

VALUE CHAIN ANALYSES IN BUSOGA AND LANGO SUB- REGION

MAY 2025

INSPIRE PROJECT



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List of Acronyms

CC	Community Conversation
CSA	Climate Smart Agriculture
CSO	Civil Society Organisation
CBO	Community-Based Organisation
EKN	Embassy of the Kingdom of the Netherlands
FO	Farmer Organisation
FMNR	Farmer Managed Natural Regeneration
GAP	Good Agricultural Practices
GESI	Gender Equality and Social Inclusion Analyses
GoU	Government of Uganda
HH	Households
ISFM	Integrated Soil Fertility Management
ISSD	Integrated Seed Sector
IWRM	Integrated Water Resource Management
LSB	Local Seed Businesses
MSD	Market Systems Development
NAP	National Agriculture Policy
PEA	Political Economy Analysis
PIP	Participatory Integrated Planning
PMEL	Planning, Monitoring, Evaluation & Learning
PHH	Post-Harvest Handling
PHL	Post-Harvest Losses
PSA	Private Sector Actor(s)
PWD	Person with Disabilities
SACCO	Savings & Credit Cooperative Organisation
SDGs	Sustainable Development Goals
SHF	Smallholder Farmers
SLU	Sustainable Land Use
SWR	Stichting Wageningen Research
ToC	Theory of Change
VSLA	Village Savings & Loan Association
WENR	Wageningen Environmental Research

1 Introduction

1.1 Background

The Integrated and Sustainable Production for Inclusive and Resilient Economies (INSPIRE) project, funded by EKN, is a five-year program implemented by GOAL Uganda with Wageningen University & Research, Resilience Uganda, and Agriterro that seeks to reach 200,000 smallholder farmers (SHFs) in the rural lowland communities of Busoga and Lango sub-regions. The project works in 9 districts in Lango (Alebtong, Lira Rural, Amolatar, and Dokolo) and Busoga (Kamuli, Buyende, Kaliro, Luuka, and Jinja Rural), working with and through local partners, including VEDCO, FINASP, and A2N.

The overall aim of the project is to contribute to “increased income and livelihood resilience of SHF to climate change and market failures.” To achieve this goal and contribute to improved land conservation, food security and income for 200,000 SHF households, the project will be implemented through four pathways:

- **Pathway 1:** Inclusive Decision-Making and Action: Promoting household and community-level inclusivity in decision-making processes.
- **Pathway 2:** Sustainable Farming Systems: Enhancing the sustainability, productivity, and resilience of smallholder farming systems to withstand shocks.
- **Pathway 3:** Inclusive Market Participation: Empowering smallholder farmers to actively participate in and benefit from inclusive market systems.
- **Pathway 4:** Enhanced Voice and Influence: Strengthening smallholder farmers’ ability to address market system challenges through advocacy and influence.

1.2 Objectives of the VCA Study

This Value Chain Analysis (VCA) provides information on 10 value chains – 8 project priority value chains and two secondary value chains- with the largest market share in Busoga and Lango. The information is based on both secondary literature and primary data gathered during the inception period, including the Production and Technology Study, the Production and Sales Study, Company Profiling, the Household-level Baseline Survey, and the Market Diagnostic Exercise.

The main objective of the VCA was to analyse the most common value chains in Busoga and Lango to identify key areas for strategic intervention by INSPIRE. Specific objectives were as follows:

- a) Compile and assess baseline information.
- b) Map the main characteristics of the various value chains.
- c) Identify and examine constraints and opportunities within the various value chains.
- d) Identify the potential for upgrading each value chain.

The VCA report will help to understand each value chain, including but not limited to:

- What is the relevance of each value chain for the individual household, community by region, and land size? (2 acres and below, and between 2 and 10 acres)?
- What are the various expenses and revenues during the production, post-harvest, and processing stages?
- What are the strengths, weaknesses, opportunities and threats within the value chain in terms of sustainability and land conservation, income and employment for all relevant social groups, particularly barriers to inclusive growth?
- What opportunities or challenges do women, men, youth, persons with disabilities and SHF households have participating in the respective value chains?

- What are potential areas of intervention? How can INSPIRE contribute to the sustainable development of that value chain while also considering inclusive participation and growth opportunities, particularly for SHF, women, youth, and persons with disabilities?

This information will support the INSPIRE team to make more informed decisions and investments to prioritise value chain interventions that are likely to have the greatest benefit to the project's target communities.

2 Methodology

2.1 Geographic scope

Various data sets were collected during the inception across the nine target districts. The VCA report relied largely on the Household Livelihoods and Production Survey (n=1,100), which was conducted in six of the nine districts under the project that represents the three farming systems in the project area:

- Kamuli and Luuka districts represent the Perennial Integrated Farming system in South Busoga characterised by the banana/ coffee/ dairy complex
- Buyende and Kaliro districts represent the Annual Legumes Systems in North Busoga characterised by the maize/cassava/legumes cropping system
- Amolatar and Alebtong districts represent the Annual Oilseed Systems in Lango characterised by the maize/cassava/oilseed cropping system.

This survey focused on the predominant farming systems across the area, as well as the geographic variations within each sub-region. Ten commodities are evaluated in this report. The report also draws on findings from the Production and Technology Study, the Production and Sales Study, Company Profiling, and the Market Diagnostic Exercise, which were conducted in all nine target districts.

2.2 Sample size

The household survey employed a quasi-experimental research design, utilising both quantitative and qualitative data collection tools to ask a series of questions to household respondents (n=1,100) from the project's treatment group (n=846) and a control group (n=254). The control group was drawn from sub-counties where the project has no intention of expanding and where no other EKN-funded initiatives are operating. As there were no significant differences between the treatment group and the control, the data on the total sample are used here.

Out of the total sample size 366 HHs were interviewed in the South Busoga, 364 in the North Busoga and 370 in Lango. In total 227 (25%) respondents were female-headed households.

Table 1: Data Set

Type	Tools	Project group	Control group	Total
Quantitative	Household Livelihood Survey	846	254	1,100
	Production & Sales Study		259	
	Production & Technology Study		138	
Qualitative	Observations			All nine districts
	FGDs and KII			20 FGDs

The survey was conducted across 10 total value chains. In FGDs and KIIs also data on vegetables were collected.

2.3 Sample size of value chain analysis

Cassava, beans, and maize are commonly grown crops across the project's geographic scope, and at the district level in South Busoga, banana and coffee-based perennial cropping systems are dominant. In North Busoga, legumes are dominant, and in Lango, oilseeds (e.g., sunflower and simsim) are dominant.

Of the 10 value chains analysed in this report, the project has identified eight priority value chains – Maize, Cassava, Beans, Coffee, soya beans, Groundnuts, Simsim, and sunflower- and two secondary value chains – Vegetables and Banana.

Table 2: Selected Value Chain by farming system

	Perennial South Busoga	Annual Legumes North Busoga	Annual Oilseed Lango
Maize	X	X	X
Beans			X
Cassava	X	X	X
Banana	X		
Coffee	X		
Groundnuts		X	
Soya		X	
Sunflower			X
Simsim			X
Vegetables	X	X	X

The table shows how many respondents were growing the respective crops in each of the farming systems and what share this represents of the sample in this farming system

Table 3: Respondent sample size by Value Chain

Farming system	Value chain	Number	Share of total
All three farming systems	Maize	907	82%
	Cassava	595	54%
	Beans	364	33%
Perennial system South Busoga	Coffee	99	27%
	Banana	87	24%
Annual Legumes North Busoga	Soya bean	48	13%
	Groundnuts	55	15%
Annual oilseeds Lango	Simsim	105	28%
	Sunflower	99	27%

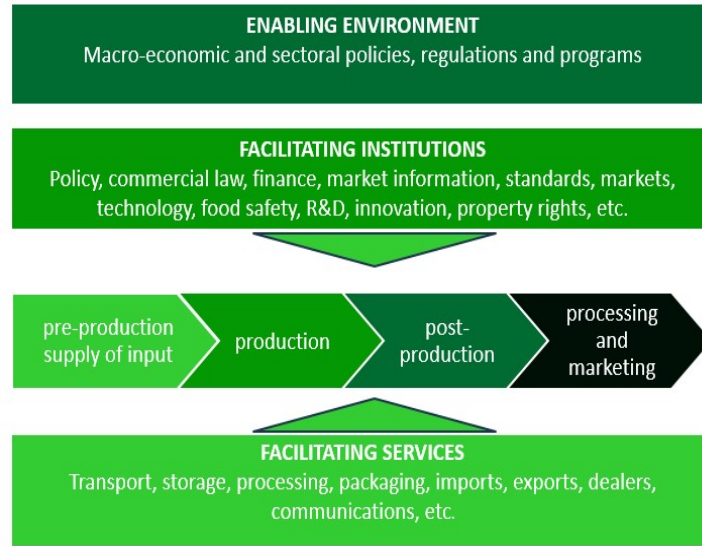
These tables show both the dominance of maize and cassava in the overall project area as well as the diversity between the farming system.

Limitations of this study: Not all private companies were willing to release information on their customer base, off-takers, and business performance. Furthermore, some companies are only present during the peak season when inputs are purchased, or sales are made. They may rent a shop for a couple of weeks only and disappear afterwards. These “visiting” companies may not show up in our market assessment

2.4 The conceptual framework

A value chain analysis is a conceptual framework to describe and analyse a sector or sub-sector in detail. It examines the core process, beginning with the input supply, followed by production and post-harvesting, and concluding with marketing and consumption. It also assesses the factors and actors across the chain that play a role and influence at various stages.

As such, it is a holistic approach, whereby, in the case of this study, we not only look at farmers as producers, but also at critical actors and stakeholders, such as input suppliers, service providers ranging from extension to logistics, financing, and various market actors. The value chains of the selected commodities follow a structured progression across six functional nodes: Input Supply, Production, Post-Harvest Handling, Processing, Marketing, and Consumption. Each stage presents unique challenges and opportunities that influence productivity, profitability, and regional competitiveness.



Input Supply: Input supply is foundational, encompassing seeds, fertilisers, pesticides, and basic mechanisation tools. Private agro-dealers, cooperatives, government programs, and NGOs are key providers. Busoga benefits from proximity to Jinja, ensuring better access to certified inputs. At the same time, Lango relies more on well-organised and a high number of Agro input dealers in Lira city, which operates as an agribusiness hub for the region, providing linkages to input and output markets.

Production: Smallholder farmers (0.5 - 5 acres) dominate production, relying on rain-fed systems with minimal mechanisation, characterised mainly by tractor and ox-ploughing. Maize and cassava are universal staples, while coffee thrives in Busoga due to favourable conditions. Lango specialises in simsim and sunflower, driven by market demand for vegetable oil, especially from sunflower. Soya beans and beans are rotational crops or intercropped with cereals. Soybeans have gained significant traction for poultry feed and oil processing.

Post-Harvest Handling: Post-harvest losses (20 - 40%) stem from poor drying, storage, and pest infestations. Maize, groundnuts, cassava and simsim face aflatoxin risks, while cassava's perishability leads to rapid spoilage. The high prevalence of aflatoxin in Uganda is primarily due to the widespread practice of directly drying harvested commodities on the ground, combined with the bagging and storing of commodities with high moisture content. Women play a central role in post-harvest activities, but they lack access to improved technologies, which exacerbates inefficiencies.

Processing ranges from primary (e.g., milling maize) to semi-industrial (e.g., cassava flour, soybean oil). Only 20 - 25% of cassava undergoes value addition due to infrastructure gaps. Coffee is primarily sold as semi-processed (Kiboko/FAQ), while soybeans and sunflower seeds are used for oil and feed.

Marketing: Middlemen dominate informal markets, exploiting farmers' weak bargaining power. Key hubs include Jinja (Busoga) and Lira (Lango). Constraints include poor roads, price volatility, and a lack of collective marketing. Seasonal gluts further depress prices, particularly for perishables such as cassava and vegetables.

Consumption and Export Potential: Staples like maize, cassava, and beans dominate local diets, while simsim features in traditional dishes. Coffee is primarily exported, but Busoga's output is insignificant compared to the overall national level production. Simsim and groundnuts have untapped export potential, hindered by challenges related to aggregation, aflatoxin risks, and inconsistent quality. Sunflower and soybeans dominate the oil processing sector, with the oil targeting both local and export markets.

3 Findings Of Livelihood & Production Survey

3.1 Commodity Production and Supply in Busoga and Lango Subregion

The Lango subregion maintains a strong agricultural economy, with key crops including maize, cassava, soya beans, beans, simsim, sunflower, and ground nuts. Maize serves as both a staple food and a primary cash crop, cultivated across two major growing seasons. Sunflower and soya beans have emerged as significant economic drivers, spurred by demand from over 50 oil processing factories in Lira, as well as cross-border trade with Kenya, South Sudan, and the DRC. Cassava, valued for its drought resilience, remains critical for food security but is increasingly becoming commercialised due to rising demand for industrial starch and high-quality cassava flour. Beans, simsim, and groundnuts fulfil dual roles in supporting local consumption while also being traded commercially. Groundnuts and simsim are locally processed into paste (locally known as odii) and edible oil. Additionally, simsim, traditionally a staple, is gaining prominence as an export commodity. Vegetables such as tomatoes and cabbage are predominantly grown near urban hubs like Lira, supplying local markets and enhancing farmer incomes.

Busoga boasts a highly diversified agricultural sector that drives both food security and economic growth. Maize serves as the primary cash crop, supplying domestic urban markets and regional export channels. Cassava plays a dual role as a staple food crop and a key commodity for local and regional processing industries, particularly for starch and flour production. Beans, groundnuts, and soybeans are extensively cultivated across the region, with soybeans gaining prominence as a critical input for Uganda's expanding poultry feed industry. Beyond staple crops, favourable agro-ecological conditions support the production of Robusta coffee, particularly in Jinja, Kamuli, and Luuka. Robusta coffee is regularly intercropped with banana, a cover crop that provides coffee with leaves that offer proper shade and support water retention in the soil. High-value vegetable cultivation, including tomatoes, pepper, and cabbage, is strategically produced to meet demand in major urban centres like Jinja and Kampala.

The table shows the total production per region. It shows the relative importance of cassava and oilseeds in Lango and of maize and coffee in Busoga.

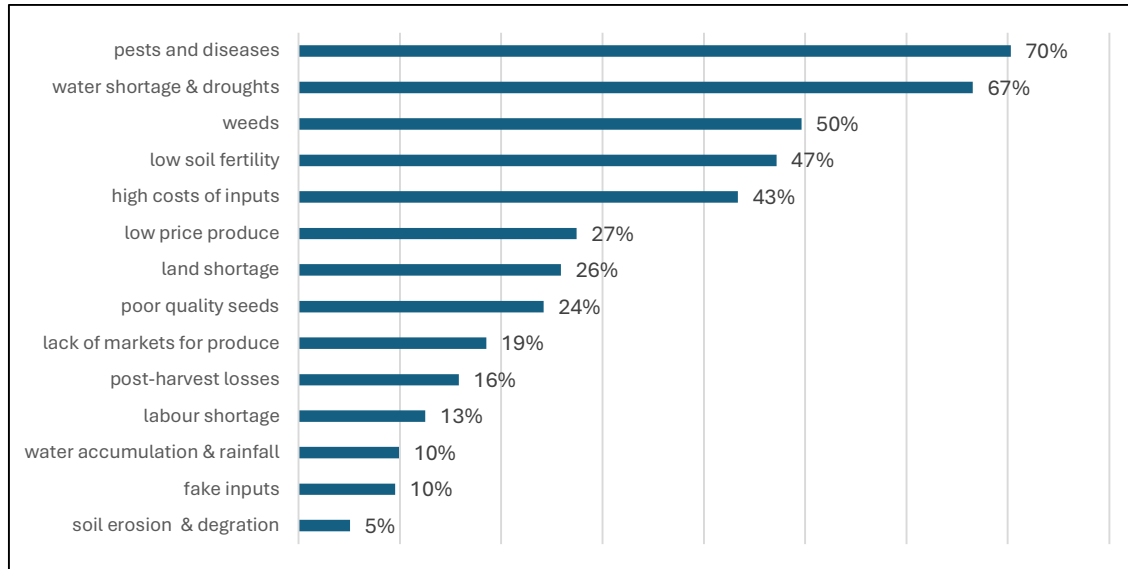
Table 4: Estimated Annual Production in MT in 2022 per region

Crop	Busoga	Lango
Maize	398,000	218,000
Cassava	927,484	1,733,522
Beans	442,741	322,111
Soya beans	48,004	89,000
Groundnuts	92,105	86,343
Simsim	Appr. 5,000	17,000
Sunflower	Minimal	Appr. 85,000
Coffee (Robusta)	84,161	Very Low

Source: UBOS 2022 Annual Agriculture Survey Report

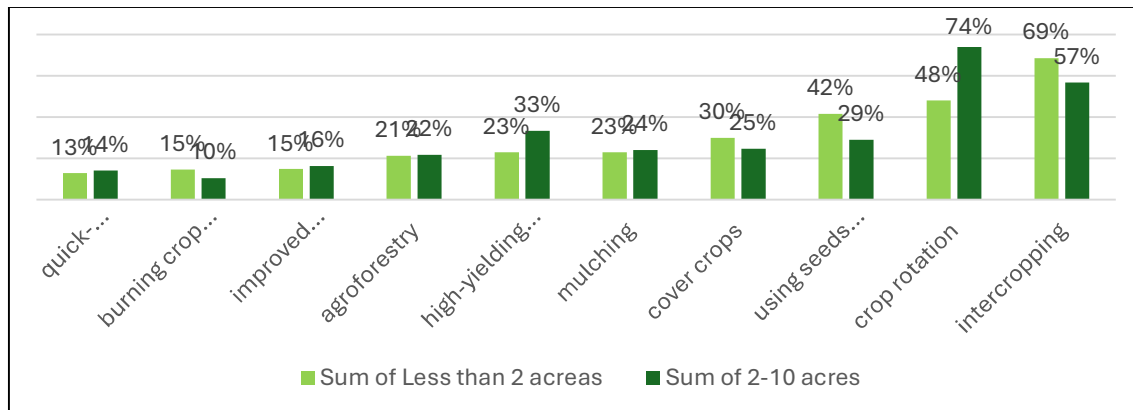
Overall, our findings noted across all commodities relatively small production areas, low productivity (yield per acre), and large yield gaps among SHFs who utilised both local seeds and hybrid varietals. The table shows the challenges farmers face in crop production.

Figure 1: Main agricultural challenge faced (N:1,100)



A growing population pressure leads to a series of production challenges. The main one is the declining soil fertility due to a lack of fallow periods. Poor soil leads to more pests & diseases and weeds. The graphs show the top ten land and soil management practices farmers apply to counter the low fertility.

Figure 2: Top 10 land and soil management practices (N:1,100)



Poor productivity is also a result of poor agronomic practices. Many SHFs are heavily reliant on local seeds, and compared to households that utilise hybrid seeds, these SHFs are not maximising the production potential of their land. The utilisation of hybrid seeds alone, however, will also not result in achieving full potential.

Figure 3: Average acres of production and calculated yield per acre in 2024 (N:1,100)

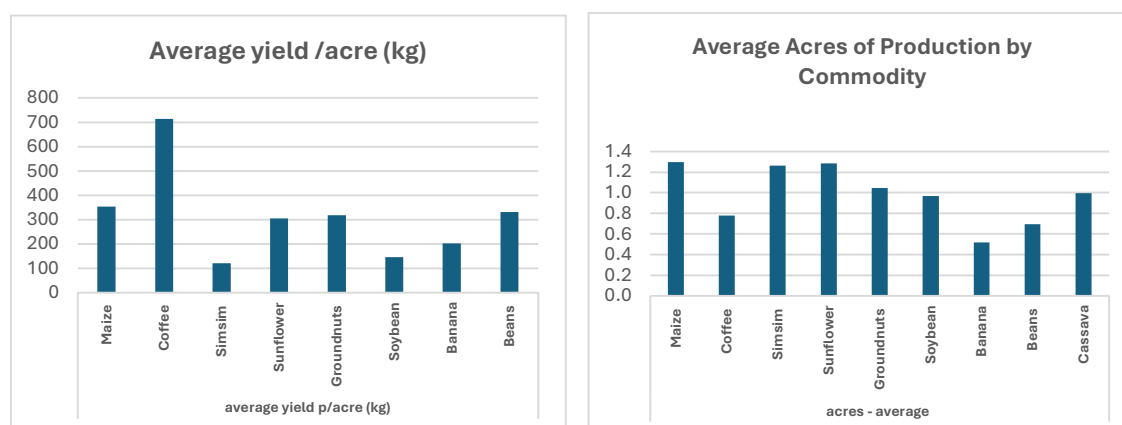
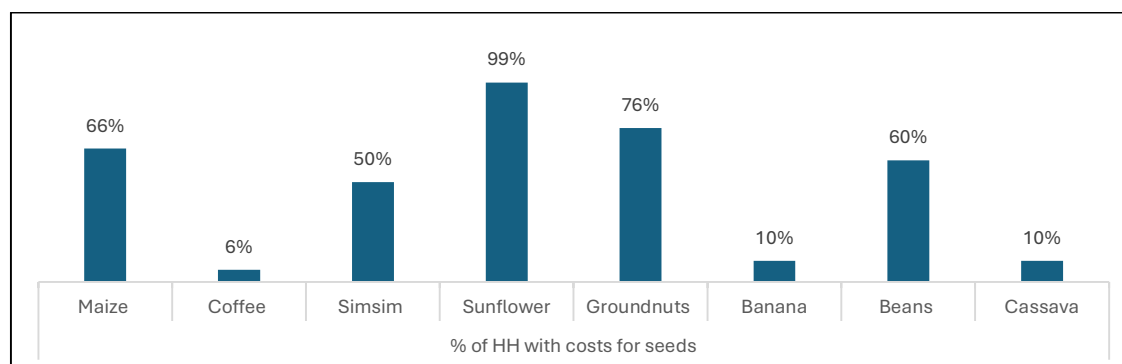


Figure 4: Households with costs for seeds (N:1,100)



Our findings also noted that SHFs' low yields, regardless of seed variety, are largely a result of low soil quality, reliance on rain-fed agriculture, and the limited application of ag-inputs, such as manure, inorganic fertilisers, and agrochemicals.

Table 5 Common varieties of the main crops

Crop	Variety	Average Yield (Kg/acre) KII data	Average Yield (Kg/acre) HH production data	Average Potential Yield (g/acre)	Yield Gap (%)
Maize	Longe 5H, DK 777, BAZOOKA, KH500	800	397	2,500	68%
	Local	500	256	1,800	72%
Cassava	NASE 14, NAROCASS 1, Mawalamba, Nakaseke, Naragus	3,000	n.a.	8,000	62.5%
	Local	2,000	n.a.	6,000	66.7%
Soya beans	MAKSOY 3N, MAKSOY 6N, Namsoy 4M	500	161	1,500	66.7%
	Local	300	158	1,200	75%

Beans	NABE 15, 16 & 19; K131, Kabonge, Kanye bwa, Nambale	500	133	1,200	58.3%
	Local	350	119	900	61.1%
Groundnut	Serenut 4R, Serenut 5R, Red Beauty	600	279	1,500	60%
	Local	400	N.A.	1,200	66.7%
Simsim	Sesame 1 and 2	600	58	1000	40%
	Local	200	103	600	66.6%
Sunflower	AGSUN 8251, PANA 7057	700	421	1,200	41.6%
	Local	500	224	800	37.5%
Coffee	Robusta	714			

Source: Field survey data

3.2 INSPIRE Project Priority Value Chains

In the following section, the main commodities are described in terms of yield and price received by the farmer for each region. The information has been asked for the most recent period during which this one was growing this crop in 2024. The section starts with a schematic overview of the value chain players for each stage.

MAIZE

Of the 1,100 farming households surveyed, 82% (907) grew maize: 279 from N. Busoga (81%), 341 from S Busoga (94%), and 287 from Lango (78%). Both average acreage of production (.86) and average yield (243 kg/acre) are the lowest in S. Busoga. Lango had the highest average acreage (1.64) and yield per acre (395 kg/acre). Yields per acre are significantly higher with maize growers who own more than 2 acres (390 kg/acre) compared to those owning less than 2 acres (293 kg/acre). One reason might be that the latter practice more intercropping.

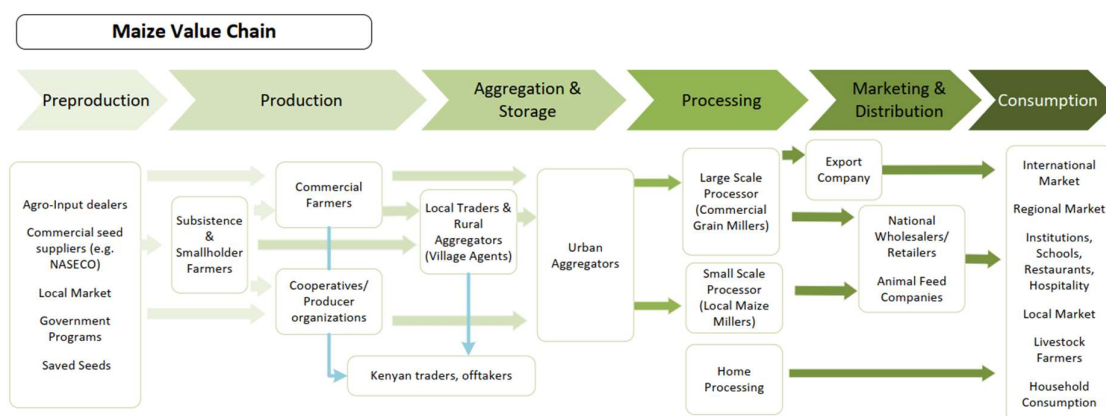
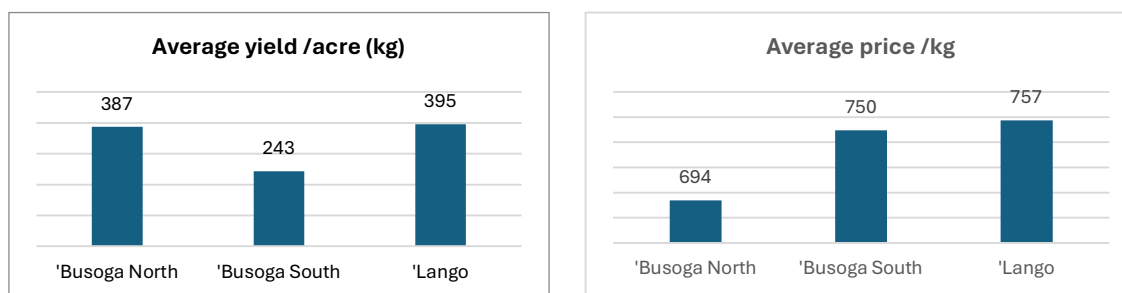


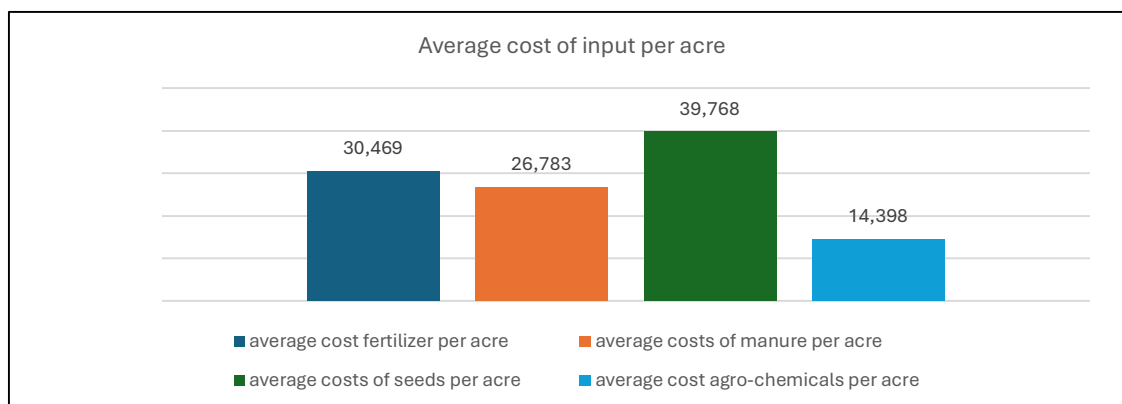
Figure 5: Average yield per acre in KG and average price received per kg (N:907)



Maize farmers who cultivate larger land holdings sell a significantly higher percentage of their total production, can sell their commodity at a higher value, and are more likely to pay for seeds, compared to neighbouring households who cultivate on 2 acres or less.

In terms of input practices, there is very little to no use of compost and manure (1% of households) by maize farmers. While 22% of households use agrochemicals, costing 23,155 UGX / acre on average, 30% of households who cultivate on 2 acres or more use agrochemicals compared to 15% who cultivate less than 2 acres.

Figure 6: Average cost of input in UGX per acre by type of inputs



CASSAVA

Of the 1,100 farming households surveyed, 54% (595) of them grow cassava: 230 in N. Busoga (63% of all HHs there), 178 (49%) from S. Busoga, and 187 (51%) in Lango.

With an average production area of 1 acre/HH, cassava is grown on a larger scale in N. Busoga (1.31 acres), compared to 0.55 acres in S. Busoga. This aligns with respondents' consumption vs sales practices. The highest share of households that sell cassava is in N. Busoga (33%), compared to only 10% of households in S. Busoga. Given the larger area and the higher share of produce sold, logically households in N. Busoga dry the highest share of their cassava (87%), compared to S. Busoga and Lango with 23% and 29%, resp.

On average, only 10% of households incur costs for seeds, with 16% of households in N. Busoga paying for seeds compared to only 2% of households in S. Busoga. Across all locations, there is little to no application of manure, fertiliser (1% of households surveyed), or agrochemicals (1% of households surveyed) by cassava producing households.

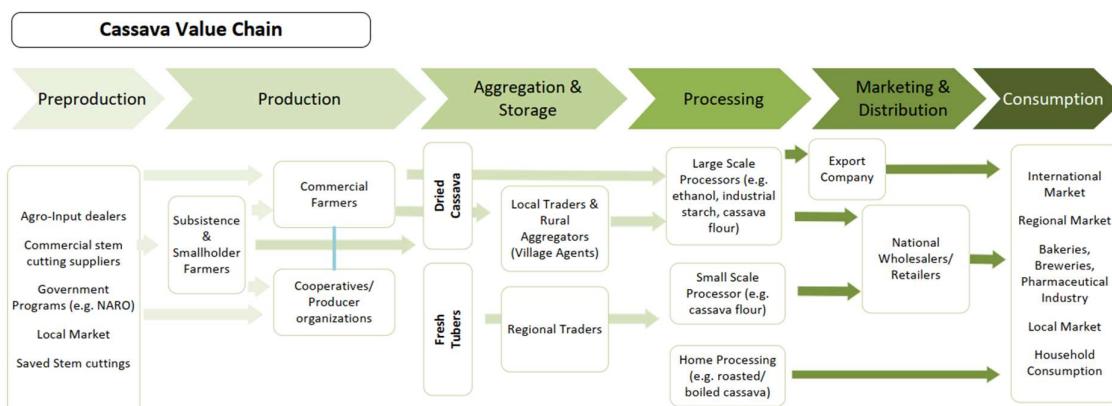
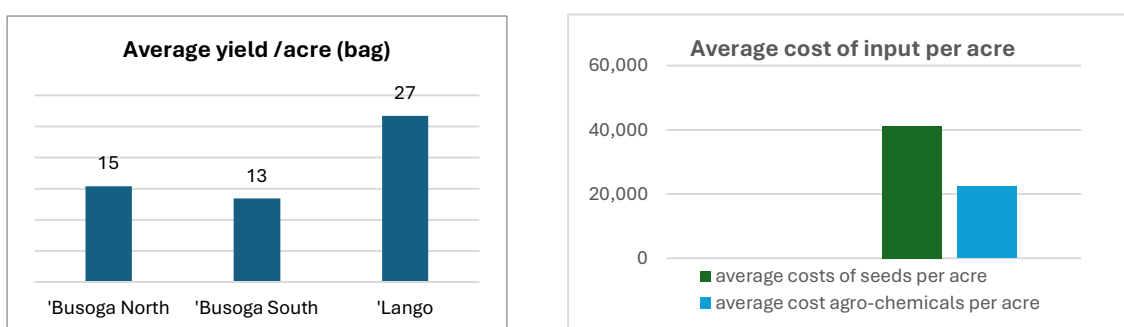
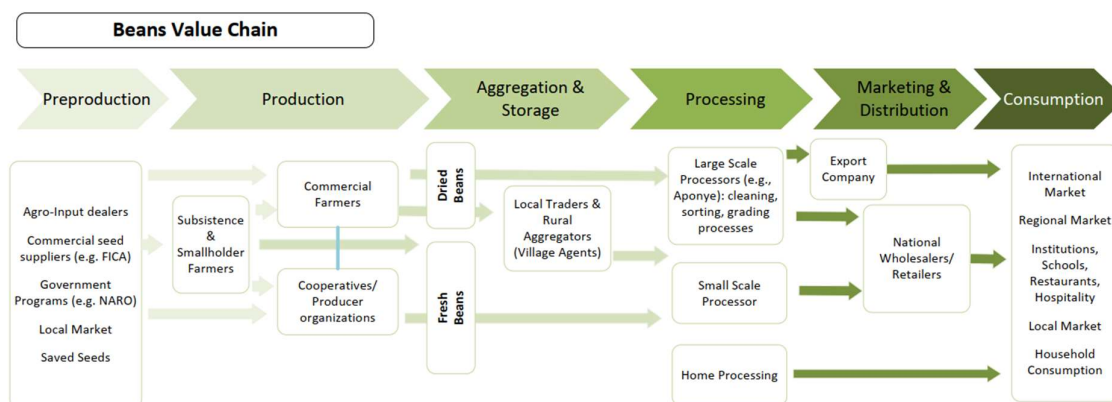


Figure 7: Average yield per acre and average cost of inputs (N:595)



BEANS

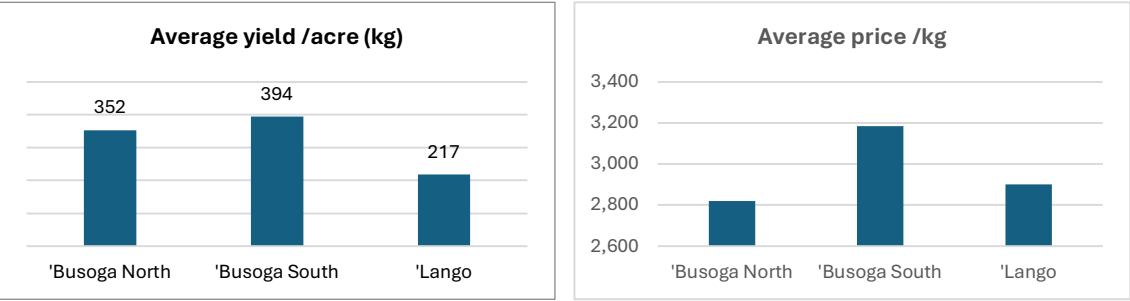
Of the 1,100 farming households surveyed, 33% (364) grow beans: 50 in N. Busoga (14% of all HHs there), 251 (69%) from S. Busoga, and 63 (17%) in Lango. The average HH grew beans on .70 acres, with the largest production areas in Lango (.95) and the smallest production areas in Busoga North (.54).



The average yield was 332 kg/acre, with S. Busoga having the highest productivity at 394 kg/acre and Lango the lowest with 217 kg/acre. Despite a greater share of HHs planting beans in S. Busoga, with higher yields and price/kg, HHs in S. Busoga South report the highest percentage of home consumption at 93%; compared to 78% in both N. Busoga

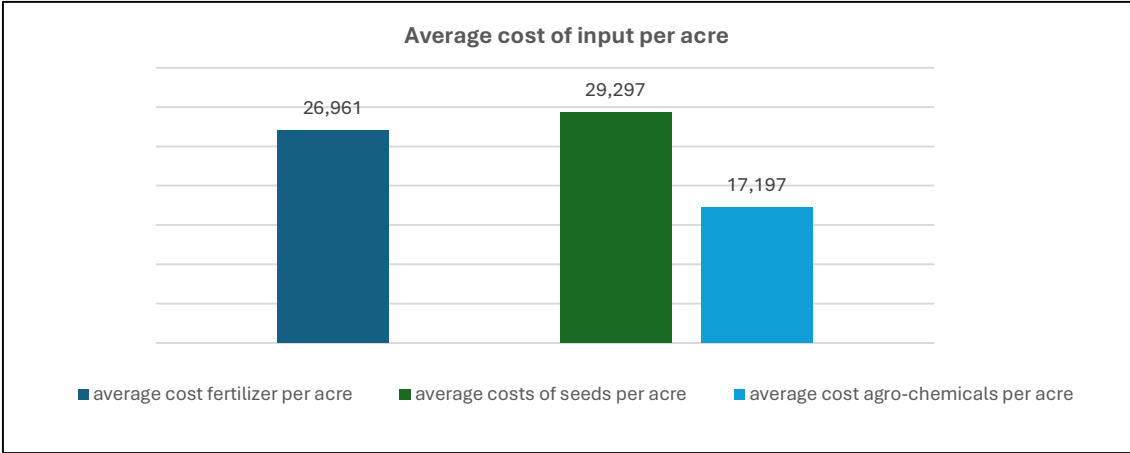
and Lango. The average price per yield was 3,020 UGX/kg, ranging from 2,646 UGX/kg in Kaliro to 3298 UGX/kg in Kamuli.

Figure 8: Average yield per acre in KG and average price received per kg (N:364)



There is a wide practice of procuring seeds by households, with 60% of households incurring costs related to seeds. While data varies between farming systems and districts regarding to the cost of seeds, the average is 29,297 UGX/acre. There is little to no application of manure or fertiliser (less than 5%) by bean-producing households, while 17% incurred costs associated with agro-chemicals, with an average of 17,197 UGX/ acre.

Figure 9: Average cost of input per acre



COFFEE

Of the 366 respondents who participated in the survey in the two districts of S. Busoga, 99 (27%) households grew coffee. There was little variation in coffee production practices among districts as well as among farmers of different production areas. The average yield per acre was 714 kg/ acre, while the average price per kg was 2,735 UGX/ kg. Unlike other commodities, 100% of all coffee is sold, with no coffee being utilised for home consumption.

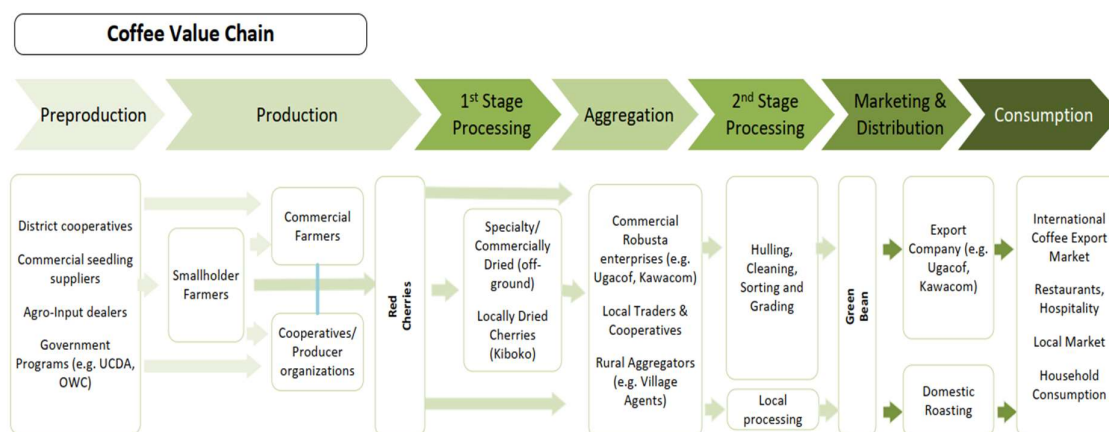
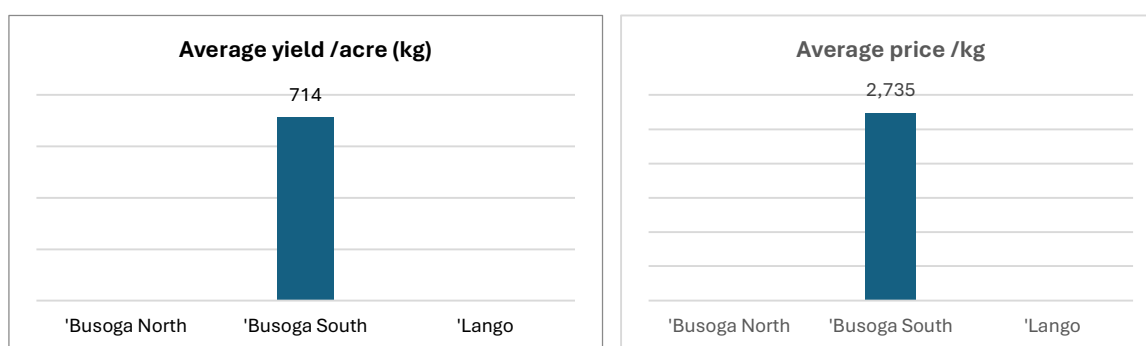
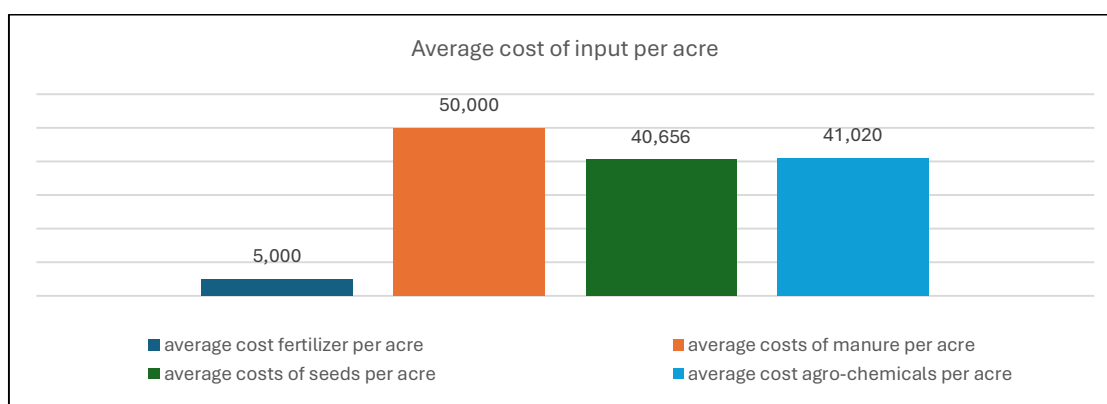


Figure 10: Average yield per acre and price received per kg (N:99)



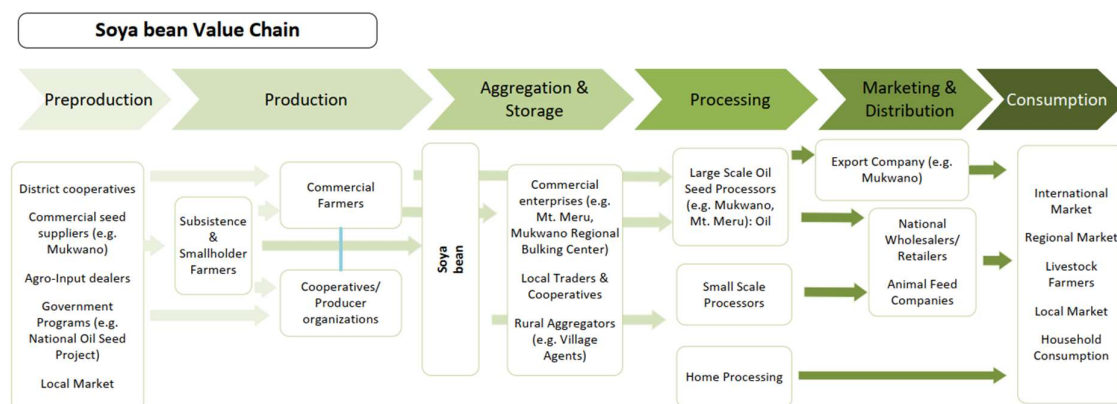
Regarding input practices, few households pay for coffee seedlings (6% on average), with the average household paying 40,656 UGX/acre for seeds. Low use of ag-inputs, such as manure (1%), inorganic fertilisers (1%), and agro-chemicals (4%), is an explanation for the low productivity of coffee in this area.

Figure 11: Average cost of input per acre



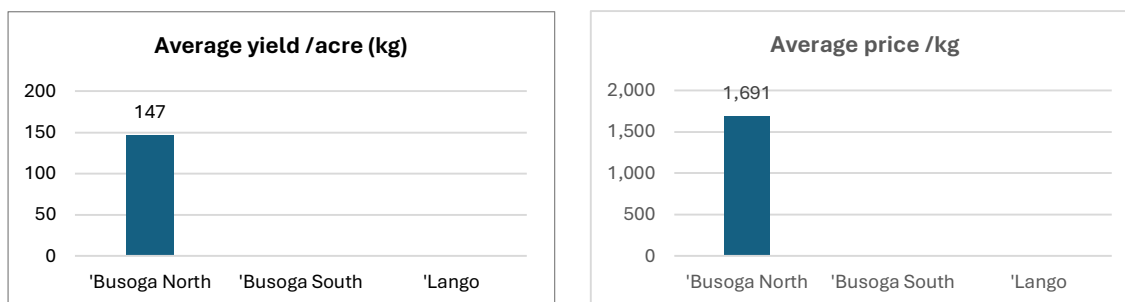
SOYA BEANS

Of the 364 respondents in the two districts in N. Busoga, 48 (13%) grew soya beans.



The average yield was 147 kg/acre, with an average price of 1,691 UGX/kg. Smaller farms (< 2 acres) earned on average 1,632 UGX/kg, compared to 1750 UGX/kg for HHs with more than 2 acres. Households sell nearly 75% of their production; 25% is for home consumption. While there is little to no use of manure (2%) or inorganic fertiliser (2%), 35% of households do pay for agrochemicals.

Figure 12: Average yield per acre and average price received per kg (N:48)



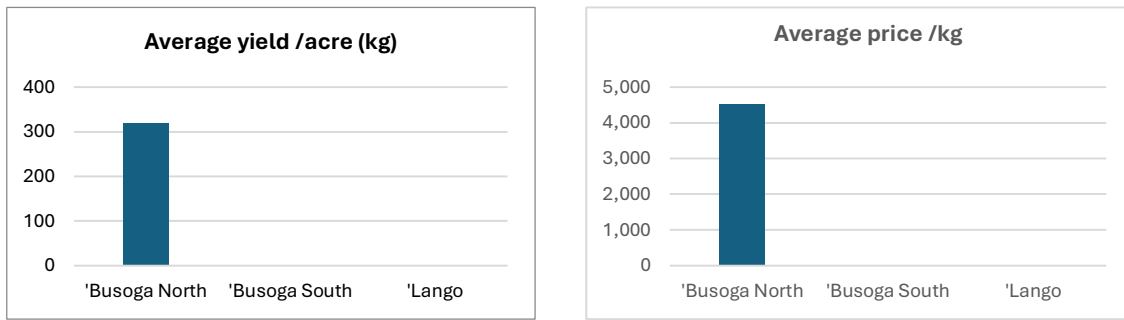
It is interesting to note the correlation between productivity and agrochemical usage at a district level. In Kaliro 45% of the famers use agrochemicals and get 165 kg/acre, In Buyende this is resp. 13% and 104 kg/acre. The total average cost are 37,459 UGX.

GROUNDNUTS

Of the 364 respondents in the two districts in N. Busoga, 55 (15%) grew groundnuts.

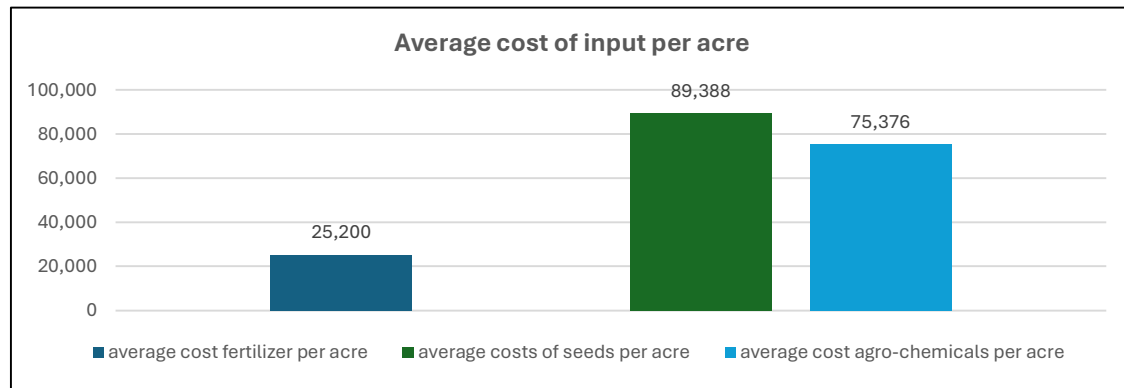
The average yield per acre was 318 kg/acre, with the average price per acre at 4,532 UGX/kg. Despite the average price is higher in Kaliro than in Buyende, only 41% of the production is sold in Kaliro, compared to 70% in Buyende. Buyende reported higher productivity compared to households in Kaliro, 333 kgs/ acre compared to 297 kgs/acre, respectively. While the average was 1.05 acres, in Buyende this was 1.22 acres compared to .86 acres in Kaliro.

Figure 13: Average yield per acre and average price received per kg (N:55)



76% of households incur costs for seeds, on average 89,388 UGX/acre. Hardly any manure or fertiliser is used, while 33% on average reported incurring costs associated with agrochemicals; on average 75,376 UGX/ acre. The share of HHs using agrochemicals is higher in Kaliro (41%) than in Buyende (25%),

Figure 14: Average cost of input per acre



SIMSIM

Of the 370 respondents in Lango, 105 (28%) households grew simsim. The average was 121kg/ acre. Productivity was significantly 76% higher in Amolatar with 139kg/acre compared to 79kg/acre in Alebtong.

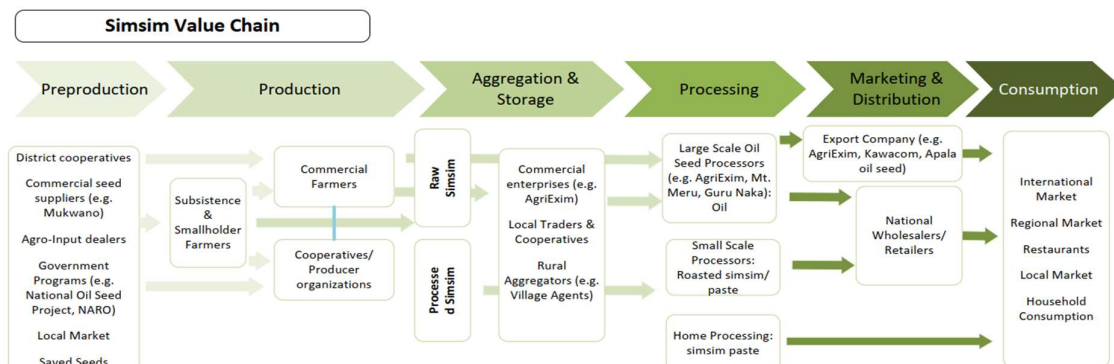
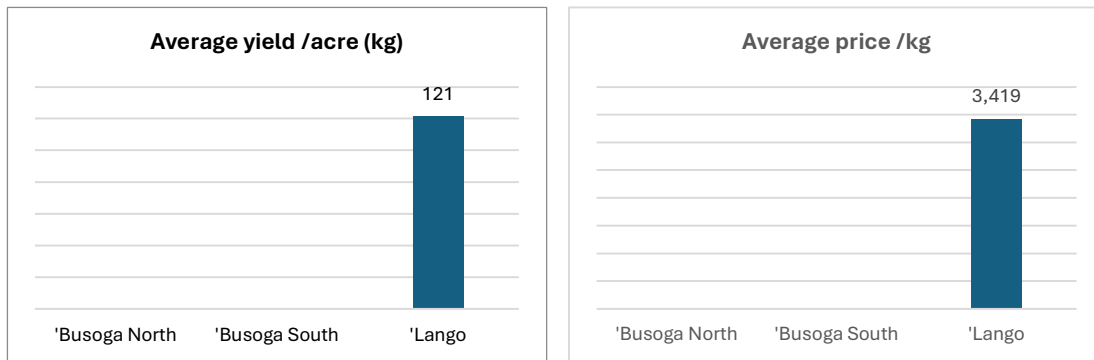


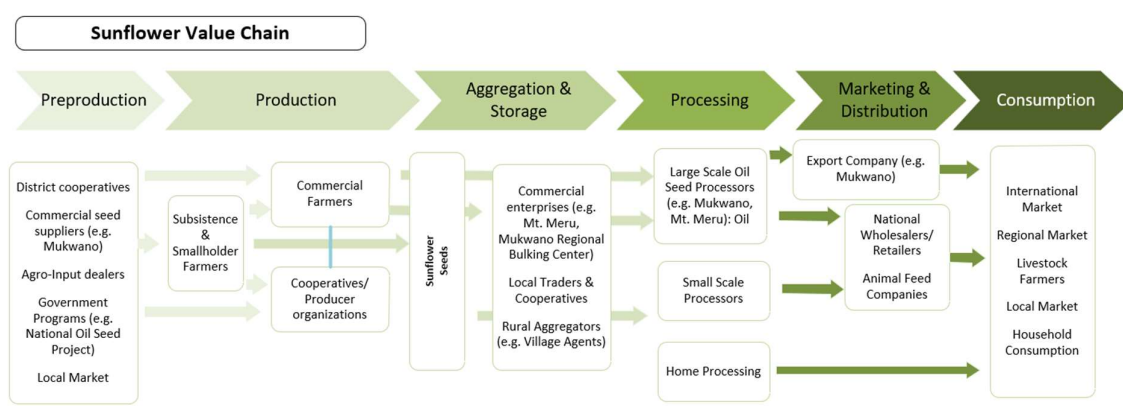
Figure 15: Average yield per acre and average price received (N: 105)



Given the higher production per HH in Amolatar, it is logical that they consume a smaller share of it: 31% compared to 68% in Alebtong.

It is interesting to note in comparison to other commodities, the percentage of simsim cultivating households (50%) who pay for seeds is much higher, with little to no variation across districts or land holding size. Similar to other commodities, there is little to no use of ag-inputs. No simsim farming households utilise manure and inorganic fertilisers, while only 3% on average utilise agrochemicals.

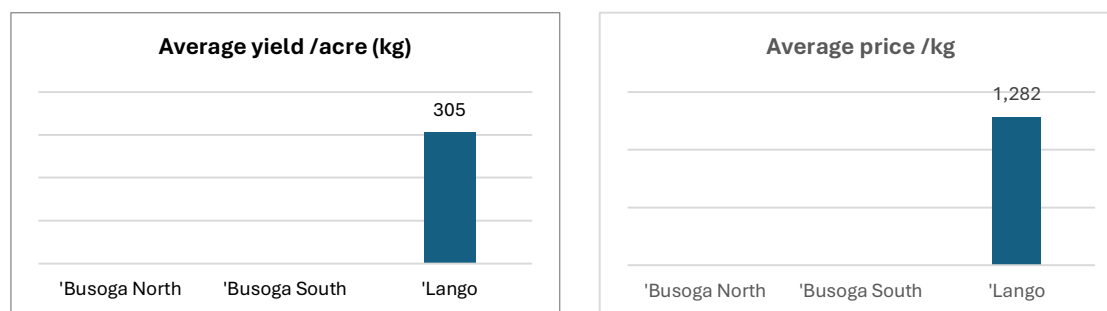
SUNFLOWER



Of the 370 respondents in Alebtong and Amolatar (Lango), 99 (27%) grew sunflowers.

Nearly all sunflowers are sold (99%). While the average price is 1,080 UGX/kg for small farms, larger landholders received 1,333 UGX/kg. While 100% of larger landholders pay for seeds, only 20% of farms with less than 2 acres do this. The average costs of inputs amounted to 40,339 UGX/acre. It is likely that the quality seeds that large landholders buy yield a higher-quality sunflower, leading to a better price.

Figure 16: Average yield per acre and average price received per kg (N:370)



Of all commodities, sunflower has the lowest adoption of manure, fertiliser or agro-chemicals, with nearly no application by any household. This is most likely due to the request of the buyers who use the seeds to produce (and export) organic oil. Yet, due to its deep rooting system, sunflower use nitrogen from soil layers that are inaccessible to most other field crops. This means it can quickly deplete the soil nutrients; indeed, it is reported that farmers in other districts in Lango abandoned the crop after having grown it for some years for organic oil exporters (who then moved on to other districts). This could be labelled nutrient grabbing.

3.3 INSPIRE Project Secondary Value Chains

Vegetables and bananas have been selected as secondary value chains. Vegetables are a critical part of household food security and additional income generation, while bananas are commonly grown in household gardens and intercropped in coffee farming systems to support shade management, productivity, and an additional source of income and household food.

VEGETABLE

Vegetable farming provides critical nutritional value and off-season income, especially for women and youth. Vegetable seeds are predominantly imported and are widely available through agro-input dealers. Companies such as East-West Seed, East African Seeds, and Holland GreenTech play a major role in the importation and distribution of vegetable seeds, working through established networks of agro-dealers in urban centres and cities.

Marketing is highly localised, relying on urban wholesale markets, roadside vendors, and short supply chains. Prices are highly variable; tomatoes sell for UGX 2,000 - 4,000/kg, while onions go for UGX 3,000 - 5,000/kg, depending on season and perishability.

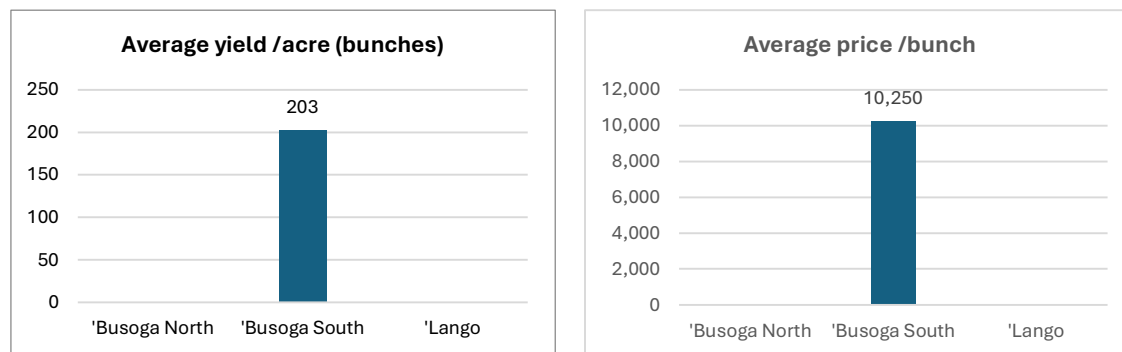
However, vegetables face some of the highest post-harvest loss rates, estimated at 30 - 50% due to inadequate cold chain infrastructure, poor packaging, and rough handling (FAO, 2021). These losses not only impact farmer income but also reduce the availability of affordable produce in urban markets.

Vegetables, including cabbage, tomatoes, and onions, are mainly consumed fresh in stews, sauces, and salads. However, due to limited preservation infrastructure, post-harvest losses are high. Agro-processing initiatives are gradually gaining momentum, with some industries beginning to process tomatoes into value-added products such as tomato sauce and paste.

BANANA

Of the 366 respondents in S. Busoga, 87 (24%) households grew bananas. The average area was .52 acres, and the average yield was 203 bunches/acre.

Figure 17: Average yield (in bunches) per acre and average price per bunch (N:366)

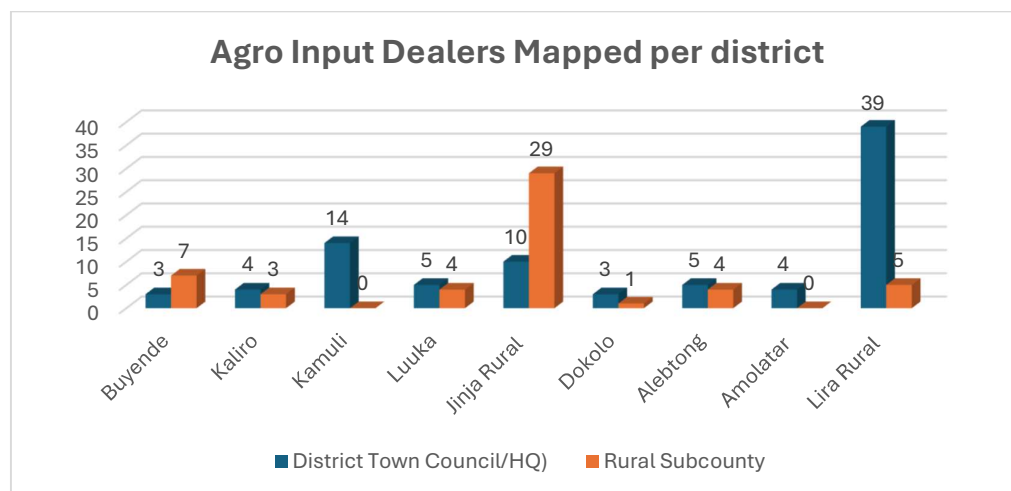


On average, 68% of the bananas are used for home consumption; 10% is immediately sold and 22% is retained for future sale. The average price per kg reported by banana-growing households was 10,250 UGX / kg. Among households, there was little to no application of manure, fertiliser, or agrochemicals reported.

3.4 Input Supply, Post-Harvest, Marketing and Home Consumption

3.4.1 Access to Inputs

Farmers located near urban centres such as Lira city, Jinja city and other major towns like Kamuli and Iganga have better access to both quality seeds and agricultural markets compared to those in remote districts like Amolatar and Buyende as the registered agro-input dealers are predominantly based in towns and cities. Rural farmers are required to travel long distances to access improved seeds, fertilisers, and agrochemicals from certified agro-input dealers. 140 Agro input business were mapped in the 9 project districts, 62% are located in urban (District Town Council/Head Quarters) and 38% is located in rural trading centers.



List of Agro Input Dealers Mapped per district				
	District	District Town Council/HQ)	Rural Subcounty	Total
1	Buyende	3	7	10
2	Kaliro	4	3	7
3	Kamuli	14	0	14
4	Luuka	5	4	9
5	Jinja Rural	10	29	39
6	Dokolo	3	1	4
7	Alebtong	5	4	9
8	Amolatar	4	0	4
9	Lira Rural	39	5	44
	Total	87	53	140
		62%	38%	

The agro-input businesses interviewed serve a wide range of farmers annually, with significant variations in scale. The majority of businesses serve between 1,000 and 10,000 farmers per year, with seasonal fluctuations demonstrated by higher demand during planting seasons.

The most common challenges reported include Counterfeit and fake inputs; Expired or low-quality seeds/agrochemicals; Seasonal demand fluctuations; Poor seed germination rates and credit default by input dealers. Counterfeit products and unreliable suppliers are the most critical risks, affecting both farmers' trust and business sustainability.

The Agro input businesses identified the following support mechanisms: Farmer training on proper agrochemical use; Regulation and monitoring of seed/input suppliers by government agencies; Germination and efficacy testing before sale; Capacity building for agro-dealers and Access to capital to stock high-demand inputs. Stronger regulatory enforcement and farmer education are the most requested forms of support identified by the Agro input business mapped.

All respondents (10 Agro Input business interviewed) see growth potential in selling to smallholder farmers justified by increasing adoption of hybrid seeds, expanding business catchment areas and rising demand for agrochemicals and fertilizers by smallholder farmers. The agro-input market is expected to grow, driven by farmer demand and expanding distribution networks.

The Agro input business proposed initiatives to Improve/expand capacity including expanding retail networks, Agent-based distribution, radio adverts and community outreach, Agro-input loans for farmers and Training programs for farmers and dealers. Geographical expansion and agent networks are key strategies for growth.

In both Lango and Busoga subregions, Maize remains the dominant crop with unmet seed demand, but diversification into soybeans, sunflower and vegetable seeds is emerging.

Record keeping is inconsistent with only 40% of the Agro input business surveyed responding Yes to record keeping, some businesses keeping records via phone logs or walk-in registrations. 60% of the Agro input business do not maintain any formal records of smallholder farmers.

Categorization of Input Dealers by Scale, Employment and Farmers Served

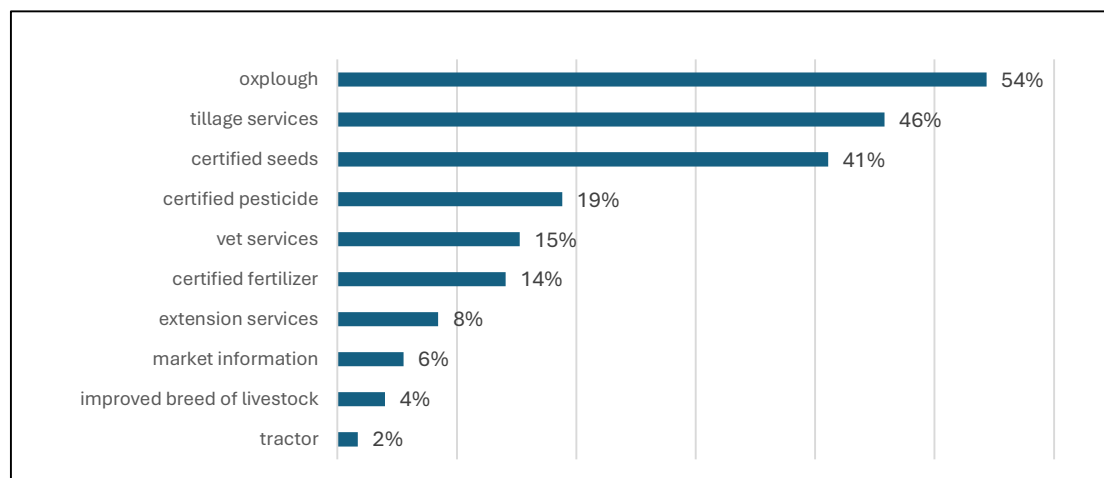
Scale Category	Location category	Employee Range	Farmers Served (Annual)
Small-Scale Agro Input Dealers	Rural agro input dealers	1-3 employees	1000 - 5,000 farmers
Medium-Scale Agro Input Dealers	Urban centre/city agro input dealers	3-10 employees	5,000 - 25,000 farmers
Large-Scale Agro Input suppliers	National Agro input suppliers	15 plus employees	Over 50,000 farmers

Our analysis reveals a well-defined three-tiered structure within the input distribution sector, characterized by distinct operational scales, geographic footprints, and market impacts. These categories form an interdependent ecosystem that sustains agricultural productivity:

1. **Grassroots Anchors** (Small-scale rural dealers)
2. **Regional Connectors** (Medium-scale urban dealers)
3. **National Catalysts** (Large-scale suppliers)

Each tier plays a specialized role in the agricultural value chain, with their effectiveness determined by a combination of workforce efficiency, geographic positioning, and service delivery models. The rural-to-urban-to-national progression demonstrates how input distribution evolves from hyper-localized personal service to industrialized supply chain operations.

Figure 18: Use of farm inputs by SHF (N:1,100)



The challenge is further compounded by the poor state of rural transport infrastructure. Many rural roads are unpaved, poorly maintained, or impassable during the rainy season,

significantly limiting the mobility of farming households. This infrastructure gap not only restricts access to agricultural inputs but also limits farmers' ability to reach output markets, extension services, and other critical agricultural support systems.

Moreover, the cost of high-quality, certified seeds remains a major barrier for SHFs. These seeds are relatively expensive, especially when compared to traditional or locally sourced alternatives. Due to financial constraints, many SHFs opt for cheaper, low-yielding seeds, often saved from previous harvests or purchased from informal local markets, which undermines their productivity and resilience.

Seed availability varies significantly by crop and region. For crops like maize, soy, and sunflower, improved seeds are primarily supplied through agro-dealers, government initiatives (e.g., NAADS and Operation Wealth Creation), out-grower schemes, and non-governmental organisations (NGOs). Despite these efforts, farmers in remote areas often continue to rely on saved seeds or purchase seeds from local markets.

Approximately 98% of sunflower hybrid seeds are imported. Oil processing companies like Mukwano import and promote specific varieties such as PAN 7351, which they distribute exclusively to their network of registered contract farmers. For maize, while hybrid seeds are also imported, local seed companies such as NASECO, in collaboration with the National Agricultural Research Organisation (NARO), have developed local hybrid varieties like LONGE 10H and BAZOOKA.

Soya bean seed development is led by NARO and Makerere University breeders, resulting in the popular MAKSOY series. Among these, MAKSOY 3N and MAKSOY 6N are the most widely adopted by farmers.

Cassava is propagated primarily through stem cuttings. Improved varieties are bred and disseminated by NARO. However, due to limited supply, farmers often recycle these improved varieties alongside traditional local cultivars.

Access to quality seeds for beans, groundnuts, and simsim remains limited. Farmers typically use home-saved seeds or purchase from informal local markets. NARO does breed and distribute open-pollinated varieties of these crops, but hybrid seed availability in the market is minimal or non-existent.

For coffee, breeding is carried out by government research institutions. The production and distribution of seedlings is handled by private nursery operators, coops, and government-owned nurseries. Unlike other commodities, robusta coffee trees can take 3-4 years before production and remain productive for 20-30 years. Given poor rejuvenation and stumping practices, many older Robusta trees are not achieving their optimal yields.

3.4.2 Post-Harvest, Marketing and Consumption

In Busoga and Lango, the processing and consumption of crops such as maize, cassava, soya beans, beans, groundnuts, simsim (sesame), sunflower, coffee, and various vegetables, including cabbage, tomatoes, and onions, reflect a blend of traditional practices and emerging modern techniques. These are shaped by local dietary preferences, cultural norms, and evolving economic activities.

Access to markets is largely through middlemen and traders, with low levels of collective aggregation and marketing, partly due to the lack of trust in cooperative leaders. Indeed farmers trust private traders better than cooperative leaders; while 6% of the respondents does not trust private traders (see table), this is 16% for cooperative leaders.

Table 6: Level of trust between SHF and agro-dealers (N:1,100)

Level of Trust of Farmers	N Busoga	S Busoga	Lango	Total
poor relationship and low level of trust	6%	10%	4%	6%
fair relationship /moderate level of trust	26%	16%	33%	25%
A good relationship / good level of trust	52%	64%	57%	58%
very good relationship /high level of trust	12%	4%	4%	7%
don't know	4%	6%	2%	4%

Maize

Maize is a dominant staple and commercial crop in both Busoga and Lango, contributing significantly to household food security and income generation. It accounts for over 60% of caloric intake among rural households and is cultivated by the majority of SHFs, often on plots of less than two acres. The marketing structure is characterised by three primary channels, that is, farm gate sales (accounting for 50 - 60% of transactions), local open-air markets, and aggregation by middlemen who supply bulk buyers and regional exporters.

Major buyers include regional traders supplying to South Sudan, Kenya, and DRC, as well as local maize millers and large-scale processors of maize flour. Farm gate prices range between UGX 700 and UGX 2,000/Kg, typically peaking during lean seasons. Post-harvest losses are estimated at 30-40% due to poor storage and handling practices that severely undermine profitability. Investment in mechanised shelling, proper drying techniques, and hermetic storage technologies like Purdue Improved Crop Storage (PICS) bags are some of the practices the farmers are employing to substantially reduce these losses and improve quality compliance for export.

Maize is a staple food across both regions and is typically dried, milled into flour, and prepared as posho (a stiff porridge). This is a common meal in schools and institutions. It is also used in brewing traditional beverages. Fresh maize is frequently boiled or roasted and sold as a popular street snack, especially in roadside and urban markets.

Cassava

Cassava plays a critical role in food security across Busoga and Lango, consumed daily by over 80% of households. Its adaptability to low-input systems, resilience against drought and its year round availability make it a key buffer crop during food shortages. Marketing occurs primarily through fresh root sales in rural and peri-urban markets, as well as processed products such as dried chips and high-quality cassava flour (HQCF).

Fresh cassava fetches UGX 500 - 800/kg at the farm gate, while dried or milled products command higher prices, ranging from UGX 1,200 - 1,500/kg. Despite this potential, only a small fraction of the crop undergoes value addition due to limited access to processing equipment, poor chipping and drying practices, and minimal storage infrastructure. Coops such as Greater Kamuli Farmers' Cooperative and Lango Cooperative Union are working to improve aggregation and marketing, but challenges related to perishability, bulkiness, and poor post-harvest techniques persist. Promoting community-level processing hubs with solar drying technologies and higher quality chippers is being adopted to help extend shelf life and increase market access.

Cassava is processed into dried chips or flour, notably mixed with millet to form "kwon kal", a common dish in Lango. It is also consumed fresh, boiled or roasted and widely sold in roadside markets as a snack.

Beans

Beans are a major source of dietary protein and micronutrients for rural households, consumed by over 70% of families at least three times per week. Its short growing cycle

and compatibility with intercropping make them a strategic crop for promoting good agronomic practice and soil health, as well as strengthening food and income security.

Marketing is dominated by farm gate transactions (60%), followed by sales in urban and peri-urban markets. Price ranges from UGX 2,000 to 3,500/kg, depending on bean type, cleanliness, supply conditions and season. The value chain is constrained by low yields, inconsistent seed quality, and post-harvest losses attributed to bruchid infestations, poor drying practices that result in high moisture content, and poor storage practices. Smallholder farmers often lack access to improved varieties and affordable drying equipment (tarpaulins), leading to rejection by bulk buyers and processors.

Soya Beans (Annual cropping system with legumes in N. Busoga)

Soya bean production has witnessed rapid growth in recent years, spurred by increasing demand from animal feed manufacturers, food processors, and export markets. In both regions, soya beans are cultivated primarily in rotation with maize, contributing to soil fertility through nitrogen fixation. Farmers market their produce mainly through local traders and cooperatives, with farm gate prices ranging between UGX 1,500 and UGX 2,500/kg depending on quality and season. Significant post-harvest losses estimated at 25 - 30% arise due to inadequate drying and high aflatoxin contamination levels. These quality challenges limit acceptance by large-scale buyers and reduce export competitiveness. Introducing threshers, encouraging collective storage, and disseminating knowledge on hermetic storage and aflatoxin management are essential interventions that have been promoted to enhance the soya bean value chain.

Soya beans are an essential source of plant-based protein and are typically mixed with a carbohydrate source for porridge. Additionally, soya beans are processed through mechanical pressing to extract oil, with the residual seedcake utilised in livestock feed production.

Groundnuts (Annual cropping system with legumes in N. Busoga)

Ground nuts are cultivated extensively across both regions, both for home consumption and sales. The crop is sold in various forms, raw (shelled or inshelled nuts), roasted, and as paste, with farm gate prices ranging from UGX 3,000 - 4,000/kg for shelled nuts.

Groundnuts are consumed in various forms, where they are often roasted, ground into paste and commonly used in stews and snacks. Value-added products such as peanut paste fetch higher prices, typically UGX 10,000 - 15,000/kg, while roasted groundnuts are sold at UGX 6,000 - 10,000/kg. Groundnuts face significant quality constraints, most notably aflatoxin contamination, which affects up to 40% of samples beyond acceptable limits. This presents serious public health risks and curtails prospects for regional and international trade.

Simsim (Annual cropping system with oilseeds in Lango)

Simsim is an increasingly important cash crop in Lango, with strong demand from international markets. Uganda exports over 80% of its sesame production, with Asia and the Middle East as the primary destinations. Farm gate prices range from UGX 3,500 to UGX 5,000/kg. Major buyers include Export Trading Group (ETG) and other regional exporters. Value chain actors note that farmers often receive a marginal share of the final market price due to limited bargaining power and dependence on middlemen, who only collect the produce at village level during peak harvesting periods.

Simsim is typically roasted and pounded into paste. A traditional mixture of groundnut and simsim paste known as odii is a staple condiment in local dishes. Simsim is also pressed for oil extraction, which is then used in preparing local stews and sauces.

Sunflower (Annual cropping system with oilseeds in Lango)

Sunflower is a commercially oilseed crop widely grown in Lango and parts of Busoga, primarily for oil extraction. Processing is concentrated in towns like Lira, which host over 50 oil milling facilities producing edible oil for domestic markets and export. The by-products, such as seedcake, are valuable inputs in animal feed production. Major players are Mukwano Industries, Nile Agro, Mount Meru and others.

Farmers sell their grains through local traders or marketing networks facilitated by processors such as Mukwano's "site coordinator" model that integrates procurement and extension services. Farm gate prices typically range from UGX 900 to UGX 1,500/kg. Production is hampered by low yields, limited access to improved hybrid seeds, and inadequate agronomic practices. Scaling access to high-oil content varieties and expanding private-sector extension could boost productivity and farmer profitability.

Coffee (Perennial cropping system in S. Busoga)

Robusta coffee is a key perennial cash crop in S. Busoga, grown mainly in agroforestry systems on smallholder plots. Farmers market their produce as Kiboko (dried cherries) or Fair Average Quality (FAQ) through traders, middlemen, and cooperatives. Leading exporters operating in the area include UGACOF and Olam Uganda. Prices range from UGX 5,000 -7,000/kg for Kiboko and UGX 12,000 - 13,000/kg for FAQ, depending on quality and market conditions. However, profitability is eroded by low yield, weak bargaining power, and poor post-harvest handling (drying and hulling). Robusta grown in Busoga undergoes sun-drying and hulling before being processed for export as a "green bean" (stage before roasting). While coffee is roasted in Uganda, domestic consumption remains below 4% of total production. Quality improvements and value addition are increasingly emphasised to meet international market standards.

3.5 Financial and Economic Analysis

This analysis evaluated the financial viability and value addition potential of selected priority agricultural commodities within Busoga (Buyende, Kaliro, Kamuli & Luuka) and Lango (Alebtong, Amolatar). The assessment focused on conducting a cost-benefit analysis and calculating Gross Value Added (GVA) across maize, cassava, soya bean, beans, groundnuts, sunflower, simsim, and coffee value chains.

The methodology employed farmgate prices as the baseline cost reference and systematically traced price changes across successive nodes of the value chain, ranging from production, aggregation, processing, to final marketable products. Gross Value Added (GVA) was quantified using the formula:

$$\text{GVA} = \text{Final Market Price} - \text{Farmgate Price}$$

In addition, profit margins were calculated at each functional node of the value chain, enabling the identification of the most economically viable stages and high-return intervention points.

Table 7: Summary of Key Profitability Indicators

Crop	Min. GVA (UGX/kg)	Max. GVA (UGX/kg)	Avg. GVA (UGX/kg)	Net Profit Range (UGX/acre)	Benefit-Cost Ratio (BCR)	Key Profitability Drivers	Risk-Adjusted Potential
Coffee	700	6,000	2,200	3,000,000 – 10,500,000	3.0 – 8.0	High export demand, premium processing margins	High (Volatile prices)
Beans	1,000	5,000	2,980	1,200,000 – 4,000,000	2.5 – 6.0	Value-added products (cooked beans)	High (Stable demand)
Simsim	1,000	7,000	3,350	1,300,000 – 4,100,000	3.3 – 7.0	Oil extraction, low input costs	Medium
Groundnuts	2,000	6,000	4,550	2,400,000 – 6,600,000	4.0 – 8.0	High-yield potential, paste/oil demand	High
Sunflower	400	2,500	1,280	1,100,000 – 3,400,000	2.2 – 5.3	Cooking oil production, drought-resistant	Medium
Soya beans	1,000	3,500	1,720	900,000 – 2,600,000	2.0 – 3.5	Protein-rich byproducts (flour, oil)	Medium
Maize	250	1,800	730	400,000 – 1,800,000	1.5 – 2.5	Staple scalable but low margins	Low

Source: Assessment data

3.6 Cost-Benefit Analysis

The cost-benefit analysis evaluated the financial viability of nine agricultural commodities based on three critical metrics of Gross Value Added (GVA) to measure value chain enhancement, Benefit-Cost Ratio (BCR) to assess investment efficiency, and net profit ranges per acre to evaluate farm-level economics.

The findings reveal distinct tiers of profitability among the studied crops. High-value commodities emerged as Coffee (UGX 8,600/kg GVA, BCR 3.0-8.0), Beans (UGX 37,900/kg GVA), especially cooked beans served in restaurants, and oilseeds including Groundnuts, Simsim and Sunflower with their value predominantly captured at processing stages. Moderate performers such as soya beans (GVA UGX 2,025/kg) and maize (GVA UGX 1,633/kg) demonstrated narrower margins, requiring either scale economies or value-added processing to enhance viability. Cassava presents an interesting case of high efficiency (BCR 4.0-8.0) despite low per-unit GVA (UGX 592/kg), while vegetables showed exceptional but risky potential with BCR reaching 15.0. The analysis further identified significant risk factors, including price volatility (particularly for coffee and vegetables), input cost sensitivity (affecting maize and soya beans), and varying climate resilience across crops.

4 Opportunities and Recommendations

Access to Ag-input to promote soil health: Promoting mineral fertilisers is critical given farmers' poor access and the overall decline in soil health; e.g in Lango, 78% of the soils were low in nitrogen. As the findings demonstrated, SHFs in the target area have low yields and are not maximising their productivity due to a range of factors, particularly low application of ag-inputs and low adoption of improved seeds. Low yields are detrimental to both the livelihoods and overall food security in the area. Additionally, the low application of fertiliser is leading to a catastrophic loss of minerals in the soil.

Through INSPIRE participatory approaches, farmers can learn about the economic potential of ag-inputs, particularly fertiliser and hybrid seeds. It can also strengthen the linkages with input suppliers, and encourage out grower schemes and pre-production financing that support farmers' transition from local to hybrid varieties.

As smallholders face serious cash flow problems to buy quality inputs, improving their access to seasonal loans is of critical importance.

Capitalising upon Climate Opportunities: Busoga has two short dry seasons (June/July and Dec. – Febr. that are mild enough for perennial crops to overcome. In Lango the five-month dry season (Nov.-March) is a serious obstacle for perennial crops to be productive. The combination with poor soils means that crops suffer more from water and heat stress. It also means that recycling organic matter is more difficult, as for five months, there is insufficient soil moisture for microbes to digest crop residues, manure and other biomass.

Promote improved post-harvest handling and storage: To reduce post-harvest losses, while encouraging collective aggregation that enables access to higher value markets, the INSPIRE team should Village Marketing Groups. Innovative models involving buyers, government, and or the supplier, as well as rent-to-own models, may incentivise various stakeholders. Support access to post-harvest solutions may include, but not be limited to:

- Maize: investments in mechanised shelling, proper drying techniques & hermetic storage technologies such as Purdue Improved Crop Storage (PICS) bags
- Cassava: Solar drying technologies and higher quality chippers are being adopted to help extend shelf life and increase market access.
- Beans: improved drying equipment
- Soya bean: Introducing mechanical threshers, encouraging collective storage, and disseminating knowledge on hermetic storage and aflatoxin management are essential interventions

Value-Chain specific recommendations:

Maize is a critical commodity for both household food security and income generation. It is a highly nutrient-dependent crop, which therefore depletes minerals, such as nitrogen, magnesium, phosphorus, and potassium from the soil. Despite this, there is little to no use of compost and manure by maize farmers, while only 22% of households on average utilise agrochemicals. INSPIRE, through ag-input suppliers and financial service providers, should promote affordable models for accessing fertiliser for maize. In This strengthens food security and income generation, while in the long term it reduces the threat of soil depletion. Rotating maize with soya beans or other legumes is another strategy that INSPIRE should promote to replenish the minerals and overall health of the soils.

Cassava As poor production and post-harvest practices limit farmers' access to higher value markets, such as breweries and feed companies, this needs to be addressed by INSPIRE, in coordination with companies that need substantial amounts of cassava.

Beans are a critical commodity for household food security (as an important source of protein). In addition beans can be easily stored throughout the year. Beans can be a critical cover crop to improve yields and soil productivity while reducing weeds and pests. Through Farmers Learning Groups INSPIRA should work with farmers on how beans can be most effectively intercropped with maize and coffee.

Coffee represents a significant opportunity for improving incomes. Its productivity is very low. Both low yields and poor quality lead to a low return on their investments. This is partly due to nearly no use of ag inputs such as manure, fertiliser, or agrochemicals. Low returns prevent farmers from expanding their coffee production. SHFs need strong linkages with private processors, as well as access to out-grower schemes and pre-financing that encourages the application of ag-inputs. Private sector and extension agents need stronger linkages with farmers, to better market their services and products.

Soya beans Similar to maize, soya bean is a nutrient-demanding crop. As mentioned above, Kaliro district, which has significantly higher practice of procuring and applying agrochemicals compared to Buyende, is likely contributing factor to the higher yields per acre in Kaliro compared to Buyende. The INSPIRE Team can offer exchanges between these two districts to share and promote the best practices in an attempt to strengthen the agronomic practices of Buyende households.

Simsim - Uganda has had significant issues of high aflatoxin levels in simsim, largely due to post-harvest handling and drying practices. It would be interesting to investigate why a high percentage of households pay for simsim seeds and why Amolatar has significantly higher yields/acre than Alebtong.

Sunflower- The quality and the yield of sunflower is highly dependent on the type of seed. All HHS with more than 2 acres buy seeds and consequently receive significantly higher value for their production than those with less than 2 acres. INPIRES should use this as a starting point for awareness raising and learning.

5 Annexes

Annex 1: Regional Value-Chain Actors Identified

Region of Operation	Name of actor	Value chain role	Value chains (Commodities)	Contact
Busoga	Agroways	Processor	Soya bean, maize, cassava	+256 782 391354
Busoga and Lango	Grain Pules	Input and Off-taker	Fertiliser and off-taker of Coffee	Gloria Asimwe 0780499778 projects@grainpulse.co.ug
Busoga and Lango	Balton	Inputs	Fertiliser, Seeds, Agrochemicals, Irrigation	balton@baltoncp.com +256 200 502 300 + 256 312 502 300
Lango	Mukwano Industries Limited	Processor	Sunflower, soya beans, sesame, maize	Okello Joseph Extension Service Advisor +256777770734
Lango	Mount Meru Millers (U) Ltd	Processor	Soya beans	+256750706616 +255272544221
Busoga	De Hues		Cassava, maize, and soya beans	
Nakasongola	Pura Organic	Processor	Cassava	
Busoga and Lango	Maganjo Grain Millers	Processor	Grains (Maize, Soya beans, finger millet, etc.)	Mr. Alex Sejjuta 0772502316/ 0772695713 asejjuta@yahoo.com
Busoga	SMART FOODS Ltd	Processor	Soya beans, Maize	

Annexe 2: District Value-Chain Actors Identified

District	Value chain category	Actor Name	Type of input	Location	Telephone
Dokolo	Input suppliers	Mukwano	Hybrid sunflower seeds (Panar)	Lira city	777770734
Dokolo	Input suppliers	Agrisol	Maize seeds (DK varieties), pesticides, fertilisers.	Lira city	772626203
Dokolo	Input suppliers	Dokolo Young Oil Seed Cooperative Limited	Soya bean seeds	Awiri -Dokolo sub county	789755490
Dokolo	Input suppliers	Kwera Youth Oil Seed Cooperative	Maize seeds, agro chemicals, fertilizers	Kwera sub county, Obapodero village	778399462
Dokolo	Input suppliers	Bakara Agro inputs	Maize seeds, agro chemicals, fertilizers	Dokolo town council	772355447
Dokolo	Input suppliers	Niye Farmers Home	Maize seeds, agro chemicals, fertilizers	Dokolo town council	777807076
Dokolo	Producers	Dokolo young Oil seed cooperative Limited	Soya bean seeds	Awiri -Dokolo sub county	789755490
Dokolo	Producers	Individual farmers	Maize seeds, soya beans, sunflower.	Dokolo district	
Dokolo	Aggregators	Mukwano	Sunflower	Lira city	777770734
Dokolo	Aggregators	Mount Meru	Soya bean and sunflower	Lira city	750706616
Dokolo	Aggregators	Tom Bora produce store	Maize, soya beans, simsim and sunflower.	Dokolo town council	772094947
Dokolo	Aggregators	Ray produce	Maize, soya beans, simsim and sunflower.	Dokolo town council	770989299
Dokolo	Processors	Mukwano	sunflower	Lira city	777770734
Dokolo	Processors	Mount Meru	Sunflower and soya beans	Lira city	750706616
Dokolo	Processors	Dokolo young Oil seed cooperative Limited	Sunflower and maize	Dokolo sub county	789755490
Luuka	Input suppliers	Kwagalakwe agro inputs	Agro input dealer		772344735
Luuka	Input suppliers	Ibrahim Kakaire	Agro input dealer		759562340
Luuka	Processors	Batwala Godfrey	Coffee processor		782319053
Luuka	Processors	Isabirye Grace	Coffee processor		786483542
Luuka	Processors	Nakabugu factory	Coffee processor		779347112
Luuka	Processors	Bubaale Godfrey	Maize processor		770523540
Luuka	Processors	Nakabugu factory	Maize processor		779347112
Luuka	Processors	Kitawulwa Dickson	Maize processor		773861030
Luuka	Financial service providers	Bukanga SACCO	Finance		775144275
Luuka	Financial service providers	BRAC bank	Finance		753633834
Luuka	Financial service providers	Bugadde SACCO	Finance		706253121

District	Value chain category	Actor Name	Type of input	Location	Telephone
Luuka	Financial service providers	Power micro finance	Finance		777573808
Luuka	Aggregators	Matende Charles	Soya bean bulking		773854889
Luuka	Aggregators	Nawampiti cooperative	Maize bulking		785035768
Luuka	Input suppliers	Asaaba farmers point	Tractor services and agro inputs		741762330
Luuka	Input suppliers	Mercury animal feeds	Animal feeds factory		770675401
Buyende	Input suppliers	Greater Kamuli Cooperative Agro-input shop		Buyende Town-council	777463671
Buyende	Input suppliers	Nabbi Daudi		Buyende Town-council	745547929
Buyende	Input suppliers	Sosi Agro-input shop		Buyende Town-council	753075596
Buyende	Input suppliers	Mugweri & Sons agro-input shop		Mukuma Trading center-Buyende s/c	785555491
Buyende	Input suppliers	Maka Wilson		Mukuma Trading center-Buyende s/c	-
Buyende	Input suppliers	East African seed		Nairobi	722207747
Buyende	Input suppliers	NASECO		Kampala	751618003
Buyende	Input suppliers	SYOVA		Kampala	756620100
Buyende	Input suppliers	Simlaw		Industrial area-Kampala	392176170
Buyende	Input suppliers	Equator Seeds		Kampala	392568937
Buyende	Financial service providers	Greater Kamuli Cooperative	Lending to members	Kamuli, Buyende Town Council	776311524
Buyende	Financial service providers	BRAC	Lending to individual women and Women in groups who own SME's	Buyende Town Council	752904336
Buyende	Aggregators	Mr. Saleh Kapala		Kampala	783065552
Buyende	Aggregators	TRAFORD Ltd		Kamuli	764901606
Buyende	Processors	Ms. Kizige Betty		Kamuli	772577061
Buyende	Processors	Greater Kamuli Cooperative	milling and packaging maize, cassava and rice	Buyende Town-council	776311524
Lira	Aggregator and Processor	ERYMAT ENTERPRISES LTD	Aggregators and exporters of produce (soya bean, maize, sesame, sunflower)		777277569
Lira	Aggregator and Processor	Mukwano Industries Ltd	Oil millers, aggregators (Sunflower, soya bean, maize, simsim)		777770734
Lira	Aggregator and Processor	Mount Meru Millers	Oil processors (Buy soya beans and sunflower for processing)		750706616

District	Value chain category	Actor Name	Type of input	Location	Telephone
Lira	Input suppliers	Pacu Opur Agro - Inputs	Agro Input supplies		781133613
Lira	Aggregator and Processor	Ngetta Tropical Holdings	Supply of sunflower seeds, an aggregator and a processor		777440226
Lira	Processors	CPN Maize Grain Millers	Maize grain millers		779408736
Lira	Input suppliers	Niye farmers Home	Agro Input supply		777807076

Annex 4: MSMEs Agro-Input Suppliers and Service Providers KII.

Introduction and consent

Please read aloud to all KII participants:

Good morning/afternoon, my/our name is/are _____. We work with GOAL Uganda. We would like to talk to you about rural financial services in this community.

The general objective of this study is to generate comprehensive insights into the structure, performance, and dynamics of selected agricultural value chains in Busoga and Lango subregions, identifying systemic barriers and opportunities to enhance smallholder participation and competitiveness, while providing evidence-based recommendations for sustainable market systems development and climate-smart interventions.

We kindly ask for your honest feedback. Please be assured that your feedback will not affect your participation in the project. If you choose not to participate, that is completely fine and will not impact your ongoing involvement in the project.

The information gathered will be used by GOAL Uganda as part of its formative studies under the INSPIRE project. Participation in this discussion is voluntary, and you are under no obligation to respond to any question. You may stop participating at any time.

Time Commitment: This discussion will take approximately 15-20 minutes.

Consent:

Do you have any questions before we begin?

Are you willing to participate in the focus group discussion?

If yes, do you provide consent for GOAL Uganda to document, use, store, and share the information provided for learning purposes?

☐ YES ☐ NO

May I begin now?

General Information

Date of Interview:	
Interviewer Name:	
Respondent Name:	
Designation in the Company/Business:	
Phone Contact:	
Email:	
Business Profile	
Type of Market Actor:	
Name of company	
Business Location/Address:	
Catchment Area:	
Primary Commodity/Product or services:	

Year of Establishment/Registration	
Level of registration:	
No. of employees (Male, Female, Youth, PWDs)	

Section One: Business Operation.

Question	Response
1. Describe the category of products/services you provide to the smallholder farmer.	
2. Describe the market trends and demand for the products/services you sell.	• Much Increasing Demand ☐ • A little increase in Demand ☐ • Stable demand ☐ • Little Decreasing Demand ☐ • Much decreased demand ☐ •
3. What differentiates your business from your competitors (unique point of strength)?	
4. Have you made any recent investments to develop or expand your business?	Yes ☐ No ☐
4 b). If yes, what kind of investments?	Increasing the stock and introducing new products
5. Where do you source your products?	• Supply contract with International Manufacturer ☐ • Supply contract with the Local manufacturer ☐ • Source products locally in the market ☐ • Produced internally ☐ • Out grower scheme ☐ • Distribution Agent Agreement with large-scale suppliers. ☐ • Others specify:
6. Describe your distribution network (How products are sold, including who you sell to).	• Formal Input shop (Farmers Walk in and buy) ☐ • Agents (Last mile sales/distribution points in rural centers) ☐ • Traders (Large/Small scale traders buy and retail to farmers) ☐ • Company marketing staff ☐ • Online sales ☐ • Others specify:
7. Which of the above ways is the most important for your company?	
8. What type of market linkages do you have regarding the agriculture value chain?	☐ Formal Horizontal arrangements with other PSA (Specify) ☐ Informal Horizontal arrangement with other PSAs (Specify) ☐ Formal Upstream/Vertical arrangement with other PSAs (exporters/importers, national companies). Specify. ☐ Informal Upstream arrangement with other PSAs. Supply arrangement with companies like Bukola, NASECO and others ☐ Others specify:
9. Do you provide embedded services? (providing services that come with the main service).	Yes ☐ No ☐
9b) If yes, which embedded services?	

10. What types of investments have you made (or are planning to make) to "upgrade" or strengthen the smallholders and or intermediaries that you supply to increase your sales volume?	
10 b) How did you (or are you planning to) finance those investments?	
11. What major challenges are affecting your overall business operation?	
12. Please list other companies like yours. Which ones have the largest market share? What do they do differently from you?	
13. Are you currently receiving support from any donor or government program? Yes	Yes ☐ No ☐
13b) If yes, from whom and what kind of support?	

Section Two: Commercial viability of products/services provided to farmers.

Question	Responses
1. How many farmers do you sell to per year through your own retail outlets or supply network? (Estimated number of farmers reached)	
2. What challenges or risks do you face in selling inputs/Services in the targeted project districts?	
3. What support do you need to reduce risk or develop capacity to address these challenges?	
4. Do you see the opportunity for selling inputs/services to smallholder farmers in the targeted project districts growing in future?	
5. How do/will you obtain information on what the smallholder farmers want? (Market demand Information)	
6. What initiative would you like to carry out to improve or expand your capacity to sell inputs/ services to smallholders?	
7. Which agricultural/animal products in our targeted project districts have the most unmet demand and growth potential?	
8. Do you keep records of clients?	

Annex 5: MSME Market off-takers KII Question Guide

Introduction and consent

Please read aloud to all KII participants:

Good morning/afternoon, my/our name is/are _____. We work with GOAL Uganda. We would like to talk to you about rural financial services in this community.

The general objective of this study is to generate comprehensive insights into the structure, performance, and dynamics of selected agricultural value chains in Busoga and Lango subregions, identifying systemic barriers and opportunities to enhance smallholder participation and competitiveness, while providing evidence-based recommendations for sustainable market systems development and climate-smart interventions.

We kindly ask for your honest feedback. Please be assured that your feedback will not affect your participation in the project. If you choose not to participate, that is completely fine and will not impact your ongoing involvement in the project. The information will be used by GOAL Uganda as part of its formative studies under the INSPIRE project. Participation in this discussion is voluntary, and you are under no obligation to respond to any question. You may stop participating at any time.

Time Commitment: This discussion will take approximately 15-20 minutes.

Consent:

Do you have any questions before we begin?

Are you willing to participate in the focus group discussion?

If yes, do you provide consent for GOAL Uganda to document, use, store, and share the information provided for learning purposes?

☐ YES ☐ NO

May I begin now?

General Information

Date of Interview:	
Interviewer Name:	
Respondent Name:	
Designation in the Company/Business:	
Phone Contact:	
Email:	
Business Profile	
Type of Market Actor:	
Name of company	
Business Location/Address:	
Catchment Area:	
Primary Commodity/Product or services:	
Year of Establishment/Registration	
Level of registration:	
No. of employees (Male, Female, Youth)	

Section One: Business Operation.

Questions	Responses
1. What agricultural products do you sell and to whom?	☐ Grains (Pulses and Cereals) E.g. Soya beans, Maize, Rice, sunflower, etc. ☐ Flour ☐ Animal feeds ☐ Others specify: Cassava
1 b) For the products selected above, name who and where you sell to?	
2. How do you source these products or raw materials used for making the products you sell?	☐ Out grower scheme (Contract farming agreement) ☐ Farmers supply directly, no formal agreement. ☐ Buy from coops or farmers' groups. ☐ Buy through local traders/agents ☐ Own production (Nucleus farm) ☐ Company collection center ☐ Other specify:
3. Please describe how the market for your products is segmented.	
4. What specific variety of crops do you purchase from farmers, and how much have you purchased in the past 3 years?	
5. Which of the varieties of crops are most profitable for smallholder farmers (producers)?	
6. What crops can be grown in rotation with the one you are currently purchasing?	
7. What percentage of the produce you purchase is from the project target areas (name the project districts)?	
8. Describe how your procurement (produce supply) network operates.	
9. How do you communicate and place orders with your suppliers?	
10. Do you provide advances to your suppliers?	Yes ☐ No ☐
10b) If yes what kind of suppliers qualify for an advance?	
11. Do you offer price premiums to producers or intermediaries for crop produce that meets specific grades or quality standards?	
12. What differentiates you from your competitors?	

Section Two: Growth Opportunities.

Questions	Responses
1. What trends do you see for the future of your crop produce business?	
2. How strong are your purchases of crop produce from smallholder farmers (producers) in the project target area? (Estimated Market share)?	
3. Do you have unmet demand?	Yes ☐ No ☐
3b) If yes, describe the demand gap	
4. What is your demand trend? (Increasing, decreasing)	

5. What interest or opportunity do you have to expand your sourcing/purchase from smallholder farmers (producers) in the project target area?	
6. How do you find out about the availability of crop produce to purchase?	
7. Do you provide any credit, information or technical support to your suppliers (farmers or intermediaries)?	Yes ☐ No ☐
7b) If yes, briefly explain	

Section three: Constraints for farmers (producers) and MSMEs (Buyers)

Questions	Responses
1. What are the greatest problems that smallholder farmers in the project area face in selling their crop produce?	
2. What are the biggest challenges you face in improving your business operation and expanding your supply network from smallholder farmers in the project areas?	

Section Four: Initiatives, support needed and collaboration

Questions	Responses
1. What types of investments or initiatives have you made (or are you planning to make) to improve and /or expand your crop produce sourcing/purchases from smallholder farmers and/or Intermediaries in the project areas?	
2. What kind of support does your business need to carry out these initiatives?	
3. Have you ever (or do you currently) worked with the government or a donor-funded agricultural program? If so, how?	