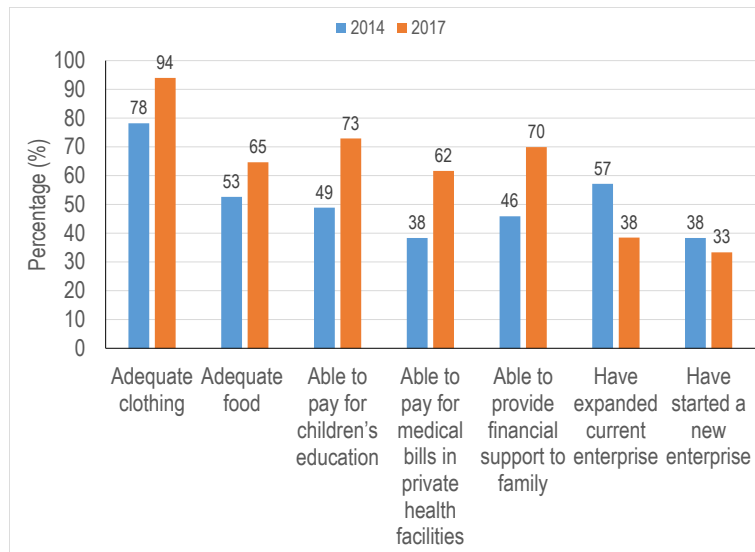


Figure 12: Quality of life of the beneficiary.

2.7.2 Social impact

Decision making on asset ownership is important for livelihood enhancement of the household as assets are precursors for investment. A very small number of beneficiary smallholders were involving their partners in taking decision on important household assets. There was decrease in the beneficiary smallholders taking decision alone on big livestock like cows (Figure 10). Nevertheless, an increased number were taking individual decision on small animals like goats/sheep and pigs. The survey found that collective (2%) and individual decision making without involvement of partners (13%), on average had not improved. Collective decision making exhibited an increase of only 1%. Overall, decision making on household asset ownership rights has not improved much amongst beneficiary smallholders as the percentage change from individual to collective decision making is 0.1% only (individual decision making 0.22% and collective decision making 0.31%).

With the increase in joint decision making on key household assets, involvement of women in household decision making generally increased by 1% (Figure 13). The increase has been more in decision on major use of income (0.7%), asset acquisition and management (0.7%), livestock use (0.7%) and land issues (0.8%). The impact of women involvement in decision making on land size own by the house holds increased.

The survey revealed an increase in the average land size owned by women over the project period (Figure 14). This was also reflected in the average land size of the women under Potato. This indicates that women were able to own productive asset.

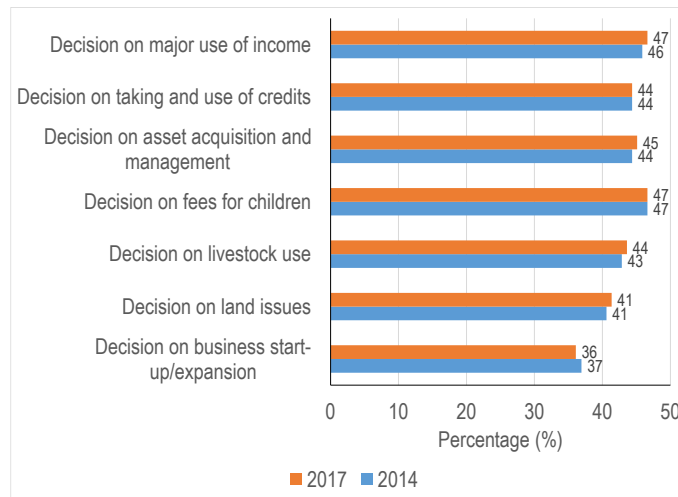


Figure 13: Women participation in household decision making.

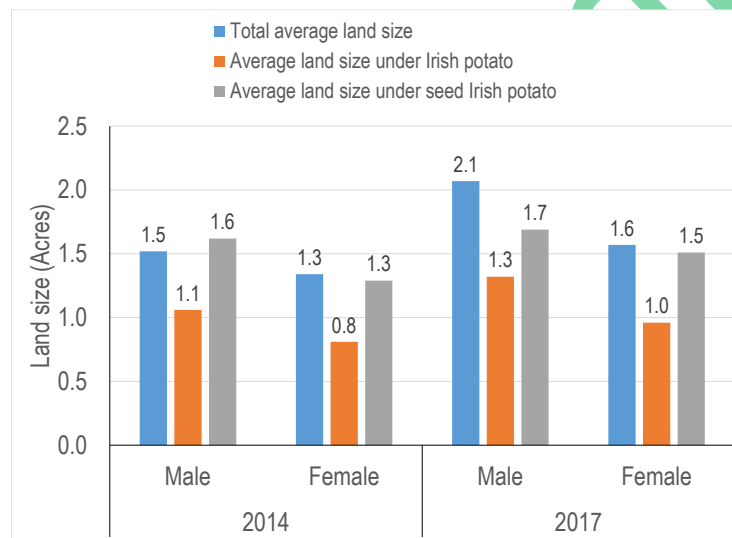


Figure 14: Average land ownership by gender (acres).

With increased key asset ownership rights and involvement of women in household decision making, there was reduction in gender violence in beneficiary households. Denial of access to resources, sexual abuse, and fighting/physical abuse all reduced (Figure 15). The increased in negligence by 4% could be due to the increase in household income and asset.

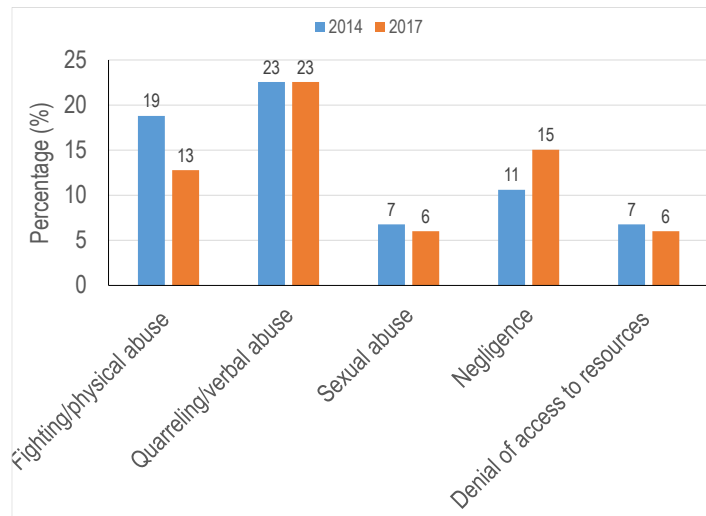


Figure 15: Beneficiary gender violence.

2.8 Sustainability

2.8.1 Project sustainability by local beneficiaries/partners after the end of project funding

Clear roles and responsibilities of all stakeholders with good relationships between project team and the stakeholders during project cycle management improve on project success. This is because engaging project relevant stakeholders from inception throughout the implementation process promotes information sharing for effective achievement of results. Mr. Edison Twinomugusha, the Senior Assistant Administrative Officer, Muko sub-county revealed that;

Involving key stakeholders at project inception creates sense of ownership of the project as buy-in becomes very easy. By encouraging local political leadership and technical staffs to participate in inception meetings, activity planning meetings and monitoring meetings you are allowing them to understand and appreciate what goes on in the project especially with respect to the challenges. The project had a lot to learn from working with local government. If lower local governments accept the project then they will continue to support the beneficiaries. That is the beauty of working in partnership.

The local government and private sector linkages established with beneficiary smallholder groups is sustainable as it is based on service delivery principles of the technical aspect and business value for the private sector other than political interest of local leadership. The combination of service delivery value for local government, financial value for the business and social value for the community, is very powerful as it secures the continued commitment of all parties to continue the partnership.

The linkages formed with lower local government's community service and production departments and Kabale district local government have worked well. Kabale district local government commercial office with the mandate to mobilize smallholder groups to form cooperatives and develop the cooperatives in to viable business entities is committed to continue monitoring the performance of the smallholder cooperatives and linking them to financial institutions for credit support. In addition, Muko and Kamuganguzi sub counties' Community Development Offices were ready to continue to provide group development support and supervision to the smallholder groups and also give opportunities to access financial and input supports from CDD fund, Youth Livelihood Programme funds and any other support from other development agencies in the sub county.

Private sector networks established with smallholder groups and cooperatives has promoted a sustainable business relationship as it is purely based on financial value for the businesses smallholder cooperatives are engaged in. This provides incentives to individual smallholder group members to continue producing for the assured, accessible and high demand markets available and also encourages continued business relationship with the buyers.

2.8.2 Project influence on policy reforms at local level

Although at the district local government level there was weakness due to lack of engagement with district commercial and production offices as well as political leadership at lower local government (sub-county) level, considerable progress was made. This can potentially be built on in any similar intervention. In Muko sub-county for example, the initial work on the formulation of a by-law on counterfeit agricultural inputs with support from International Institute for Tropical Agriculture (IITA), cooperatives signing of Memoranda of Understanding (MoU) with private sectors and opening accounts with SACCOs could potentially lead to the increased access to improved agriculture input qualities. Thereby, contributing to increased seed and ware Irish production and promotion for better markets.

The main successes of the 3 year project timeline is contribution to increasing seed and ware Potato volumes and quality for sale, value addition and marketing infrastructure, and contributing to increasing income from Potato for smallholders and the cooperatives. By following-up, the smallholder groups and their cooperatives, providing technical support and linking them to other sources of funding, the beneficiary sub-counties should be able to develop sustainability strategies to tackle specific challenges of project.

2.8.3 Project aspects/components for replication/scale up

Interviews with project beneficiary showed that quality production and the provision of value addition inputs, training and skills development and cooperative business development were widely applicable. These are potential areas for wide learning across/between district local governments and lower local governments in Kigezi sub region. In a KII with the Kabale District Commercial Officer and Sub-county Agricultural Officers, it was reported that the continued effective cooperative member mobilization; monitoring and provision of technical support and promotion of private sector-smallholder cooperative linkage and networking by local governments are recognized as ingredients for smallholder agribusiness development. Overall, the *Enhancing Sustainable Productivity and Utilization of Potato project model* has been tailored for the needs of seed and ware Potato smallholders in Kabale district in Kigezi sub region. The methodology and the concept in itself, with the holistic approach to smallholder agricultural inputs, extension, market and agribusiness development needs, can easily be taken to other districts and regions in Uganda. However, the model needs to be adapted to the specificities of that particular context. In regions with low to moderate rainfall context, for instance, affordable irrigation facilities would likely be the key focus rather than provision of value addition inputs.

3 CONCLUSIONS, LESSONS LEARNED, BEST PRACTICES AND RECOMMENDATIONS

3.1 Conclusions

- Despite the relatively short implementation period, it is clear that the basic premises of the hunger and poverty reduction is valid in practice and that broader stakeholder engagement in participatory process promotes an improved understanding, buy-in and action increasing smallholder's production and productivity for increased income. Although pre-determined, the focus areas of the project were

largely considered to be relevant at all levels and progress was made in all four (4) lower local governments towards the achievement of the project objectives. Overall, some of the projects main areas of achievements were in the areas of increased seed and ware potato yield with improved pricing, quality of life and key household asset ownership rights, increased women participation in decision making and reduced gender violence achieving.

- There was evidence that training, provision of crisp making equipment and upgrade of smallholder groups into cooperatives contributed to increased seed and ware Potato yield, and thereby increased income, in addition to promoted cooperative agribusiness development management. However, there was no clear evidence to improved access to drip irrigation facilities and improved abilities of smallholders to use drip irrigation. Only 30.1% of beneficiary respondents practice drip irrigation, an indication that the facilities were not provided.
- To consolidate gains and promote wider impact and sustainability, more remains to be done in areas of irrigation technology improvement and cooperative development. These should focus on strengthening the functionality for increased cooperative revenue through building on initial successes and developing linkages with other development agencies through strong partnerships and advocacy for support.
- Excel Hort Consult and Gorta Self Help Africa should strengthen their approaches to M&E. This should involve using clear outcome indicators and developing simple tools to collect data (including key household production and productivity indicators and poverty indicators) and track progress towards objectives on a regular basis.
- As with most external donor funded projects, this project comes with a relatively high proportion of personnel/ administrative and drip irrigation facilities costs at the expense of foundation seed and extension service costs. This resulted in the small production volumes realized over the 3 year period, given that little efforts were made to maximize technology adoption and income amongst smallholders in both project design and implementation. In addition, where smallholder groups and cooperatives are given same amounts of money, it will be important to assess the depth and the scope each group and cooperative achieve with the sum allocated and understand the reasons for any significant differences. Developing a basic unit cost model that can be adapted to real costs in each context can support this analysis. Longer-term sustainability should be promoted by continuing to encourage buy-in of key beneficiaries at local level and emphasizing collaborative advocacy work both internally with other sections of Self Help Africa.

3.2 Lessons learned

- *Smallholder training and mentorship*: Taking the journey together with smallholders from training through to application of the skills learned is important for increasing adoption of improved technologies and sustainability. Although Excel Hort Consult Limited had well qualified staffs who provided the training to members of the smallholder groups they were few in number. This could not provide adequate mentorship to individual group members, which had implications for smallholders to continue learning and sharing knowledge and skills to increase their yields and income. There is need to promote farmer-to-farmer learning through training farmer trainer-of-trainers.
- *Quality and quantity of agriculture input and infrastructure*: Increased access to right quality and quantity of essential seed and ware Potato production inputs and market infrastructure guarantees the expected product quality and volumes needed to meet the increasing local and regional market demands. At the same time, provision of labor reducing crisp making and packaging machines and promoting smallholder cooperative linkage and networking with micro finance institutions for accessing input credit at low interest rates will ensure cooperative members continue to produce and sell for increased member income and cooperative revenue.
- *Multi-stakeholder engagement*: A multi-stakeholder project platform comprising district and lower local authorities, smallholder cooperative representatives and Information Board Managers that provides both technical and management advisory services improves not cooperation and collaboration among project stakeholders. This helped in identifying and sharing resources during the project implementation period especially in passing resolutions regularizing potato packaging and by-law on counterfeit agriculture inputs. The choice of participants proved strategic in ensuring key support during specific activities (e.g. formation and registration of cooperatives). However, one of the challenges was that selfish cooperative representatives failed to mobilize required number of members, because they wanted only their people to benefit.
- *Partnerships*: Some of the main lessons learned about successful partnerships during this project include:
 - a) Better stakeholder analysis at project inception and collaboration, particularly with other organizations focusing on similar seed and ware Potato projects. This should including International Fertilizer Development Centre (IFDC), Uganda Industrial Research Institute (UIRI) as well as Farmer's Federation and line departments during implementation strengthened the links between local, district and national-level cooperative marketing platforms.
 - b) Working with partners especially district local government departments of production and commercial office who have the mandate to work on agriculture and cooperative with a strong level of expertise, knowledge and understanding of the issues and context increased smallholder outputs.
 - c) A strong oversight committee put in place to support effective planning and input during implementation improved achievements of project outcomes.

- *M&E and baseline*: A robust M&E system is needed to allow a realistic set of outcome indicators to be measured in a systematic way. This should include indicators that will measure overall changes in the quantity and quality of seed and ware Potato. This is viewed to be as important as the outcomes, and constitutes a key factor in delivering the outcomes and ensuring long-term capacity to bring about increased clean seed and ware Potato production and productivity by forming smallholder cooperatives and strengthening their capacity and that of the individual members to increase yield and quality of seed and ware Potato for increased smallholder household income and cooperative revenue.
- A small number of outcome indicators linked to the project and tied to baseline figures would have been identified and tracked systematically throughout the lifetime of the project. There were no specific indicators aimed at improving or measuring changes in seed and ware Potato production technology improvement, value addition and processing and group marketing. Quantities and qualities of seed and ware Potato produced and sold by cooperatives and individual group members and quantities of washed ware Potato and crisp produced and sold by cooperatives were not tracked. If there was an expectation of wider buy-in to the project approach, smallholder data collection and analysis of the right quantity and quality of seed and ware Potato should not be seen as something that can only be done by a professional researcher but rather a routine stage in any project M&E cycle.

3.3 Best practices

- **Involvement of local governments in the implementation of the project.** At the inception and during the implementation of project, district local government and beneficiary lower local governments were invited to participate in the by-in meetings, planning meetings and monitoring meetings of the project. In the process, the district local government and each beneficiary lower local government was able to share its respective expertise and lessons learned with the project implementation. For example, Lower local government have a lot of experience working with smallholder groups and cooperatives as well as promotion of seed and ware Potato production and productivity through the National Agriculture Advisory Services (NAADS)/Operation Wealth Creation (OWC), CDD and Youth Livelihood Programme initiatives. Involving them in the implementation influenced how the smallholder groups and cooperatives would continue to be functional and increased the group's chances of receiving funds from lower local governments.
- **Established linkages and networks with private sector to provide effective and sustainable business relationships.** Initiating private sector-smallholder linkage in the project provided opportunity for accessing input credits and also opened up new markets and increased income to the smallholders. As the supply volumes of smallholders continue to increase and the traders and super market demands for crisp also increase, there is opportunity for sustainable business engagement for the smallholder cooperatives.

- **Built a strong farmer-to-farmer extension network that facilitated project activities.** Use of already trained Community Based Facilitators (CBFs) to continue delivering training and mentorship to smallholders, would enable sustainable learning and sharing among/between smallholders. It is a cost-effective and efficient way to promoting peer learning and farmer-to-farmer extension for the many smallholders.

3.4 Recommendations

Relevance

- For up-scaling purposes it is important to focus on the existing cooperatives by consolidating the gains realized during the first phase of the Enhancing Sustainable Productivity and Utilization of Potato project rather than expanding the coverage and scope. This need to focus on the remaining Sub Counties in Kabale and Rubanda district local governments.
- To enable future similar projects meet the needs of target beneficiaries and get buy-in from stakeholders ensure consultations with local partners and other stakeholders (including target beneficiaries) inform the focus of project objectives and activities during project design stage.
- To develop collaborative approaches to meet specific local needs through effective, integrated and sustainable solutions in addressing hunger and poverty, ensure Self Help Africa's Theory of Change is built into all projects rationale/learning hypotheses during project design and that Excel Hort Consult Limited as a implementing partners must be made fully aware of its significance and implications for their work.
- During project design it is very important to develop Theory of Change / Results Chain that can adequately inform adequate identification of indicators needed for development of a robust M&E framework.
- Internal stakeholder analysis should be done during project identification and development of proposal to ensure that the project is taking maximum advantage of connections with others already working on these issues for right targeting, reduced duplication, learning and impact. There are a range of other organizations working on these issues in all the four lower local governments including IFDC, UIRI and IITA.

Impacts

a) Infrastructure

- Self Help Africa with Excel Hort Consult to continue supporting smallholder groups and cooperatives to explore opportunities of leveraging for local level support for accessing funds for market infrastructure improvement including transportation and DLS construction ensuring this takes in to consideration issues related to seed and ware Potato production and productivity.

- Smallholder groups and cooperatives through lower local governments can advocate for reduction on cooperative taxes and interest rates charged by SACCOs and other financial institutions on agricultural inputs and services.

b) Agricultural inputs

- For the cooperatives to continue producing and supplying the right quality and quantity of seed and ware Potato as well as crisp that meet local and regional market demands, Self Help Africa and Excel Hort Consult need to create network and linkage between the cooperatives, input dealers and Kachwekano ZARDI for access to basic seed and other inputs and also provide modern Potato processing machines.
- For cooperative members to access good quality agricultural inputs, Self Help Africa and Excel Hort Consult need to introduce Information and Communication Technology (ICT) for cooperative members to identify counterfeit agricultural inputs.

c) Extension Education

- For increased cooperative member improved seed and ware Potato production practices, marketing and agribusiness practices, Excel Hort Consult together with District Local Government, Production and Commercial departments need to identify and train own cooperative members as farmer trainers in seed and ware Potato production practices, marketing and communication. This will promote smallholder peer learning through sharing information for increased technology adoption.
- Providing incentive and motivation to farmer trainers requires the cooperatives to create a separate funding mechanism through member's contribution. This will strengthen their relationship with the trainers for effective monitoring and evaluation of their work for increased accountability to members.

d) Marketing

- To increase investment levels and retain cooperative members, Excel Hort Consult and Self Help Africa need to strengthen the linkage between the cooperatives and district commercial office to ensure capacities of cooperatives are built to develop appropriate institutional arrangements and good governance system that improve performance of enterprises initiated by cooperative group members. This will enable cooperatives remain viable business units.
- Cooperatives together with their lower local government and district local government authorities need lobby Ministry of Trade, Tourism and Cooperatives (MoTTC) and Ministry of Finance Planning and Economic Development (MoFPED) for increased funding of district commercial office for them provide routine technical backstopping to cooperatives.

e) Sustainability

- To mitigate risks associated with climate change and exploit new market opportunities the cooperatives working with insurance companies and agricultural input dealers need to ensure they offer mutual insurance packages and irrigation facilities for their members.
- For effective negotiation with buyers and to leverage for support from other development agencies and local governments as well as discussions on important policy issues with government authorities, Excel Hort and Self Help Africa need to support the cooperatives to form lobbying and advocacy forum and built the capacity for sustainable growth and development.
- District Commercial Office and beneficiary lower local governments need to allocate specific funds for capacity development of cooperatives as well as smallholder groups to encourage improved performance at cooperative and individual smallholder group member after the end of project funding.
- Cooperatives need to build on the good practice of Farmer Trainers/CBFs and lower local government linkage to ensure strategic support for increased likelihood of onward sustainability after project closure.

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APPENDICES

The output performance were measured as detail of achievement of activities implemented is shown below.

Appendix 1: Assessment of output achievement form (Logframe)

<i>Objective 1: Increase the availability of clean seed among Potato producers in the sub counties of Kamugagunzi, Muko, Ikumba and Bubaare.</i>			
Activity	Target	Actual	Achieved
1.1 Support Irish Seed production from the nucleus farm using drip irrigation technology	1	1	√
1.2 Train farmers in potato seed production using the small seed plot techniques and rapid multiplication using stem cuttings	480	267	×
1.3 Establish demonstrations for small seed plots and vegetative multiplication nurseries	4	7	√
1.4 Train famer Community Based Facilitators (CBFs) in agronomic practices on seed production and Multiplication	4	16	√
1.5 Train farmers in Pre & Post harvest handling and seed storage at association level	4	7	√

<i>Objective 2: Enhance production and productivity of Potatoes for Food and Income security among project beneficiaries</i>			
Activity	Target	Actual	Achieved
2.1 Identification and formation of groups for both seed and ware potato production at Parish level	8	8	√
2.2 Formation and Registration of seed and ware potato Association at sub-county and District level	4	4	√
2.3 Establish demonstrations for small seed plots and vegetative multiplication nurseries	2	7	√
2.4 Training farmers in agronomic practices for ware potato for increased production at farm level	4	8	√
2.5 Conduct trainings for associations in group dynamics	4	?	Not clear
2.6 Conduct trainings for farmers in soil and water conservation practices	8	1	×

Objective 3: Enhance farmers' income through Value addition options.			
Activity	Target	Actual	Achieved
3.1 Training farmers in sorting and grading of Potatoes	4	4	√
3.2 Establish washing stations for cleaning and sorting of Potatoes	8	8	√
3.3 Development of standard packaging and brands for washed Potatoes	8	1	x
3.4 Training farmers in crisps making as a new product of Potatoes	4	4	√
3.5 Support farmer associations with basic equipment for value addition (crisps making)	4	4	√
3.6 Support the construction of collection centres for post-harvest handling	2	2	√

Objective 4: Facilitate market and market linkage options for Potatoes			
Activity	Target	Actual	Achieved
4.1 Identify and train information board managers in the use of SME feeds and Information boards	8	25	√
4.2 Procure and Install information boards targeting major trading centres	16	16	√
4.3 Establish and training market committees about market access options for Potatoes	8	7	x
4.4 Establish and equip bulking centres with basic equipment for collective marketing	8	2	x
4.5 Facilitate trade meeting and contract negotiations between producers and other key value chain actors	8	3	x
4.6 Organise radio talk shows on local markets	2	2	√
4.7 Conduct exchange visits of farmers across the borders of Rwanda	1	1	√
4.8 Production of seasonal crop calendars	500	500	√
4.9 Documentation, Publication and Dissemination of best practices and lessons	4	1	Not clear
4.10 Participation in regional and national agricultural trade fairs	4	1	x

Objective 5: Project coordination and monitoring including field staff			
Activity	Target	Actual	Achieved
5.1 Provision of technical and administrative support to the project implementation (Project Officer (100%))	1	1	√
5.2 Provision of technical and administrative support to the project implementation (2 Project Assistants (100%))	2	1	√
5.3 Project Inception and planning workshop	1	4	√
5.4 Project steering committee meetings	6	2	×
5.5 Conducting annual monitoring and evaluation exercises with Local Government	3	1	×
5.6 Joint Monitoring Mission (steering committee and EHC Board Members)	2	1	×
5.7 end of project evaluation	1	1	√

Objective 6: Capacity building.			
Activity	Target	Actual	Achieved
6.1 Facilitate 3 staff and 3 partners to attend 1 short course on potato seed production	6	5	×
6.2 Development of the EHC Communication and Knowledge Management Strategy	1	0	×
6.3 Carry out exposure visits for 6 staff and partners to other seed producer through exchange studies	1	1	√
6.4 Conduct 1 training of staff in SME Mentoring and coaching facilitation skills for agribusiness development (3 days)	1	0	×
6.5 Website upgrading	15	1	×

Appendix 2: Beneficiary v. Non-Beneficiary Impact Analysis

Using Figure 1: Adapted Results Chain, specific variables were selected to measure the type of influence Enhancing Sustainable Productivity and Utilization of Irish Potato project had on its beneficiaries. Using the Difference in Difference method, the following table displays the net impact of the project.

Table 5: Key Impact Analysis

Key Impact Indicators	Beneficiaries			Non Beneficiaries			Net Impact
	Before	Now	Change	Before	Now	Change	
Average land size in acres owned by smallholders	1.49	1.97	0.48	0.75	1.58	0.83	-0.35
Average land size in acres under Irish potato	1.08	1.36	0.28	0.42	0.42	0	0.28
Average land size in acres under seed Irish potato	2.11	2.38	0.27	0.33	0.46	0.13	0.14
Achievement in Access to Land							
Percent of smallholders accessing land							
Own land	57.14%	45.11%	12.03%	53.85%	56.41%	2.56%	-14.59%
Rent land	8.27%	6.77%	-1.50%	5.13%	2.56%	-2.57%	1.07%
Own and rent land	34.59%	48.12%	13.53%	41.03%	41.03%	0.00%	13.53%
Average selling price per Kilogram of seed Irish potato in UGX	1137.9	5718.1	4580.2	1233.3	1433.3	200	4380.2
Average selling price per Kilogram of ware Irish potato in UGX	922.4	2775.9	1853.5	800	1200	400	1453.5
Average quantity of seed Irish potato harvested in bags	3.86	7.12	3.26	6.47	6.88	0.41	2.85
Average quantity of ware Irish potato harvested in bags	7.11	12.38	5.27	5.24	4.53	-0.71	5.98
Average quantity of seed Irish potato harvested in bags	3.86	7.12	3.26	6.47	6.88	0.41	2.85
Average quantity of ware Irish potato harvested in bags	7.11	12.38	5.27	5.24	4.53	-0.71	5.98
Average earning from alternative income source	231,148.30	310,027.60	78879.3	20,000	20,000	0	78879.3
Percent of smallholders selling in groups	5.30%	14.30%	9.00%	7.70%	10.30%	2.60%	6.40%
Smallholder average savings in Banks/SACCOs	223,966	292,535	68,569	40,000	186,667	146,667	-78,098
Smallholder average amount of money in credit	226,569	530,604	304,035	70,000	243,333	173,333	130,701
Smallholder average amount of money in debts	125,379.30	204,448	79,069	50,000	333,333	283,333	204,264
Achievement in Storage Facilities							
Percent smallholders storing Irish potato in the house	81.20%	63.20%	18.00%	92.31%	84.62%	-7.69%	-10.31%
Percent smallholders storing Irish potato in DLS	18.80%	36.84%	18.04%	7.70%	15.40%	7.70%	10.34%
Percent smallholders heaping Irish potato on the floor	87.23%	70.68%	16.55%	71.80%	82.10%	10.30%	-26.85%

Percent smallholders curing Irish potato in shelves of DLS	12.80%	29.32%	16.52%	28.21%	17.95%	-	26.78%
Achievement in Value Addition Practices							
Percent smallholders selling tuber ware Irish potato	100.00%	94.74%	-5.26%	100.00%	100.00%	0.00%	-5.26%
Percent smallholders processing and selling crisp Irish potato	0.00%	17.95%	17.95%	0.00%	0.00%	0.00%	17.95%
Achievement in Smallholder Savings							
Percent smallholders with self	21.10%	18.80%	-2.30%	41.03%	35.90%	-5.13%	2.83%
Percent smallholders saving in banks/SACCOs	48.12%	51.13%	3.01%	7.70%	7.70%	0.00%	3.01%
Percent smallholders saving with savings groups	10.53%	15.80%	5.27%	41.03%	51.30%	10.27%	-5.00%
Percent smallholders saving with other informal groups	9.02%	7.53%	-1.49%	0.00%	0.00%	0.00%	-1.49%
Percent smallholders saving with others	4.51%	3.76%	-0.75%	0.00%	2.56%	2.56%	-3.31%
Achievement of Quality of Life Improvement							
Adequate clothing	78.20%	94.00%	15.80%	94.90%	100.00%	5.10%	10.70%
Adequate food	52.63%	64.70%	12.07%	48.72%	48.72%	0.00%	12.07%
Able to pay for children's education	48.90%	72.93%	24.03%	64.10%	64.10%	0.00%	24.03%
Able to pay for medical bills in private health facilities	38.35%	61.65%	23.30%	51.28%	56.41%	5.13%	18.17%
Able to provide financial support to family	45.86%	69.92%	24.06%	30.77%	41.03%	10.26%	13.80%
Achievement of Household Asset Ownership Rights							
Percent smallholders owning cash savings							
Self	26.32%	27.10%	0.78%	10.53%	21.05%	10.52%	-9.74%
Partner	3.00%	2.30%	-0.70%	23.68%	23.68%	0.00%	-0.70%
Jointly	19.55%	19.55%	0.00%	2.63%	2.63%	0.00%	0.00%
Percent smallholders owning big livestock (Cows)							
Self	9.02%	7.52%	-1.50%	2.56%	2.56%	0.00%	-1.50%
Partner	2.30%	3.00%	0.70%	12.82%	10.26%	-2.56%	3.26%
Jointly	11.28%	12.03%	0.75%	7.69%	7.69%	0.00%	0.75%
Percent smallholders owning small livestock (goats/sheep/pigs)							
Self	17.30%	18.80%	1.50%	5.13%	2.56%	-2.57%	4.07%
Partner	2.30%	3.00%	0.70%	15.38%	17.95%	2.57%	-1.87%
Jointly	22.56%	23.31%	0.75%	12.82%	12.82%	0.00%	0.75%
Percent smallholders owning motorcycles							
Self	3.00%	3.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Partner	0.75%	0.75%	0.00%	2.56%	2.56%	0.00%	0.00%
Jointly	0.75%	0.75%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent smallholders owning bicycles							
Self	3.76%	3.76%	0.00%	0.00%	0.00%	0.00%	0.00%
Partner	1.50%	1.50%	0.00%	0.00%	0.00%	0.00%	0.00%
Jointly	5.30%	5.30%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent smallholders owning major farm inputs							

Self	22.56%	22.56%	0.00%	0.00%	0.00%	0.00%	0.00%
Partner	2.30%	2.30%	0.00%	2.56%	2.56%	0.00%	0.00%
Jointly	21.10%	22.56%	1.46%	5.13%	7.69%	2.56%	-1.10%
Percent smallholders owning any other income crop							
Self	8.30%	9.02%	0.72%	0.00%	17.95%	17.95%	-17.23%
Partner	2.30%	2.30%	0.00%	0.00%	2.56%	2.56%	-2.56%
Jointly	6.80%	6.02%	-0.78%	0.00%	0.00%	0.00%	-0.78%
Achievement in Women Participation in Decision Making							
Decision on business start-up/expansion	37.0%	36.1%	-0.9%	7.69%	7.69%	0.00%	-0.90%
Decision on land issues	40.6%	41.4%	0.8%	30.80%	30.80%	0.00%	0.80%
Decision on livestock use	42.9%	43.6%	0.7%	30.80%	33.33%	2.53%	-1.82%
Decision on fees for children	46.6%	46.6%	0.0%	35.90%	33.33%	-2.57%	2.57%
Decision on asset acquisition and management	44.4%	45.1%	0.7%	15.38%	17.95%	2.57%	-1.87%
Decision on taking and use of credits	44.4%	44.4%	0.0%	25.64%	20.51%	-5.13%	5.13%
Decision on major use of income	45.9%	46.6%	0.7%	7.69%	12.82%	5.13%	-4.42%
Achievement in Reduction of Gender Violence							
Fighting/physical abuse	18.8%	12.8%	-6.0%	23.1%	25.6%	2.56%	-8.58%
Quarrelling/verbal abuse	22.6%	22.6%	0.0%	18.0%	10.3%	-7.69%	7.69%
Sexual abuse	6.8%	6.0%	-0.8%	12.8%	7.7%	-5.13%	4.38%
Negligence	10.6%	15.0%	4.4%	5.1%	2.6%	-2.57%	7.00%
Denial of access to resources	6.8%	6.0%	-0.8%	5.1%	10.3%	5.13%	-5.88%

Background and context

Self Help Africa – Gorta programme in a non-government organization based in Ireland with operational Offices in the United Kingdom and United States of America. Through open gate fundraising it has been funding a three year project in partnership with EXCEL HORT and LADA in has been implementing a 3 year Integrated Agriculture livelihoods, Clean Water Supply and Environmental Sanitation project aiming at improved smallholder farmer quality of life in Kabale, Rukungiri, Kanungu and Mitooma. This project based its actions in farming communities, health facilities and primary schools, since 2014.

Project objectives

1. To increase smallholder farmer household incomes earned from promoted agricultural value chains
2. To increase agricultural smallholder farmer production and returns on enterprises in the promoted value chain.
3. To strengthen Partner ability to support and sustain grass root activities.
4. To increase access to clean and safe water in 1,452 households (8,712 people) inclusive of school pupils and 7 sub counties in Rukunjiri, Kanungu and Mitooma by end of 2016
5. To improve hygiene and sanitation, knowledge, attitude and practice in 3,600 households and 8 schools in three districts of Rukungiri, Kanungu and Mitooma by end of 2016.
6. To conserve and protect water catchment areas surrounding the 41 protected water sources.
7. To build and or strengthen community structure to sustain project benefit.

Purpose of the evaluation

This evaluation exercise intends to measure the contribution of the project towards smallholder quality of life in terms of incomes, food access, crop productivity, market access, returns on enterprises, partner sustainability to support communities, access to clean & safe water supply, hygiene and sanitation KAP and conservation of water catchment areas and assess the effectiveness of the monitoring systems towards achievement of results.

Scope of the evaluation

Technical Scope

Technically this evaluation will measure;

1. Change in smallholder agriculture and livelihoods returns and KAP.
2. Changes in smallholder farmer access to clean water, adoption of sanitation & hygiene KAP and conservation of water catchment areas
3. Sustainability of the partner capacity to support smallholder farmer households towards improved quality of life.

By; Relevance, Effectiveness, Sustainability, Efficiency and Value for money

Capacity of community structures/ farmer associations and or groups to sustain project benefit to its members.

Effectiveness of the monitoring systems towards achievement of results.

Geographical and partner scope

This evaluation will cover: Rukungiri, Kanungu and Mitooma districts for Sustainable improvement in smallholder farmer household livelihood sustainance and access to clean water supply and environmental hygeine & sanitation and Partner capacity to sustain support to rural communities with LADA. Kabale district for sustainable smallholder farmer household increase in income earned from supported agriculture and livelihoods, strengthening farmer associations to support its member and sustain project benefits and Partner capacity to sustain support to smallholder farming communities with RUCID

Time scope and duration

This evaluation will take a period of 20 working days inclusive of inception report to final evaluation report submissions.

Key evaluation questions by objective

1. *Do the project results have a logical flow?*
2. *Was the intervention placed to the right beneficiary?*
3. *Was there stakeholder participation during design, implementation & monitoring of the project?*
4. *In what proportion were the project targets/results attained and to what extent can this achievement be contribution by the project?*
5. *Were the project processes delivered as planned in deed and time?*
6. *Did the target beneficiaries appreciate and adopted the promoted practices?*
7. *To what extent did the project meet the needs/priorities of the targeted beneficiaries?*
8. *Did the engaged approaches achieve anticipated results?*
9. *What will ensure sustainability of achieved project benefits?*
10. *Were the actualized results worth the resources spent by the project?*
11. *What has happened among the beneficiary community as a result of the project, including both intended and unintended effects?*
12. *To what extent are the outcomes and anticipated impacts of the project likely to continue beyond the funding period?*
13. *To what extent did the project contribute to Technical and social sustainability*
14. *To what extent did the project support Institutional, staff and managerial capacity*

Approach and methodology

The consultant should suggest a fitting approach that will bring out clear evidence of the evaluation questions above. A mixed approach is suggested by the organization according to the salient characteristics of the information needed. This will involve collection of both quantitative and qualitative data collection to give a full understanding of the project attributive nature to the target beneficiaries.

Methods of data collection

The following methods of data collection are thought to be of importance in this evaluation any added methods justified to add value as per the discretion of the consultant can be added or any on the list omitted if thought irrelevant.

1. Document and systems review
2. Households interviews
3. Focus Group Discussions
4. Key Informant Interviews
5. Field observations
6. Case studies

Sampling methodology

The sampling methodology to be used will be at the discretion of the consultant according to the unique situations encountered in the project document. A mix of purposive stratified sampling with random sampling is suggested.

Sample size; The sample size derivation is at the discretion of the consultant according to his justification though the sample survey calculator is suggested at 95% confidence level and 5% confidence interval.

Quality Control

The following measures but not limited to them can help in ensuring data quality;

There data collection instruments will be discussed and approve in the inception meeting

There should be training of the data collectors on the approved instruments
 During this training, the instruments will be pretested in the field to see that they clearly draw the anticipated subject responses. There should be a team leader to check for completeness, quality and supervise & guide the data collection exercise.

Data Entry

There should a recruited data entrant on to ensure data is entered as it is collected to ensure completeness and relevance of information is corrected as soon as possible to avoid unnecessary costs and loss of information. Data entry for quantitative data should be done using a programme compatible to excel while qualitative data should be recorded and transcribed

Data analysis

Quantitative data should be analyzed using a programme compatible to excel in excel is not sufficient while qualitative data should be analyzed using Nvivo.

Composition of the Evaluation team

A multi-stakeholder participatory approach to evaluation is suggested. The team should include; representatives from the local government, beneficiary communities, implementing team and the consultant' team. The reason why the key stakeholders are involved is for them to promote understanding of the project performance, areas of intervention, follow-up and support

Expected deliverables

1. Technical and financial proposal
2. Inception report
3. Final report
4. A power point presentation of findings
5. Final de-briefing on the report findings
6. Copies of electronic data sets
7. 3CDs with the report, power point presentation of findings and electronic data sets

Dissemination of findings

Self Help Africa – Gorta, the consultant and implementing partners will conduct validation meetings before a multi-stakeholder array and after in-putting comments from within and Head quarter a final report submission will be submitted on mail as well as 2 CDs to Self Help Africa Gorta who will in tandem dissemination of the report to Key stakeholder including but not limited to those listed below;

Beneficiary communities through feedback meetings

Sub county, Town council and district leaderships through feedback meetings.

Development partners by submission of a report.

Evaluation team and selection criteria

Consultants will be selected according to the following criteria:-

No	Criteria	Rating/vetting
1	Understanding of the TOR	10%
2	Proposed methodology and planning of assignment	20%
3	Experience and understanding of Uganda's development context	15%
4	Experience of the team in conducting evaluations	10%
5	Experience and suitability of the team leader	10%
6	Cost of the exercise (breakdown)	25%
7	Contact details for 2 referees	10%
	Total	100%

Application procedure

Applicant should meet the above criteria and Technical and financial proposals must not exceed 10 pages.

Apply to Self Help Africa procurement department through the procurement and logistics officer at hawa.nasuuna@selfhelpafrica.net and copy the Head of programmes at Misaki.okotel@selfhelpafrica.net. For clarification please call office line +414 286305 through which you will be linked to Madam Hawa Nassuuna the procurement and logistics officer.

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