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ANNUAL SALES & MARKETING AUDIT REPORT

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AdVance AFRIKA

AFARD The Quest for A Better Society

GWED-G Gulu Women's Economic Development & Globalization

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List of Abbreviations and Acronyms

AA	Advance Afrika
AFARD	Agency for Accelerated Regional Development
ALENU	Action for Livelihood Enhancement in Northern Uganda
COVID-1	Coronavirus Disease 2019
DCO	District Commercial Officer
DINU	Development Initiative for Northern Uganda
DPO	District Production Officer
DLG	District Local Government
DRC	Democratic Republic of Congo
FGD	Focus Group Discussion
FGs	Farmer Groups
GoU	Government of Uganda
GWED-G	Gulu Women Economic Development and Globalisation
KII	Key Informant Interview
KTB	Kenya Top Bar Hive
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
NARO	National Agricultural Research Organisation
NURI	Northern Uganda Resilience Initiative
NGO	Non-Governmental Organisation
OPM	Office of the Prime Minister
TOR	Terms of Reference
TUNADO	The Uganda National Apiculture Development Organisation
UBOS	Uganda Bureau of Statistics
UGX	Uganda Shillings
VHT	Voluntary Health Trainer
VSLA	Village Savings and Loan Association

Executive Summary

Under the Development Initiative for Northern Uganda (DINU), a Government of Uganda programme supported by the European Union (EU) and supervised by the Office of the Prime Minister, Caritas Switzerland received a grant to implement the Action for Livelihood Enhancement in Northern Uganda (ALENU). ALENU is implemented by a consortium of four NGOs that include Caritas Switzerland, Advance Afrika, Agency for Accelerated Regional Development (AFARD) and Gulu Women Economic Development and Globalisation (GWED-G) in the Northern Uganda districts of Zombo, Nebbi, Pakwach, Amuru, Omoro and Agago. The purpose of ALENU is "to consolidate stability in Northern Uganda, eradicate poverty and under-nutrition, and strengthen the foundations for sustainable and inclusive socio-economic development". Its specific objective is "to increase food security, improve maternal and child nutrition, and enhance household incomes through support to diversified food production and commercial agriculture, and through improving household resilience (notably to climate change) and women empowerment."

To achieve the goals and objectives, ALENU sought to conduct a sales and marketing audit on the action commodities in order to assess the problem areas. These were in terms of market penetration, examine the commodities' total marketing environment, marketing mix, competitive advantage, and evaluating the product's success. The selected action commodities were; apiary, local poultry, groundnuts, Irish potatoes, beans, soybeans, onions and tomatoes. Africa Agribusiness Academy was hired as the consultant to undertake the audit and provide recommendations on effective marketing strategies that tailor the marketing efforts to what the target market wants and needs. The sales and market audit was conducted in Zombo, Nebbi, Pakwach, Amuru, Omoro and Agago districts where ALENU is implementing the interventions.

The objectives of the sales and marketing audit included:

i. Understanding the market environment of the action commodities.

ii. Reviewing the marketing strategies and mix for the different action commodities.

iii. Identifying market functions, actors, customer segments and the current market competition.

iv. Assessing the profitability of the different action commodities and evaluate the success of the commodities.

v. Documenting the challenges and opportunities for the different action commodities.

Using both qualitative and quantitative methods, the consultant collected data on the various market aspects. Initially a desk review was conducted to establish and understand the general market situation for the action commodities. It mapped out the findings from previous studies and project reports on the market system. The desk review also generated key analytical questions and identified market data gaps to be collected in the field. The data collection methods used in the field were Participatory Rural Appraisal (PRA), Focus Group Discussions (FGDs), Key Informant Interviews (KII) and Rapid Market Survey. The respondents for the study were selected using purposive sampling. The main target was to engage farmer groups and participants that were already involved in the production and marketing of the action commodity for at least a year. A total of 60 farmer groups participated in the audit through the FGDs across the commodities. Thirty-seven (37) FGDs were conducted in West Nile region while and twenty-three (23) FGDs were conducted in Acholi region. The study also interviewed 65 market actors across the commodities including traders, processors and

vendors. Eleven (11) KIIs were conducted with the leaders of farmer association and district officials such as the entomologists, commercial officers, agriculture officers and production officers.

Key findings of the sales and marketing audit

Analysis of the macro environment indicates that political stability, government interventions to support industrialisation are critical in promoting sector growth and competitiveness. The pandemic also affected the employment rate thus the population has low incomes which negatively affects the purchasing power. However, the pandemic also accelerated use of technology and digital platforms to market products.

All the action commodities assessed were profitable and have the potential to create value and employment along the value chain. However, production and yield of these commodities is still low because of limited acreage, weather disruptions and failure to adhere to the recommended agronomic practices. Production is done both on own land or hired land for the FG demonstration farms and own farms. The FGs have also received inputs, equipment and training support to improve production.

The marketing of the commodities among the farmer groups was informal, with no contracts or mutual relationships being agreed with the buyers. The farmer groups are not engaged in any promotional activities in the marketing of the products. The farmer groups have smart phones with the GAIN application on market and trade but this has not been fully utilised, thus the FGs are mainly price takers as they not yet able to properly negotiate prices with the buyers.

The buyers of the commodities are the individual household consumers and traders within the districts and the nearby districts of Arua, Gulu and Lira. Other traders come from neighbouring countries such as the Democratic Republic of the Congo (DRC), Kenya and South Sudan. The FGs sell most of the products in the raw form without any further value addition or processing. The buyers/traders were the ones engaged in adding value to the commodities before selling to the consumers.

All the commodities had positive gross margins regardless of the low production volumes recorded from the different farmer groups. Local poultry gives the highest returns with 73 per cent, followed by honey at 43 per cent and onions at 39 per cent. The reason behind the high returns for poultry is that the costs of production are low while for honey, the high returns are attributed to the business being long-term after the initial input costs. Tomatoes have the lowest gross margin at 23 per cent because it is highly perishable.

Despite the market potential of the commodities assessed, the major challenges hindering market efficiency were low production volumes, price fluctuations, lack of standardised measures, poor price-setting and lack of linkages between the market actors. The challenges unique to each commodity and opportunities are presented in the SWOT analysis. The major market opportunity across all the commodities is the increasing market demand within the Northern Region and from the neighbouring countries which will stimulate production and competition among the actors in the market system.

Recommendations

Recommendations from the sales and market audit assessment:

- To improve market efficiency, it is important for the farmer groups to be connected to the market actors who have a lot of influence in the market chain, provide services in the market place where they can get critical knowledge about the market requirements and input supplies.
- Farmer groups can benefit from increased production volumes if they adopt good agriculture practices, increase production as well as engage in bulking and aggregation as members of one farmer group or farmer groups engaged with a similar commodity.
- To better understand current pricing practices, farmer groups should be facilitated to set prices with multiple choices. First, the prices set for the commodities should be able to cover the production and marketing costs incurred and also leave a mark-up for the farmer group that is selling to avoid over pricing that hinders potential buyers.
- The success of agricultural enterprises depends heavily on the specialised skills gained; therefore, farmers need continuous skills training for production and marketing of the various commodities. During the trainings, other market actors such as buyers, input suppliers and trainers need to be engaged so that there is a clear understanding of the needs of the different parties in order to deliver the required products or services.
- Adoption and use of standardised weights and measures is critical to improving market performance for the various action commodities. This will not only reduce opaque transactions but also help bring fair pricing to the market system for all the different actors.

1.

Introduction

1.1 Background to the ALENU-DINU Project

Under the Development Initiative for Northern Uganda (DINU), a Government of Uganda programme supported by the European Union (EU) and supervised by the Office of the Prime Minister, Caritas Switzerland received a grant to implement the Action for Livelihood Enhancement in Northern Uganda (ALENU). ALENU is implemented by a consortium consisting of four NGOs, including Caritas Switzerland, Advance Afrika, Agency for Accelerated Regional Development (AFARD) and Gulu Women Economic Development and Globalisation (GWED-G) in the districts of Zombo, Nebbi, Pakwach, Amuru, Omoro and Agago.

The purpose of ALENU is "to consolidate stability in Northern Uganda, eradicate poverty and under-nutrition and strengthen the foundations for sustainable and inclusive socio-economic development." Its specific objective is "to increase food security, improve maternal and child nutrition, and enhance household incomes through support to diversified food production and commercial agriculture, and through improving household resilience (notably to climate change) and women empowerment."

1.2 Purpose of the Assignment

The overall purpose of the sales and marketing audit was to collect data on the action commodities in order to assess the problem areas. These were in terms of market penetration, examine the commodities' total marketing environment, marketing mix, competitive advantage, and evaluating the product's success. The marketing audit was conducted for selected agro-commodities namely; apiary, local poultry, groundnuts, Irish potatoes, beans, soybeans, onions and tomatoes. The audit results provide recommendations on effective marketing strategies that tailor the marketing efforts to what the target market wants and needs. The assignment also proposes actions to farmer groups and market actors on how to improve the market system, and achieve a far more effective marketing mix.

1.3 Specific Objectives

Specifically, the sales and marketing audit was intended to:

- Understand the market environment of the action commodities.
- Review the marketing strategies and mix for the different action commodities.
- Identify market functions, actors, customer segments and the current market competition.
- Assess the profitability of the different action commodities and evaluate the success of the commodities.
- Document the challenges and opportunities for the different action commodities.

2.

Approach & Methodology

2.1 Approach

This study employed both qualitative and quantitative data collection methods. An initial desk review was conducted to establish and understand of the general market situation for the action commodities. It mapped out the findings from previous studies and project reports on the market system. Some of the documents reviewed included the ALENU Market and Value Chain Analysis Report, ALENU project partner annual report, MAAIF Annual performance report 2019/20 and Nebbi District Strategic Plan 2019/2020. The desk review generated key analytical questions and identified market data gaps to be collected in the field. However, there was lack of adequate secondary data documentation in some districts so key informant interviews were used to fill in the gaps.

2.2 Methodology

2.2.1 Participatory rural appraisal (PRA)

PRA methods were used to actively engage the FGs in analysing the current market situation of the action commodities and come up with possible actions to improve the situation. The method was also used for groups and institutions operating in the market and to show how they interact with each other. Data on seasonal analysis, trends and timelines was also collected. The method was used to ensure that there is involvement and participation of such busy participants in the study.

2.2.2 Focus group discussions (FGDs)

The FGDs were conducted using a predetermined checklist to gather qualitative data from the FGs on the group livelihoods, commodity production, market perception, marketing activities and unmet market demand. The method was further used for FGs to express their understanding of the market chain, the different chain actors, their roles and functions in the market. The FGDs were both group and commodity specific to generate deeper insights on the commodity performance and success.

2.2.3 Key informant interviews (KIIs)

KIIs were held with the upper stream stakeholders including the: leaders of farmer group associations, and district officials (commercial officers, agricultural officers, entomologists and production officers) within the target districts. Purposeful sampling was used to identify and target the informants that have information and context about on the production and marketing of the priority commodities. The interviews gathered information on their perspective on the general outlook of the market environment, highlighting the FGs capacities, needs and skills gaps. The KIIs further provided information on the different stakeholders supporting the farmers, agriculture interventions in place, and as well as identify areas for future improvement in the form of recommendations to improve market efficiency and effectiveness for the action commodities.

2.2.4 Rapid market survey

The rapid market survey was used to collect historic and current information on how the market has evolved over a set period of time, who are the main players, what is the basic structure in terms of channels and distribution coverage; who is benefiting from being in the market and providing the team with a reasonable perspective of past performance. The survey was also used to get data on the size and growth potential of local, regional, national, and export markets from the different market chain actors on the different action commodities. These actors included; traders, processors, vendors, aggregators and consumers of the different commodities.

2.3 Study Area, Sample Selection and Size Determination

2.3.1 Study area

The research team visited all the six project districts – Zombo, Nebbi, Pakwach, Amuru, Omoro and Agago. In each district, the team worked in the sub-counties where the project had been rolled out. Selection of the number of farmer groups to audit was done with the

support of the ALENU Project team staff, who were guiding the research team in the field, and the team leaders.

2.3.2 Sample selection and determination

The respondents to participate in the FGDs and the KIIs were purposively selected. The focus was to engage participants that were already involved in the production and marketing of the action commodity for at least a year. The sampling frame was derived from ALENU's list of farmer groups in the target districts that were already involved in marketing. The number of groups identified which had done marketing for a year and available for the audit were only 60 FGs that participated in the FGDs. Thirty-seven (37) FGDs were conducted in the West Nile districts and twenty-three (23) FGDs conducted in the Acholi districts. The audit was conducted on 8 commodities instead of the 10 commodities because those were already being marketed and these included: groundnuts, soybeans, apiary, beans, onions, tomatoes, Irish potatoes and local poultry. Moringa was not audited because no marketing had been done by the farmer groups. Fruits and vegetables were not audited because they were not marketed by all the farmer groups, being produced mainly for the nutrition and health of the participating families.

2.3.3 Data management, quality control and analysis

The completed data collection tools were cross-checked for consistency and validity while still in the field. Any gaps identified were accordingly addressed. The data was further cleaned and edited to obtain a clean data set for storage and analysis. Different methods of analysis were used to address the study objectives. These included descriptive and qualitative methods. The descriptive analysis involved the generation means, percentages and profitability margins. The qualitative market analytical frameworks PESTEL and SWOT were used to establish the external and internal factors that affect marketing of the commodities. The audit also employed ethical considerations, before data collection. The potential respondents got an explanation about the study objectives, sought their consent and assured them of confidentiality.

2.3.4 Limitations of the study

The study was conducted at a time when many of the ALENU Project farmer groups had not started marketing and selling since some of the groups had just been formed and introduced to the new enterprises. This is the reason for the sample size selection since consideration was given to FGs that were engaged in marketing at the time of the audit. With regard to traders, at the time of the survey, many of the crops were off-season, hence some traders and transporters were not available within the project districts to provide information and some contacts were not available for follow-up. Nonetheless, the information and data collected were adequate to address the study objectives.

3.

Study Findings

3.1 Market Macro-environment

The PESTEL (Political, Economic, Social, Technological, Environmental and Legal) analysis framework was used to assess the market macro-environment. The tool was used to identify and monitor the macro-environmental factors that may have a profound impact on the farmer groups' market performance as do not operate in an isolated market environment. The PESTEL analysis explored the key external trends that influence the market, as shown in Figure 3.1 below.

Political

Despite the political stability, the market environment has been negatively affected by the COVID-19 pandemic effects that led to travel restrictions in and out of the country, resulting in a reduction in aggregate demand for and consumption of the various commodities. However, the situation is changing with the ease of the movement restrictions. The government and several stakeholders have put in place agro-industrialisation thus promoting growth and attracting potential market and investment.

Figure 3.1: PESTEL analysis of key external trends influencing the market

POLITICAL	• The Governmnet removing restrictions on travel within and out of the country, opening up the market • Political stability for the agriculture production and marketing to take place • Government supporting agriculture extension through the production department and extension officers
ECONOMIC	• Unemployment rates thus limited income to purchase the farmers commodities • Lucractive markets from cross border trade to attract foreign currency • Economic down time due to the pandemic that is affecting the market prices
SOCIAL	• High population and urbanisation increasing demand for action commodities • Shift in consumption of local commodites because of avialability and health concerns • Growing interest of youth to engage in agriculture activites along the market chain
TECHNOLOGICAL	• Innovation of low cost production and storage technology • Availability of efficient value addition technologies for the commodities to maintain quality • Access to online marketing platforms to source information and sell products
ENVIRONMENTAL	• Bye-laws in place for tree conservation to provide a conducive environment for agriculture environment • Climate and weather pattern allow for production of the commodities
LEGAL	• Acceptance for the foreign traders to come to the communities to source products and trade liberisation • High taxes discouraging farmers to bring products to the market place • Quality assurance in place for the inputs such as seed used in the production of the action commodities

Economic

Generally, the economy was not good because of the high rates of unemployment due to the pandemic effects. The population has low disposable income which is affecting the purchasing power. The audit results indicated that due to low income there has been low demand and consequently causing low prices; sometimes producers ending up without making profits. The cross-border trade between the Democratic Republic of Congo (DRC) and South Sudan also offers a big market potential to earn foreign currency.

Social

The society is now very health conscious which provides a potential market for most of the commodities. There are no cultural barriers in the consumption and usage of most commodities. These factors are especially important for the FGs when targeting certain customers. In addition, there is availability local workforce and the youth now have a positive attitude to work in the agricultural sector.

Technological

The pandemic accelerated the use of technologies to source information, access training and reach the target markets, which the farmer groups are embracing. There is also availability of efficient value addition technologies for the commodities to improve the quality, and make the products more attractive to the market.

Environmental

These factors include ecological and environmental aspects such as weather, climate, environmental offsets and climate change. There is growing awareness of the potential impacts of climate change, the communities are now aware of the benefits of environment and have put in place by-laws to conserve the environment. Generally, the climate and weather are favourable for production of the agricultural commodities.

Legal

High taxes and tariffs related to trade and marketing were identified as hinderances for the FGs to deliver. Nonetheless, acceptance of the foreign traders to come to the communities to source products and trade liberalisation has improved trade. The presence of quality assurance enforcement is helping in eliminating sub-standard inputs and thus the farmers are able to get good quality inputs for production.

3.2 Farmer Group Characteristics and Functions

3.2.1 Characteristics

The farmer groups that participated in the ALENU Project market audit were all established in 2021, and each comprised 25 members. Each FG was engaged in the production of one priority action commodity produced both in a group garden and in individual gardens. Apart from the primary action commodities, the group members were also engaged in the production of fruits and vegetables as secondary crops. The groups had been facilitated with inputs (seed, herbicides etc.) and training in the production of various commodities.

The FGs have an organised leadership structure which includes the chairperson, vice-chairperson, treasurer, agro-ecological champions, para-vets and VSLA mentors. The FGs also get support from Village Health Teams (VHTs) to help with immunisation and sensitisation on health-related issues. The farmer groups also had a marketing committee comprising five persons. The committee was responsible for sourcing market information and markets for the groups.

3.2.2 Functions

The market audit was intended to facilitate understanding of the efficiency of commodity marketing among the farmer groups. The audit identified farmers and traders as two of the most important actors who perform various functions in the marketing system. The marketing functions performed included transporting, processing, grading, storing and providing market information. It was noted that the farmers are mostly price-takers; thus, the FGs need capacity to be able to get better prices thus allowing room for negotiation with the buyers. In addition to negotiating prices, farmers access the following benefits from the FGs:

i. Access training in agronomy and other related training in health, nutrition and savings.
ii. Access to production inputs provided through the groups.
iii. Access to savings and credit services.
iv. Fostering unity among the farmers.

3.3 Commodity sales and market audit

The marketing audit conducted for the action commodities under the ALENU Project focused on the entire range of marketing activities with the purpose of helping the farmer groups improve productivity and profitability. During the market audit, the team was able to learn about the farmer groups' efficiency in performing marketing functions, the marketing services they provide to farmer group members, the marketing constraints or problems they face, and to understand the coping mechanisms available. The sections below provide details of the sales and market audit per action commodity.

3.3.1 GROUNDNUTS

3.3.1.1 Production and yield

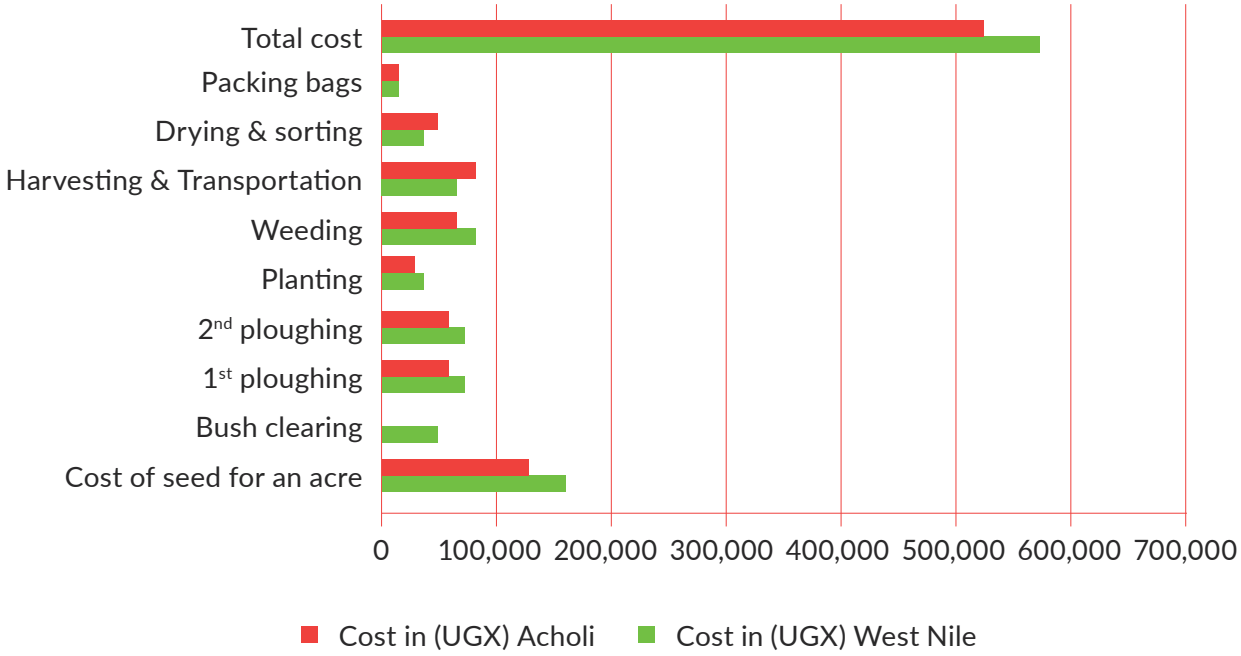
The groundnut is a widely grown legume within Northern Uganda and a very popular crop that has become part of the people's culture and also a cash crop. Groundnut production was carried out by farmer groups in the districts of Pakwach, Nebbi, Agago, Amuru and Omoro. However, the groups in Nebbi and Agago had not yet engaged in the marketing of groundnuts and thus were not audited. Groundnuts were planted on an average of 1.5-2 acres for individual farms while the group demonstration farms were on 1 acre and are managed collectively. Some farmer groups demonstration farms were on a hired piece of land and while the others were given free by a group member. The cost of hiring 1 acre of land ranges between UGX 50,000 and UGX 150,000 per season. The common variety grown is "Red Beauty". This is preferred because it has a bright attractive colour and is commonly demanded by consumers. The groundnuts are harvested when the crop has the highest percentage of sound mature kernels. The plants are uprooted by hand, if possible, when the soil is still moist. After lying in the sun for a few hours, the pods are picked off and moved indoors. They are put out to dry in the sun every day on a tarpaulin or on bare ground until ready for storage or sale. The average yield per acre of groundnuts is 8-15 bags (45-55kg per bag) of unshelled groundnuts per season. The production challenges include high cost of production, issues of land conflict, diseases and pests, and farmers losing a very high percentage of potential harvest volumes.

Photo 3.1: FGD - groundnut farmers in Amuru District

Table 3.1: The average cost of production per acre in West Nile and Acholi

Farm activity	Costs in (UGX)	
	West Nile	Acholi
Cost of seed (45kg) per acre	160,000	120,000
Bush clearing	50,000	50,000
1st ploughing	70,000	60,000
2nd ploughing	70,000	60,000
Planting	40,000	30,000
Weeding	80,000	60,000
Harvesting and transportation	60,000	80,000
Drying and sorting	40,000	50,000
Packing bag	10,000	10,000
Total	**580,000**	**520,000**

Figure 3.2: Production cost of groundnuts per acre by district



The cost of production in the West Nile sub-region is slightly higher than in Acholi. The difference is attributed to the higher cost of seed because there is low production of groundnuts, which affects the volumes and the prices. In both cases, the application of fertilisers, herbicides and additional inputs were not considered in the costing because it not a common practice, and the project is promoting a climate smart agriculture; farmers are encouraged to use organic farm inputs.

3.3.1.2 Marketing strategy

The market status, potential and market channels were assessed to understand the marketing activities and prices, and to obtain information on the quality and volumes traded. All the farmer groups involved in the groundnut's enterprises did not have written production and marketing plans because they were still being developed, but had some basic guidelines and skills acquired from training on how to conduct the marketing. The farmer

groups had received training about the market and constituted a marketing committee consisting of five persons. The committee is responsible for searching for market information, identifying buyers, planning for market days and sourcing market prices. The marketing committee received two smart phones from ALENU to enable them source market information. The marketing of the groundnuts is done at the farms or sometimes taken to assembly markets. Although the FGs had received groundnut threshers and training on value addition, they mentioned that most of the buyers preferred unshelled groundnuts because they have a longer shelf life compared to shelled groundnuts. The farmer groups shelled groundnuts only if they were selling them for seed or to individuals who needed them for consumption. After buying them from the farmers, the rural traders shelled the groundnuts before selling them to the town traders. They spend about UGX 100 per kilo for shelling using an appropriate technology hand-operated device. The farmer groups sold a 50 kg bag of unshelled groundnuts at UGX 130,000-UGX 150,000 within the rural areas while the traders sold them at a wholesale price of UGX 150,000-UGX 175,000 per 50 kg bag of shelled groundnuts within Gulu and Pakwach towns. However, the retail price of shelled groundnuts per kilo ranged from UGX 3,000 to GX 3,500, while groundnut paste cost UGX 4,000-UGX 5,000 per kilo.

3.3.1.3 Consumption and utilisation

Groundnuts are mostly consumed locally. The unshelled groundnuts are boiled and consumed as a snack. The shelled seeds are consumed as roasted or peanuts. The flour or paste is used in preparing different dishes. Groundnut cake, after extracting oil, is used as animal feeds. Groundnuts are a high-value crop that can be marketed with little processing but are extremely versatile and can be used in a wide range of products. The oil can be used for cooking or as a shortening, or a base for confectionery and to make peanut butter.

3.3.1.4 Profitability analysis

At the farm level, the profitability of groundnut production depends very much on the volume of output, the price-output, and the total cost of production. In both regions, the farmers are able to earn positive gross margins, even if the yield is relatively low. However, when the costs of production increase, farmers' profit margins tend to be lower. Table 3.2 below shows the economics of groundnut crop production on a plot of one acre in different regions with both low and high production.

3.3.1.5 SWOT analysis

The SWOT analysis shows how well the farmer groups are performing, their weaknesses and how they can improve based on an internal and an external perspective. The analysis will also help the farmer groups undertake priority actions in production in order to improve the market efficiency of the commodity.

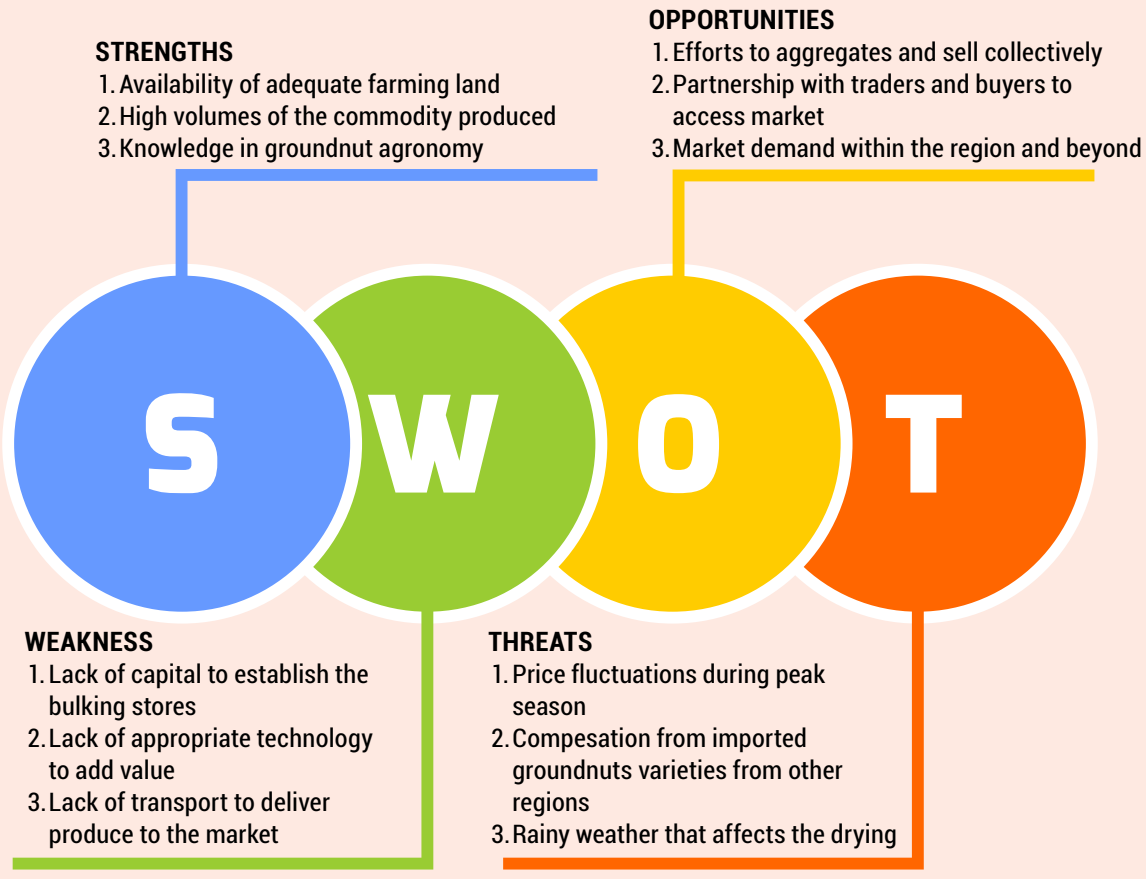
Table 3.2: Profitability analysis for 1 acre of groundnuts

Farm activity	Acholi		West Nile	
	Low (UGX)	High (UGX)	Low (UGX)	High (UGX)
Cost of production	580,000	580,000	520,000	520,000
Yield per acre 50 kg bags	8	12	10	15
Price per bag (50kg) of unshelled groundnuts	130,000	150,000	130,000	150,000
Total revenue	1,040,000	1,800,000	1,300,000	2,250,000
Gross margins	**460,000**	**1,220,000**	**780,000**	**1,730,000**

Assumption:
The cost of production is the same for both the low and high yields.

Photo 3.2: FGD with groundnut farmers in Pakwach district

Figure 3.3: SWOT analysis of groundnuts



3.3.2 BEANS

3.3.2.1 Production and yield

The production of beans is currently done by farmer groups in Agago district. The varieties grown include the Nambale, yellow and green beans. Bean production uses low inputs (improved seed and foliar fertilisers) despite a proven return on investment. The yield per acre ranges from 4 to 6 bags per season, depending on the agronomic practices. Bean production and yields are vulnerable to adverse weather changes, as they are intolerant of prolonged rainfall or drought. The farmer groups assessed were not yet aggregating so as to be able to sell bulk quantities to the traders and try to attract better prices. With conducive weather and rainfall, the farmer groups can grow two crops a year. Most post-harvest activities are manual, with substantial contributions being made by women. Threshing is done using sticks and the youth assist with this activity. Drying is done on the ground or on a tarpaulin and the beans are subsequently piled in heaps or packed in sacks or tins for storage within the household. Regardless of the volumes, beans are stored improperly since they lose viability quickly and are also very prone to pest damage. However, beans are stored for only a short period before they are sold out. The challenges faced by the farmer groups include low production, high post-harvest losses at the farm level due to poor post-harvest handling practices and pest diseases during storage.

3.3.2.2 Marketing strategy

The market committees of the farmer groups have the purpose of looking for the market, by visiting selling points to identify the buyers and the prices in the markets. The individual farmers sell within the community and buyers come to the homestead. The farmers also sometimes sell to traders who do the bulking in the communities.

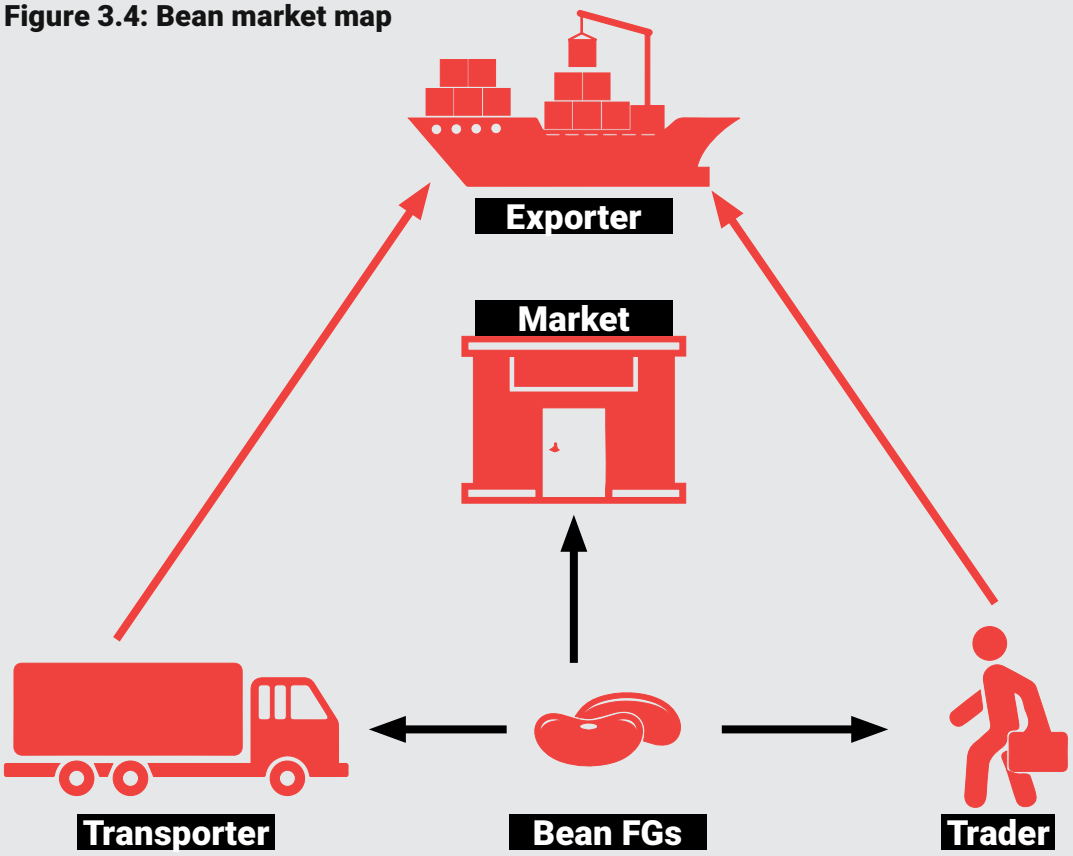
Beans are usually transported in sacks on motorcycles, pick-ups or small trucks. The main customer of the farmer groups for the beans are traders who own stores in the trading centres and agents of aggregators in the neighbouring districts, and some of the beans are exported to Kenya, DRC and South Sudan. Beans are mostly traded by informal actors at cross-border points. The farmer groups also access the traders in the community markets that happen twice or once a month in the nearby areas. Bean prices are volatile and dependent upon demand and supply as well as consumer preferences. At seasonal harvest points, prices are low. However, they increase during the off-seasons. Fresh beans fetch higher prices than dried beans, while different bean varieties fetch different prices. For example, single-colour beans are more expensive than mixed-colour beans. The price per kilo of fresh beans at the farm gate is UGX 3,000, while the price for the dry beans is UGX 1,400. The traders sell the fresh and dry beans within the town centres at UGX 4,000 and UGX 1,600 per kilo, respectively.

Table 3.3: Cost of production per acre of beans in Agago district, Acholi sub-region

Farm activity	Cost in UGX
Cost of seed 20kg @UGX 3,000	**60,000**
Bush clearing	50,000
1st ploughing	60,000
2nd ploughing	60,000
Planting	40,000
Weeding	60,000
Harvesting	10,000
Drying and threshing	10,000
Packing bags	10,000
Total cost	**360,000**

3.3.2.3 Bean market map

Figure 3.4: Bean market map



3.3.2.4 Consumption and utilisation

Bean consumers include rural and urban households, institutions and restaurants. The growing population, coupled with increasing prices of alternative protein sources, are key drivers of bean demand for most rural and middle-class consumers – as beans are a cheap source of protein. Beans are consumed often as food, making them an essential part of the household diet. Beans are consumed at various stages of growth: fresh (green leaves), immature green pods or fresh grains, dry (to a lesser extent), and in powder form (soups, porridge and confectionery). The dried beans are most popular and are consumed throughout the year. Consumer preference for different varieties is driven by certain varietal attributes such as short cooking time, suitability for a thick soup, swelling characteristics, good taste, familiarity, long shelf life after cooking, bean size, colour and susceptibility to weevils.

3.3.2.5 Profitability analysis

At the farm level, the profitability of bean production depends very much on the volume of output, the price-output, and the total cost of production. Even with low production of 4 bags per acre, the farmer groups are able to get a positive gross margin. However, when the costs of production increase, with additional activities such as applying organic manure and additional weeding, the gross margins tend to increase because of the increased yield per acre. Table 3.4 below shows the economics of bean production on a plot of one acre in different regions with no input costs.

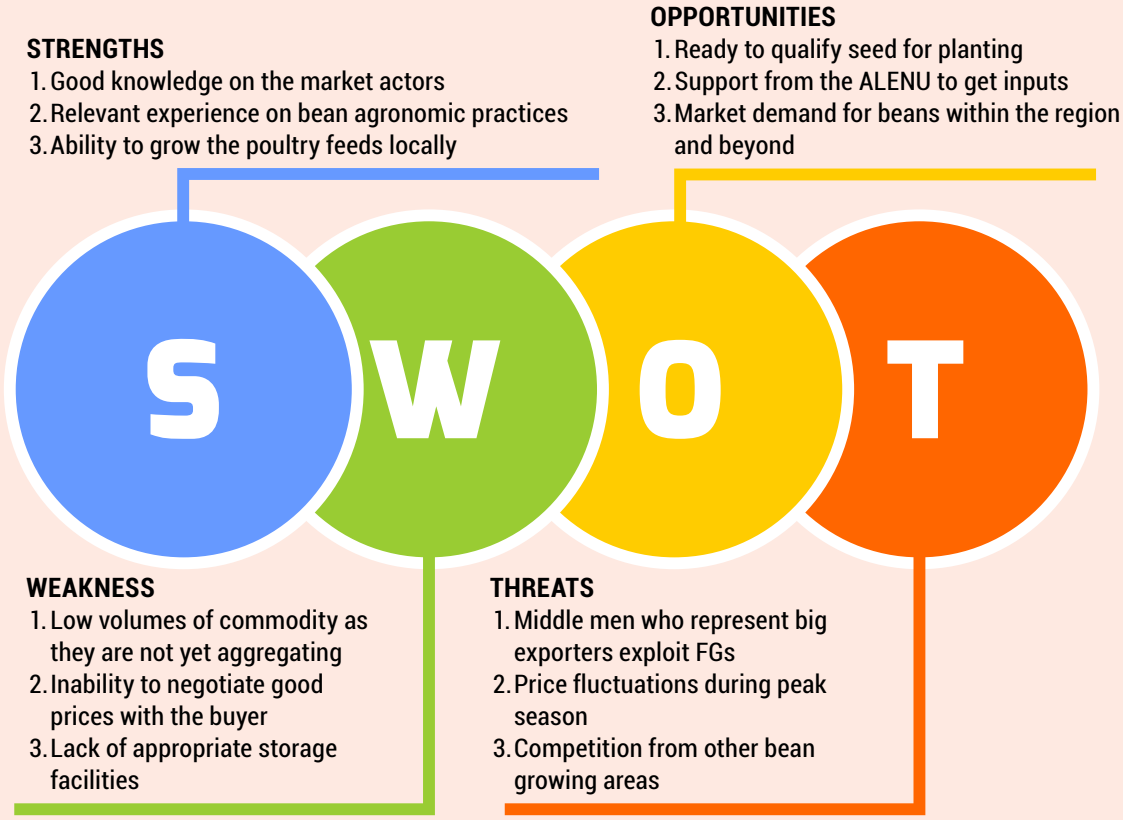
3.3.2.6 SWOT analysis

The SWOT analysis shows how well the farmer groups are performing, their weaknesses and how they can improve based on an internal and external perspective. The analysis will also help the farmer groups undertake priority actions in production, in order to improve the market efficiency of the commodity.

Table 3.4: Bean production on a one-acre plot in different regions with no input costs

Farm activity	Amount (UGX)
Cost of production for beans	**360,000**
Yield per acre 100 kg bags – 4 bags	
Price per bag @ kg UGX 1,400	140,000
Total revenue	**560,000**
Gross margins	**200,000**

Figure 3.5: SWOT analysis of beans



3.3.3 SOYA BEANS

3.3.3.1 Production and yield

The soya bean was assessed in the farmer groups of Agago, Omoro and Pakwach. The varieties grown are Maksoy 3N, 6N and some local varieties. While most of the seed was sourced from the previous harvest, the farmer groups also received seed through the ALENU Project. Soya bean varieties were chosen based on attributes including drought tolerance, minimum shattering, high-yielding, early maturity, big seed size, preferred colour, and disease resistance. On average, the farmers grow between 1 and 2 acres of soya beans each. Land preparation for soya bean growing is done using both animal traction and hand hoes. In West Nile and Acholi sub-regions, weeding of soya beans was done twice per season. The minimum production per acre was recorded as 4 bags of 100kg while the highest production with the application of good agricultural practices was 10 bags of 100kg per acre per season. The use of fertiliser or pesticides as production inputs was very uncommon. The main challenges faced in production are high labour costs, the rapid growth of weeds, weather changes (too much

rain or sun), breakage of the seed due to much drying as well as pests and diseases. When the soya bean was ready, it was harvested, threshed and then dried before storage. The commonest transportation methods used by the farmers to move the product from the farm to home for storage or to the market are head porterage and the bicycle. Boda-boda motorcycles and trucks are used when the buyer comes directly to the farms to buy from the farmers, traders or farmer groups.

3.3.3.2 Marketing strategy

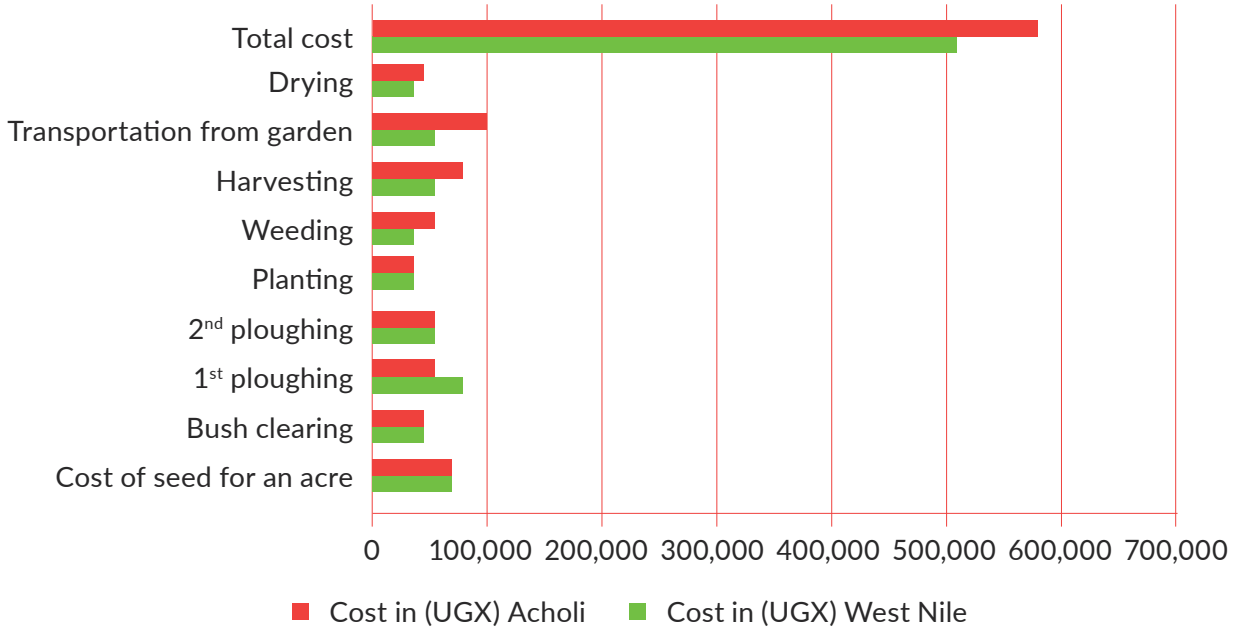
The market committees of the farmer groups have a responsibility of looking for the market, and this is done by visiting selling points to identify the buyers and prevailing market prices in the markets. Most of the farmer groups reported that they market all the soya bean grown and that they regard it as a cash crop. The traders and wholesalers do the lowest level of aggregating and then sell to the pro-

Table 3.5: Cost of production per acre of soya beans by sub-region

Farm activity	Costs in (UGX)	
	West Nile	Acholi
Cost of seed 25 kg	75,000	75,000
Bush clearing	50,000	50,000
1st ploughing	80,000	60,000
2nd ploughing	60,000	60,000
Planting	40,000	40,000
Weeding	40,000	60,000
Harvesting	60,000	80,000
Transport from garden	60,000	100,000
Drying	40,000	50,000
Total cost	**505,000**	**575,000**

Assumption:
Each kilogram of soya bean seed costs UGX 3,000.

Figure 3.6: Cost of production of soya per acre by region



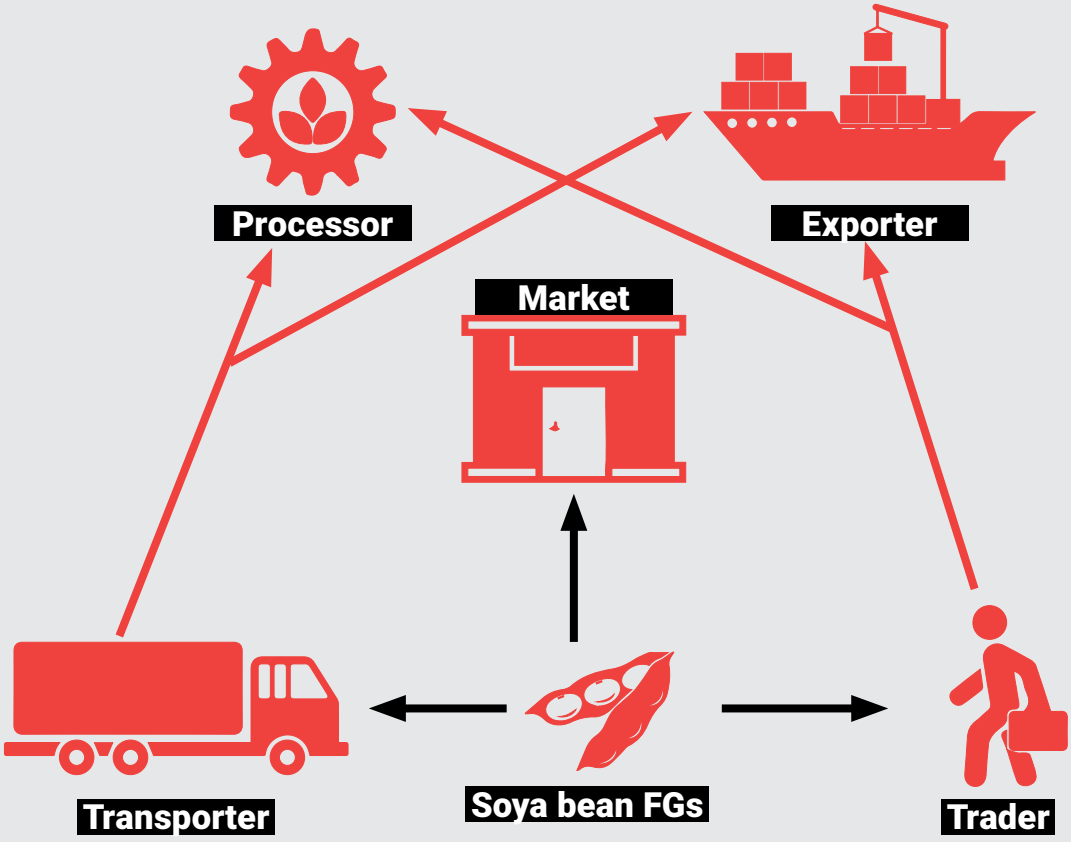
cessors, exporters and big aggregators for the product to move forward in the market. Some of the exporters and big aggregators in the market are represented by transporters who come with trucks, purchase and take the produce for processing and export. Most farmers sell to agents or traders who come from the region but also from Kenya and South Sudan, to buy at farm level and then take the product to different locations. The local traders, such as agents and collectors, mainly work on behalf of these urban traders and aggregators. The prices at the farm gate per kilo were UGX 1,600 and UGX 1,500 in West Nile and Acholi respectively. Within Acholi, the farmer groups stated that there were also processors who sometimes provided seed and training to some farmers as part of a contractual arrangement to supply them with the product. The processors identified include Guru Nanak, Mukwano Industries and Mt Meru East African Soya Bean Solutions. Some of these companies are involved in primary processing (sorting, cleaning, re-branding and transportation) and the provision of inputs (provide seed, fertiliser, agrochemicals and equipment) to producers. Below is a market map showing the different channels for the commodity to the market.

3.3.3.3 Soya bean market map

3.3.3.4 Consumption and utilisation

The main consumers of the soya beans were identified as food processing companies and those involved in the making of animal feeds. The main products of processing are soybean oil, soybean cake/meal, animal feeds (mash and pellets), soy cup, soy millet, brown butter, soymilk and soy yoghurt. A few household consumers were also reported who mainly consumed the soya flour as baby porridge, hot beverages and grain that was roasted or fried for snacking. The consumers preferred bright-coloured soya beans that had big grains. These were associated with having high oil and protein content. The smaller grains were always considered to be of poor quality and very hard to cook or process.

Figure 3.7: Soya bean market map



3.3.3.5 Profitability analysis

At the farm level, the profitability of soya bean production depends very much on the volume of output, the price-output, and the total cost of production. Although the production cost is higher in the Acholi sub-region and the selling price is lower than in the West Nile sub-region, farmer groups earned more profit from the production of soya beans. This was attributed to higher yields per acre due to implementing better agronomic practices.

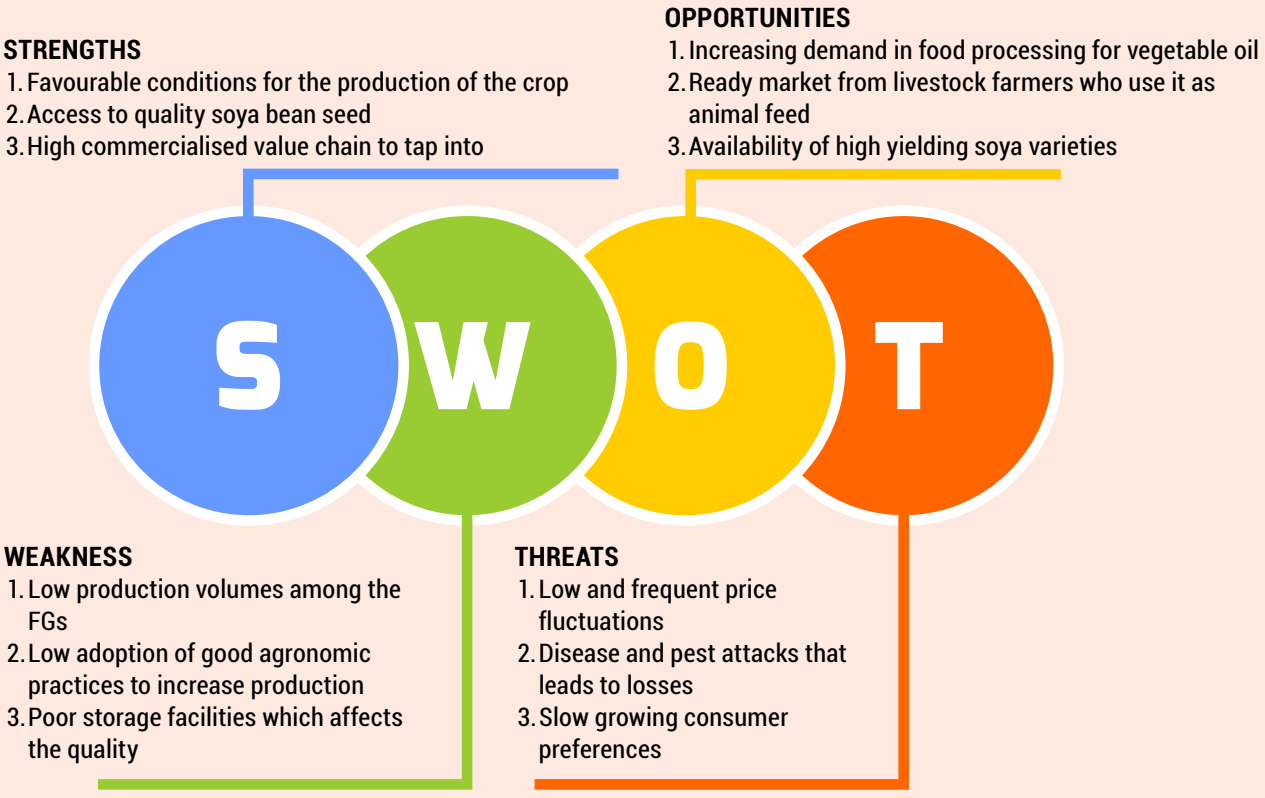
3.3.3.6 SWOT analysis

The SWOT analysis shows how well the farmer groups are performing, their weaknesses and how they can improve based on an internal and an external perspective. The analysis will also help the farmer groups undertake priority actions in production in order to improve the market efficiency of the commodity.

Table 3.6: Soybean production on a one-acre plot in different regions with no input costs

Farm activity	Costs in (UGX)	
	West Nile	Acholi
Cost of production	505,000	575,000
Yield per acre 100 kg bags	4	6
Price per bag	160,000	150,000
Total revenue	640,000	900,000
Gross margins	**135,000**	**325,000**

Figure 3.8: SWOT analysis of soya beans



3.3.4 APIARY

3.3.4.1 Production and yield

Apiary or apiculture is the keeping of bee colonies in hives. The beehive products include honey, propolis, royal jelly, pollen, beeswax and bee venom. The West Nile and Acholi sub-regions of Uganda are suited to beekeeping because in these areas agricultural production is still practiced in traditional forms, providing good conditions for beekeeping. Bees forage on the flowers of trees, shrubs and the different agricultural crops grown in the area. Efficient beekeeping necessitates both modern hive technologies and supporting equipment. Nonetheless, most of the beekeepers in Uganda use traditional hives.

Apiary production among the farmer groups that were audited is mainly characterised by the use of traditional hives. The hives are made locally and on average each farmer owns 7-30 traditional hives. The average yield for the traditional hives per harvest is 7-10 kilos per harvest and they usually harvest 2-3 times a year. With the ALENU Project intervention, the farmer groups were introduced to modern hives known as the Kenya Top Bar (KTB) hives and Langstroth hives. Each participating farmer group was provided with 125 hives that were shared among the members, with each member receiving five hives. Similarly, at least 12 selected pilot farmers received 10 Langstroth hives each for commercial production. These hives were sited six months ago and the FGs had only achieved only 30-50 per cent colonisation while others are not yet colonised. The Farmer groups had neither harvested nor marketed any bee products as a group from the hives supplied by the ALENU Project. The farmer groups were expecting the first harvest in the December–March season. The expected average yield from the KTB hives is 15-20 kg/hive per harvest from two harvests in a year. The average production yield for Langstroth in 10-12kg/hive per harvest from four harvests in a year. The farmer groups also stated that apart from the hives, they received production equipment such as buckets, protective wear and hive tools. They also received processing equipment such as honey extractor, honey tank, bee venom machines, soap and candle moulds, plus some packaging materials for propolis and beeswax jelly. The FGs have also been trained on production, processing and value addition from the project. Additionally, within the sub-regions, training, extension services, beehives and equipment are offered by the Entomology Department of the Ministry of Agriculture, Animal Industries and Fisheries (MAAIF) and other organisations that support apiary within these districts. The Entomology Department mentioned that they continuously support apiary with the main objective to improve the quantity and quality of honey and beeswax produced in the country.

3.3.4.2 Marketing strategy

The general market status, potential and market channels were assessed, including understanding the marketing activities, prices and information on the quality and volumes traded. All the farmer groups that were audited did not have written marketing plans or strategies for the apiary enterprise. However, they had knowledge of what they would want to achieve from the group enterprise. The farmer groups had not done marketing as a group because they had not harvested yet. The FGs were focusing on commercial production and marketing of honey and other bee products such as beeswax candles, propolis and bee venom in the short term. Farmer groups were trained by the ALENU project in marketing and were facilitated with two smart phones to access market information. The farmer groups said they could make direct contact and exchange information with potential customers to discuss prices and quantities.

Farmer groups have several alternatives for marketing their honey in the districts surveyed. They may sell directly to consumers (in local markets or from roadside stands), to a wholesaler, to a honey packer or dealer, or to traders travelling to and from Kampala. Roadside marketing of honey packed in small containers was also common in the three districts. They affirmed that selling honey from a roadside stall or market can bring the advantages of plenty of passing traders, without the overhead costs of a shop. Beekeepers near trading centres do not experience a lot of marketing constraints. However, those far away from the trading centres face the challenge of bringing their honey to the centre for marketing. Beekeepers use various containers available to pack and sell honey. These include used water bottles, small jerricans, or honey

Photo 3.3: Beehives of Watamu pi Anyim Honey Group, Odek Parish, Omoro District

jars. Honey in larger volumes is often carried in plastic 20-litre jerricans although they are not suitable for comb honey as they have a narrow neck. The best options for processing and transporting large volumes of honey are stackable, airtight buckets.

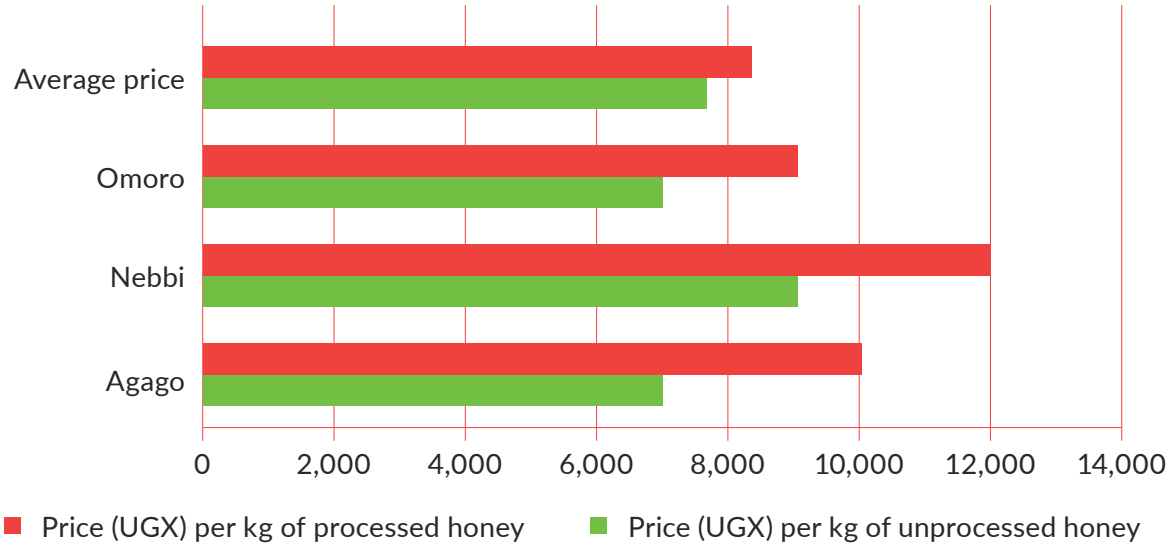
The volume of honey sold by the individual farmers from the traditional hives was estimated to be 100-250 kg of both processed and unprocessed honey per year. Most of the honey produced is sold as honeycombs. Some of the honey is extracted and sold in liquid form in small retail packs to the users. The low volumes of honey were mainly due to the use of traditional hives as well as the challenges of bee absconding and delayed harvesting, which allows bees to consume the honey. The farmer groups also lack collection centres so it is hard to buy and bulk significant volumes of honey for sale from other farmers. The establishment of honey collection centres also requires a lot of money, which they do not have at the moment. Aggregating production to increase volume levels could unlock access to larger buyers, increasing producers' bargaining power and lowering marketing costs. Increasing production volumes remains a key issue to address, as it affects the marketing of honey and its by-products.

There was a slight variation in the honey price in the different districts. The farmer group members revealed that the prices offered were acceptable to them. The price per kilogram of processed honey in West Nile was UGX 12,000 which was higher than that in Acholi which was between UGX 9,000 and UGX 10,000. The price variation was because of the differentiation of honey by origin or region. The honey from the West Nile region has a special reputation among consumers as the region is zoned and produces plenty of natural honey. The differentiation by origin provides an advantage for Nebbi to sell at a higher price compared to the other districts. The farmer groups had branding nor product range for the honey at the time of the audit.

Table 3.7: Honey prices from the different districts

District	Agago	Nebbi	Omoro	Average price
Price (UGX) per kg of unprocessed honey	7,000	9,000	7,000	7,700
Price (UGX) per kg of processed honey	10,000	12,000	9,000	10,300

Figure 3.9: Honey prices by district



3.3.4.3 Consumption and utilisation

Honey and other apiary products are utilised as food, medicine and raw materials in agro-processing industries. The main users of honey are individual consumers, who comprise urban middle and high-income earners. The other end-users within the country such as hotels, pharmaceutical companies and food processing industries use relatively big quantities of honey. Sometimes they import most of the honey used. The domestic demand for honey in Uganda is small due to the low incomes of the population. In addition, the presence of a number of substitutes for honey, such as sugar which is cheaper, is another reason. Furthermore, the low consumption of honey is attributed to a lack of promotion of the advantages of honey. The findings show that if there is aggressive promotion of honey for its health benefits at the national level it will stimulate demand and consequently production.

The farmer groups revealed that they had not engaged the customers to understand the honey preferences. However, basing on experience and hearsay, they said some consumers that use honey for bread and tea preferred honey with a lighter or golden colour. Consumers do not like crystallised honey but are willing to pay extra for liquid honey, whilst darker honey was preferred by the consumers who needed honey for medicine as it is seen as more suitable for medicinal purposes. Comb honey was mainly bought in bulk by traders who process and pack honey. The farmers also said that consumer demand for honey changes depending on the seasons. For example, with the current pandemic, a lot of people demand honey and use it as a remedy for coughs and colds. The youth and older people demand honey for health purposes. Consumer demand also changes according to honey prices in the market. For example, at honey harvest times prices may be low if the honey harvest is good and a lot of people tend to buy honey at this time. As time passes and honey is consumed, prices will start to rise and the demand reduces.

3.3.4.4 Profitability analysis for local and modern hives

The profitability analysis indicates that the benefits of honey production using both local and modern hives is high. The existence of a large natural environment and the prevailing market price can ensure that the farmer derives a meaningful income from this venture. It was established that using the local hive, a farmer can produce 25 kg per hive per year with a gross income of UGX 532, 500 from 5 local hives. While the gross margins from 5 KTB hive and 5 Langstroth hives is UGX 647,500 and UGX 1,067,000 respectively (See Table 3.9).

Table 3.8: Profitability analysis for the local and KTB hives

Equipment	Unit cost (UGX)	Quantity required	Total cost (UGX)
Beeswax bait (kg)	20,000	0.5	10,000
Protective wear (pc)	130,000	1	130,000
Gloves (pair)	20,000	1	20,000
Gumboots (pair)	20,000	1	20,000
Smoker (pc)	40,000	1	40,000
Bucket (pc)	25,000	2	50,000
Hive tool (pc)	20,000	1	20,000
Torch (pc)	15,000	1	15,000
Management	100,000	Lump sum	100,000
Processing & extraction of honey	100,000	Lump sum	100,000
Total cost for equipment & processing (A)			**505,000**
Cost of 5 KTB hives (B)	130,000	5	650,000
Cost of production using KTB hives (A+B)			***1,155,000***
Cost of 5 local hive (C)	50,000	5	250,000
Cost of production using local hives (A+C)			***755,000***
Cost of 5 Langstroth hives (D)	180,000	5	900,000
Cost of production using Langstroth hives (A+D)			***1,405,000***

Notes:

- The life span of the equipment is at least three years.
- Good quality KTB hives and Langstroth can last 10+ years.
- Local hives from palm trees can last 15+ years.
- Honey processing equipment was not considered since it is a small number of 5 hives.

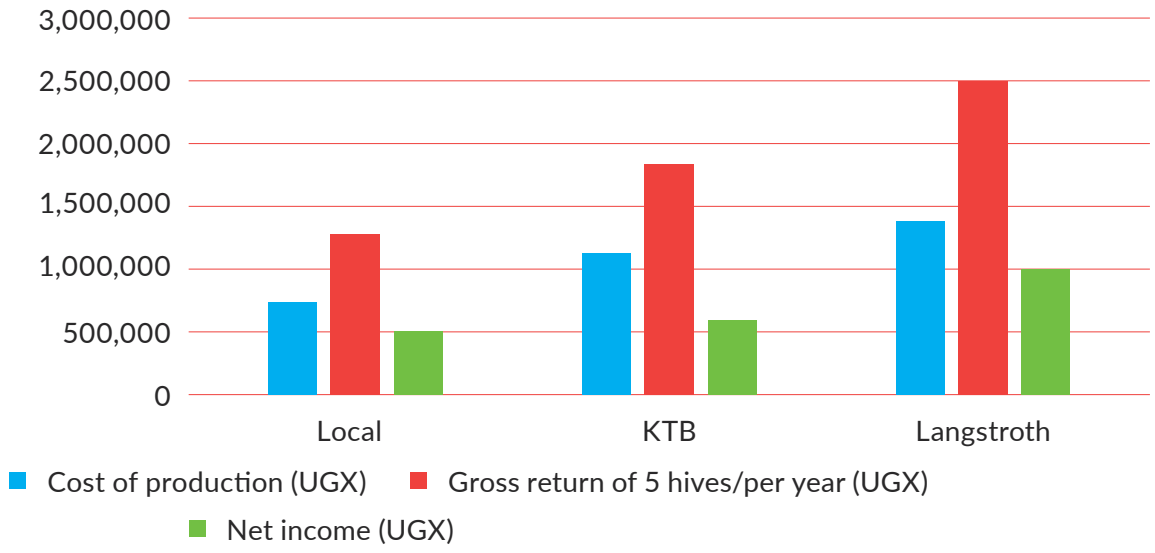
Table 3.9: Annual cost and return of the hives at the specified scale of 5 colonised hives

Beehive type	Cost of production for 5 hives (UGX)	Yield per hive per year	Price per kg of liquid honey (UGX)	Gross return of 5 hives/ per year (UGX)	Net income (UGX)
Local	755,000	25	10,300	1,287,500	532,500
KTB	1,155,000	35	10,300	1,802,500	647,500
Langstroth	1,405,000	48	10,300	2,472,000	1,067,000

Notes:

- A sample of 5 hives was chosen because each farmer group member received five hives.
- Average price of processed honey is UGX 10,300 per kg.
- Figure 3.10: Profitability analysis by hive type

Figure 3.10: Profitability analysis by hive type

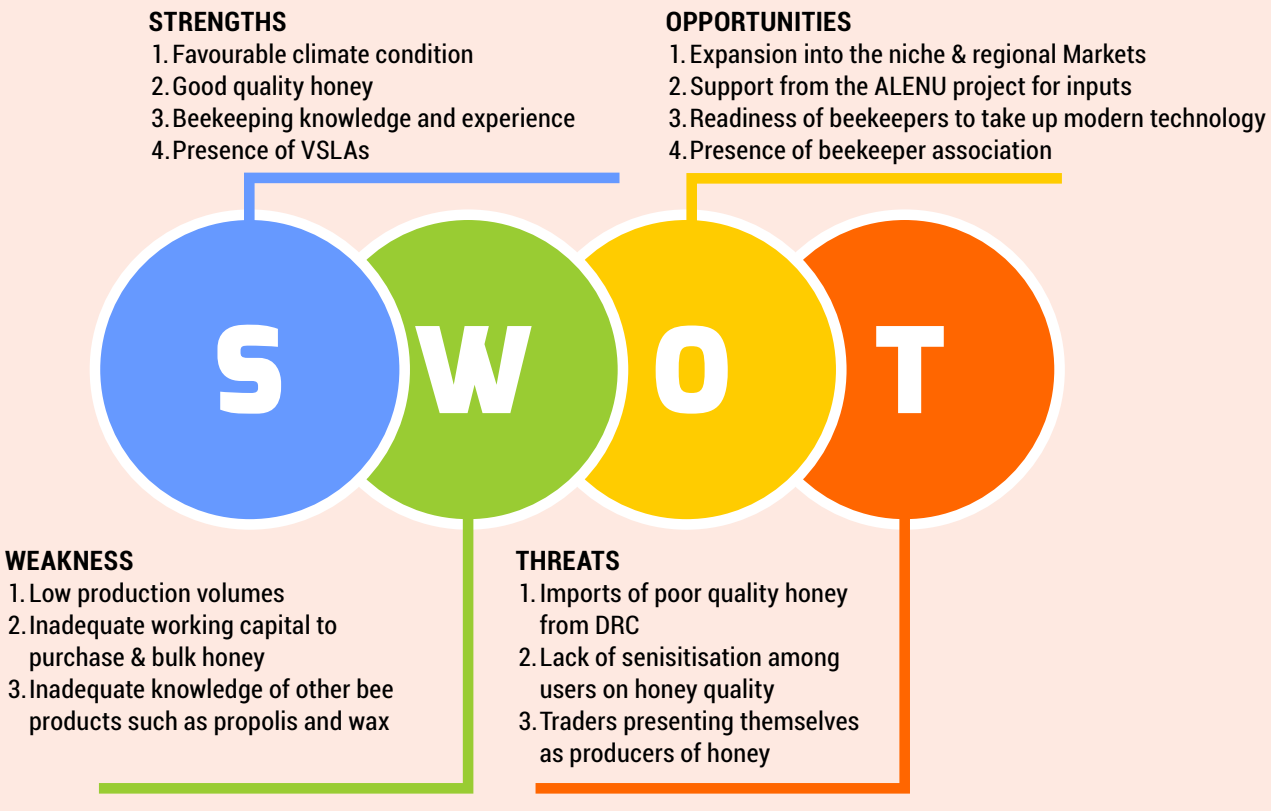


The profitability of the KTB hive is higher compared to the local hives given that it is high yielding and easier to manage. Therefore, if in future each of the farmer group members gets to manage at least 10 KTB hives, they can each possibly derive a gross income of UGX 3,605,000 per year. This income can further be enhanced through the use of the Langstroth hives, which is more productive because it can be harvested up to 4 times in a year.

3.3.4.5 SWOT analysis

The SWOT analysis shows the farmer groups' capacity indicating how well it is doing and where it can improve from an internal and external perspective. The analysis also can also be used as a guide on priorities to help further improve the market efficiency of the commodities.

Figure 3.11: SWOT analysis of apiary



Based on the SWOT analysis, it could be concluded that the major weakness is the low production volumes, which can be turned to an advantage by the producers assuming a larger role in the production and marketing of the products. This can help them gain bargaining power with the consumers, thus eliminating the threats of a large number of traders who present themselves as producers to the end consumers. The existence of Village Savings and Loan Associations (VSLAs) among the farmer groups is a great opportunity to increase savings, and as the savings grow the farmer groups can access credit from financial institutions that can help them raise capital to bulk honey during the harvest season. The farmer groups can also take advantage of the existing membership associations such as The National Apiculture Development Organisation (TUNADO) to obtain services such as training and access to markets for the bee products.

3.3.5 IRISH POTATOES

3.3.5.1 Production and yield

The production and marketing of Irish potatoes was done by farmer groups in the West Nile districts, and eight farmer groups were assessed during the market audit. The Irish potato varieties grown are mainly Rwangume and Victoria, which are improved seed varieties. The farmer groups had produced and marketed Irish potatoes for only two seasons since their formation. The farmer groups plant Irish potatoes on group demonstration farms which they manage collectively. The size of the demonstration farms for Irish potato production ranged from between 1 to 4 acres and the land was hired. The cost of land hire for the farmer groups ranged between UGX 50,000 and UGX 100,000 per season. The demonstration sites were also used by the farmer groups for learning the best agronomic practices. The group members were also engaged in planting Irish potatoes on their individual farms and the size was between 0.25 acres and 1 acre. The farmer groups assessed indicated variations in the yields per acre. The average yield per acre for the Irish potato variety planted is 2,011 kg per acre per season. The highest yield recorded was 4,818 kg and the lowest yield was 800 kg per acre per season. According to the National Agricultural Research Organisation (NARO), the estimated average yield for the Rwagume variety is between 4,000 and 5,000 kg. Generally, the yields in the sub-region are relatively low and given the seasonality of production, Irish potato supply to the market is complemented by the Irish potatoes from Eastern Uganda.

Figure 3.12: Irish potato per acre by district

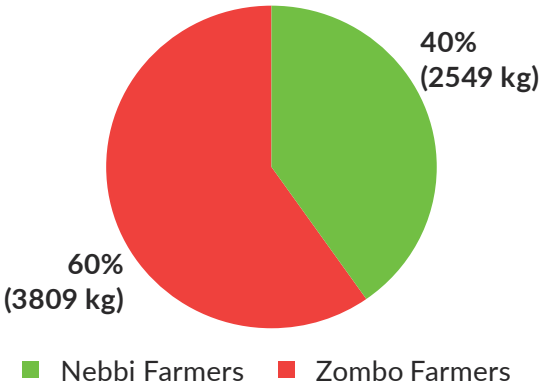


Table 3.10: Cost of production for an acre of Irish potatoes by district

Farm activity	Costs in (UGX)	
	Nebbi	Zombo
Hiring land	71,000	71,000
Cost of seed 1,200kg * UGX 800	960,000	960,000
Land clearing	35,000	40,000
1st ploughing	120,000	120,000
2nd ploughing	80,000	80,000
Planting	90,000	80,000
Weeding	80,000	60,000
Inputs and labour	80,000	80,000
Cutting/slashing	20,000	40,000

Assumption

- Cost of land is the same in Nebbi and Zombo. Nebbi farmer groups did not hire land.
- The cost of seed is the same for both districts.

The seed and inputs (herbicides) used in the production of Irish potatoes were initially provided by the ALENU Project. For the second season, the farmer groups were able to multiply seed to expand the group gardens and distribute it to the members to grow. When the ALENU Project procures the new seed, it engages the district Production Department to test the viability before supplying it to the beneficiaries. The farmer groups also receive training in the production of Irish potatoes from the ALENU Project together with the district's extension staff, who also guide them on how to construct the storage houses and manage the Irish potatoes in storage, and also ensure that all the groups have stores for the Irish potatoes. The stores are well ventilated and this intervention has helped a lot to prevent losses that may be caused by pests and rotting. The main challenge at the production stage was lack of adequate good quality seed as the farmers choose the small-sized potatoes that cannot be sold as seed. They also face the issue of land conflicts where the owner of the land rents out the land to more than two people, the high cost of renting land, pests and diseases, the high cost of farm inputs such as fungicides and thieves who raid the farms.

3.3.5.2 Marketing strategy

The market status, potential and market channels were assessed to understand the marketing activities, prices and information on the quality and volumes traded. All the farmer groups involved in the Irish potato enterprise did not have written marketing plans but had some basic guidelines on how to conduct the marketing. The farmer groups had received training in marketing and each had constituted a marketing committee of three persons. The committee is responsible for weighing, sorting, storage and sourcing price information and buyers. Two members of the marketing committee had received phones from ALENU to enable them to source for market information. They also used the farm Gain application to look for buyers. When they harvested the Irish potatoes, the committee members conducted weekly market visits to find out the prices, meet with prospective buyers and also get their contacts. The farmer groups sold to different actors in the market chain of Irish potatoes, including farmer groups (producers), retail traders, bulk traders/wholesalers and institutions (hotels, restaurants). The buyers came from within the district, neighbouring districts and the DRC. The traders came directly to the farmer groups collection points or stores to buy the commodity.

Photo 3.4: A farmer group in Zombo in the newly constructed Irish Potato store

The farmer groups sold the Irish potatoes through group marketing. The produce from the group garden was stored in farmer group stores while the members stored produce from their farms at their homes. When the farmer group identified a buyer and they agreed on a price for the group produce, the members would also be informed to bring their individual products for aggregation and sale. The volumes traded by farmers depended on the buyers, the yield and the price of the commodity. The farmer groups in Zombo sold the Irish potatoes in kilos, and the selling price per kilo was between UGX 700 and 900. In Nebbi, the Irish potatoes were measured in sacks and basins. Each 20 kg basin was sold for between UGX 35,000 and UGX 40,000 while a 100 kg sack was sold for between UGX 120,000 and UGX 240,000. The farmer groups that the lowest process recorded per kilo was UGX 650 during the lockdown period while the highest received was UGX 1,000. The major marketing costs incurred for the commodity were airtime to call buyers, data and transport to the market to find out the current prices, and amounted on average to UGX 50,000 per month. The farmer groups further stated that customers said that the product was good and the price was reasonable. The traders in Zeu, Paidha and Nebbi town revealed that they sold at least 5-10 bags (100kg) of Irish potatoes per week.

Photo 3.5: Irish potato trader in Paidha market, Zombo district during the interview

In Zombo the major value addition activities included cleaning to remove soil and foreign matter, sorting to remove rotting pieces and grading in terms of sizes. The farmer groups in Nebbi also cleaned, stored and graded the potatoes, but also went ahead and packed them in sacks before selling. Apart from using the phones and market visits to seek price information, the groups also used social media platforms such as WhatsApp and Facebook, as well as churches and other public places to advertise their product. The main marketing challenges faced included price fluctuations, competition from the Irish potatoes bought from Eastern Uganda as they are cheaper, lack of transport to deliver products to the market, limited volumes and perishability. There was a general lack of organisation in the marketing chain, particularly among producers, leading to a lack of coordination and, subsequently, considerable price instability. Irish potato marketing remained informal, with no contractual agreements being made between sellers and buyers. The high level of informality in Irish potato production hinders access to credit because unregistered and informal businesses cannot provide legal proof of their location and operations, restricting transactions to well-connected people who primarily transact based on trust.

3.3.5.3 Consumption and utilisation

The consumers of the Irish potatoes purchased them and used them for seed consumption, as food by steaming, or as fried chips or crisps. Consumers are sensitive to both the price and quality of the products. The consumers buy all the Irish potatoes in raw form. The processing of Irish potatoes in Uganda continues to be small-scale and is limited to a few products for immediate consumption such as boiled vegetables, fried chips and crisps. The farmer groups had a customer segmentation strategy in place. The focus was on getting buyers that were offering a premium price. The key attributes that affect the consumption and utilisation of Irish potatoes are the variety, size and price of the potatoes. The farmer groups revealed that the variety grown in the area was preferred for steaming as food as it was regarded to be tender, organic and sweet, and the buyers could easily identify them in the market. A small number of consumers used the potatoes to make chips and crisps. The commercial consumers, such

as restaurants and hotels that make chips and processors of crisps, preferred the Irish potatoes from Mbale and Kapchorwa because they were hard and did not easily burn when being fried. In terms of size, the preference was for medium- and large-sized Irish potatoes. The farmer groups stated that the small-sized Irish potatoes were kept and used for seed or sold as seed to other farmers.

3.3.5.4 Profitability analysis

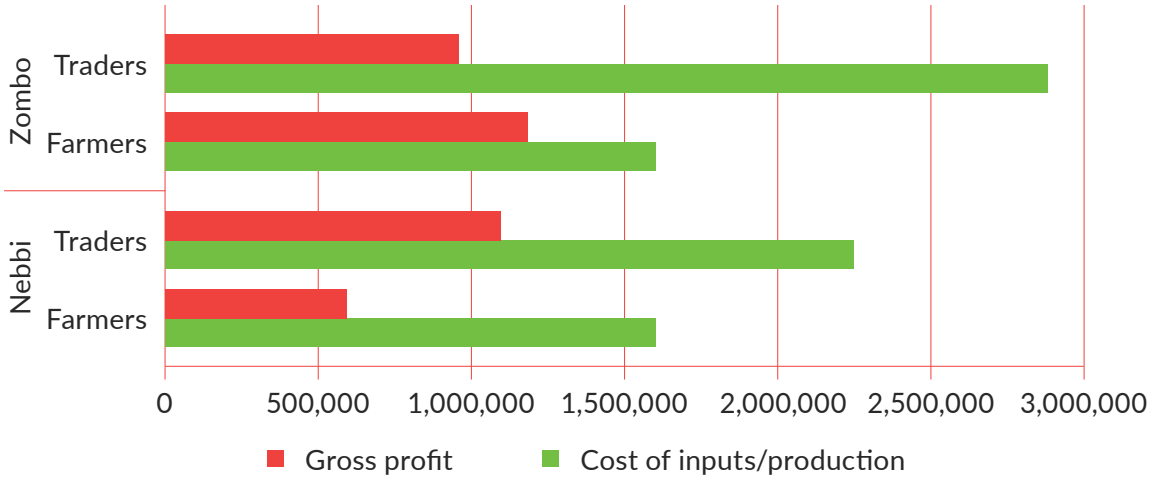
The gross revenues for Irish potato farmers and traders in Nebbi were estimated at approximately UGX 2, 217,630 and UGX 3,313,700 per acre, respectively, while the gross revenues in Zombo were estimated at UGX 2,856,750 for the farmers and UGX 3,809,000 for the traders. Thus, the profit margin is estimated at UGX 621,630 and 1,225,750 per acre for farmers in Nebbi and Zombo respectively. The profits for the traders were UGX 1,096,070 and UGX 952,250 in Nebbi and Zombo respectively. It is clear that the low yield per acre in Nebbi is the reason for a lower gross profit for the farmer groups as compared to the farmer groups in Zombo whose production is 1.5 times higher. This type of result can imply that the profitability of Irish potato at the farmer group level is dependent on farm size and yield. It is also important to note that prices per unit of the Irish potato vary, with Nebbi farmers and traders enjoying a price advantage because Nebbi is centrally located in the West Nile sub-region. The traders in Nebbi indicated that the prices of Irish potatoes from Nebbi and Zombo were higher compared to those of Irish potatoes sourced from Eastern Uganda, thus it was more profitable for them to sell Irish potatoes from Eastern Uganda. The traders in Nebbi also revealed they were able to get potatoes on credit from the sellers in Eastern Uganda, who also delivered the produce to them. With the credit arrangement, the traders were able to pay after they had sold the delivered stock or as they made the next order.

Table 3.11: Profitability analysis for Irish potatoes by district

Item	District	
	Nebbi	Zombo
Yield in acre	2,549	3,809
Selling price per kg	870	750
Gross revenue	2,217,630	2,856,750
Cost of inputs/production	1,596,000	1,631,000
Gross profit	**621,630**	**1,225,750**

Assumptions
Traders buy all the Irish potatoes produced in one acre from the farmer groups in the respective districts.

Figure 3.13: Profitability analysis of key actors by district

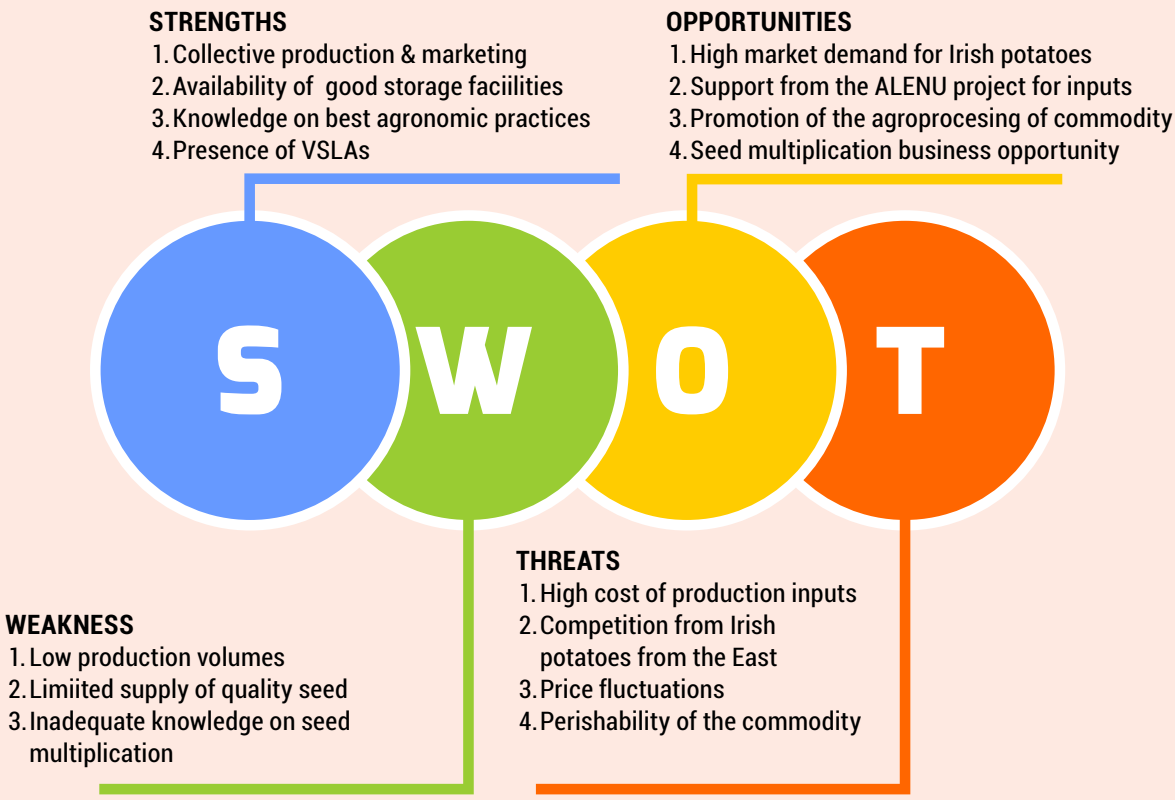


3.3.5.5 SWOT analysis

The SWOT analysis shows how well the farmer groups are performing, their weaknesses and how they can improve based on an internal and an external perspective. The analysis will also help the farmer groups that undertake Irish potato production and marketing with what to prioritise in order to improve the market efficiency of the commodity.

The Irish potato commodity has high market demand and is utilised by various consumers for different purposes. However, the production is still low due to poor quality and inadequate seed. Therefore, some farmer groups can be empowered to specialise in the production of high-quality seed to distribute within the district and beyond, because seed multiplication is also a viable business. The farmer groups also need to source inputs, especially the required herbicides, collectively in order to manage the costs but also to gain high bargaining power.

Figure 3.14: SWOT analysis of Irish potatoes



3.3.6 TOMATOES

3.3.6.1 Production and yield

The tomato is among the vegetables most widely grown in Uganda by smallholder farmers. It is also a reliable source of food security and employment both on- and off-farm. As such, it is regarded as an economic crop for rural and peri-urban farmers. The production and marketing of tomatoes were done by farmer groups in Nebbi district, West Nile sub-region. The tomato variety commonly grown is called Moneymaker. It is preferred because it has a high-yielding potential and a long shelf life. The farmer groups had produced and marketed tomatoes for only two seasons since their formation. The farmer groups planted tomatoes on a group demonstration farm which they manage collectively. The farmer group demonstration farms for tomato growing mainly measured 0.5 acres and the land was hired. The cost of hiring half an acre to grow tomatoes was UGX 40,000-UGX 84,000, depending on the location, per season. The demonstration sites were also used by the farmer groups for learning the best agronomic practices. Only a few group members were also engaged in tomato production on individual gardens comprising small plots measuring 10m by 30m. The farmer groups assessed indicated variations in the yields. The average yield from the 0.5 acres of tomatoes among the groups ranged between 20 and 40 basins. Each basin is estimated to weigh 25 kg, which means the production in kilograms was between 500 kg and 1000 kg. The tomato yield is considered very low because, according to research, the average yield per acre of tomatoes for the different improved varieties is at least 10-25 tonnes per acre. The main reasons for the low production were failure to use the recommended agronomic practices, limited availability of land and delayed spraying with fungicides, which caused the crops to spoil. The farmer groups revealed that there was a range of constraints that impeded tomato production. These included a high pest and disease burden, high cost of inputs, seed and fungicides, and seasonal variability. Other tomato production constraints reported included high labour costs, weed infestation and management.

The estimated cost of tomato production activities based on 0.5 acres for the farmer groups is presented in Table 3.12 below.

3.3.6.2 Marketing strategy

The farmer groups sell fresh fruits in regional and domestic markets in their localities to generate income. Tomato fruits were sold in three main forms: ripe fresh fruit, mature green, mixed green and ripe fresh fruits. The ripe fruits were mostly harvested for ready markets (rural and urban), while the mature green

Table 3.12: Cost of production for 0.5 acres of tomatoes by farmer group

Farm activity	Unit cost (UGX)
Cost of seed (1.5 kg)	50,000
Hiring land	84,000
Nursery bed management	90,000
Land clearing	15,000
1st ploughing	50,000
2rd ploughing	35,000
Planting	30,000
1st weeding	40,000
2rd weeding	40,000
Spraying (labour)	40,000
(Fungicide cost/kg = UGX 5,000 and labour	17,000
Staking	70,000
Harvesting and transportation	15,000
Total cost	**576,000**

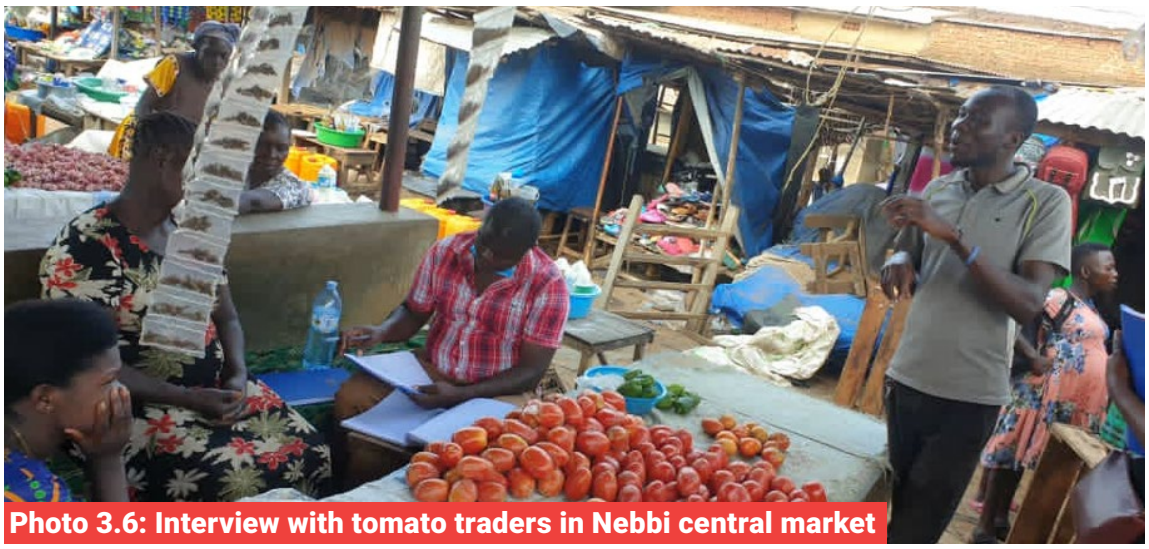


Photo 3.6: Interview with tomato traders in Nebbi central market

ones were mainly targeted at regional markets such as South Sudan. The farmer groups sold to traders and consumers who came to pick up the tomatoes from the group store. The price of the tomatoes charged the traders was between UGX 15,000 and UGX 25,000 per basin. The selling prices charged individuals was UGX 1,000 per kg of tomatoes. The farmer groups indicated that the prices could drop in case there was a bumper harvest. Even with the relatively low prices, they had no choice; they had to sell the tomatoes before they perished. The farmer groups had marketing committees that received phones and sourced for prices and other market information online. The marketing committees also visited the nearby markets to enable them to bargain with the buyers. The farmer groups revealed that they had no specific buyer for the product at the time of the audit but that they sold it to any buyer as long as they were able to agree on the price. The farmer groups preferred to sell on-farm or at nearby markets to avoid transportation costs and the road dues charged during transportation. Generally, for marketing of tomatoes, price determination was mainly through the buyer setting the price and through negotiations between farmer groups and the buyer, but it also depended on market supply and demand.

Buyer preference for the tomatoes is dependent on fruit size, shape and shelf life. Traders preferred big-sized, oval-shaped and hard-skinned tomato fruits which are not easily damaged in transit. On the other hand, the consumers preferred tomatoes with a long shelf life and are inclined to buy small-, medium- or big-sized tomatoes as long as they have a long shelf life. The traders in the market who buy from the farmer groups also revealed that they bought tomatoes from other traders from Kampala. The traders from Kampala sold to them on credit terms and sent tomatoes in boxes (ply) on different trucks. The price of tomatoes per box from Nebbi and Kampala was UGX 250,000. For the tomatoes from Kampala, the trucks delivered the tomatoes on credit for the traders to sell and send back the cash and the boxes before delivery of the next order. The market traders said that the farmer groups in Nebbi produced seasonally and have limited quantities yet they always needed cash when the traders were buying. The traders sold tomatoes to other vendors, household consumers and snack vendors. The traders also sold in bulk to institutions such as schools, hotels and restaurants. The volumes traded were 3-4 boxes per week and each box sold for between UGX 300,000 and UGX 350,000 in a good season.

The main marketing constraints mentioned were price fluctuations, perishability, low prices during bumper harvests and high transport costs. The traders said that the high transport costs associated with poor road networks were a constraint on marketing since most of the tomato production zones are in rural areas with poor road networks, which increases the distribution costs. The traders further revealed that they faced the challenge of limited storage space in the market, which limited the quantities to purchase. Additional market constraints of economic importance reported by farmers included the exploitation of non-standardised measures by traders who used extra-large boxes, hence exploiting farmers.

Photo 3.7: Interview with a trader in Paidha market

3.3.6.3 Consumption and utilisation

In Uganda, tomatoes are consumed by many households in most meals due to their nutritional value. Tomatoes can be processed and added to many different dishes, and eaten in different ways, such as tinned paste, fresh vegetables, tomato juice, sauce or soup. The tomato is known for its nutritive value; it is rich in vitamin C and contains lycopene, a vital antioxidant that prevents cancers. During the market audit, the farmers and traders reported that the tomatoes were consumed by households, restaurants, eating places and roadside snack vendors. The tomatoes were consumed raw as a salad mixed with cabbage and onions while other consumers cooked the tomatoes with different dishes. It was noted that the type of food preparation determines the number of tomatoes used by the different consumers. Consumers that fry food and prefer heavy soup use more tomatoes per meal, followed by those consumers who use tomatoes as a fresh salad, and those who use the smallest amounts were consumers who add tomatoes to boiled dishes. Consumption is also affected by the age of consumers. It was noted that the raw tomatoes served as a salad with chapattis and chips were mainly consumed by the youth, while the older people consumed the tomatoes boiled or fried with food.

3.3.6.4 Profitability analysis

Smallholder farmers cannot do without tomato production because of its special attributes and ability to generate quick cash despite its perishable and non-storable nature. The market audit examined the profitability of fresh tomato for the farmer groups at the production level on a 0.5-acre farm based on an average yield reported by the farmer groups.

The profitability analysis shows that there is a positive gross profit margin and that there is room to enhance the profitability of tomato production through increasing production among the farmer groups, using hybrid varieties and timing when supply is low in order to get a good price.

3.3.6.5 SWOT analysis

The SWOT analysis provides a summary of the performance of the commodity and the opportunities that the value chain actors can leverage to improve market efficiency. The tomato commodity market remains high in Northern Uganda, and the neighbouring countries of DRC and South Sudan. However, there are a number of weaknesses recorded for the commodity such as physical and quality losses, which are mainly due to poor temperature management, use of poor-quality packages, rough handling, and a general lack of education regarding the need for maintaining quality and safety of perishables at the producer, wholesaler and retailer levels.

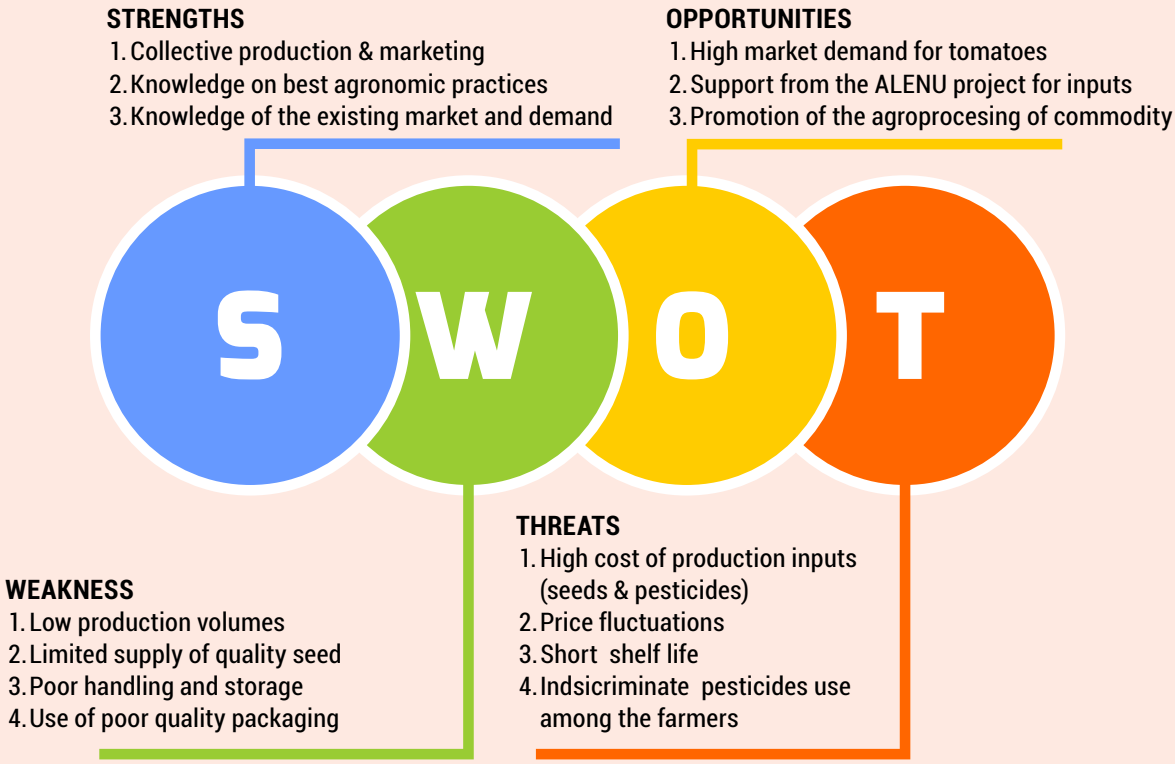
Table 3.13: Profitability analysis of tomato production on a 0.5-acre farm

Item	Amount (UGX)
Cost of production (0.5 acres)	576,000
Average yield in kg (30 basins)	750
Average selling per kg	1,000
Total revenue	750,000
Gross Profit Margin	**174,000**

Notes:

- Yield per 0.5 was 20-40 basins (each basin weighs 25kg).
- An average of a 30-basin yield of 750 kg was used.

Figure 3.15: SWOT analysis of tomatoes



3.3.7 ONIONS

3.3.7.1 Production and yield

Red bulb onion is a vegetable widely grown in Uganda by smallholder farmers. It is a biennial plant but considered an annual crop because it is harvested in its first growth stage. The production and marketing of onions are done by farmer groups in Zombo, Nebbi and Amuru districts of the West Nile sub-region. The common onion varieties grown are Red Creole and Bombay. The farmer groups had produced and marketed tomatoes for only two seasons since their formation but some individual members had engaged in onion production for two years or more. The farmer groups currently plant onions on a group farm which they manage collectively. The size of group farms for onion production was between 1 and 2 acres and the land was mainly hired. The cost of land hire per acre ranges between UGX 40,000 and UGX 100,000. The group farms were also used for demonstrating the best agronomic practices for onion growing to other members. The farmer groups indicated that they had received training from the ALENU Project and the district extension staff in onion growing and post-harvest handling practices. The current yield per acre for onion was between eight and 12 bags, which implies a good yield for the farmer groups. The average weight of the bag is 100 kg. Some farmer groups measured their yield in terms of basins, with a full basin being equivalent to 12.5 kg-15 kg. The onions are harvested by pulling them out of the ground and then taken for drying before storage. The farmer groups mentioned that there is a range of constraints on onion production. These include perishability during the rainy season due to lack of drying, lack of adequate storage, inadequate quality seed, seasonal variability, high labour costs and weed infestation.

Table 3.14: Production costs of onion per acre

Farm activity	Unit cost (UGX)
Cost of seed (1.5 kg)	150,000
Nursery preparation	120,000
Hiring land	75,000
Land clearing	50,000
1st ploughing	140,000
2nd ploughing	140,000
Planting	100,000
1st weeding	100,000
2nd weeding	100,000
3rd weeding	100,000
Pesticides and spraying (labour)	30,000
Harvesting and transportation	50,000
Total cost	**1,155,000**

Photo 3.8: Interview with an onion trader in Paidha

3.3.7.2 Marketing strategy

Various methods of marketing are used by farmer groups to dispose of their onions, and estimates are not available as to the proportion sold by the different methods. All the farmer groups reported that they sort and grade their own crops on the farm and take them for storage. When they have sufficient volumes, such as 10 basins from the farmer group farm and individuals that can be aggregated, they can then engage the buyers. In such instances, sales are often made to local dealers or other buyers for cash. The individual farmer groups members also sell directly to households and other local traders through roadside vending. Some farmer groups and members who are near markets sell some of the onions in these markets to traders, retailers and consumers. The onions are delivered to the markets using motorcycles and bicycles. Apart from the local buyers within Nebbi, Kampala, Warr and Alangi markets within West Nile, the farmer groups also sell to traders from DRC and South Sudan, who take the onions to their respective countries.

The farmer groups also reported that they sold the onions mainly in basins and the buyers usually came with plastic or gunny sacks to pack the onions after purchasing. The selling price per basin of onion was UGX 30,000 for the small and medium-sized onions while the price for the big-sized onions was UGX 45,000. The traders, on the other hand, sold the small to medium-sized onions at UGX 40,000 and the big-sized onions at UGX 60,000. The traders also revealed that they sourced some of the onions from Mbale district when they were not available within West Nile. Both the farmer groups and traders said that they faced a challenge of price volatility for the onions during peak and off-seasons. The wholesale and retail prices of onions are dictated by seasonal availability and source of onions. As there is ready demand, it is important for farmers to efficiently use resources to get higher production and deliver the onions to the market. The farmer groups also reported that there is a challenge of failure to use standardised measurements, which leads to exploitation by traders who may insist on buying in sacks and the farmers end up selling more onions for less money.

3.3.7.3 Consumption and utilisation

Most of the onions consumed in the West Nile sub-region are produced locally. They are, however, supplemented by onions from Mbale during the off-season. The consumption attributes of onions include size, degree of dryness, out-layer appearance and shape. Consumers prefer the round and well-dried onions which cannot rot easily, thus have a longer shelf life. Small- and medium-sized onions are preferred by households because each can be used at one go rather than the big ones that have to be used piecemeal and may contribute to spoilage of the unused portion. The hotels, restaurants and institutions prefer the big-sized onions since they use large amounts to prepare meals. The traders also reported that the consumers take small-sized onions because they are cheap and sweet compared to the big-sized ones. Apart from being utilised in food preparation in cooked form, onions are also consumed in the form of vegetables or salad in raw form.

3.3.7.4 Profitability analysis

Onion production and marketing is becoming important in the West Nile sub-region because it is relatively easy to grow and can easily generate cash for the farmer group given the readily available market. The market audit examined the profitability of dry onions for the Farmer groups at the production level based on a 1-acre field.

The profitability analysis shows that there is a positive gross profit margin and that there is room to enhance the profitability of onion production through increasing production by the farmer groups and having more standardised weighing and packing.

3.3.7.5 SWOT analysis

The SWOT analysis provides a summary of the performance of the commodity and the opportunities that the market actors can leverage to improve market efficiency. The growing demand and export market opportunities provide an incentive for the farmer groups to continue onion production.

To embrace the opportunities at hand, the farmer groups need to devise means of accessing solar dryers to enable them dry the onions even in the rainy seasons. Secondly, the construction of stores will enable them to bulk the onions from the members and other farmers, thus attracting traders that offer a continuous market. The farmer groups also need to learn from other onion growing farmers about the standardisation of weighing and packaging to avoid associated losses.

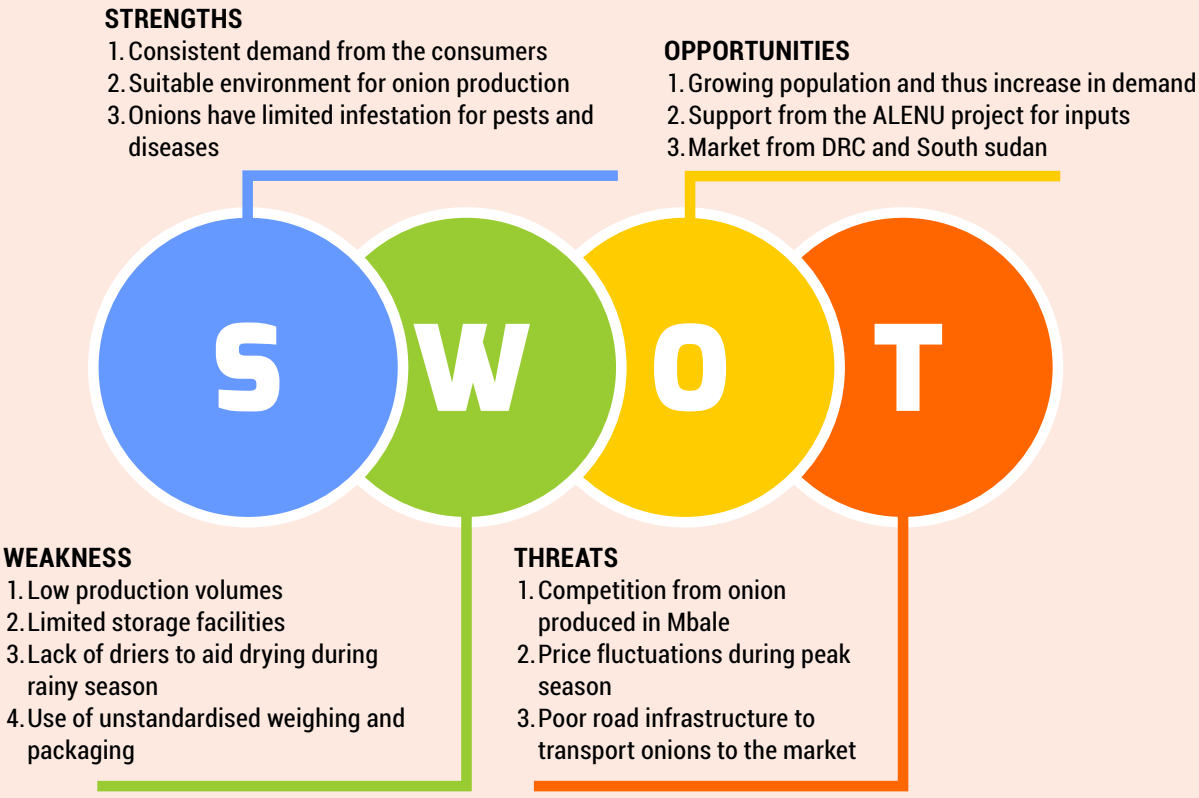
Table 3.15: Profitability analysis of onion production in a 1-acre field

Item	Amount (UGX)
Cost of production	1,155,000
Average yield in 8 bags @ 100 kg	800
Average selling per kg	3,200
Total revenue	2,560,000
Gross profit margin	**1,010,000**

Notes:

- The average weight of a basin of onions is 12.5 kg.
- Six basins fill a 100 kg bag.
- Estimates based on the minimum yield of 8 bags per acre.

Figure 3.16: SWOT analysis of onions



3.3.8 LOCAL POULTRY

3.3.8.1 Production and yield

Each member of the poultry FG received 5 local poultry birds while all other target households received 2 birds adding to the ones they already had. On average, each member owned between 8 and 12 birds. The FGs' poultry production systems are mainly based on free-range of indigenous chickens which are kept at the subsistence level and are found in almost all households in the community. The poultry feed in the gardens, compounds and nearby bushes; what the birds forage for is supplemented with small amounts of broken maize or bran given three times a day. The owners rear the birds for a period of eight months and then look for buyers. The farmer groups also reported that they were not engaged in active vaccination of the local poultry, but in case they noticed a weak bird they isolated it and treated it using plant concoctions. They indicated that it was very difficult for them to access the vaccines and other medicines for treating poultry. The farmer group members indicated that they reared birds with a view to targeting festive seasons. The major challenges they faced in poultry production was bad weather, poultry diseases, and high prices of poultry medicines and yet they were not readily available.

3.3.8.2 Marketing strategy

Marketing of local chickens is informal. The chickens are mainly marketed alive and this presents many challenges with regard to transporting them; as a result, they sometimes die while being transported. The traders also face the challenge of maintaining the birds in the market stalls. The main means of transport for the chickens from the farmer groups are the motorcycles and bicycles used by the traders which come directly to the farmers' homesteads. The farmer groups sometimes access the market directly by taking their birds to community markets. The farmer group members in Acholi were not aware of the destination to which the poultry was taken, while the farmer groups in West Nile stated that the traders who bought chickens from them sold to restaurants, other eating places and to travellers to Arua and Kampala. All the buyers preferred to buy live and healthy chickens. The figure below is a market map for the local poultry in the West Nile and Acholi sub-regions.

The prices of the birds were relatively the same in both sub-regions and were dependent on the size of the bird. The trader bought the cocks from the farmer at between UGX 25,000 and UGX 30,000 in Acholi while in West Nile the price was UGX 20,000 to UGX 25,000. The traders reported that cocks were more on demand compared to hens. To attract buyers, the members ensured that the birds were looked after well enough so that they attained a good size that would not be underpriced by the buyers.

Figure 3.17: Market map for local poultry

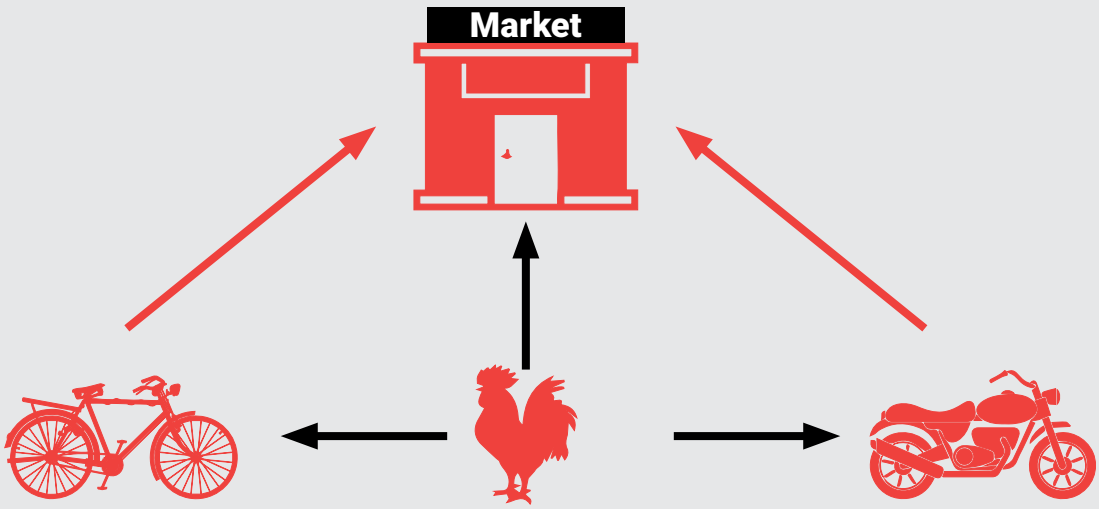


Table 3.16: Price of local poultry in Agago and Omoro

Commodity	Acholi		West Nile	
Local poultry type	Normal price (UGX)	Seasonal price (UGX)	Normal price (UGX)	Seasonal price (UGX)
Hen	10,000	15,000	10,000	15,000
Cock	25,000	30,000	20,000	25,000

This is further supported by the fact that the buyers must always find some birds to buy so that they can come back next time. It is also good to target birds that will mature close to the Christmas season as one is then able to get a higher price. Hotel owners and restaurants in West Nile revealed that they bought birds from specific traders who sometimes supplied them on credit terms and were paid the following day.

3.3.8.3 Consumption and utilisation

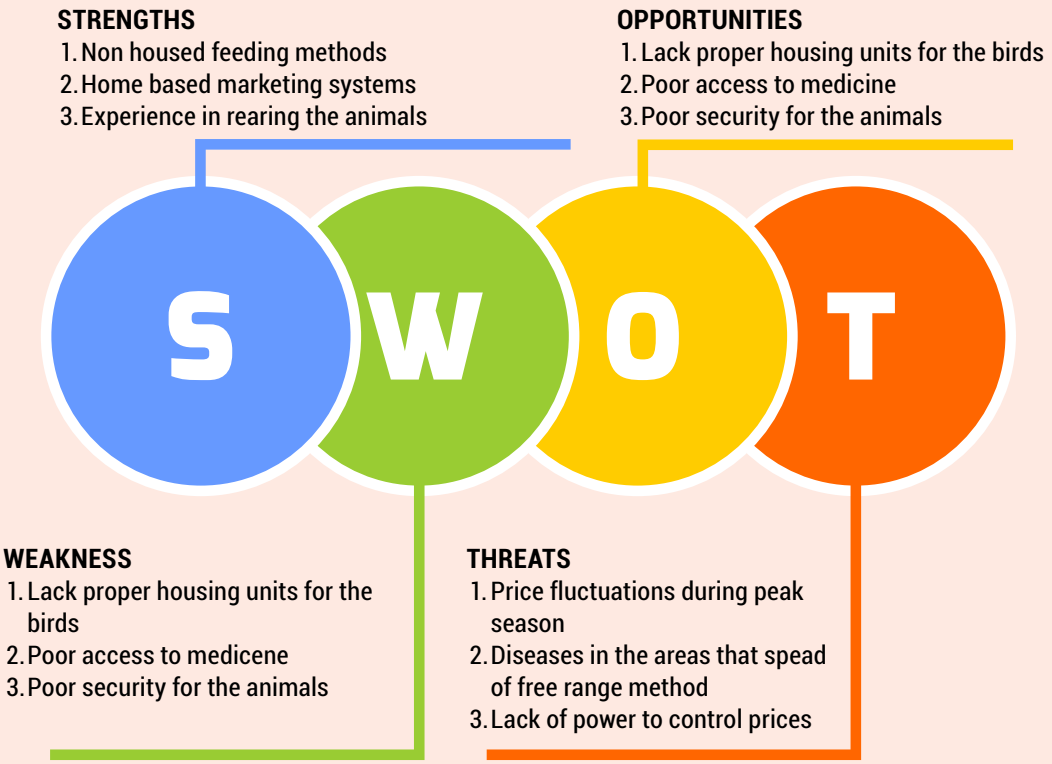
The local poultry is on high demand for the preparation of traditional meals but is also given in traditional ceremonies as gifts to families. Furthermore, among urban consumers there is a general preference for local chickens over their exotic counterparts because of the belief that they are tastier and have no drug residues. On a weekly basis, the restaurants and other eating places were able to purchase between five and ten birds each. Individual household buyers were very few because most of the households reared the chickens. The individuals occasionally bought one or two birds when they had a special visitor or on specific important days. All the consumers said that they were willing to pay more money for local chickens compared to the exotic chickens, which shows great potential for the local chicken trade in the region and the country as a whole.

3.3.8.4 SWOT analysis

The SWOT analysis provides a summary of the performance of the commodity and the opportunities that the market actors can leverage to improve market efficiency. The biggest opportunity is that the buyers come to the farmers' homes directly, thus ensuring that there are fewer costs invested by the farmer groups in marketing. Lack of technical skills and poor security for the animals are key hinderances to the growth of the sector. For the farmer groups to fully benefit from the opportunities that the market provides, it is important for them to work together, collect and negotiate with the buyers as a group. Diseases and animals that attack the birds are the biggest threat to the commodity. The farmer groups need to start working together to market their product so that they can approach the market with many birds at a time and thus attract better prices.

Strategies to increase the number of birds in each household can help the farmer groups to leverage economies of scale. In order to manage the diseases, the para-vets need to actively support the different members to manage disease outbreaks. Safety of the birds when out during the day is always not guaranteed. Therefore, farmer groups should be encouraged to have simple poultry houses at household level which can be constructed using locally available materials.

Figure 3.18: SWOT analysis of poultry



4.

Overall Market Performance for the Action Commodities

Improving marketing system efficiency and promoting access to markets have proven necessary for maintaining production incentives, permitting specialisation among farmer groups and enabling movement to high-value products and to value-added activities. Smallholder farmers in Uganda struggle to gain market access because they lack knowledge of the market requirements and skills in how to meet them. The farmer groups under the ALENU Project have been supported and trained in production and marketing for the commodities. Some of the trainings include; good agronomic practices, record keeping, value addition, pricing and market research. However, they still face several obstacles that are preventing them from entering new markets to benefit fully from them. This section provides an analysis of the performance of the commodities, indicating the most profitable and developed market chains among the commodities. It also indicates the main actors in the market chains and the major challenges affecting the efficiency of the market system for the commodities.

4.1 Gross Margins for the Different Commodities by Season

The margins for each of the commodities were estimated based on production costs, yield and selling prices per season for the farmer groups. As the table below indicates, all the commodities had positive gross margins regardless of the low production volumes recorded from the different farmer groups. Local poultry gives the highest returns with 73 per cent, followed by honey at 41 per cent and onion at 39 per cent. The reason behind the high returns for poultry is that the costs of production are low while for honey, the high returns are attributed to the business being long-term after the initial input costs. The farmer groups continue to harvest honey for a period of over five years without incurring any significant costs. Honey also has a long shelf life, which allows the farmer groups to sell it when they have negotiated a good price. Tomatoes have the lowest gross margin at 23 per cent because it is highly perishable and affected in the peak season where the price for a box of tomatoes will go as low as UGX 70,000 or less. The remaining commodities have similar gross margins because the production activities and related costs are similar.

Table 3.17: Production costs and gross margins for the commodities

Commodity	Amount in UGX			
Local poultry type	**Cost of production**	**Total Revenue**	**Gross margin**	**Percentage Margin %**
Local poultry	80,000	300,000	220,000	73
Onion	1,155,000	2,560,000	1,010,000	39
Irish potatoes	1,613,500	2,537,190	923,690	36
Tomatoes	1,152,000	1,500,000	348,000	23
Honey	755,000	1,287,500	532,500	41
Soya bean	540,000	770,000	230,000	30
Groundnuts	1,047,500	1,597,500	550,000	34
Beans	360,000	560,000	200,000	36

4.2 Key Actors in the Market Chain and their Influence

The key market actors are the rural and urban traders. The local traders' source the commodities from the farm households while the urban traders buy from the local traders and aggregate the commodities. In the Acholi sub-region, the urban traders are based in Lira, Gulu and Kitgum, while others come from the neighbouring countries of Kenya and South Sudan. In the West Nile sub-region, the urban traders are mainly based in Nebbi, Arua and Gulu, besides those that come in from DRC and South Sudan. The farmer groups mainly interact with the rural traders, the agents of big traders and transporters who sometimes come with buyers during periods of high production. These traders who come to the communities buy in small quantities from the farmer groups and individual farmers. They then bulk the products and coordinate with aggregators, middlemen and processors from the districts who come to buy and take the goods. The farmer groups also deal directly with the consumers, who are the households, because of the comestible nature of the commodities. Transporters are also major actors in the market chain of commodities. The transporters use bicycles, motorcycles, trucks and buses, depending on the distance from the source of the product to the market. The transport cost is charged per bag loaded, or a truck is hired to transport the commodities from one point to another. For example, the cost of transporting one sack of Irish potatoes from Zombo to the Paidha market is UGX 5,000 per bag. Yet in case the farmer group has produced a big enough quantity to fill a truck, the cost ranges between UGX 80,0000 and UGX 120,000. The weather and state of the goods also influence the cost of transport to the marketplace.

4.3 Major Challenges in the Marketing of the Action Commodities

During the market audit, many challenges and constraints were cited during the FGDs and the KIIs in the marketing of the commodities. The major challenges in marketing across the region and the action commodities include:

Price fluctuation

Price fluctuation was identified as a major marketing challenge for most commodities. Although high prices are considered good news for the farmers, the farmer groups said that whenever the price fell, they would make losses. This resulted in a reduction in the acreage produced for the market in the next season. They revealed that when the demand is higher than supply, they are able to get high prices for the product although this may not always translate into higher gross margins. The low prices were attributed to the peak season when there is a lot of supply in the market and yet the farmers are unable to store or hold the commodities for even the short period that elapses before the prices go up again. The farmer groups also said that the changing weather conditions and the pandemic had led to rapid price fluctuations in recent times.

Price-setting problems

Most farmer groups were not efficient at setting prices for their commodities. They stated that they would negotiate prices based on the prevailing market prices and also the buyers' offers as opposed to pricing the commodities based on the costs incurred in the production and marketing. The key concern here was that the farmer groups sometimes wanted to sell at retail prices to the traders instead of selling at the farm-gate or wholesale prices. This resulted in traders failing to buy from them or even failure to have a consistent and trusted buyer who could take the commodities whenever they are available. Similarly, failure by the farmer groups to understand pricing led to them sometimes believing that the traders exploited them, which was not the case most times.

Low production volumes

The market audit assessed the farmer groups' productivity per acre, which showed that for most commodities the production volumes do not match the seasonal capacities of other farmers and the recommended yields. This is because the production volumes are low, which makes it hard for the farmers to reach or attract markets without needing the whole-

salers and traders to bulk the produce. Low volumes were mainly due to failure to implement the recommended agronomic practices, bad weather as well as pests and diseases. Farmer groups also found it hard to invite big buyers to the farm and negotiate good prices if they had small volumes.

Poor linkage among the actors

There were no effective linkages or partnerships between the farmer groups and the various actors in the market chain. The farmer groups mostly carried out production on their own without any linkage with other farmer groups or belonging to any associations within the community, sub-county or district. The farmer groups also did not have the contacts of their previous buyers, transporters or suppliers of inputs such as tarpaulins or sacks. As a result, they could not combine efforts to influence prices, aggregate produce, negotiate credit among themselves, and also learn new skills and lessons within the marketplace to improve market efficiency.

Lack of standardised measures

During the market audit, all the farmer groups were found to be facing a challenge related to weights and measures. They relied on traditional weights and measures such as basins, tins and baskets. As a result, the farmer groups sometimes distrusted the market's pricing system. In the market, there was proper grading and packing based on a particular standard, which led to price distortion. In addition, sometimes the traders would bargain and request additional quantities, thus benefiting trader interests while the farmers, on the other hand, lost on their margins. For example, in Zombo some Irish potato farmer groups were selling in terms of basins and sacks and yet they were not aware of the quantity of the potatoes in kilograms, the unit in which the potatoes were sold to the buyers. Some farmer groups also complained that the traders in the sub-regions used scales that had been tampered with to cheat them. The traders also did not want to allow the farmer groups to use their own scales because they considered them not to be genuine.

5.

Conclusions and Recommendations

5.1 Conclusions

The marketing audit assessed eight commodities out of the 10 in the regions of Acholi and West Nile. The marketing of the commodities is generally informal and does not involve contracts, mutual trust or relationships between the farmer groups, and the buyers they interact with. All the commodities assessed were profitable, with local poultry being the most profitable and tomatoes the least profitable. The farmer groups produced commodities as a group or individually, and had received inputs to establish group demonstration farms. Although the volumes were low, the quality and consistency of the commodities were acceptable to the buyers, and the market was readily available. The farmer groups did not have documented market plans, but had market committees that planned the marketing activities to be implemented. The farmer group marketing committees went to the markets to identify buyers and negotiate prices, and almost all the products were sold on a cash basis at one of the member's homesteads. The buyers were mainly urban and rural traders from the project districts as well as from the neighbouring districts of Arua, Gulu and Lira. There were also buyers for the various commodities coming from the neighbouring countries of DRC, Kenya and South Sudan. The farmer groups had started group selling for commodities produced on the group farms, while the individual members could bring their own farm products for aggregation when the buyer came to buy group products. The farmer groups were not engaged in any promotional activities in the marketing of the products. Despite the market potential of the commodities assessed, the major challenges hindering market efficiency were low production volumes, price fluctuations, lack of standardising measures, poor price-setting and lack of linkages between the market actors. The challenges can be countered by the unique opportunities identified in the SWOT analysis of each of the commodities, especially the increasing market demand within the northern region and from the neighbouring countries.

5.2 Recommendations

Based on the findings of the market audit, the following recommendations were forwarded to improve market efficiency for the action commodities among the farmer groups:

- To improve market efficiency, it is important for the farmer groups to be connected to the market actors (trade associations, exporters, processors and transporters) who have a lot of influence in the market chain. This can help them get critical knowledge about market dynamics, customer preferences, skills in value addition and how to better engage price-setting processes. This can be done by joining trader or market associations relevant to the specific action commodities.
- Farmer groups can benefit from increased production volumes if they adopt bulking and aggregation as members of one farmer group or farmer groups engaged with a similar commodity. This will not only help them access the ready market but also allow them to negotiate prices with the buyers based on the volumes to be traded. It will also increase buyer and farmer group confidence and trust in the consequent sales.
- To better understand current pricing practices, farmer groups need to set prices with multiple choices. First, the prices set for the commodities should be able to cover the production and marketing costs incurred and also leave a mark-up for the farmer group that is selling. The farmer groups also need to understand and differentiate between farm-gate price, wholesale price and retail price so that they do not lose out on the right price for them or demand more than what they should get to avoid throwing the traders out of business.
- The success of agricultural enterprises depends heavily on the specialised skills gained. Farmers, therefore, need continuous skills training or on-farm support by specialists in good farming practices, farm management and post-harvest handling. Special efforts are needed for those involved with apiary and poultry commodities. The farmer groups can take advantage of existing associations to access the skills training, and learning to allow them to develop and implement record-keeping, market plans and strategies.
- Adoption of standardised weights and measures is critical to improving market performance for the various action commodities. This will not only reduce opaque transactions that lead to a loss for the farmer groups but also help bring fair pricing to the market system. Based on the commodity, farmer groups may adopt specific packaging, weigh it and then establish a uniform price in the different marketing channels. This will incentivize further production because farmers will not feel cheated in the marketplace. The local governments can successfully implement market standardisation by informing farmers and marketers about the benefits standard weights and measures can bring.

6.

Annexes

Market audit participants for the commodities by district

District	Action commodities	Farmer groups selected for the action commodities	FGDs (leaders and members)	Rapid market survey Target market chain actors (traders, vendors, processors, final consumers)	KII (Commercial Officer, association leaders)
Nebbi	Apiary	1	2	4	4
	Irish potato	2	3	4	
	Tomatoes	1	2	6	
Zombo	Irish potato	6	9	8	3
	Onions	4	6	9	
Pakwach	Local poultry	2	2	3	3
	Groundnuts	6	10	4	
	Soya bean	3	2	3	
Sub-total		**25**	**37**	**45**	**10**
Agago	Local poultry	1	1	1	0
	Soya beans	1	1	2	
	Apiary	1	1	1	
	Beans	1	1	3	
Amuru	Groundnuts	2	1	4	1
	Onions	1	1	2	
Omoro	Local poultry	2	1	1	0
	Groundnuts	2	1	2	
	Soya beans	1	1	3	
	Apiary	1	1	1	
Sub-total		**13**	**10**	**20**	**1**
Grand total		**38**	**37**	**65**	**11**

i. List of Respondents and Key Informants

No	Name	Title	District	Telephone
1	Christopher Jakweyo	DCO	Pakwach	0772 348812
2	Samuel Habajja	DPO	Pakwach	0772 342228
3	Walter Komakech	DPO	Zombo	0782 705511
4	Lamet Olum	DCO	Zombo	0777 277380
5	Piwa Joyce	Agricultural Officer	Nebbi	0772 949799
6	Munguhel Nelson	Entomologist	Nebbi	0784 190055
7	Akim Jennifer Viddah	Commercial Officer	Nebbi	0779 169002
8	Collins Maditchan	AFARD officer	Nebbi	0785 578145
9	Julius Adubbango	Send a Cow	Pakwach	
10	Okecha Stephen	Potato trader	Zombo	0784 232499
11	Okwong Charles	Irish potato trader	Zombo	0784 007135
12	Anecho William	Irish potato trader	Zombo	0777 499249
13	Brian Pimundu	Zombo DFA	Zombo	0773 868483
14	Godwin Wapoowtho	Manager Rest Inn	Nebbi	0382 175212
15	Sylivie Agnes	Onion trader	Nebbi	0774 236028
16	Gilimia Jacinta	Onion trader	Nebbi	0788 479092
17	Joyce Masendi	Irish potato trader	Nebbi	0783 573019
18	Jackline Amia	Irish potato trader	Nebbi	0784 652743
19	Olul Unice	Groundnut trader	Pakwach	0784 623368
20	Ongier Godwin	Local poultry trader	Pakwach	0788 095431
21	Muber Harriet	Local poultry trader	Pakwach	0786 234098
22	Odota Johnson	Soya bean trader	Pakwach	
23	Awekonimungu Charon	Groundnut trader	Pakwach	0784 646111
24	Apio Isha	Soya bean trader	Pakwach	0782 489686
25	Otema Geoffrey	DINU focal person	Agago	0779 935898
26	Abwola Charles	Soya bean and bean trader	Agago	0778 643025
27	Tokuru Charles	Groundnut trader	Amuru	0788 655585
28	Komakech Simon Peter	DAO	Amuru	0782 635203
29	Ola Geoffrey	Amuru Tek – Rice and maize processor	Amuru	0783 240125
30	Martin Omar	Groundnut trader	Amuru	0779 262539
31	Okello Edward	Soybean trader	Omoro	0779 884605
32	Okello Ivan	Groundnut and soybean trader	Omoro	0779 996195
33	Oryema Isaac	Bean and soybean trader	Agago	0756 561854
34	Okot Paul Onyona	Soybean trader	Agago	0783 234373
35	Lwanga Charles Komakech	Soybean trader	Agago	0777 33 85 24
36	Scovia Akello	Groundnut consumer	Omoro	0775 702709/ 0786 162439
37	Okello Johnson	Bean and soybean trader	Agago	0785 187414

ii. Questionnaire for traders

Dear respondent,

Good morning / afternoon / evening. My name is .....
.....We are carrying out a sales and market audit for action commodities for the The 'Action for Livelihood Enhancement in Northern Uganda (ALENU) project implemented by Advance Afrika and other partners AFARD and GWED-G. The purpose of the audit is to assess the problems areas in market penetration in order to tailor marketing activities for the commodities towards what the market wants. This audit is being conducted by a team of external consultants and in order to collection information on the critical marketing activities, the market size, actors, consumer segments so that effective marketing strategies are implemented.
We recognize that you are a key participant in as a consumer for the action commodities produced and marketed by the farmer groups. Therefore the information you provide will benefit this study and the development of effective marketing strategies.
As such, we seek your opinion through this interview and would like to take a few minutes to ask you some questions that will allow us to know the current market situation for the commodities. Please feel free to share your experiences and please note that all the information you give us is confidential and will be used for the purpose as outlined before. Thanks for taking time to talk to us.

Questionnaire No _____ **Location**_____

Flow of Consumer questionnaire

1) SECTION A Social Demographic Characteristics
2) SECTION B Commodity supply and prices
3) SECTION C Marketing and Trading of the commodity
4) SECTION D Processing/Value Addition
5) SECTION E Price determination
6) SECTION F Understanding Customers
7) SECTION G Knowledge of Competitiors

Research Assistant name: ..... Supervised by: .....

Date/Time: ..... Respondent contact: .....

A) SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

1. Name of respondent.....
2. Name of Organization: .....
3. Sex *(tick one)*: Male ..... Female .....
4. District .....
5. Subcounty:..... Parish.....Village.....

B) COMMODITY SUPPLY AND PRICES

1. What type of business are you (e.g., processor, exporter, aggregator, LSB, transporter etc.)
2. What commodities do you buy?
3. What quantities of the commodity do you buy?
4. What is the buying price?
5. What are the quantities do you sale? What is your selling price?
6. How does the product reach the market?
7. Do you have ties with other market actors? Which kind of ties?

8. Where do you sale it? Who do you sale it to?
9. Who are your main customers/buyers? What quantities do you supply them in a year?
10. Where do they take the products?
11. How many workers do you have?
12. What is your Warehouse capacity?
13. What is your average turnover per season or per year? (What is the estimated annual Apiary products, e.g honey, Local poultry, Ground nuts, Irish potatoes, Beans & soya beans Onions, Tomatoes, Moringa, Fruits & Vegetables volumes handled?)
14. What is the estimated annual Revenue/ Sales) UGX?
15. How much is traded domestically and how much is traded within the region or to international markets.
16. What are the export destinations for these commodities traded in.
17. What are the price averages of the products across the last 3-5years?
18. What are some of the youth employment opportunities that are untapped or that may be explored?

C) MARKETING AND TRADING OF THE SELECTED COMMODITIES

1. How long have you spent in the marketing and trade?
2. Please explain the marketing activities you engage in for listed commodities listed above
3. Where do you source the commodities? in what form do you buy them? what price per unit?
4. What other costs do you incur in sourcing and marketing of the commodity(ies) other than those related to actual commodity sourcing?
5. What are the marketing trends of the commodity (2015, 2020, 2021)? What has worked? What is making it work? Will it work in the future? Which have failed?
6. What are your most market effective communication strategies?
7. How much do you spend on communication?

D) PROCESSING/VALUE ADDITION ON THE ACTION COMMODITIES BEFORE SELLING

1. Do you carry out any form of processing/value addition on the commodity(ies)?
2. If yes, what form of processing/value addition do you carry out?
3. What was the cost of investment of processing technology? For how long have you been doing it?
4. How do you access the special skills or technology required for processing/value addition?
5. Do you require any additional skills in processing/value addition?
6. What special skills or technology do you require to do the processing/value addition?
7. What is the cost of processing/value addition?
8. Type of technologies in use (Probe specifically for processors/ SMEs doing value addition)?
9. What technology related gaps do exist and how would you best want to facilitate its acquisition in the short, medium & long term?

E) PRICE DETERMINATION, GROUP MARKETING & PROMOTIONAL CAMPAIGNS

1 How do you determine price to sell the commodities in the market? Do you buy from organized farmers? What benefits do you get from buying from them?
2 Are there cartels controlling marketing of the commodities in this locality?
3 If yes, are you a member to any of these cartels?
4 What is your estimate of the market share for each of the commodities that you deal in?

5 Do you undertake any promotional campaigns to market the products to your prospective customers?
6 If yes, what promotions do you undertake?
7 What benefits do you get from the different promotion campaigns or activities?
8 What problems do you experience while marketing the different action commodities
9 In your opinion, what do you think can be done to improve the marketing of the various commodities?
10 Do you have access to Market information? What is the source?

F) UNDERSTANDING CUSTOMERS

1. In what form do your customers prefer the products you sale?
2. If the price of your products is high what optional the products do your customers buy?
3. How do your customers relate with your products? (Price, quality etc.)
4. Do you have specific customer segmentation, targeting and positioning in the target markets like?

G) KNOWLEDGE OF COMPETITORS

1. How many people in your environment are dealing in the same products like you?
2. What are their relative strengths and weaknesses of the competition? (This will involve determining he nature of the competition in the target markets, Competitors and their level of profitability, their number and concentration, relative strength and weakness of the competitors).
3. What are the marketing strategies do you have in place to edge the competition?
4. Do you belong to any association in your trade? If yes name the association. What are the benefits of being a member?

iii. Questionnaire for consumers

Dear respondent,

Good morning / afternoon / evening. My name is ....We are carrying out a sales and market audit for action commodities for the The 'Action for Livelihood Enhancement in Northern Uganda (ALENU) project implemented by Advance Afrika and other partners AFARD and GWED-G. The purpose of the audit is to assess the problems areas in market penetration in order to tailor marketing activities for the commodities towards what the market wants. This audit is being conducted by a team of external consultants and in order to collection information on the critical marketing activities, the market size, actors, consumer segments so that effective marketing strategies are implemented.

We recognize that you are a key participant in as a consumer for the action commodities produced and marketed by the farmer groups. Therefore the information you provide will benefit this study and the development of effective marketing strategies.

As such, we seek your opinion through this interview and would like to take a few minutes to ask you some questions that will allow us to know the current market situation for the commodities. Please feel free to share your experiences and please note that all the information you give us is confidential and will be used for the purpose as outlined before. Thanks for taking time to talk to us.

Questionnaire No _____ **Location** _____

Flow of Consumer questionnaire

1) SECTION A Social Demographic Characteristics
2) SECTION B Marketing and trading
3) SECTION C Supply and buying
4) SECTION D Value Addition

Research Assistant name: ..... Supervised by: .....
Date/Time: ..... Respondent contact: .....

A) SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

1. Name of Organization: .....
2. District .....
3. Subcounty:..... Parish.....Village.....

B) COMMODITY PRODUCTION

1. What quantities of the commodity do you produce?
2. What quantities do you harvest from an acre/farm filed?
3. How do you store it? Where?
4. What are you costs of production? (Cost of materials + Cost of labour + cost of inputs)
5. How does the produce reach the market? Do you do any form of packaging?
6. Do you make a profit from your investments in the production process?
7. What production challenges do you experience in your work?

C) MARKETING AND TRADING OF THE SELECTED COMMODITIES

1. Who do you sale to?
2. What is the price per unit? Who sets the price? What has been the lowest and highest price in the last 3 years?
3. Do you engage in any marketing activities? If Yes, Which ones?

4. Where do you meet with the buyers?
5. Do you know where your buyers take the product to?
6. What market challenges do you experience?

D) VALUE ADDITION ON THE ACTION COMMODITIES BEFORE SELLING

1 Do you carry any form of processing/Value Addition on the commodities?
2 If yes, what form of processing/value addition do you carry out?
3 How do you access the special skills or technology required for processing/value addition
4 What special skills or technology do you require to do the processing/value addition

iv. FDG checklist for the farmer groups

Dear respondent,

Good morning / afternoon / evening. My name is .....
.....We are carrying out a sales and market audit for action commodities for the The 'Action for Livelihood Enhancement in Northern Uganda (ALENU) project implemented by Advance Afrika and other partners AFARD and GWED-G. The purpose of the audit is to assess the problems areas in market penetration in order to tailor marketing activities for the commodities towards what the market wants. This audit is being conducted by a team of external consultants and in order to collection information on the critical marketing activities, the market size, actors, consumer segments so that effective marketing strategies are implemented.
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As such, we seek your opinion through this interview and would like to take a few minutes to ask you some questions that will allow us to know the current market situation for the commodities. Please feel free to share your experiences and please note that all the information you give us is confidential and will be used for the purpose as outlined before. Thanks for taking time to talk to us.

Questionnaire No _____ **Location** _____

Flow of Consumer questionnaire

1) SECTION A Social Demographic Characteristics
2) SECTION A Production
3) SECTION B Marketing
4) SECTION C Processing
5) SECTION D Infrastructure
6) SECTION E Other Issues

Research Assistant name: ..... Supervised by: .....
Date/Time: ..... Respondent contact:.....

A) SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

1. Name of Organization: .....
2. District .....
3. Subcounty:..... Parish.....Village.....

FOR: DLGs (DPMOs, DAO, DCOs, CAO)
- CBOs/NGOs,
- NARO/ZARDI- NAADS/OWC, NUSAF, ETC

Part B: Check list for key informant interviews at district level

Production

1. What are the major crops grown in this district?
2. What are the major Irish, Soybean, Local poultry, Ground nuts, Beans, Tomatoes varieties/breeds grown in the district (Rank according to importance)?
3. Are there any farmer groups engaged in Irish, Soybean, Local poultry, Ground nuts, Beans, Tomatoes, apiary, moringa farming and trade in this district?
4. If yes, mention the farmer groups in this district

5. What are the roles of the famer groups?
6. What kind of assistance is government extending to Irish, Soybean, Local poultry, Ground nuts, Beans, Tomatoes, apiary, moringa farmers in this district?
7. Are there NGOs promoting production of Irish, Soybean, Local poultry, Ground nuts, Beans, Tomatoes, apiary, moringa in this district?
8. If yes, mention the organization and the activities engaged in promoting Irish, Soybean, Local poultry, Ground nuts, Beans, Tomatoes, apiary, moringa production
9. For the major Irish, Soybean, Local poultry, Ground nuts, Beans, Tomatoes, apiary, moringa grown in the area, how many seasons are these harvested in a year (For each namely Irish, Soybean, Local poultry, Ground nuts, Beans, Tomatoes, apiary, moringa mentioned, indicate the month (s) for each season, also probe which season has more harvest)
10. On average how many farmers are engaged in commercial production of Irish, Soybean, Local poultry, Ground nuts, Beans, Tomatoes, apiary, moringa varieties in this district
11. What is the average size of the Irish, Soybean, Local poultry, Ground nuts, Beans, Tomatoes, apiary, moringa farms in the district (Indicate for each)?
12. What is the average yield per acre (Indicate for the crops namely Irish, Soybean, Ground nuts, Beans, Tomatoes, apiary, moringa)?
13. What are the main varieties of the Irish, Soybean, Local poultry, Ground nuts, Beans, Tomatoes, apiary, moringa in the district (Indicate for each)?
14. What are the major constraints to Irish, Soybean, Local poultry, Ground nuts, Beans, Tomatoes, apiary, moringa farming in the area?
15. How can the above constraints be overcome?

C: Marketing

16. Where do most farmers sell their Irish, Soybean, Local poultry, Ground nuts, Beans, Tomatoes, apiary, moringa?
17. What is the average price/kg of the Irish, Soybean, Local poultry, Ground nuts, Beans, Tomatoes, apiary, moringa (Indicate for each?
18. What are the major constraints to marketing of Irish, Soybean, Local poultry, Ground nuts, Beans, Tomatoes, apiary, moringa in this district?
19. How can the above constraints be overcome?

D: Processing

20. Are there groups/companies involved in processing/value addition of the Irish, Soybean, Local poultry, Ground nuts, Beans, Tomatoes, apiary, moringa in the district?
21. If yes, mention the groups and the products they are engaged in
22. What technologies are they using to process Irish, Soybean, Local poultry, Ground nuts, Beans, Tomatoes, apiary, moringa?
23. How much of the Irish, Soybean, Local poultry, Ground nuts, Beans, Tomatoes, apiary, moringa (kgs) are processed by these companies on a monthly basis?
24. What are some of the challenges facing Irish, Soybean, Local poultry, Ground nuts, Beans, Tomatoes, apiary, moringa processors in the district?
25. How can these challenges be overcome?

E: Infrastructure

26. What is the state of feeder roads to farming areas in the district?
27. Do farmers have easy access feeder roads in the district
28. Does the district have access to three phase electricity?
29. Does the district have access to portable water supply?
30. Are there cooperative societies target Irish, Soybean, Local poultry, Ground nuts, Beans, Tomatoes, apiary, moringa farmers in the district?

Other issues

1. What value chain specific opportunities and cross-cutting opportunities in Irish, Soybean, Local poultry, Ground nuts, Beans, Tomatoes, apiary, moringa do you think you have not fully utilized? What are the blockages preventing potential opportunities to be seized? Elaborate…
2. How does informal trade on border points with Tanzania, S. Sudan, and DRC influences the market space in your district and Northern Region?
3. How has **COVID-19 affected the production, marketing, and trade within Irish, Soybean, Local poultry, Ground nuts, Beans, Tomatoes, apiary, moringa VCs?**

v. Key Informant interview tool

Dear respondent,

Good morning / afternoon / evening. My name is ....We are carrying out a sales and market audit for action commodities for the The 'Action for Livelihood Enhancement in Northern Uganda (ALENU) project implemented by Advance Afrika and other partners AFARD and GWED-G. The purpose of the audit is to assess the problems areas in market penetration in order to tailor marketing activities for the commodities towards what the market wants. This audit is being conducted by a team of external consultants and in order to collection information on the critical marketing activities, the market size, actors, consumer segments so that effective marketing strategies are implemented.

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Questionnaire No _____ **Location**_____

Flow of Consumer questionnaire

1) SECTION A Consumer Demographic a Characteristics
2) SECTION B Commodity consumption patterns
3) SECTION C Constraints to accessing the commodity

Research Assistant name: ..... Supervised by: .....
Date/Time: ..... Respondent contact: .....

A) SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

1. Name of respondent.....
2. Sex *(tick one):* Male Female
3. District .....
4. Subcounty:..... Parish.....Village.....
5. Age of respondent (Complete in years) .....

B) COMMODITY CONSUMPTION PATTERNS BY THE MARKET

1. Do you consume the following commodity items or their products? Apiary products, e.g honey, Local poultry, Ground nuts, Irish potatoes, Beans & soya beans Onions, Tomatoes, Moringa, Fruits & Vegetables.
2. In what form do you buy them? What is your preferred form?
3. How much have you purchased the last 12-month period?.
4. What is the price/ per unit for amount bought?
5. What is the source of the market information? Where (source) did you buy the commodity?
6. How easy is it for you to get commodity, if you wanted?
7. How often do you consume (frequency of consumption) the selected commodities?
8. Do some commodities carry any social implications? If yes, what are these social implications?

C) CONSTRAINTS TO ACCESSING THE SELECTED COMMODITIES IN THE MARKET

1. In your opinion, what do you think are major constraints to accessing the selected commodities in the market?
2. What do you suggest could be the possible solutions to the challenges listed above.
3. Do you have any additional information about the selected action commodity?

vi. Terms of Reference

Kampala: Plot No. 4258, Sunday Close, Mulawa,
Kiira Municipality, Wakiso District
Gulu: Plot 29, Acholi Road, Pece Housing Estate
Ibanda: Main Street, Kagongo, Division, Ibanda Minicipality,
Arua: Room A112, KKT Center, Plot 16 - 22 Duka Road
P.O. Box 36888 Kampala, Uganda
Email: admin@advanceafrika.org
Web: www.advanceafrika.org

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