





STUDY ON HOUSEHOLD LIVELIHOODS AND **PRODUCTION IN BUSOGA AND LANGO SUB-REGION**

MAY 2025

INSPIRE PROJECT



Disclaimer

This study has been conducted following the ethical protocol and data protection guidelines of GOAL International. All respondents or their guardians gave consent for being interviewed and the use of their anonymised information. The data in this study have been collected, processed, and analysed with professional quality care. GOAL Uganda remains the proprietor of the data and information presented. Any extensive use shall be informed to and approved by GOAL Uganda. Quoting the report is welcome, but with reference to the INSPIRE project. The content and views in this report do not necessarily express those of the Embassy of the Kingdom of the Netherlands and the partners in the project.

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Acronyms & Abbreviations

BDS Business Development Services

DCDO District Community Development Officer

EKN Embassy of the Kingdom of the Netherlands

FGD Focus Group Discussion

GESI Gender Equality and Social Inclusion

HH Households

INSPIRE Integrated Sustainable Production for Inclusive and Resilient Economies

KII Key Informant Interview

MAAIF Ministry of Agriculture, Animal Husbandry, and Fisheries

MSME Micro to Medium-Sized Enterprise

PSA Private Sector Actor

SACCO Saving and Credit Cooperative Organisation

SHF Smallholder Farmers

TUNADO The Uganda National Apiculture Development Organisation

VCA Value Chain Analysis

VSLA Village Savings and Learning Association

Executive Summary

The Household Livelihood and Production study was conducted as part of the inception phase of the INSPIRE project, a five-year initiative funded by the Embassy of the Kingdom of the Netherlands and implemented by GOAL Uganda and partners. INSPIRE seeks to improve the income and livelihood resilience of 200,000 smallholder farmers across Busoga and Lango subregions through sustainable farming systems, inclusive market participation, stronger local advocacy, and more equitable decision-making at household and community levels.

The study interviewed 1,100 smallholder farming households (SHFs) from six districts: 364 in Busoga North (with annual legume farming systems), 366 in Busoga South (with perennial integrated farming systems), and 370 in Lango (with annual oil-seed farming systems). Per district two project sub-counties were samples and one control sub county. As no significant difference were found between the control group and the project group this report will use the averages of both groups. The baseline report will give the disaggregated data.

Of the total number of interviewed households, 583 had access to 2 acres or less, and 517 had 2 to 10 acres, i.e. 53% and 47%, respectively. The average farm size is small, at 2.85 acres, with Busoga South averaging only 1.85 acres. The educational level is low, with only 27% of individuals continuing their education after primary school. Female-headed households comprise 21% of the sample. A control group was interviewed in sub-counties where no EKN projects are being implemented (255 HH).

Main crops grown by households are maize, cassava, and beans. In Lango, there is a focus more on oilseeds, in Busoga South on coffee intercropped with banana, and in Busoga North on soya and groundnuts. Production levels of all crops are very low, resulting in a yield gap that can range from 40% to 80% at times. The very low usage of farm inputs, such as organic and inorganic fertilisers and agrochemicals, is the main contributing factor. Composting and using manure are hardly done. The inconsistent use of certified seeds, often said to be fake, is another major cause of these low yields. Major reasons for not using inorganic fertiliser are the high price and the availability. A significant part of the produce is meant for home consumption. For instance, for maize home consumption reaches 63%, beans 88% and cassava 74%.

Respondents mentioned a series of challenges affecting their farming. Although there are regional differences, pests and diseases are mentioned by most respondents, i.e., 70%; droughts

are, according to 67%, a major challenge. In addition to low soil fertility, according to 47%, this is especially prevalent in Busoga North. High prices for inputs and low prices for the produce are challenging, especially for those in Lango (66% and 54% respectively). The physical distance to a nearby trading centre or town is the highest for the districts in Lango. Climate-related hazards became more common - 91% experienced such a hazard in the last five years; mostly droughts.

Upon closer examination of the ease of purchasing inputs, the study reveals that accessibility is a significant issue for all inputs, with SHFs in Lango experiencing the most severe challenges. With seeds, 66% find it difficult to access, for inorganic fertiliser, 72% and organic fertiliser, 70%. Irrigation equipment is most challenging to find in the districts: 90% indicated that it is (very) difficult. SHFs are poorly organised and lack basic motivation for cooperation. Only 1% are members of a cooperative, 2% of a SACCO and 57% of a VSLA. Almost no households sell their produce collectively.

VSLAs, however, play a crucial role in enabling households to save and access loans. Very few households have managed to obtain a loan from a bank or SACCO, i.e., 1% and 2%, whereas 42% of respondents indicated having acquired a loan from the VSLA. Processing is taking place at a rudimentary level, primarily involving cleaning, drying, and in some cases, milling. The letter pertains to preparing products for home consumption, such as maize and cassava flour.

Women, micro-farmers, and female-headed households score lower than average on almost all aspects, including access to inputs, yields, loans, land, and income.

Agriculture (incl. livestock) is the primary activities for 95% of all HHs; 49% is solely engaged in agriculture. 39% mentions to have other businesses as well, mostly trading, a small shop, brick making, boda-boda riding, or making local brew. Agricultural income is 2.4 million UGX, the same as the values found in the baselines of Common Ground and Include. For the poor crops contribute the lion's share of their income. Livestock is more important for the 20% most wealthy households. Average overall income is very low (3.7 million UGX) and similar in all farming systems. It is well below the poverty line of 10 million of UGX/HH. The poorest 25% does not even have enough income (1 million UGX) to satisfy their basic needs in terms of calories. In total 14% of all HHs are food insecure in six or more months per year. In Lango this is 28%.

1 Introduction

With funding from the Embassy of the Kingdom of the Netherlands, GOAL Uganda, with three other partners (Wageningen University & Research, Resilience Uganda and Agriterra) are implementing a five year Integrated & Sustainable Production for Inclusive and Resilient Economies (INSPIRE) project in rural lowland communities in two regions of Busoga and Lango. INSPIRE aims to contribute to "increased income and livelihood resilience of Small Holder Farmers (SHF) to climate change and market failures." The consortium will implement the project in nine districts: four in Lango (Alebtong, Lira Rural, Amolatar, and Dokolo) and five in Busoga (Kamuli, Buyende, Kaliro, Luuka, and Jinja Rural). The project will work with and through local partners, VEDCO, FINASP and A2N, with ISSD and East West Seed Knowledge Transfer providing technical expertise. A total of 240,000 smallholder households are expected to be reached.

The project is implemented through four pathways to achieve its goal of "increased income and livelihood resilience of SHF to climate change and market failures":

- a) **Pathway and Outcome 1:** Focuses on inclusive household and community decision-making and action.
- b) **Pathway and Outcome 2:** Focuses on ensuring SHF farming systems are more sustainable, productive, and resilient to shocks.
- c) **Pathway and Outcome 3:** Focuses on SHF actively participating and benefiting in inclusive markets.
- d) **Pathway and Outcome 4:** Ensures SHF have enhanced voice and influence to address market system issues.

This report for INSPIRE is one of seven studies conducted during the project's inception phase, between December 2024 and May 2025.

1.1 Study Purpose and Objectives

The study sought to establish baseline values for key performance indicators and understand the current socio-economic and agricultural conditions of SHFs in six out of nine project districts.

More specifically, the study was conducted to:

• Determine the baseline status of project indicators, including income levels, production volumes, livelihood resilience, and market engagement of SHF households.

- Assess the socio-economic, cultural, and environmental context within the targeted districts, including SHF decision-making dynamics, farming systems, and market participation.
- Identify the key needs, challenges, strengths, weaknesses, opportunities, and threats of SHFs
 in achieving sustainable production, income growth, and resilience to climate change and
 market failures.

1.2 Geographical Coverage of the Study

The study took place in six out of the nine districts: Alebtong, Amolatar, Buyende, Kamuli, Kaliro, and Luuka. Two intervention sub-counties were selected, and one control sub-county was selected from sub-counties where the project will not be implemented. As no significant difference were found between the control group (253 HH or 23%) and the project group (847 or 77%) here the averages are used of both the groups. The baseline report will provide the disaggregated data.

The project area is characterised by three dominant farming systems - perennial, oilseeds, and legumes. For each farming system, two districts were selected. The two districts closest to (semi) urban settings (Lira and Jinja) were not considered. For the control sub-counties, those where no other EKN project has been conducted were selected. These considerations led to the following sample frame:

Table 1: Summary of districts and sub-counties under survey

District	Intervention sub counties	Control sub counties
Kamuli	Kitayunjwa, Mbulamuti	Wankole
Buyende	Buyende, Ndolwa, Gumpi	Kidera
Alebtong	Abia, Akura, Abako	Amugu
Amolatar	Aputi, Opali	Agwingiri
Kaliro	Gadumire, Namwiwa	Buyinda
Luuka	Nawampiti, Waibuga	Irongo

1.3 Study Methodology

This section includes the study design, sampling methodology, sample size determination, data collection methods and data analysis techniques.

1.4 Study Design

The study adopted a mixed-methods approach integrating both qualitative and quantitative data collection techniques. The quantitative component generated measurable components aligned with the project monitoring tracker and results framework, providing a clear basis for monitoring progress. The qualitative component involved FGDs with SHFs, small private sector companies, and KIIs with government agencies.

1.5 Sampling

A multi-level sampling approach was employed for this study. At the first level, purposive sampling was used to purposively select districts from the three farming systems: North Busoga (Kamuli, Buyende), South Busoga (Kaliro, Luuka), and Lango (Amolatar, Alebtong).

At the second level, stratified sampling was applied to select sub-counties as the sub-counties are natural strata with homogeneous characteristics within the chosen districts. At the third level, semi-randomised sampling was used to select SHFs from the household lists, divided into two land size categories (< 2 acres and 2 -10 acres). The study aimed at 50% female respondents.

1.6 Sample Size Determination

This study used a 90% level of confidence with a 5% standard error, which resulted in a sample size of 270 per study group. With a margin of 10 respondents to be potentially deleted, the total number was raised to 280. For the control group, the level of confidence remained 90% with a standard error of 10%, resulting in 69 respondents. To accommodate the potential deletion of respondents, the sample size was increased to 80. The distribution is as follows:

Table 2: Number of respondents by district - Intervention districts (N:840)

Intervention sub-counties								
Regions	District	Total	0-2 acres	Above 2 acres				
Lange (200)	Alebtong	210	105	105				
Lango (280)	Amolatar	70	35	35				
Puggas North (200)	Kamuli	128	64	64				
Busoga North (280)	Buyende	152	76	76				
Puraga Couth (200)	Kaliro	112	56	56				
Busoga South (280)	Luuka	168	84	84				
Grand Total		840	420	420				

Table 3: Number of respondents in control sub-counties by district (N:240)

Control sub-counties								
Regions	District	Total	0-2 acres	Above 2 acres				
Lango (80)	Alebtong	60	30	30				
	Amolatar	20	10	10				
Busoga North (80)	Kamuli	36	18	18				
	Buyende	44	22	22				
Busoga South (80)	Kaliro	32	16	16				
	Luuka	48	24	24				
Grand Total		240	120	120				

1.7 Demographics of Respondents

A total of 1,100 households were interviewed across six districts, out of which 227 (21%) were female-headed and 872 (79%) male-headed households. The main group of respondents was female (51%) and had finished higher primary (45%). More details are provided in the tables.

Table 4: Demographics of respondents by district (N:1,100)

	Busoga North		Busoga South		Lango		Total
	Buyende	Kaliro	Kamuli	Luuka	Alebtong	Amolatar	
Female respondent	47%	56%	68%	62%	55%	52%	57%
Male respondent	53%	44%	32%	38%	45%	48%	43%

	Busoga Noi	rth	Busoga South		Lango		Total
	Buyende	Kaliro	Kamuli	Luuka	Alebtong	Amolatar	
Female-headed HH	75%	80%	83%	81%	77%	82%	79%
Male-headed HH	25%	20%	17%	19%	23%	18%	21%

Table 5: Educational level of respondents by district (N:1,100)

	Busoga north	Busoga south	Lango	Grand Total
No formal education	9%	10%	16%	11%
Lower primary	21%	18%	12%	17%
Higher primary	46%	41%	49%	45%
Secondary O-Level	22%	28%	18%	23%
Secondary A-Level	2%	2%	2%	2%
Higher education	1%	2%	4%	2%
Total	100%	100%	100%	100%

Lango had more respondents who lacked any form of formal education, almost double the percentage of Busoga North. The largest share of respondents who completed O-Level secondary education came from Busoga South (28 per cent). Twenty-eight % of the respondents from female-headed households had not received any formal education, versus 7 % for male-headed households. Respondents from the micro-farms (below 2 acres) had generally received less education than the households with more land (2 to 10 acres), i.e. only 21 % had entered post-primary education, versus 32 % of the households with more land.

All households in this study live outside urban settings, including small trading centers (as per EKN instructions). The table below shows the average distance from household locations to the nearest tarmac road and the nearest town. Amolatar is the most remote district, with regular floods making the district's accessibility even worse. Kamuli and Luuka, on the other hand, are much better connected and could benefit much more from (distant) markets. Respondents in most districts mentioned distance and the poor condition of the roads as a challenge in terms of accessing inputs and reaching output markets. High costs of transport are an important constraint for those living in Amolatar, Alebtong and Buyende.

Table 6: Accessibility of households to roads and towns by district (in km) (N:1,100)

	Alebtong	Amolatar	Buyende	Kaliro	Kamuli	Luuka	Total
Average distance to nearest tarmac road (km)	39.3	61.7	31.3	21.1	4.7	13.3	27.0
Average distance to nearest town (km)	18.0	16.1	10.1	10.4	4.2	7.3	11.2

Table 7: Distance in kilometres to nearest town (N:1,100)

	Busoga North	Busoga South	Lango	Total
0-10 km	71%	89%	61%	73%
11-25 km	21%	9%	16%	16%
26-50 km	7%	2%	16%	9%
51-100 km	1%	0%	6%	2%
Total	100%	100%	100%	100%

Most respondents (55 per cent) use motorcycles to reach markets, while 23 % use bicycles and 16 % walk.

Table 8: Preferred means of transport (N:1,100)

	Alebtong	Amolatar	Buyende	Kaliro	Kamuli	Luuka	Total
Bicycle	20%	28%	37%	33%	24%	2%	23%
Car	1%	0%	0%	0%	0%	0%	0%
Motorcycle	44%	51%	38%	42%	62%	93%	55%
Public transport	17%	4%	3%	0%	0%	0%	5%
Walking	18%	17%	20%	25%	14%	5%	16%
Total	100%	100%	100%	100%	100%	100%	100%

1.8 Data Collection, Processing, and Analysis

Data for this study was collected through semi-structured survey questionnaires, focus group discussions (FGDs) and a series of interviews with Key Informants (KIIs). The downloaded data was cleaned and analysed using Microsoft Excel. Descriptive statistical analysis was employed to analyse data using frequencies, percentages, and means. The following chapters present a comparative analysis of results across the three farming systems as they appear in the different regions, as well as by farm size categories. For ease of reference, farms of two acres or less are referred to as "micro-farms," while those between two and ten acres are considered "small farms." In some cases, highlights will be presented by district and or by head of household (man or woman).

1.9 Ethical Considerations and Quality Assurance

This study adhered to all relevant ethical codes of conduct and requirements for researching human subjects as per GOAL's standards. Measures were taken to fulfil ethical requirements, including the signing of consent forms, voluntary participation, confidentiality, anonymity, and respecting the privacy of participants.

2 Features of the Household

The following paragraphs provide a brief overview of the main characteristics of the households included in this study. The average size of a household is 6.85 persons, significantly higher than the average derived from the census in 2024, which was 4.4 for both regions. One-fifth of the households in Busoga North have more than 11 members. In Lango, it is only 3%. Households in Lango more frequently include members with disabilities—24 % compared to 19 % across the total surveyed population. Overall, 17 % of households have one member with a disability, while 2 % have two. The most common types of disability reported are difficulties with walking (31 per cent) and seeing (30 per cent).

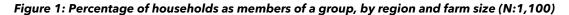
Table 9: Key characteristics of households surveyed (N:1,100)

	Busoga north	Busoga south	Lango	2 acres or less	More than 2 acres	Overall total
Average size HH	7.95	6.83	5.78	6.49	7.26	6.85
Average female in HH	3.95	3.40	2.95	3.32	3.56	3.43
Average dependents	4.72	3.86	2.91	3.70	3.97	3.83
Average female dependents	2.51	2.51	1.67	2.19	2.27	2.23
> 11 people in HH	20%	9%	3%	8%	14%	11%
HH with people with disabilities	15%	17%	24%	16%	21%	19%

Households have an average of 3.83 dependents. The dependency ratio ranges from 1.46 in Busoga North to 1.02 in Lango, indicating that in Busoga North, each productive-age individual supports more non-productive members. A lower ratio suggests a lighter burden on the working-age population. This ratio is much higher than the national average of only 0.83. Interestingly, in the census, the productive age starts at 14 years, explaining the rather lower national average.

2.1 Group Membership

Most households are members of a group. Lango has the highest proportion at 69 %, in contrast to Busoga North, which reports the lowest at 56%. Micro-farmers and female-headed households are less likely to be members of a group. For those with more than 2 acres, 73 % are members of a group.



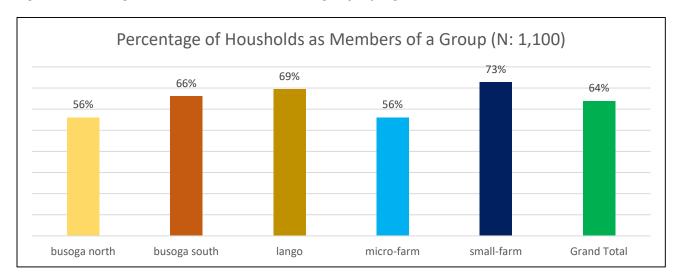
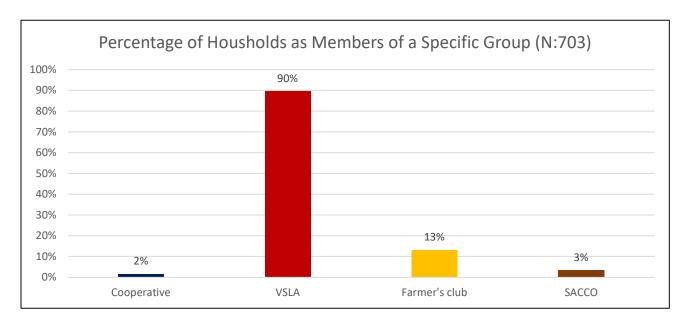


Figure 2: Percentage of households as members of a specific group (N:703)



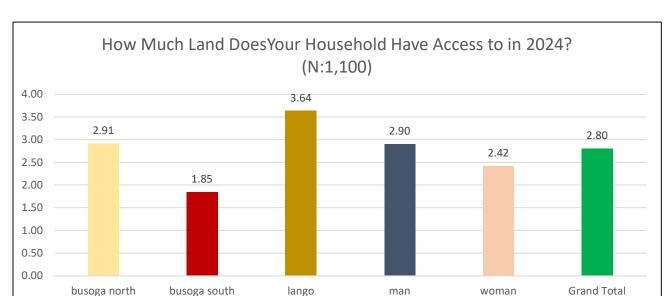
Village Savings and Loan Associations (VSLAs) are the most common type of group membership. Among households participating in any group, 90 % have at least one member in a VSLA. This figure is even higher in Busoga North, where it reaches 95 per cent.

SACCOs and cooperatives are generally unpopular across all regions, farm sizes, and household head types. In contrast, farmers' clubs or production groups - typically organised around specific value chains - are slightly more common.

2.2 Access to Land

Access to land was mentioned in various conversations with community members and government officials as a challenging issue. Overpopulation and land degradation have resulted in less land available for a growing population, leading to further land fragmentation. The project's gender and inclusion study revealed that access to land remains a significant challenge for farmers who are women, youth, and persons with disabilities. This study reveals that 26 % of households mentioned land shortage as one of the major problems in agriculture. In Busoga North, the percentage was highest at 28%. For female-headed households, the figure stands at 21 %, which is lower than that of male-headed households. As explained in focus group discussions, single mothers and widows are granted access to land for their survival by their families. As they primarily face a genuine labour shortage, it is labour-not land-that serves as the main limiting factor. Female-headed households have access to nearly half an acre less land than male-headed households - 2.42 acres compared to 2.9 acres, respectively. On average, households have access to 2.8 acres of land.

There is a clear regional difference in land size. Households in South Busoga had access to 1.8 acres of land in total, compared to 3.64 acres in Lango. For 36 % of households, part of the land they accessed was rented, averaging 1.54 acres among those who rent land.



man

woman

Figure 3: Types of groups and registration status (N: varying per group

When asked whether women and men have equal access to land, they wish to cultivate, 59 % of respondents said access is easier for men, while only 7 % said it is easier for women. A total of 32 % believed access is equally easy for both.

Table 10: Equal access to land for men and women (N:1,100)

	Busoga North	Busoga South	Lango	Total
Don't know	0%	5%	1%	2%
Equal access	25%	54%	17%	32%
Men easier access	67%	36%	75%	59%
Women easier access	8%	5%	7%	7%
Grand total	100%	100%	100%	100%

3 Household Engagement and Production

This section presents findings on household engagement in agricultural activities in Busoga and Lango, including priority crops and livestock, as well as the inputs accessed by farmers.

3.1 Household Engagements

Nearly all households engage in farming on their own land. However, a higher proportion of households in Lango also farm on land owned by others - 22% compared to the overall average of 11%. Exchanging labour and working in groups, locally known as 'awak,' is common during the activities of land preparation and harvesting. Engagement in micro or small businesses provides supplementary income for households. Typical activities include trading, brickmaking, bodaboda riding, and construction for men, while women are more often involved in tailoring, shopkeeping, and brewing local alcohol. Formal employment and offering farm-related services are uncommon across all three regions.

Table 11: Farming and business engagement (N:1,100)

	Busoga North	Busoga South	Lango	Grand total
Farming on own land	99%	98%	89%	95%
Working on someone else's farm	7%	3%	22%	11%
Micro & small businesses and work	43%	33%	42%	39%
Someone else's business	0%	0%	5%	2%
Formal employment	2%	3%	5%	3%
Farm-related services	2%	3%	3%	3%
Grand Total	364	366	370	1,100

3.2 Crop Production

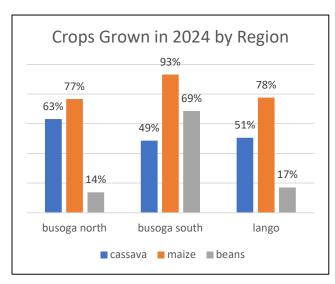
The study shows the wide diversity of agricultural production in the three regions. In Busoga South, robusta coffee, intercropped with banana, is an important cash crop. In Lango, oilseed crops like sesame (simsim), sunflower and soyabean are more popular. Maize is the most widely grown crop, cultivated by 88 % of all households, followed by cassava at 54%. Beans are especially popular in Busoga South, thanks to favourable land and water conditions.

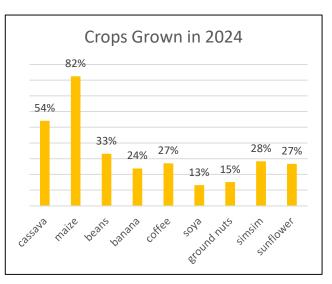
Nevertheless, 2024 was a bad year for bean production according to our study results. Due to prolonged droughts, the yields were extremely low.

Besides commercial crops, households were asked whether they had a kitchen garden. On average, 60 % of households have a kitchen garden, with 89 % in Busoga North and 51 % in Lango. Interestingly, female-headed households are slightly less likely to have kitchen gardens, compared to male-headed households, i.e. 56% vs 61%. This may be the result of having access to less land for female-headed households.

The following graph presents the percentage of households growing cassava, maize, and beans across the three regions, based on 2024. The next graph shows the overall distribution of all reported crops across regions. Note that some crops were only included in specific areas: coffee and banana in Busoga South; sunflower and simsim in Lango; and soya and groundnuts in Busoga North.

Figure 4: SHF with crops grown in 2024 by region (N:1,100) Figure 5: SHF with crops grown in 2024





Simsim was grown by 72 % of households in Amolatar, compared to just 15 % in Alebtong. In contrast, sunflower was more commonly cultivated in Alebtong, with 33 % of households growing it, versus only 8 % in Amolatar.

Maize was more popular in Alebtong and Buyende (82% and 87%, respectively) than in Amolatar and Kaliro, where it was grown by 64 % of households.

Beans and maize are grown more by micro than by smallholder farmers, whereas coffee, bananas and oil seeds are more popular among smallholder farmers with more than 2 acres.

Table 12: Popularity of crops by district (N:1,100)

	Alebtong	Amolatar	Buyende	Kaliro	Kamuli	Luuka
Maize	82%	64%	87%	64%	94%	92%
Beans	14%	27%	13%	15%	58%	78%
Cassava	48%	57%	60%	67%	41%	55%
Banana					28%	20%
Coffee					30%	24%
Soya			7%	20%		
Ground nuts			14%	17%		
Simsim	15%	72%				
Sunflower	33%	8%				

For all commodities, the gross revenue and gross margin have been calculated. A complete overview is presented in Annexe 3. Below are the gross margins for the selected crops (value of yield per acre minus costs for seeds, fertiliser, and other agrochemicals).

Table 13: Gross margins in 2024 for the selected crops

Стор	Gross Margin (UGX/acre)
Banana	1,974,495
Coffee	1,865,519
Groundnuts	1,251,768
Beans	930,072
Simsim	401,028
Sunflower	350,953
Maize	153,555
Soya	152,127

n.b. These data are an rough indication of the average GM. Substantial difference can occur over the year; e.g. in 20024 the GM for beans seems to be higher than normal due to the high price caused by poor yields.

3.3 Animal Production

Most households keep animals, like cows, goats, sheep, and chickens. The next graph shows the difference in ownership by region, land size and gender of head of household.

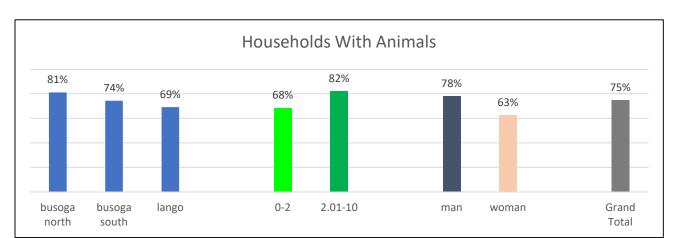


Figure 6: Percentage of households with animals, by region, farm size and gender.

Cattle keeping is closely linked to land availability, with cows primarily kept for meat production. In Busoga North and Lango, most households raise cattle for this purpose. In contrast, Busoga South - where population pressure is highest - has the lowest percentage of households keeping cattle. However, it leads in dairy production, with the highest share of households keeping cows for milk. This is supported by the presence of several milk cooperatives and processing businesses in and around Kamuli and Jinja, which facilitate market access.

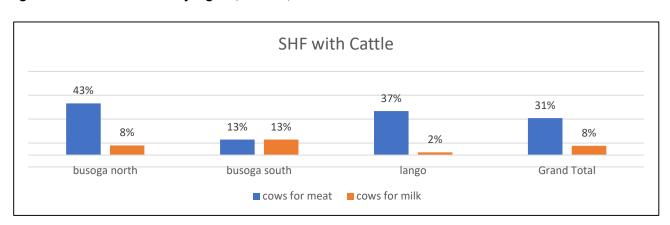


Figure 7: Farmers with cattle by region (N:1,100)

Population pressure, the conversion of land into sugar cane plantations and the privatisation of land have reduced the area of grazing. During interviews, households mentioned conflicts between cattle-keeping households and other households, noting that the frequency of these conflicts is rising. Female-headed households are less likely to keep cattle than male-headed ones - 22% versus 33 per cent for meat production, and 6 % versus 8% for milk. The lower rates are likely due to limited access to land and the high cost of investment required for cattle rearing.

The number of cows kept by households is generally small: only 3.5 head of cattle on average. In Lango the average number of cows is highest among the three farming systems.

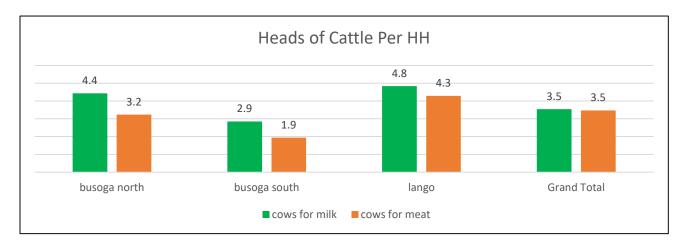


Figure 8: Heads of cattle per household by region.

The next table looks at the number and type of cattle per household and per farming system.

Table 14: Number and types of cattle per HH

	Legumes FS	Perennial FS	Oilseeds FS	Total
Total cows / all HHs	1.7	0.6	1.6	1.3
Cows/ HH with cows	3.4	2.4	4.2	3.4
Dairy cows/ HH with dairy	4.4	2.9	4.8	3.5
% dairy cows	20%	60%	5%	20%
Cows per capital	0.3	0.1	0.3	0.2

In South Busoga, the number of cows per HH is very low indeed. However, the majority of the animals there are dairy cows. At the same time, the number of dairy cows per HH that have them is the lowest. In Lango most cows are found, yet very few are dairy cows. One interesting historical fact is that sixty years ago the number of cows per capita was ten times higher.

Of all other animals, goats are the most popular to keep for "commercial purposes," at 39 percent. Chickens for meat (broilers) are more popular than layers, at 25percent vs 17 percent.

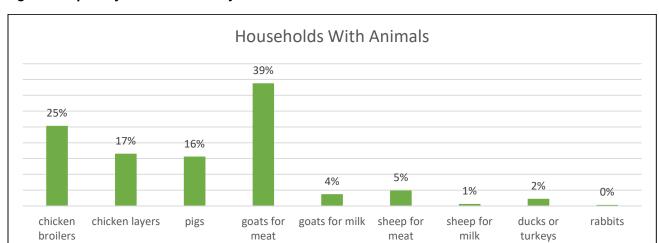


Figure 9: Popularity of other animals by SHF.

Except for ducks, ownership of all livestock is higher among male-headed households compared to female-headed ones. Additionally, households with more than two acres of land are more likely to keep animals than those with smaller landholdings.

3.4 Access and Availability of Farm Inputs

Respondents were asked about their household's use of farm inputs in 2024. Notably, 14% of farmers reported using certified fertilizer; however, this may apply to only one crop, and even then, potentially on just part of their land. Most frequently mentioned were 'certified seeds' (41 percent) and use of 'ox-plough' (54 %). In Busoga South, the use of certified fertilizer is quite common at 31% – more compared to the other regions.

Table 15: Use of farm inputs by region (N:1,100)

	Busoga north	Busoga south	Lango	Grand total
Certified seeds	34%	47%	42%	41%
Certified pesticide	26%	19%	12%	19%
Certified fertilizer	8%	31%	3%	14%
Vet services	13%	18%	15%	15%
Improved breed of livestock	5%	6%	1%	4%
Extension services	6%	10%	9%	8%
Ox-plough	74%	13%	75%	54%
Tractor	3%	2%	1%	2%
Market information	2%	11%	3%	6%
Total no. or respondents	364	366	370	1,100

Micro-SHFs scored lower on most inputs compared to those with small farms. For example, 36% of micro-SHFs use certified seeds, compared to 47% of small SHFs. The use of pesticides follows a similar trend – 15% for micro SHF versus 23% for small SHFs. The most striking difference is in the use of ox ploughs: 42% of micro-SHFs versus 69% of small SHFs. SHFs with the lowest use of certified seeds can be found in Amolatar district: only 17 percent.

Analysis of crop-related data shows that most households spend money on seeds, although only partially on certified seeds. Certified seed use is particularly common among sunflower growers. In contrast, certified seed use is low for coffee and, to a lesser extent, banana - largely because these perennial crops were not newly planted in 2024, even though they remain under cultivation. For many other crops, farmers tend to rely on leftover seeds from previous seasons or reuse seeds they have produced themselves.

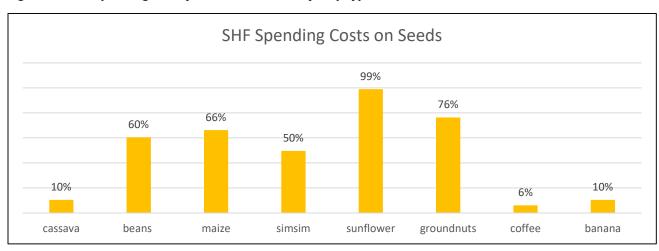


Figure 10: SHF spending money on certified seeds by crop type.

Use of inorganic fertilizers and agrochemicals as fungicides and pesticides remains low across the board. Fertilizer use is largely limited to a subset of maize farmers, while for other crops, including coffee (surprisingly), it is exceptionally rare, with less than 2% of farmers applying it. Similarly, the use of manure is extremely limited, with no crop recording usage rates above 2%.

Figure 11: SHF use of mineral fertilizer by crop type (N:1,100)

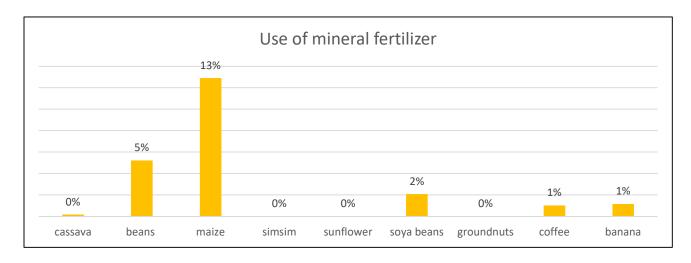
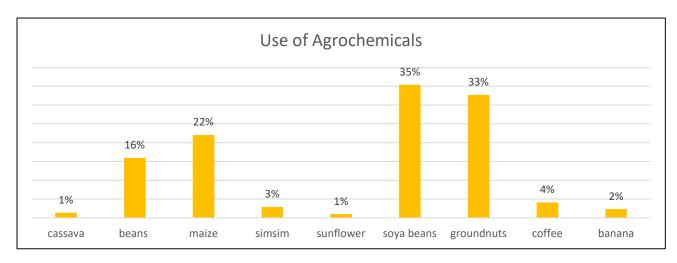
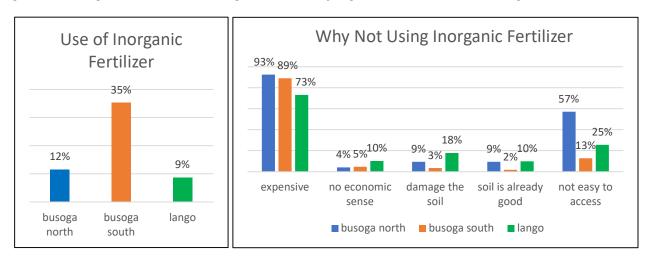


Figure 12: SHF use of agrochemicals by crop type (N:1,100)



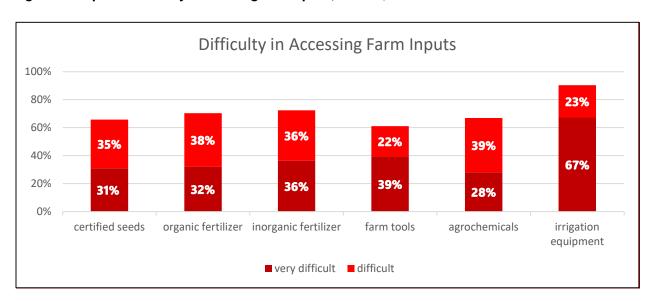
The generally low use of farm inputs is attributed to several factors: high costs and limited household funds, a perception - often based on past experience - that such investments do not yield sufficient returns, and limited access to both the inputs themselves and lack of reliable information on their effective use. When asked about the use of agrochemicals in farming, 18 % of respondents reported using them. However, usage varies significantly by location. In Busoga South, particularly in Kamuli, usage was notably higher at 41 %, while in Alebtong, only 8 % of households reported applying agrochemicals in their farming practices. When asked about the main reason for not applying for mineral fertiliser, most respondents mentioned price (84 %) and availability (33 per cent). In Lango 18% stated they believe their use will damage their soils.

Figure 13 and Figure 14: SHF use of inorganic fertiliser by region and reasons for not using (N:1,100)



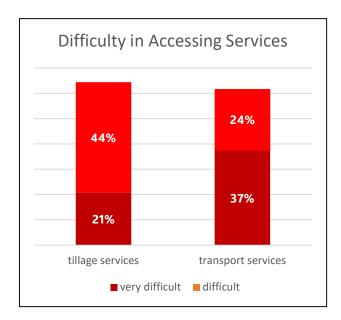
Across all farm inputs, most respondents indicated that access is challenging. Notably, 90% reported that irrigation equipment is particularly difficult to obtain. Households in Lango, especially those in Alebtong and Amolatar – consistently reported the greatest difficulty in purchasing inputs.

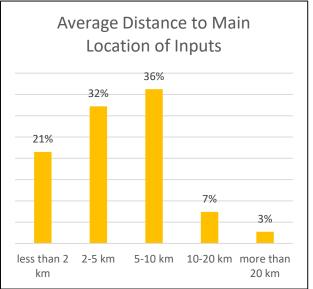
Figure 15: Reported difficulty in accessing farm inputs (N:1,100)



When it comes to services, the picture is slightly less pessimistic, with around 65% of respondents on average reporting difficulty accessing transport and tillage services. Once again, the districts in Lango appear to be the most underserved.

Figure 16 and Figure 17: SHF reporting difficulty in accessing services and average distance to inputs





Looking at geographic differences in the distance to farm input suppliers, Amolatar District in Lango stands out with the highest proportion of respondents (25 percent) reporting a distance of more than 10 kilometers - well above the overall average of 10 percent. In contrast, Luuka and Kamuli districts have the lowest percentages, at 4% and 5% respectively, indicating relatively better access. When asked who finds it easier to access farm inputs, 38% of respondents said men, while 53 % believed access was equal for both men and women. In Busoga South, only 26 % felt that women were at a disadvantage.

3.5 Access to Financial Services and Credit

A total of 33% of the respondents used some kind of formal financial services in 2024, ranging from 25% in Lango to 42% in Busoga North. Most popular are savings at 24 percent. Looking at farm size, the data reveals that the smaller households have less access to formal financial services – at only 27% for micro-farm households compared to 39% for small-farm households. In all aspects, the smaller ones make less use of financial services. Female-headed HHs also have less access to formal financial services compared to male-headed HHs – 29% & 34%, respectively.

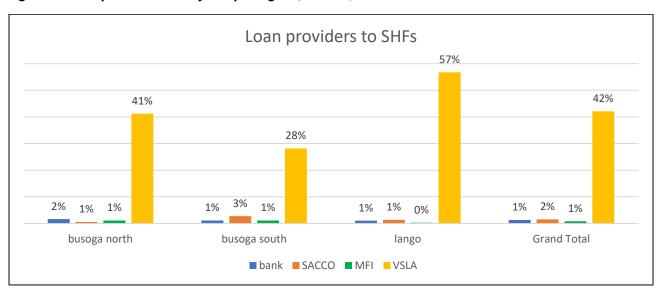
Table 16 Type of formal financial service accessed by SHF in 2024 (N:1,100)

	Busoga North	Busoga South	Lango	Grand total
Formal loan product	3%	6%	2%	4%
Bank account	4%	2%	3%	3%
Mobile banking	17%	4%	8%	10%
Formal savings product	34%	22%	17%	24%
Other services	2%	4%	2%	3%
No formal financial services	58%	69%	75%	67%
Use of formal financial services	42%	31%	25%	33%

For those receiving a loan (including informal loans), most SHFs mentioned their VSLA as provider. The graph below highlights the significance of VSLAs as a source of loans, particularly in comparison to MFIs, banks, and SACCOs. Notably, 57% of households in Lango reported receiving a loan through a VSLA. In contrast, the proportion of households in Lango – and in other regions – accessing loans from formal financial institutions remains minimal.

The primary barriers to formal credit include administrative requirements such as land title or other forms of collateral, documented income, and having an active bank account. From the borrower's perspective, a loan from a VSLA is much more flexible, without time-consuming administrative hurdles, and is easier to pay back.

Figure 18: Loan providers used by SHF per region (N:1,100)



3.6 Access to Information

Respondents were asked to identify their main sources of farming information, both on technology and market developments. The data reveal a strong reliance on traditional media such as television and radio, as well as informal personal networks, including neighbours and friends. Cooperatives play a minimal role, with only 1 % of respondents citing them as a source of information. In Busoga South, more than a quarter of respondents reported having no significant source of farming information, while in Busoga North, community meetings appear to serve as an important information hub.

Table 17: Main sources of information of SHF per region (N:1,100)

	Busoga North	Busoga South	Lango	Overall
Community meetings	18%	9%	11%	13%
Extension worker	13%	10%	12%	12%
Radio and television	49%	33%	54%	45%
Cooperative and farmer groups	1%	2%	1%	1%
Own reading	14%	3%	3%	7%
NGO	3%	17%	6%	9%
Friends and neighbours	58%	34%	44%	45%
Own experience	0%	2%	4%	2%
No source	14%	27%	19%	20%

Extension workers are another important source of information. These include government-employed extension officers at both district and sub-county levels, as well as agents affiliated with cooperatives or private companies. Despite their presence, the proportion of respondents citing them as a source of information is relatively low. Data show that 74 % of respondents had (almost) never interacted with a government extension officer. Female respondents were less likely than male respondents to have met with one. However, there was no significant difference between micro- and smallholder farmers in terms of contact with extension officers.

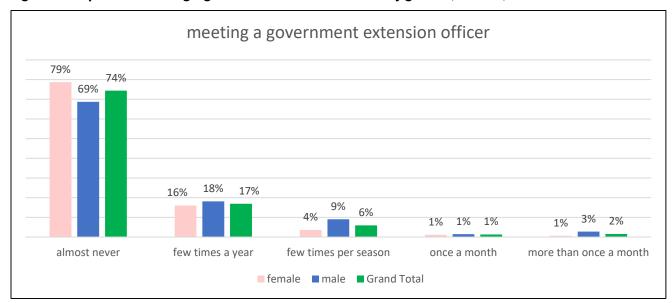


Figure 18: Experience meeting a government extension worker, by gender (N:1,100)

When asked for whom it is more difficult to access information, 41 % of respondents said it is more difficult for women to access information compared to men. 51 % of respondents said there is no difference. Interestingly, more male than female respondents answered that it was more difficult for women to access information (43 % versus 40 per cent).

3.7 Access to Water for Irrigation

Almost all respondents said they depend on rainfall for watering the plants, at 92%. Only a few individuals succeeded in having an irrigation system: sprinkler (3 individuals), gravity (2 individuals) and furrow irrigation (2 individuals). Seven % of respondents reported watering their plants by using a bucket. Of those 84 HHs that report also using sources other than rainwater, 40 % take water from a borehole, 35 % from a stream or lake, and 15 % from a shallow well.

3.8 Farm Practices

Households were asked about their use of farm inputs and farming practices. The table below presents the application rates across the three regions, showing generally modest variation, though some notable differences exist. For example, the reuse of seeds from previous harvests in Lango is only half as common as in the other regions, while the use of manure is particularly low in Lango. In contrast, households in Busoga South report higher use of inorganic fertilisers compared to the other areas.

Table 18: SHF farm inputs and farm practices by region (N:1,100)

	Busoga North	Busoga South	Lango	Total
Application of farm inputs				
Using seeds previous harvest	43%	41%	22%	36%
High-yielding seeds	23%	32%	29%	28%
Quick-maturing seeds	16%	14%	10%	13%
Drought-resistant seeds	10%	14%	16%	14%
Mineral fertilizer	8%	25%	9%	14%
Manure of own animals	17%	18%	6%	14%
Manure bought	2%	2%	2%	2%
Compost	1%	8%	1%	3%
Natural pesticides	1%	1%	0%	1%
Farm practices				
Intercropping	84%	80%	26%	63%
Crop rotation	73%	22%	86%	60%
Mulching	44%	14%	12%	23%
Agroforestry	36%	23%	6%	21%
Improved weeding	31%	5%	10%	15%
Burning crop residues	22%	7%	9%	13%
Zero-tillage	9%	4%	2%	5%
Grass bunds	0%	1%	4%	1%
Trenches	7%	8%	1%	5%
Contour farming	0%	1%	0%	0%
Rainwater harvesting	2%	2%	1%	2%
Total	364	366	370	1,100

Among all sustainable farming practices, intercropping and crop rotation are the most widely applied, at 63% and 60%, respectively. Some practices listed in the table - such as contour farming and grass bunds - are likely to be more beneficial in hilly areas.

The following table provides further insight into the specific crops that are intercropped, highlighting only those with an occurrence of 10% or more.

Table 19: Crops for intercropping by region (N:1,100)

	Maize	beans	cassava	coffee	banana	soya	groundnuts	sunflower	simsim
Busoga North	Beans (10%) Cassava (34%) Soya (15%	Maize (52%) Cassava (16%)	Maize (55%)			Maize (75%) Cassava (13%)	Maize (60%) Cassava (16%)		
Busoga South	Beans (59%) Soya (13%)	Maize (85%) Cassava (10%)	Beans (21%) Maize (49%)	Maize (11%) Groundnuts (42%) Other crops (16%)	Coffee (52%)				
Lango	Beans (12%)	Maize (17%)							Maize (10%)
% of inter- cropping	61%	75%	51%	79%	76%	83%	76%	94%	18%

3.9 **Processing**

Twenty-eight % of respondents reported processing one or more of the crops they produce. In Lango, however, crop processing is significantly less common, with only 6 % of households engaging in value addition. The most commonly processed crops – though still at relatively low levels – are cassava (25 %), maize and groundnuts (22% each), and coffee (16%). For cassava, processing typically involves drying, chipping, or milling; for maize, drying and milling are most common; while for other crops, processing generally consists of drying only.

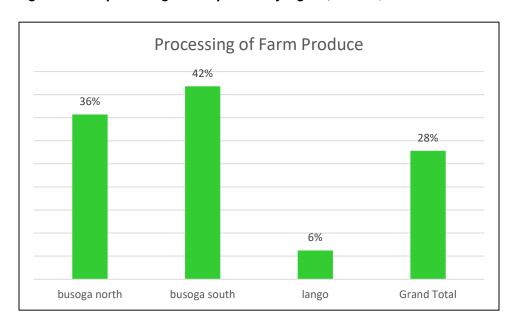


Figure 19: SHF processing of farm produce by region (N:1,100)

3.10 Sales

Almost all respondents reported selling some of their produce at the market, with only 2 % stating they did not engage in any sales. Among the nine major crops grown in the project area, only coffee and sunflower are produced almost exclusively for the market, with negligible home consumption. In contrast, beans had the highest rate of home consumption at 88%, followed by cassava (74%), banana (68%), and maize (63%). For all other crops – aside from coffee and sunflower – households typically retained a portion for home use.

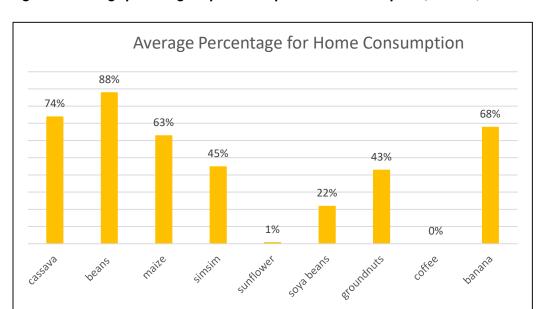


Figure 20: Average percentage of produce kept for home consumption (N:1,100)

The low level of commercialisation (where households produce primarily for the market) is closely linked to low production levels. Farmers are discouraged from investing in external inputs due to a combination of factors: limited market access, low prices for their produce, and high input costs. These constraints reduce incentives to scale up production and hinder the transition toward more market-oriented farming.

Table 20: Percentage of produce kept for home consumption by crops and district (N:1,100)

	Alebtong	Amolatar	Buyende	Kaliro	Kamuli	Luuka	Overall
cassava	65%	78%	62%	67%	88%	92%	74%
beans	73%	79%	75%	85%	90%	94%	88%
Maize	39%	41%	50%	60%	88%	90%	63%
simsim	68%	31%					45%
sunflower	1%	7%					1%
soya beans			27%	20%			22%
groundnuts			30%	58%			43%
coffee					0%	0%	0%
banana					68%	69%	68%

For produce sold, most sales went through a trader at the farm gate (57 per cent). Selling produce at the local market and to a trader at the trading centre was the main point of sales for 34 % of the respondents. Few made use of an agent (10 %), and hardly anyone sold to a cooperative. There are notable regional differences in where farmers sell their produce. In Lango, the village agent model is relatively common, with 27 % of respondents identifying it as an important point of sale. Local markets are also significant in Lango, with 76 % mentioning them, compared to just 4 % in Busoga South. In contrast, farm gate trading dominates in Busoga South and North, where 87 % and 74 % of households, respectively, sell directly from their farms.



Figure 21: SHF main point of sale of produce (N:1,100)

Table 21 Main sources of information

	Busoga North	Busoga South	Lango	Overall
Agent	2%	0%	27%	10%
Local market	21%	4%	76%	34%
Shop	1%	1%	4%	2%
Trader at the farm gate	74%	87%	11%	57%
Trader at the trading center	32%	12%	56%	34%
Cooperative	0%	1%	0%	0%
Not selling	1%	6%	1%	2%
Grand Total	364	366	370	1,100

For those households selling products, 43 % said the distance to the most common point of sale was within 2 kilometres, and only 5 % said it was more than 10 kilometres. There are significant geographical differences: for Busoga South, 88 % of the respondents mentioned their main point of sale was closer than 2 kilometres; for Lango and Busoga North, it was only 19 % and 22 %, respectively.

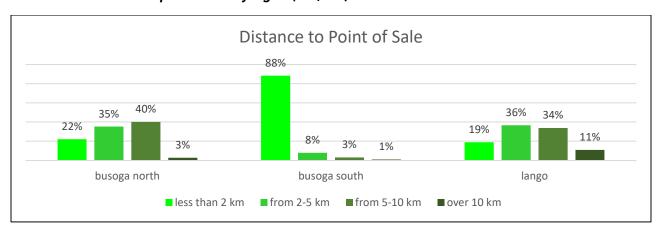


Table 22: SHF distance to point of sale by region (N:1,100)

Group selling of produce is very rare. Only 2% of respondents reported selling as a group, and even then, only for part of their produce. Where collective selling did occur, it was mostly through informal groups. Cooperatives were not mentioned by any respondents as the channel through which they sell their produce.

Respondents were asked to what extent they trusted their agro-dealers and the companies they dealt with in the market. The Data showed that a majority consider their relationship good and trust the agro dealer (65 per cent). Only 6 % of the respondents considered their relationship and level of trust as poor.

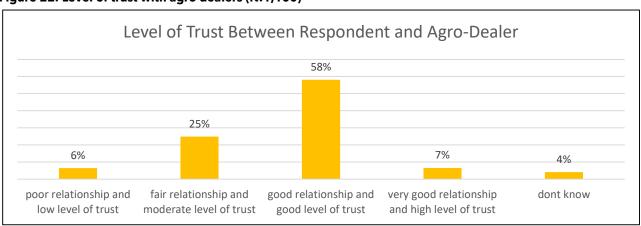


Figure 22: Level of trust with agro dealers (N:1,100)

3.11 Income

The study collected net income data from agriculture, livestock production, and other incomegenerating activities. Income from agriculture was collected by cropping season, whereas animal production was collected every month. Annual household income was calculated using these inputs, resulting in an average of UGX 3,699,456 per year.

Table 23 Annul income per household for the three farming systems

Farming System	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Perennial system	872,199	1,177,642	2,188,136	4,296,056	10,066,785	3,448,419
Annual Legumes	851,858	1,138,457	2,126,629	3,485,350	11,185,026	4,263,280
Annual Oil seeds	782,639	1,204,704	2,059,716	3,764,516	10,489,200	3,393,100
Total	846,093	1,179,862	2,112,749	3,751,544	10,607,034	3,699,456

The differences between farming systems are limited to a deviation of 15% of the overall average. While farmers in the perennial system have much less land, their income per acre is substantially higher. Average overall annual household income is well below the poverty line of around 10 million UGX (depending on the definition and source). Only the 20% most wealthy families reach this threshold of 10 million UGX. About a quarter of the HHs do not generate the 1 million UGX needed to get at least a minimum intake of 2.000 Kcal per day. Poverty is deep indeed.

Farmers with less than 2 acres earned UGX 2.6 million annually, compared to UGX 4.3 million for those with 2 to 10 acres.

Female-headed households reported significantly lower incomes, 43 % less than male-headed households. In the below graphs, the total annual income, and the percentage below 1 million UGX are presented by region, farm size and head of household.

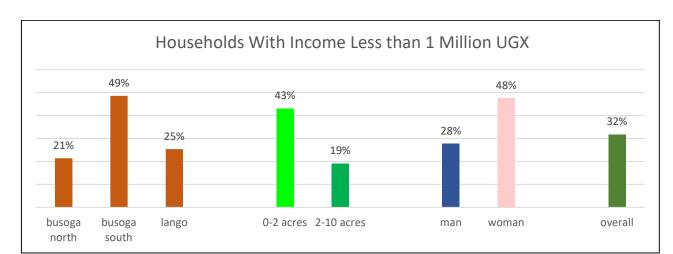


Figure 23: Household with income less than 1 million UGX by region, farm size and gender of head (N:1,100)

The highest share of households earning less than 1 million UGX per year are found in S. Busoga, among those with less than 2 acres of land, and among female-headed households. The next table shows the main sources of the income.

Table 24 Composition of the annual income per quintile

Annual income	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Overall	846,093	1,179,862	2,112,749	3,751,544	10,607,034	3,699,456
Crops	430,184	608,499	976,840	1,496,090	2,369,306	1,176,184
Livestock	115,909	230,455	474,545	979,091	4,082,727	1,176,545
Off farm (others)	300,000	340,909	661,364	1,276,364	4,155,000	1,346,727

Total agricultural income is 2.4 million UGX, similar to the values found in the baselines of Common Ground and Include. Off farm income is 1.3 million. While the average income from crops and livestock seems similar when one looks at the overall average, for the vast majority of farmers this is not the case. The table has the data:

	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total			
Share in annual income									
Crops	51%	52%	46%	40%	22%	32%			
Livestock	14%	20%	22%	26%	38%	32%			
Off farm	35%	29%	31%	34%	39%	36%			
Share Agricultural income									
Crops	79%	73%	67%	60%	37%	50%			
Livestock	21%	27%	33%	40%	63%	50%			

For poor families crops represent half of their income and 75% of their agricultural income. Rich households get two thirds of their agricultural income is from livestock. Livestock income is highly concentrated in the fifth quintile. While crop income in this quintile is six times the crop income of the 20% poorest families; for livestock it is 36 times (!) higher. Another perspective is that 69% of all income form livestock is earned by the 20% most wealthy households.

Not all members of the household are equally engaged in agriculture. Households may have family members working in major cities and receiving remittances from them. Income from poultry, livestock and other businesses was also shown to be an important source. The latter often consist of jobs like shopkeeping, brickmaking, hairdressing, boda-boda driving.

4 Challenges and Plans

4.1 Challenges in agricultural production

Respondents were asked to identify the major challenges affecting their agricultural production.

Table 25 Main challenges for SHF per farming system

	Busoga North	Busoga South	Lango	Grand total
Pests and diseases	79%	63%	69%	70%
Water shortage & droughts	70%	58%	72%	67%
Weeds	56%	53%	40%	50%
Low soil fertility	61%	52%	28%	47%
High costs of inputs	35%	29%	66%	43%
Low-price produce	19%	9%	54%	27%
Land shortage	28%	26%	24%	26%
Poor quality seeds	24%	21%	27%	24%
Lack of markets for produce	16%	3%	36%	19%
Post-harvest losses	13%	5%	30%	16%
Fake inputs	7%	10%	12%	10%
Labor shortage	10%	3%	24%	13%
Water accumulation & rainfall	13%	9%	8%	10%
Soil erosion & degradation	11%	1%	3%	5%
Grand Total	364	366	370	1,100

Pests and diseases are the most commonly cited issues, mentioned by 70 % of households. Water shortages and droughts follow closely, with 67 % citing them as a significant constraint. Low soil fertility is also a major concern, reported by 47 % of respondents – an unexpectedly high figure considering the very limited adoption of fertilisers, as discussed earlier. Interestingly, poor seed quality and the prevalence of fake inputs – frequent topics in discussions with farmers and agricultural officials – ranked relatively low in the survey results. Field observations suggest that poor germination is not always due to seed quality but often stems from improper handling and field practices.

4.2 Poor Markets

Lack of markets for produce is a problem for more SHFs in Lango than elsewhere, affecting 36 % in Lango compared to 3 % in Busoga South and 16 % in Busoga North. High costs of inputs are a challenge to 66 % in Lango, about twice as high as in other regions. The low market prices for

SHF produce in Lango, indicated by more than half of the respondents, make profitable farming more challenging. The physical distance to the market and the lack of adequate infrastructure were reported as important factors.

4.3 Labour Shortages

Labour shortage was initially mentioned by only 13 % of respondents as a key challenge, with the highest proportion in Lango at 24%. However, when the issue was explored further in discussions, a significantly higher percentage (45 per cent) acknowledged labour shortages as a problem. This concern was particularly pronounced among respondents in Lango and those with more than 2 acres of land, with 65 % and 58 %, respectively, identifying it as a major constraint.

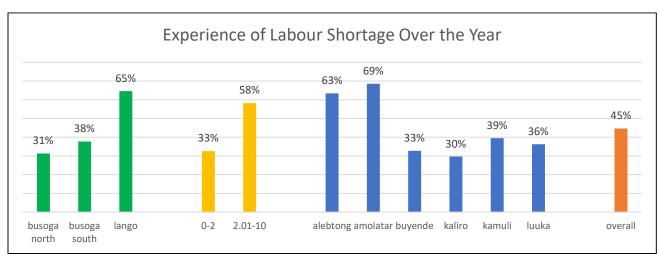


Figure 24: Experience of labour shortage over the year by region, farm size and district (N:1,100)

Labour shortages are most common during land preparation, weeding and harvesting of crops.

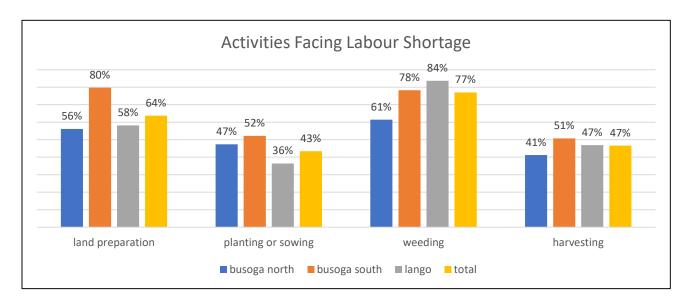


Figure 25: Activities for which SHF are facing labour shortages by region (N:1,100)

For animal keeping, the percentage of respondents indicating labour shortages was significantly lower, with only 14% of respondents reporting an issue, notably Lango at 33%.

4.4 Food insecurity

Food insecurity was highest in Lango: 29% of all respondents indicated that their household had not had enough food for six months or more. For Amolatar District, the figure was even higher at 32%. In other districts, the food security situation appears significantly better, with 0%, 1%, and 2% of respondents in Luuka, Buyende, and Kaliro, respectively, reporting severe food insecurity. Female-headed households show slightly higher levels of food insecurity: 8 % reported not having enough food in almost all months, compared to 4 % among male-headed households.

Table 26: SHF reporting food insecurity by District (N:1,100)

	Alebtong	Amolatar	Buyende	Kaliro	Kamuli	Luuka	Overall
Not enough in almost all months	10%	15%	1%	2%	6%	0%	5%
Not enough in about half of the months	18%	17%	5%	4%	4%	6%	9%
Not enough in some months	59%	51%	42%	52%	46%	38%	49%
Enough food in almost all months	14%	18%	52%	41%	44%	57%	37%
Total	281	89	202	162	170	196	1,100

4.5 Climate-Related Disasters

Households were asked whether they had experienced any natural disasters in the previous 5 years. Out of 1,100 respondents, 91% confirmed having been impacted by climate-related natural disasters, with minimal variation across the regions. Common types of disasters reported include prolonged droughts, floods, storms, and waterlogging. Most households mentioned droughts at 94%, with no variation between the regions. Waterlogging (12% overall) is more common in Busoga North and Lango, with Buyende at 19% and Amolatar at 25%. Storms were reported to be more prevalent in Busoga North compared to other regions, with Buyende at 39% and Kaliro at 33%.

Households were asked how they coped with the immediate impact of these hazards. The majority – 79% – did not take any action, either because they did not feel the need or could not respond.

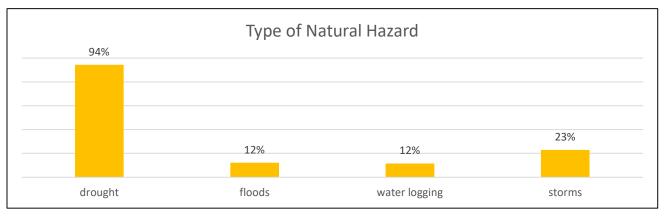


Table 27: Types of natural hazard experienced (N:1,100)

Only 10 % felt an urgent need to change their farming practices. Some households resorted to selling assets, such as livestock or land (8%), or taking out a loan (6%), to cope. There were no significant differences in responses by region, district, or land size. However, female-headed households were less likely to act, with 83 % reporting no short-term response.

Respondents were asked whether they had adjusted their farm practices to be less vulnerable to potential natural hazards. Farm diversification was mentioned by 22% of the respondents, with those in Busoga South scoring highest at 29%. Busoga South also scored highest in adopting agro-forestry practices, at 26%. In contrast, only 5 % of the respondents in Lango reported having taken agro-forestry measures. Other possibilities, such as irrigation, water, and soil management, and change of seeds, had few reported adopters. 62% of the respondents did not change any of

their farm practices. 70% of the female-headed households were not taking any measures or doing things differently, compared to 60 % for male-headed households.

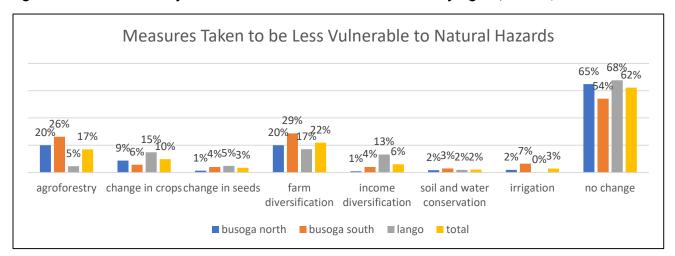


Figure 26: Measures taken by SHF to be less vulnerable to natural hazards by region (N:1,100)

4.6 Gender Inequality and Limited Power of Micro and Smallholder Farmers

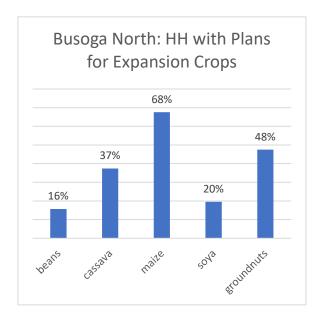
The study reveals a perceived disparity in access to credit, land, farm inputs, and output markets between men and women. Findings from the Markets for Youth gender and inclusion study suggest that similar perceived and actual disparities affect young people and persons with disabilities. Although the primary focus of this study was on households, respondents were asked whether men and women – and in some cases, smallholder farmers – have equal access to key agricultural resources. Where possible, data were disaggregated by household head, showing that female-headed households consistently score lower on many indicators compared to maleheaded households.

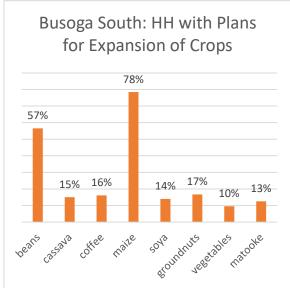
A complete analysis of gender equality and social inclusion with a prime focus on SHFs is presented in the project's GESI report.

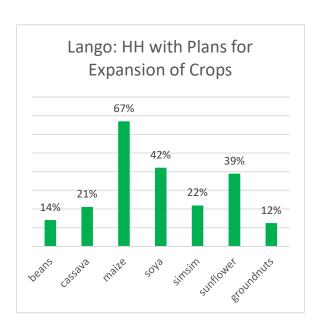
4.7 Plans for Expansion

Respondents were asked whether they had plans to increase the production of specific crops or the number of animals they keep. For livestock, 9 % of respondents indicated plans to expand, with no significant difference between male and female-headed households. However, regional variation was evident: respondents in Busoga South were about twice as likely to plan for herd expansion compared to those in Lango and Busoga North: 13 % versus 9 % and 5 %, respectively. When it comes to crop production, interest in expansion was nearly universal, with fewer than 1 % (only six respondents) reporting no plans to increase crop production.

Figures 30, 31, 32: Plans for the expansion of crops by region







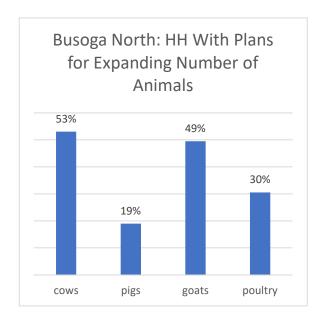
4.8 Expansion of Crops

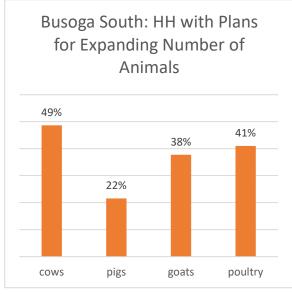
Maize appeals to most respondents as the crop to invest in. Beans score high in Kamuli, while oil seeds (soy and sunflower) score high in Lango. Groundnuts and cassava are most popular in Busoga North.

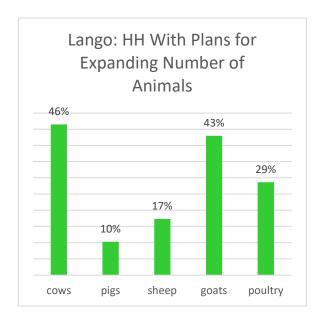
4.9 Expansion of the heads of animals

Cows are the most popular animal to invest in among respondents (49 %), with goats as the second most popular (23%). A significantly higher percentage of male-headed households reported plans to invest in cows compared to female-headed households—52 % versus 39%. In contrast, poultry attracted more investment interest from female-headed households, with 37% indicating plans to invest, compared to 32% of male-headed households.

Figures 33, 34, 35: Plans for expansion of the number of animals by region







5 Conclusions

The main conclusions of this Household Livelihood and Production Survey are that:

- 1. Households are large, yet they have very small farms indeed. This forces them to focus on food production. Typically, cassava, maize, beans, groundnuts, and banana are grown for this reason. This means that HH prioritised food security over optimal income.
- 2. Yields are very low, due to very low levels of investment. For most crops, most HHs buy seed, but besides that, no investments in fertilisers, crop protection, or irrigation are being made.
- 3. There are substantial differences between the three farming systems:
 - a. The perennial system in S. Busoga has a much smaller farm size that is used more intensively (agroforestry, dairy, and mineral fertiliser) with higher-value crops (coffee and banana) and better market access (inputs and outputs).
 - b. HHs in the annual cropping systems have more land that is used more extensively (with very few soil and water management practices and external inputs), with lower-value crops (cereals, oilseeds, and legumes) and less market access.
- 4. The main challenges to improving livelihoods are in the area of agricultural production, including crop disorders (pests, diseases, and weeds), drought, and soil fertility issues.
- 5. Limited access to inputs, services, and markets is a complementary challenge. The role of cooperatives (incl. SACCOs) is very limited.
- 6. Access to formal finance is very low. Loans are taken from a VSLA, but the loan size is small. Due to the peak in loan demand, the existing modality does not provide a solid foundation for investment in agriculture for a VSLA as a group, unless the VSLA can secure a group loan from a bank.
- 7. Processing and value addition to the produce are limited and mostly associated with the preparation of the product for its consumption.
- 8. Women-headed households score on almost all indicators of income, production, and access to services worse than men-headed households. Women often face challenges in being heard and represented in the community, although some exceptions are noted.

- 9. Households face increasing challenges due to (micro-) climate and off-farm natural hazards. Droughts and floods are occurring more frequently and with greater intensity. Few households engage in mitigation actions.
- 10. Off-farm work is an important source of income for most households, and most especially for the poorest ones.
- 11. The agricultural income is 2.3 million UGX, the same as the values found in the baselines of Common Ground and Include. Crops contribute the lion's share of this (75%)
- 12. Overall income is very low (3.5 million UGX) and similar in all farming systems. The average is well below the poverty line of 10 million UGX/HH. The poorest 40% of the HHs do not even have enough income (1 million UGX) to satisfy their basic needs in terms of calories.

The final conclusion is that to improve and sustain the livelihoods of the INSPIRE target group, production levels can and need to be improved. The present approach of INSPIRE to develop more resilient, sustainable, diverse, and productive landscapes and farming systems, via an inclusive and participatory process with communities, households, and the private sector, appears adequate to contribute to this in an effective and sustainable manner.

Annexes

Annex 1: Production Overviews per Commodity

maize	Busoga North	Busoga South	Lango	total
Households growing maize in 2024	279	341	287	907
Households sampled in survey	364	366	370	1100
% maize-growers of total sampled	77%	93%	78%	82%
acres (average)	1.49	0.86	1.64	1.30
average production (in kg)	576	208	647	460
average yield per acre (in kg)	387	243	395	354
average price per kg	694	750	757	731
% sold	43%	8%	57%	34%
% home consumption	54%	89%	40%	63%
% kept for future sales	3%	3%	4%	3%
No.of HH with costs for seeds	185	172	244	601
% of HH with costs for seeds	66%	50%	85%	66%
average costs seeds per HH	49,534	28,033	80,502	55,953
average costs of seeds per acre	33,567	30,401	47,446	39,768
No.of HH with cost manure	8	5	1	14
% of HH with costs for manure	3%	1%	0%	2%
average cost manure for HH with manure	47,000	28,000	100,000	44,000
average costs of manure per acre	28,923	20,000	33,333	26,783
No.of HH with cost inorganic fertilizer	11	99	7	117
% of HH with costs for inorganic fertilizer	4%	29%	2%	13%
average cost fertilizer for HH with fertilizer	64,455	37,742	32,857	39,962
average cost fertilizer per acre	26,755	37,761	8,214	30,469
No.of HH with cost agro-chemicals	41	58	101	200
% of HH with costs for agro-chemicals	15%	17%	35%	22%
average cost agro-chemicals for HH with agro- chemicals	29,805	20,966	21,713	23,155
average cost agro-chemicals for acre	17,272	19,967	11,542	14,398
No.of HH with cost compost	3	0	0	3
% of HH with costs for compost	1%	0%	0%	0%
Cost compost for HH with compost	30,000	0	0	30,000

beans	Busoga North	Busoga South	Lango	total
Households growing beans in 2024	50	251	63	364
Households sampled in survey	364	366	370	1100
% bean-growers of total sampled	14%	69%	17%	33%
acres - average	0.54	0.66	0.95	0.70
average production (in kg)	191	261	208	231
average yield per/acre (kg)	352	394	217	332
average price p/kg	2819	3184	2900	3020
% sold	18%	5%	18%	9%
% home consumption	80%	93%	75%	88%
% kept for future sales	2%	3%	7%	3%
No. of HH with costs for seeds	38	149	33	220
% of HH with costs for seeds	76%	59%	52%	60%
average costs seeds per HH	38,811	16,405	21,479	21,036
average costs of seeds per acre	64,543	22,696	25,742	29,297
No. of HH with cost manure	0	2	0	2
% of HH with costs for manure	0%	1%	0%	1%
average cost manure for HH with manure	0	10,000	0	10,000
average costs of manure per acre	Doe	Dode	Doe.	D.a.
No. of HH with cost inorganic fertilizer	3	16	0	19
% of HH with costs for inorganic fertilizer	6%	6%	0%	5%
average cost fertilizer for HH with fertilizer	23,667	20,375	0	20,895
average cost fertilizer per acre	34,424	26,432	0	26,961
No. of HH with cost agro-chemicals	16	36	6	58
% of HH with costs for <u>agro-chemicals</u>	32%	14%	10%	16%
average cost agro-chemicals for HH with agro-ch,	19,969	11,403	7,167	13,328
average cost <u>agro-chemicals</u> for acre	29,045	14,793	6,935	17,197
No. of HH with cost compost	0	0	0	0
% of HH with costs for compost	0%	0%	0%	0%
Cost compost for HH with compost	0	0	0	0

sunflower	Lango
Households growing sunflower in 2024	99
Households sampled in survey	370
% sunflower-growers of total sampled	27%
acres (average)	1.28
average production (in kg)	391
average yield per acre (in kg)	305
average price per kg	1282
% sold	99%
% home consumption	1%
% kept for future sales	0%
No. of HH with costs for seeds	98
% of HH with costs for seeds	99%
average costs seeds per HH	51707
average costs of seeds per acre	40339
No. of HH with cost manure	0
% of HH with costs for manure	0%
average cost manure for HH with manure	
average costs of manure per acre	
No. of HH with cost inorganic fertilizer	0
% of HH with costs for inorganic fertilizer	0%
average cost fertilizer for HH with fertilizer	
average cost fertilizer per acre	
No.of HH with cost agro-chemicals	1
% of HH with costs for agro-chemicals	1%
average cost agro-chemicals for HH with agro-	
chemicals	
average cost agro-chemicals for acre	
No. of HH with cost compost	0
% of HH with costs for compost	0%
Cost compost for HH with compost	

coffee	Busoga South
Households growing coffee in 2024	99
Households sampled in survey	366
% coffee-growers of total sampled	27%
acres (average)	0.78
average production (in kg)	556
average yield per acre (in kg)	714
average price per kg	2735
% sold	100%
% home consumption	0%
% kept for future sales	0%
No. of HH with costs for seeds	6
% of HH with costs for seeds	6%
average costs seeds per HH	31667
average costs of seeds per acre	40656
No. of HH with cost manure	1
% of HH with costs for manure	1%
average cost manure for HH with manure	50000
average costs of manure per acre	50000
No. of HH with cost inorganic fertilizer	1
% of HH with costs for inorganic fertilizer	1%
average cost fertilizer for HH with fertilizer	5000
average cost fertilizer per acre	5000
No. of HH with cost agro-chemicals	4
% of HH with costs for agro-chemicals	4%
average cost agro-chemicals for HH with	50250
agro-chemicals	41020
average cost agro-chemicals for acre No. of HH with cost compost	0
% of HH with costs for compost	y
Cost compost for HH with compost	

soya beans	Busoga North
Households growing soya beans in 2024	48
Households sampled in survey	364
% soya been-growers of total sampled	13%
acres - average	0.97
average production(kg)	142
average yield p/acre (kg)	147
average price p/kg	1691
% sold	70%
% home consumption	22%
% kept for future sales	8%
No. of HH with costs for seeds	36
% of HH with costs for seeds	75%
average costs seeds per HH	41800
average costs of seeds per acre	43093
No. of HH with cost manure	1
% of HH with costs for manure	2%
average cost manure for HH with manure	12000
average costs of manure per acre	
No.of HH with cost inorganic fertilizer	1
% of HH with costs for inorganic fertilizer	2%
average cost fertilizer for HH with fertilizer	15000
average cost fertilizer per acre	
No.of HH with cost agro-chemicals	17
% of HH with costs for agro-chemicals	35%
average cost agro-chemicals for HH with agro-	35118
chemicals	
average cost agro-chemicals for acre	37459
No. of HH with cost compost	0
% of HH with costs for compost	0%
Cost compost for HH with compost	

simsim	Lango
Households growing simsim in 2024	105
Households sampled in survey	370
% simsim-growers of total sampled	28%
acres (average)	1.26
average production (in kg)	153
average yield per acre (in kg)	121
average price per kg	3419
% sold	53%
% home consumption	45%
% kept for future sales	2%
No. of HH with costs for seeds	52
% of HH with costs for seeds	50%
average costs seeds per HH	16788
average costs of seeds per acre	14282
No. of HH with cost manure	0
% of HH with costs for manure	0%
average cost manure for HH with manure	
average costs of manure per acre	
No. of HH with cost inorganic fertilizer	0
% of HH with costs for inorganic fertilizer	0%
average cost fertilizer for HH with fertilizer	
average cost fertilizer per acre	
No. of HH with cost agro-chemicals	3
% of HH with costs for agro-chemicals	3%
average cost agro-chemicals for HH with agro- chemicals	
average cost agro-chemicals for acre	
No. of HH with cost compost	
% of HH with costs for compost	0
Cost compost for HH with compost	0%

groundnuts	Busoga North
Households growing groundnuts in 2024	55
Households sampled in survey	364
% groundnut-growers of total sampled	15%
acres (average)	1.05
average production (in kg)	333
average yield per acre (in kg)	318
average price per kg	4532
% sold	56%
% home consumption	43%
% kept for future sales	1%
No. of HH with costs for seeds	42
% of HH with costs for seeds	76%
average costs seeds per HH	93113
average costs of seeds per acre	89388
No.of HH with cost manure	1.00
% of HH with costs for manure	0.02
average cost manure for HH with manure	12000.00
average costs of manure per acre	0.00
No.of HH with cost inorganic fertilizer	0
% of HH with costs for inorganic fertilizer	0
average cost fertilizer for HH with fertilizer	52500
average cost fertilizer per acre	25200
No.of HH with cost agro-chemicals	18
% of HH with costs for agro-chemicals	33%
average cost agro-chemicals for HH with agro-	72444
chemicals	
average cost agro-chemicals for acre	75376
No.of HH with cost compost	0
% of HH with costs for compost	0
Cost compost for HH with compost	

banana	Busoga south
Households growing banana in 2024	87
Households sampled in survey	366
% banana-growers of total sampled	24%
acres (average)	0.52
average production (in bunches)	106
average yield per acre (in bunches)	203
average price per bunches	10250
% sold	10%
% home consumption	68%
% kept for future sales	22%
No.of HH with costs for seeds	9
% of HH with costs for seeds	10%
average costs seeds per HH	50278
average costs of seeds per acre	80088
No.of HH with cost manure	3
% of HH with costs for manure	3%
average cost manure for HH with manure	10333
average costs of manure per acre	
No.of HH with cost inorganic fertilizer	1
% of HH with costs for inorganic fertilizer	1%
average cost fertilizer for HH with fertilizer	4000
average cost fertilizer per acre	
No.of HH with cost agro-chemicals	2
% of HH with costs for agro-chemicals	2%
average cost agro-chemicals for HH with agro- chemicals	17500
average cost agro-chemicals for acre	
No.of HH with cost compost	2
% of HH with costs for compost	2%
Cost compost for HH with compost	210000

Annexes 2: Average Income Per Income Source by Quintile

Busoga North	Lowest quintile	Second quintile	Middle quintile	Fourth quintile	Highest quintile	Total
Income from crop sales	-	54,000	298,000	724,000	3,504,000	916,000
Home consumption	50,000	188,000	306,000	536,000	1,366,000	489,200
Income from livestock	-	-	-	152,000	1,878,000	406,000
Off-farm income	250,000	250,000	750,000	1,160,000	4,610,000	1,404,000
Total by quintile	481,000	1,068,000	1,799,000	3,211,000	9,926,000	3,297,000
Busoga South	Lowest quintile	Second quintile	Middle quintile	Fourth quintile	Highest quintile	Total
Income from crop sales	-	-	2,000	258,000	4,924,000	1,036,800
Home consumption	42,000	218,000	408,000	716,000	2,144,000	705,600
Income from livestock	-	-	31,000	352,000	4,539,000	984,400
Off-farm income	250,000	250,000	250,000	440,000	3,740,000	986,000
Total by quintile	390,000	765,000	1,442,000	3,069,000	12,890,000	3,711,200
Lango	Lowest quintile	Second quintile	Middle quintile	Fourth quintile	Highest quintile	Total
Income from crop sales	-	186,000	542,000	1,138,000	4,316,000	1,236,400
Home consumption	-	108,000	296,000	672,000	2,504,000	716,000
Income from livestock	-	-	-	159,000	1,725,000	376,800
Off-farm income	250,000	250,000	280,000	780,000	3,670,000	1,046,000
Total by quintile	446,000	1,069,000	1,858,000	3,541,000	9,959,000	3,374,600

Annex 3: Gross Revenue and Gross Margin of Main Commodities

E	Busoga north	Busoga south	Lango T	Total	
beans gross revenue	992,861	1,255,624	630,211	1,003,527	
beans gross margin	864,849	1,191,702	597,533	930,072	
maize gross revenue	253,454	181,707	293,590	238,190	
maize gross margin	175,860	93,577	226,388	153,555	
Soya gross revenue	248,184				
Soya gross margin	152,127				
groundnuts gross revenue	1,441,732				
groundnuts gross margin	1,251,768				
Sunflower gross revenue			391,292		
Sunflower gross margin			350,953		
Simsim gross revenue			415,311		
Simsim gross margin			401,028		
banana gross revenue		2,079,766			
banana gross margin		1,974,495			
Coffee gross revenue		1,952,195			
Coffee gross margin		1,865,519			

annex 4: Link to Tool