



**THE REPUBLIC OF UGANDA**  
**MINISTRY OF AGRICULTURE, ANIMAL INDUSTRY**  
**& FISHERIES**

**FARMER REGISTRATION REPORT**  
**IGANGA DISTRICT**

**MAY 2020**

## **TABLE OF CONTENTS**

<b>CHAPTER ONE: BACKGROUND .....</b>	<b>1</b>
1.1 Introduction.....	1
1.2 Background.....	1
1.3 Objectives .....	2
1.4 Methodology, Scope and Field Organization.....	3
1.5 Data cleaning and analysis.....	4
<b>CHAPTER TWO: SOCIO ECONOMIC CHARACTERISTICS .....</b>	<b>5</b>
2.1 Introduction.....	5
2.2 Map of Iganga District .....	5
2.3 Distribution of Administrative Units registered.....	6
2.4 Gender disaggregation of Farming households.....	6
2.5 Disaggregation by Farming activity .....	8
2.6 Main purpose of the farming activity .....	8
<b>CHAPTER THREE: CROP CULTIVATION.....</b>	<b>10</b>
3.1 Introduction.....	10
3.2 Households involved in Crop Production .....	11
3.2.1 Cereals .....	11
3.2.2 Legumes.....	11
3.2.3 Oil seeds .....	12
3.2.4 Vegetables .....	13
3.2.5 Tree Crops .....	13
3.2.6 Root crops.....	14
3.2.7 Fruits.....	15
3.2.8 Plantains.....	15
3.2.9 Sugar Cane, Vanilla and Cotton .....	16
3.3 Area under crops in acres.....	17
3.3.1 Banana Food.....	17
3.3.2 Sweet Potatoes.....	17
3.3.3 Beans .....	17
3.3.4 Rice.....	17
3.3.5 Irish Potatoes .....	17
3.3.6 Ground Nuts .....	17
<b>CHAPTER FOUR: AQUACULTURE .....</b>	<b>19</b>
4.1 Introduction.....	19
4.2 Production Systems.....	19

4.2.1	Fish Ponds.....	19
4.2.2	Fish Tanks and Cages .....	19
4.3	Type of Fish Stocked .....	19
<b>CHAPTER FIVE: LIVESTOCK REARING.....</b>		<b>20</b>
5.1	Introduction.....	20
5.2	Cattle Keeping .....	20
5.2.1	Cattle population by breed.....	21
5.3	Goats .....	22
5.3.1	Goat Population by breed .....	23
5.4	Poultry.....	23
5.4.1	Poultry Population by breed .....	24
5.5	Other livestock .....	24
<b>CHAPTER SIX: APICULTURE FARMING .....</b>		<b>26</b>
6.1	Introduction.....	26
6.2	Proportion and Number of beehives .....	26
<b>CHAPTER SEVEN: ACCESS TO AGRICULTURE TECHNOLOGIES AND SERVICES .....</b>		<b>27</b>
7.1	Adoption of improved technologies.....	27
7.2	Access and Source of free/subsidized inputs .....	29
7.2.1	Reason for non-use of inputs .....	30
7.3	Access to Agricultural support services.....	30
<b>CHAPTER EIGHT: CHALLENGES, RECOMMENDATIONS, CONCLUSION .....</b>		<b>32</b>
8.1	Challenges.....	32
8.2	Recommendations.....	32
8.3	Planned Way Forward.....	33
8.4	Conclusion .....	33
<b>ANNEX .....</b>		<b>34</b>

## LIST OF TABLES

Table 1: Number of administrative units registered.....	6
Table 2: Number of Farming Households by Sub County.....	7
Table 3: Number of Farming Households by Sub County and age of Household Head .....	7
Table 4: Proportion of Households Practising each farming Activity .....	8
Table 5: Proportion of Households growing the different Crop .....	10
Table 6: Proportion of Households growing cereals by sub county .....	11
Table 7: Proportion of Households growing Vegetables by Sub county .....	13
Table 8: Percentage of households growing Fruits by Sub County .....	15
Table 9: Proportion of households growing Vanilla, cotton and sugarcane .....	16
Table 10: Area under Crops .....	18
Table 11: Number and proportion of fishponds stocked.....	19
Table 12: Type of fish stocked.....	19
Table 13: Number of households keeping livestock .....	20
Table 14: Cattle population.....	22
Table 15: Goat population by breed.....	23
Table 16: Poultry Population by Sub County .....	24
Table 17: Other livestock population.....	25
Table 18: Proportion and Number of beehives by Sub-County .....	26
Table 19: Adoption of improved technologies.....	28
Table 20: Access and Source of free/subsidized inputs .....	29
Table 21: Reason for non-use of inputs .....	30
Table 22: Proportion of Farming Households accessing Support services .....	31

## LIST OF FIGURES

Figure 1: Main Purpose of Farming Activity .....	9
Figure 2: Proportion of Households growing Legumes by sub county.....	12
Figure 3: Proportion of Households growing Oil seeds by sub county .....	12
Figure 4: Proportion of households growing Tree Crops by Sub County.....	14
Figure 5: Proportion of households growing Root crops by Sub County .....	14
Figure 6: Proportion of households growing Plantains by Sub County .....	16
Figure 7: Proportion of Households keeping Cattle.....	21
Figure 8: Proportion of Households keeping goats by Sub County.....	22
Figure 9: Proportion of Households keeping Poultry .....	23

# **CHAPTER ONE: BACKGROUND**

## **1.1 Introduction**

This report presents findings of the farmer registration pilot exercise that was conducted by the Statistics Division team of the Ministry of Agriculture Animal Industry and Fisheries in collaboration with the Agriculture Cluster Development Project (ACDP) Coordination Unit team that provided technical guidance. The first chapter presents the objectives as well as the methodology that forms the basis of presentation of the survey findings; it also presents the scope and field organization as well as a brief on the data cleaning and analysis. Chapter 2 to 7 presents the findings from the exercise and Chapter 8 presents the challenges and recommendations for the next phase of implementation.

## **1.2 Background**

Over the years, the Agricultural Sector has suffered from lack of reliable, accurate and timely data to inform decision-making. A broad spectrum of stakeholders including; Government; the private sector; the NGO's; Academia; the Donor community and the wider public including the farmers for a variety of purposes require agricultural data. Although there are many producers of Agricultural data in the country, they are not coordinated and the Agricultural statistics system remains fragile, vulnerable and not fully developed. This is reflected in the lack of consistent, reliable and data from the several players in the agricultural sector. This prompted Government to establish a one-stop center for Agriculture data in the Ministry of Agriculture, Animal Industry and fisheries under the National Food and Agricultural Statistical System (NFASS) Project.

The Ministry's ASSP 2015/16-2019/20 identified setting up an efficient National Food and Agricultural Statistics System as one of the sector priorities if the sector is to provide timely and accurate data for policy and decision-making. The overall goal of the NFASS is to ensure that data related to the Agricultural sector is accurate, timely, consistent, disaggregated and accessible to facilitate planning, and decision-making. The NFASS focuses on; utilizing the data collected optimally to reduce the cost of data collection; harmonizing data collection protocols across MDAs and institutional partners; and, establishing a permanent field data collection system. NFASS is implemented in three components namely; the Institutional component, The Data center which houses the database; and, the Routine Agriculture Administrative Data System. The Ministry started implementing the NFASS project in FY 2015/16, which was mainly government funded and with the help of USAID-EEA was able to set up a state of the art Data center at MAAIF headquarters and set up a MAAIF database.

The Ministry in collaboration with the World Bank started implementing the Agriculture Cluster Development project (ACDP) in 2016 to support activities that will raise both productivity and production of maize, beans, cassava, rice, and coffee in 57 districts clustered into 12 high-potential agricultural areas. The project is implemented through four components namely; (i) support for intensification of on-farm production; (ii) value addition and market access; (iii) policy, regulatory and institutional support; (iv) Project coordination and ICT platform.

In 2018, the ACDP project was restructured and added a subcomponent 3.3 to support the implementation of the National Food and Agricultural Statistics System. Under this sub-component, all administrative data; surveys including systematic surveys of the number and capacity of inputs producers and producer organizations and systematic monitoring and transparent reporting on farmers and efforts to bulk their demand for inputs; sector studies; pest and diseases surveillance data; and any other sector data were to be undertaken.

Implementation of subcomponent 3.3 began in 2019 with all efforts focused on setting up the Routine Agricultural Administrative Data System (RAADS) and in order to set up the RAADS, there was need to have a sampling frame from which sample households for data collection was drawn. The need for the sampling frame together with the national requirement to register farmers prompted the development of the National farmers register, which was to be administered to all farming households in the country. After registration of farmers was completed, data collection using the already developed tools commenced in the districts.

The Statistics division with assistance from the ACDP-PCU started piloting the Farmer register in five pilot districts to draw lessons that can be used in the roll out to the rest of the districts in the country.

### **1.3 Objectives**

The primary purpose of this activity was to register and have a central database in the Ministry Data Centre of all farmers in the country who practice agriculture for planning purposes.

Specifically, the Farmers' Registration exercise will provide;

1. Government with an estimate of the number of farmers in the country engaged in different Agricultural enterprises or values chains relevant for planning purpose and making investment decisions;
2. A sample frame for the routine data collection
3. A detailed understanding of the agricultural technology adoption in Uganda.
4. Provision of background information about the farmers (i.e. name, location, farm size, enterprise involved in, etc.) in Uganda

#### **1.4 Methodology, Scope and Field Organization**

The exercise started with the training of the Parish Chiefs and Extension staff, which was conducted in each of the five ACDP pilot districts of Iganga, Amuru, Nebbi, Kalungu and Ntungamo. During the training, emphasis was put on articulating instructions regarding interviewing techniques and field procedures and a detailed review of the farmers register. The trainings mainly used English but translations were constantly done to ensure accurate re-translation and adequate understanding in order to assist in application during translation to local languages in the farmer registration exercise.

The training also involved use of visuals and power point presentations. The Parish Chiefs and Extension Staff were also taken through an illustration that they used as a field scenario example. At the end of the trainings, the parish chiefs and extension officers were dispersed to their respective Parishes/Sub counties to start the actual farmer registration. The registration exercise utilised the Paper Assisted Personal Interviewer (PAPI) where by the farmers' register books were printed and distributed across parishes.

During the actual data collection, teams consisting of cluster supervisors from the Ministry headquarters were routinely dispatched to the field after having been trained in data quality control procedures and fieldwork coordination. They were also provided with a supervisor's manual to assist in carrying out their duties. At District level, the District Production & Marketing Officers and the District Agricultural Officer (ACDP focal persons) also carried out supervision

The procedures for supervision and communications between the Statistics Division and the interviewing teams during data collection were specified in the manuals and discussed during training for the farmer registration exercise. Close communication was maintained at all times between the Statistics Division and ACDP- PCU.

The registration covered all farmers in all villages to enable construction of the sampling frame for use in subsequent routine data collection.

The completed farmer registration books were assembled at the Sub county headquarters and the Extension staff entered the data in tabs using the Computer Assisted Personal Interviewer (CAPI). The data was subsequently sent to the Ministry headquarters for Cleaning and Analysis

### **1.5 Data cleaning and analysis**

After data collection, the Statisticians extracted and merged all data from the different Pilot districts and exported to STATA. Cleaning was done to check out for inconsistencies and outliers. Data was analysed using STATA to obtain statistical outputs including frequencies and percentages in tabular and graphical forms. The statistical outputs were later extracted and presented in more acceptable tables ready for interpretation

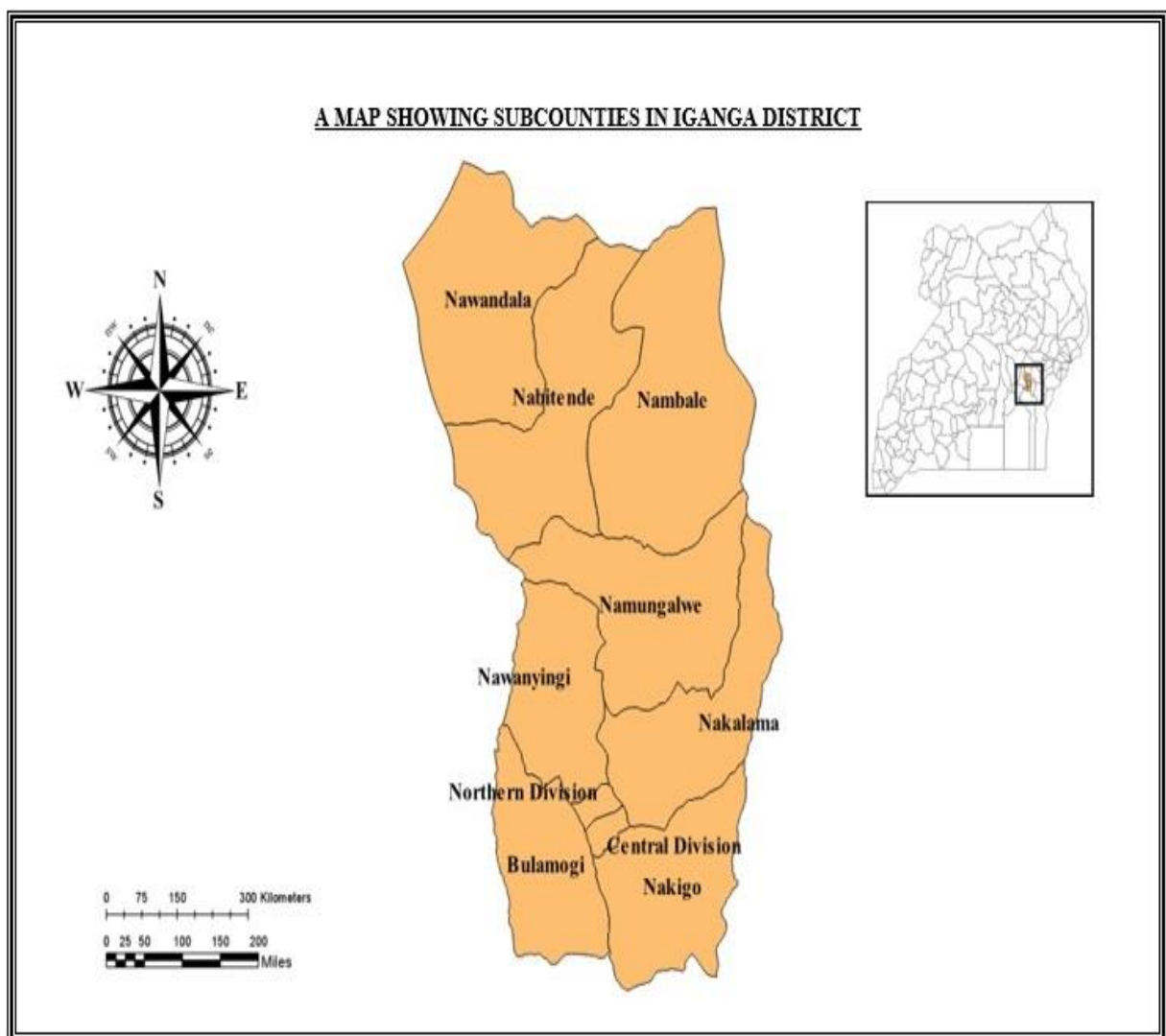
The RAADS component of the NFASS has been piloted and data from over 150,000 farming households has been collected from 2,100 villages in the five pilot districts. Data collected includes information on the type of farming activity (crop growing, livestock rearing, aquaculture and apiary) that households are involved in, types of crops grown, number of animals reared per household, access to technology and support services and access to inputs. Other household tools will have data on production, sales, food security of households, access to extension services, irrigation, agricultural practices, farm gate prices, type of inputs used, storage facilities, access to agriculture facilities, and soil and water management among others. All these are key indicators for formulation of policies and planning for the Agriculture sector in the country. In addition, this data will go a long way in populating the ACDP Results Framework.

## CHAPTER TWO: SOCIO ECONOMIC CHARACTERISTICS

### 2.1 Introduction

This chapter presents information on; the distribution of Administrative units registered; distribution of Agriculture households by district; the classification of Agriculture households by sex and age of household heads by district; and type of farming activity involved in and main purpose.

### 2.2 Map of Iganga District



### 2.3 Distribution of Administrative Units registered

A total of 26,090 farming households from 212 Villages, 51 Parishes/Wards and 10 Sub Counties including Town Councils were registered during the exercise as shown below. At the time of registration, Iganga district consisted of eight (8) sub counties and two (2) Divisions

**Table 1: Number of administrative units registered**

<b>Sub-county/TC</b>	<b>Parish</b>	<b>Village</b>
Bulamagi	5	27
Central Division	6	16
Nabitende	6	27
Nakalama	4	20
Nakigo	5	23
Nambale	5	20
Namungalwe	7	21
Nawandala	5	29
Nawanyingi	3	16
Northern Division	5	13
<b>Total</b>	<b>51</b>	<b>212</b>

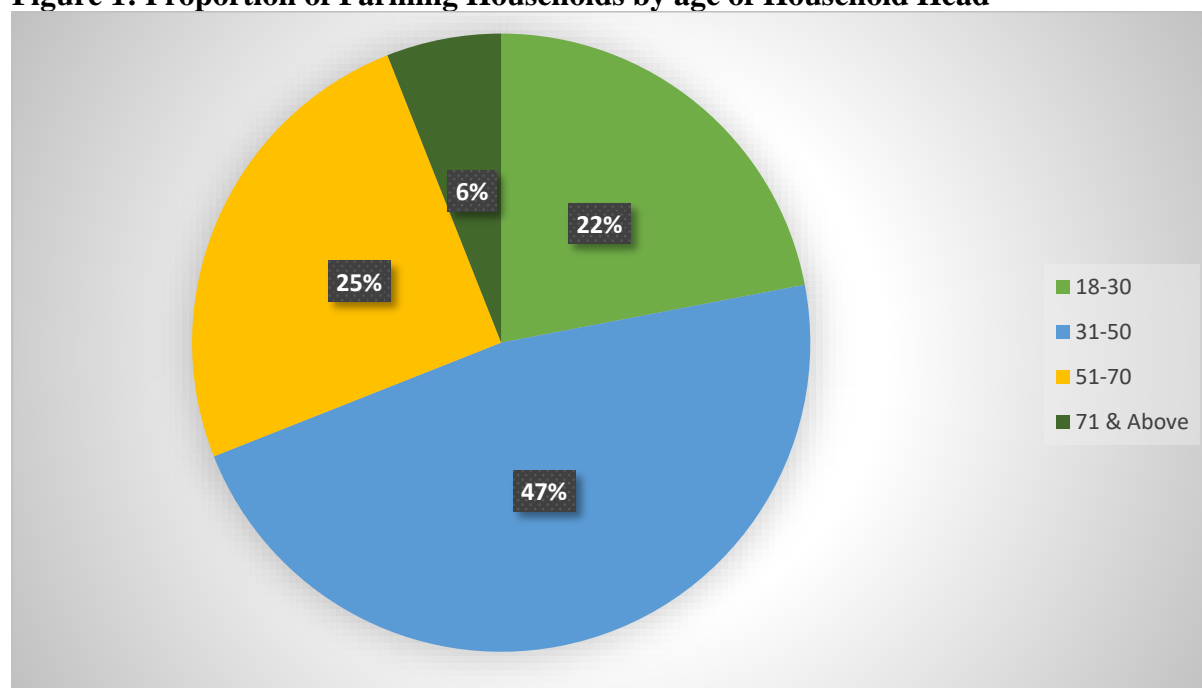
### 2.4 Gender disaggregation of Farming households

Table 1 below shows that 14,223 (54.5%) of farming households registered were male headed while 11,867 (45.5%) were female headed. Majority of the households in Bulamogi, Nabitende, Nakalama, Nakigo, Nambale, Namungalwe, Nawandala and Nawanyingi were male headed while majority of the households in Central Division, Northern Division and Nakalama were female headed.

**Table 2: Number of Farming Households by Sub County**

Sub County	Male	Female	Total
Central Division	535	631	1,166
Northern Division	246	310	556
Bulamogi	1,682	1,447	3,129
Nabitende	1,991	1,291	3,282
Nakalama	1,438	1,584	3,022
Nakigo	1,524	1,376	2,900
Nambale	1,754	1,364	3,118
Namungalwe	2,247	1,353	3,600
Nawandala	1,736	1,556	3,292
<b>Total</b>	<b>14,223</b>	<b>11,867</b>	<b>26,090</b>

A total of 5,544 farming households were headed by youths (18-30years). Majority of farming households (11,659) were headed by people aged between 31 and 50 years. Crop cultivation was the most common type of farming activity across all age groups followed by livestock rearing.

**Figure 1: Proportion of Farming Households by age of Household Head**

## 2.5 Disaggregation by Farming activity

Table 4 shows the proportion of the households by farming activity. Majority of the farming households in all sub counties were involved in crop cultivation, Namungabwe having the highest proportion at 99%. Overall, Farmer registration pilot findings revealed that 66.2% of the households reported to keeping livestock with Namungabwe having the highest proportion at 78%. The number of aquaculture households in all Sub Counties was low. The overall proportion of aquaculture households was 0.24%. Nambale Sub County had the highest proportion of aquaculture households at 0.58%. The proportion of Apiculture households practicing apiculture in Iganga was 0.08%. The highest proportion of apiculture households were in Nawanyingi at 0.25%.

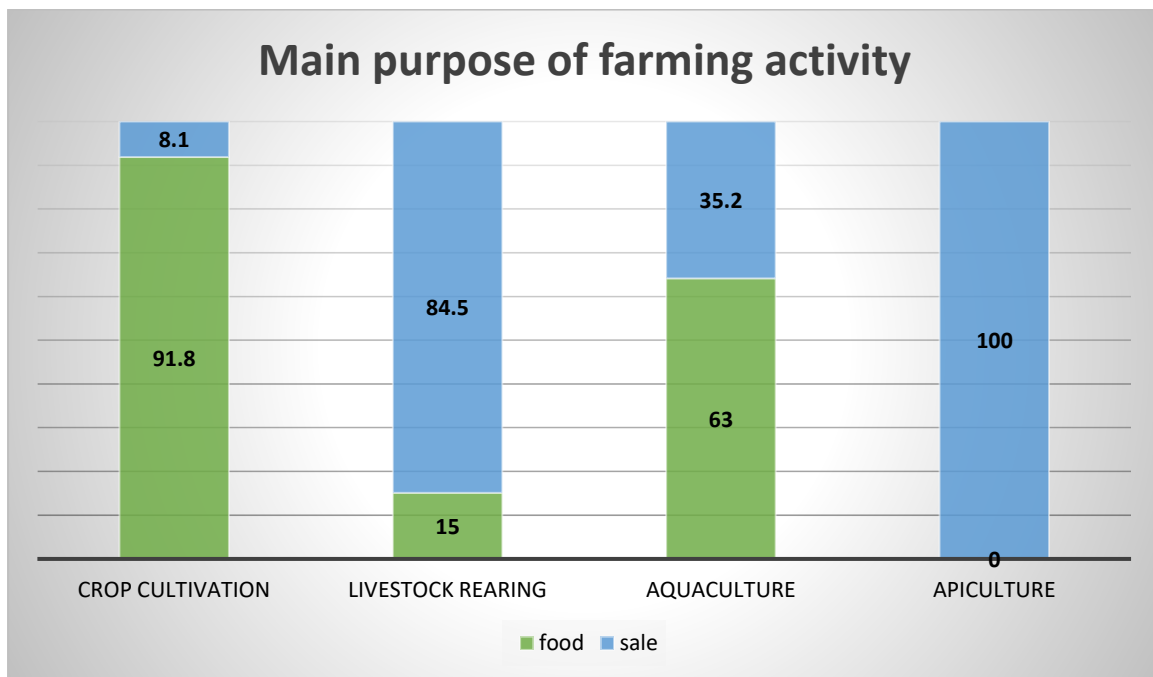
**Table 3: Proportion of Households Practising each farming Activity**

Sub county	Crop	Livestock	Aquaculture	Apiculture
Central Division	74.98	68.34	0.17	0.00
Northern Division	80.07	76.84	0.00	0.00
Bulamogi	94.32	56.16	0.38	0.16
Nabitende	87.32	63.12	0.15	0.06
Nakalama	85.07	56.03	0.07	0.00
Nakigo	95.28	69.15	0.03	0.03
Nambale	98.01	69.36	0.58	0.06
Namungabwe	99.06	78.09	0.03	0.06
Nawandala	86.99	65.19	0.49	0.12
Nawanyingi	89.32	70.03	0.15	0.25
<b>Total</b>	<b>91.02</b>	<b>66.22</b>	<b>0.24</b>	<b>0.08</b>

## 2.6 Main purpose of the farming activity

Table 4 reveals that 59% percent of farming households are involved in agriculture activities with the main purpose of acquiring food (subsistence farming). Most (91.8%) of the farming households grow crops for food while only 8% cited sale as main purpose for growing crops. 84.5% of households stated sale as main purpose of livestock farming. Furthermore, most households in Iganga practice aquaculture to acquire food (63%) while apiculture is solely practiced for sale (100%).

**Figure 2: Main Purpose of Farming Activity**



## CHAPTER THREE: CROP CULTIVATION

### 3.1 Introduction

The results revealed that cereals were the most commonly grown crop category followed by leguminous crops while fruits were the least commonly grown crop within all Sub Counties in the district.

Namungalwe Sub County had the highest proportion of households growing cereals (96%), legumes (74%) and Oil seeds (70%). Nambale had the highest proportion growing root tubers followed by Namungalwe Nakigo had the highest proportion of households growing Plantains at 60%.

Fruits were the least commonly grown crop category by households in all Sub counties; however, Nawandala Sub County had the highest proportion at 20% of households growing the crop.

Furthermore, Nambale had the highest proportion of households growing Tree Crops at 39.

**Table 4: Proportion of Households growing the different Crop**

Sub County	Cereals	Leguminous	Oilseeds & Oil Palm	Vegetables	Root tubers	Fruits	Plantains	Tree crops
Central Div	70.6	46.3	31.9	36.1	41.7	3.6	25.2	6.4
Northern Div	73.2	47.4	40.3	31.0	35.2	4.2	25.3	4.2
Bulamogi	89.1	58.3	41.0	16.8	66.3	8.9	31.4	31.7
Nabitende	82.4	60.8	54.7	37.1	69.3	17.6	37.4	38.9
Nakalama	79.4	56.8	38.2	32.3	52.1	10.6	42.4	19.3
Nakigo	92.8	74.8	64.2	24.8	75.3	3.0	56.9	36.7
Nambale	95.1	72.1	68.2	28.4	85.8	15.8	42.2	39.2
Namungalwe	95.9	74.0	70.0	26.4	85.5	4.9	54.6	39.1
Nawandala	79.4	63.9	53.4	34.2	63.5	4.8	23.7	31.3
Nawanyingi	85.6	72.8	60.1	30.3	71.0	21.1	49.3	34.4
<b>TOTAL</b>	<b>86.6</b>	<b>65.2</b>	<b>54.9</b>	<b>29.2</b>	<b>69.3</b>	<b>9.9</b>	<b>40.8</b>	<b>32.1</b>

## 3.2 Households involved in Crop Production

### 3.2.1 Cereals

The study results below revealed that Maize was the most commonly grown cereal by the households in the district with Namungalwe Sub County having the highest proportion at 98.2%.

Overall 16% of the households reported to growing Rice with Nambale recording the highest proportion at 33%. Nabitende had the highest proportions growing Finger Millet and Sorghum with over 17% of households. Wheat was the least commonly grown cereal within all the Sub Counties, less than 1% of households in the district grew wheat

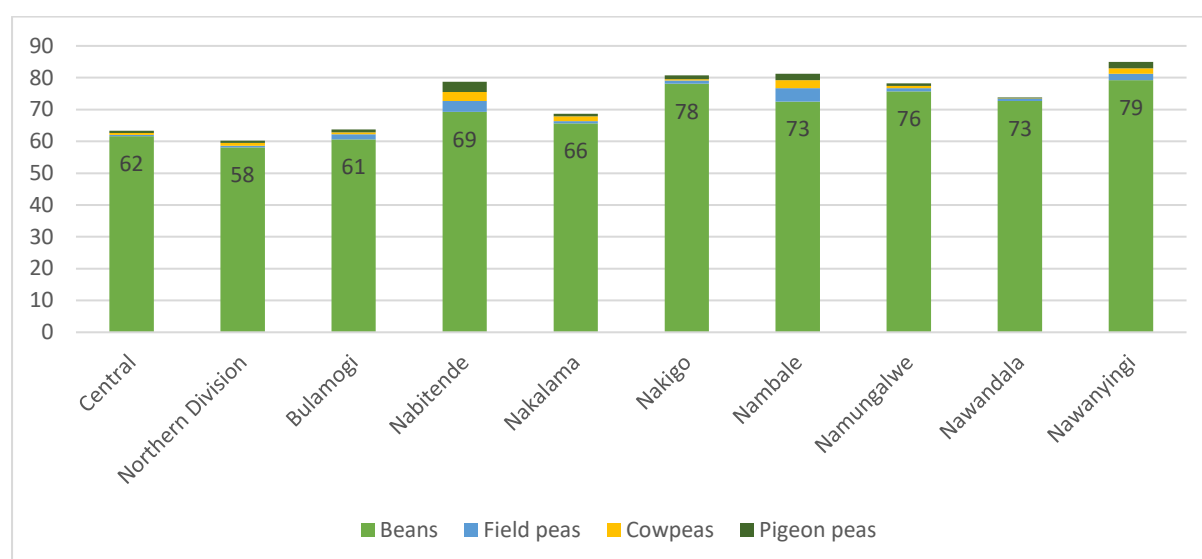
**Table 5: Proportion of Households growing cereals by sub county**

Sub County	Wheat	Rice	Maize	Finger millet	Sorghum
Central	0	8.7	91.3	1.4	5.5
Northern Division	0	6.7	88.1	0.7	3.8
Bulamogi	0.6	7.7	90.5	4.1	5.4
Nabitende	0.4	27.4	91.9	17.4	19.0
Nakalama	0.0	10.1	89.9	1.6	5.1
Nakigo	0.2	7.2	96.5	2.9	3.1
Nambale	0.2	32.8	94.0	13.0	11.3
Namungalwe	0.1	19.3	98.2	2.5	2.9
Nawandala	0.4	15.6	87.1	3.5	3.8
Nawanyingi	0.3	6.0	93.6	3.6	6.4
<b>Total</b>	<b>0.3</b>	<b>16.1</b>	<b>92.7</b>	<b>5.9</b>	<b>7.0</b>

### 3.2.2 Legumes

Beans were the most commonly grown legumes by the households in all the Sub Counties. Nawanyingi Sub County had the highest percentage of households growing the beans followed by Nakigo at 79% and 78% respectively. Less than 5% of the households grew field, cow and pigeon peas

**Figure 3: Proportion of Households growing Legumes by sub county**

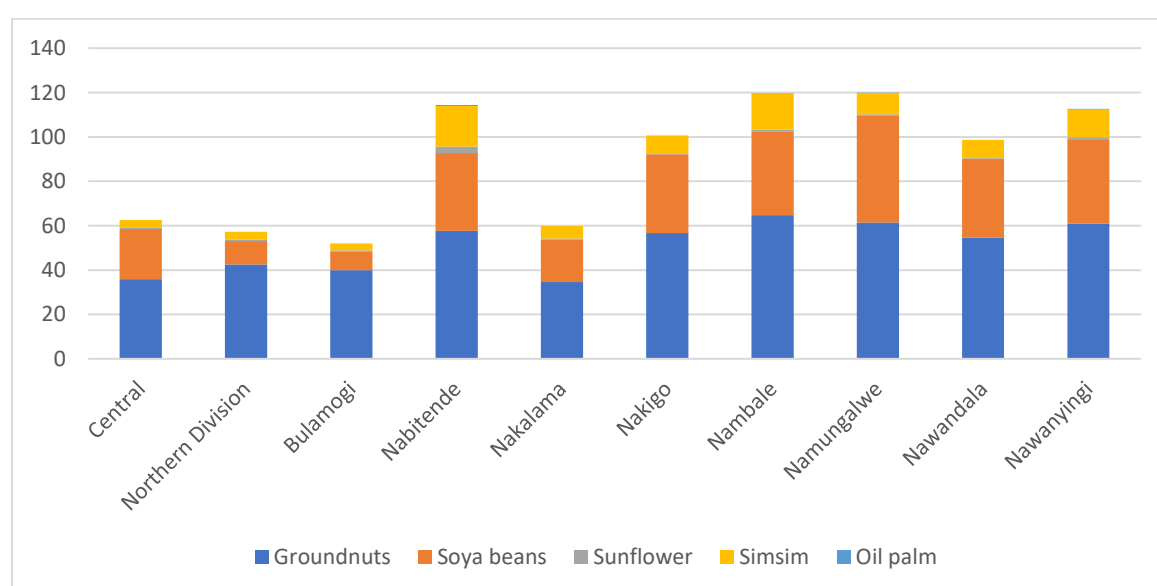


### 3.2.3 Oil seeds

According to the study, results in the graph below, Groundnuts were the most commonly grown Oil seeds all the Sub Counties. Nambale Sub County had the highest proportion of households growing Groundnuts at over 65%. Namungalwe had the highest proportion growing soya beans at 48.3% and Nabitende had the highest proportion growing simsim at 18%.

Less than 1% of the households in all subcounties reported to growing Oil Palm and sunflower was the least commonly grown Oil Seeds by all Sub Counties.

**Figure 4: Proportion of Households growing Oil seeds by sub county**



### 3.2.4 Vegetables

In Iganga district, 29% of the households were involved in vegetable growing. Eggplants were the most commonly grown vegetable followed by tomatoes in the district. Nambale had the highest proportion growing eggplants at 16% followed by Nakalama at 15%. Tomatoes were mostly grown in Nawandala and Nambale. Furthermore, over 11% of the households with in Nawandala Sub County grew cabbages

Carrots and Dodo were the least vegetables grown by the households in the District at less than 1%

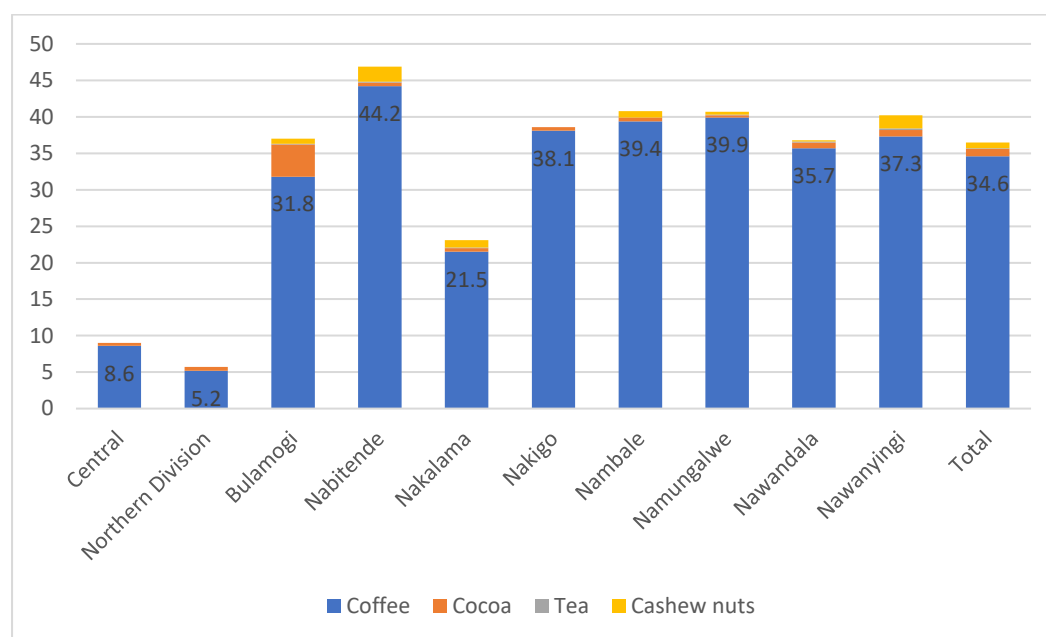
**Table 6: Proportion of Households growing Vegetables by Sub county**

Sub County	Cabbages	Tomatoes	Carrots	Onions	Pumpkins	Eggplants	Dodo
Central Div	4.1	6.0	0.7	0.7	1.4	6.6	1.4
Northern Div	2.2	7.4	0.2	0.7	2.7	6.7	0.7
Bulamogi	2.3	3.3	0.8	1.1	4.0	5.4	0.2
Nabitende	6.4	8.7	0.6	2.3	13.2	16.4	0.4
Nakalama	3.6	5.2	0.4	0.8	6.5	15.0	0.1
Nakigo	4.3	7.2	0.1	0.7	4.8	13.6	0.3
Nambale	6.6	11.1	0.2	0.5	7.4	16.0	0.8
Namungalwe	4.6	8.1	0.1	0.9	9.2	13.7	0.1
Nawandala	11.0	12.8	0.2	0.7	6.2	14.1	0.0
Nawanyingi	4.6	4.5	0.8	1.2	8.9	14.6	0.7
<b>Total</b>	<b>5.4</b>	<b>7.8</b>	<b>0.4</b>	<b>1.0</b>	<b>7.2</b>	<b>13.1</b>	<b>0.4</b>

### 3.2.5 Tree Crops

Findings reveal that Coffee was the most commonly grown Tree crop by all the Sub Counties with Nabitende having the highest percentage (44%). Less than one percent (<1%) of the households grew Cocoa, Tea and Cashew nuts except for Nabitende, Nakalama and Nawanyingi.

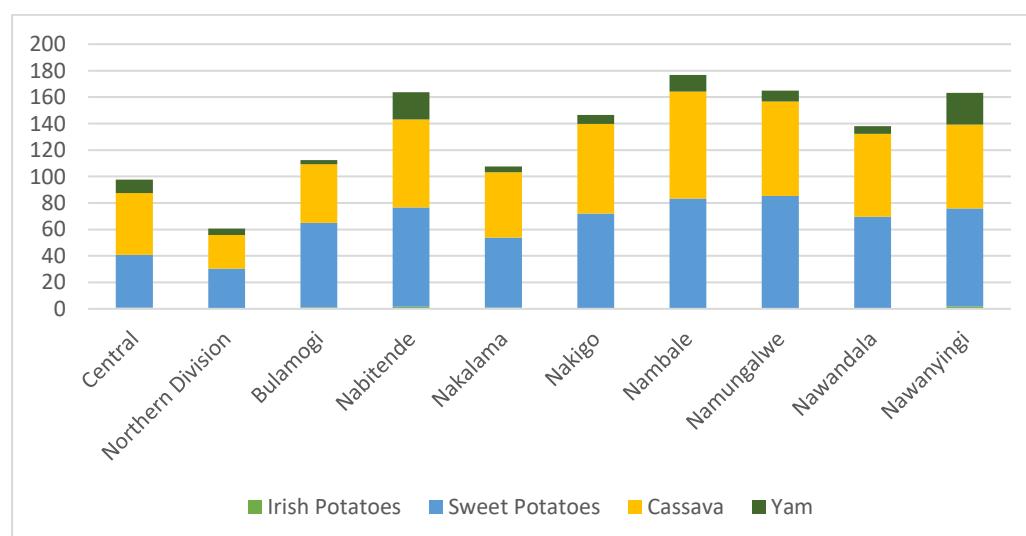
**Figure 5: Proportion of households growing Tree Crops by Sub County**



### 3.2.6 Root crops

Sweet potatoes were the most commonly grown root tubers followed by cassava. Namungabwe and Nambale had the highest proportion growing Sweet potatoes at 85% and 83% respectively. The analysis also reveals that Nambale had the highest percentage (80.7%) of households growing cassava. Irish potatoes were the least grown root tubers followed by Yams within all the Sub Counties in Iganga District. Nawanyingi had a higher proportion growing yams than other subcounties at 24%

**Figure 6: Proportion of households growing Root crops by Sub County**



### 3.2.7 Fruits

Table 13 shows that Mangoes were the most commonly grown fruits within the Sub Counties of Bulamogi, Nabitende, Nakalama, Nakigo, Nambale, Namung'alwe, Nawandala and Nawanyingi Sub Counties. On the other hand, Oranges were most commonly grown in the Northern Davion, Central Division and Namung'alwe. Passion Fruit was the fruit most commonly grown by households in Nakigo. Apples were the least grown fruit with in all the Sub Counties in the district.

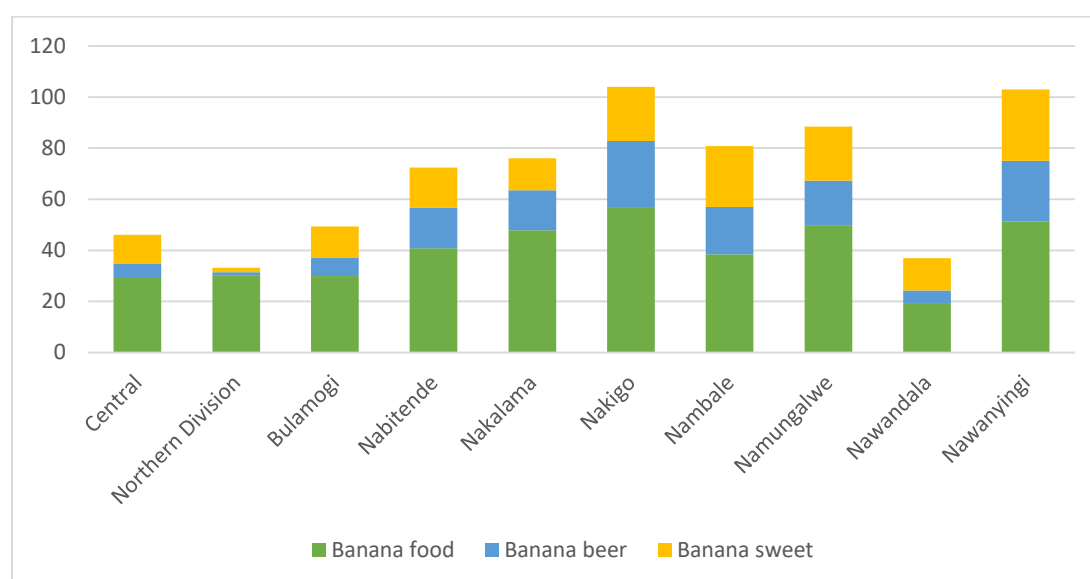
**Table 7: Percentage of households growing Fruits by Sub County**

Sub County	Oranges	Pawpaw	Pineapples	Mango	Avocado	Guava	Apples	Passion fruit
Central Div	2.6	0.7	0.1	2.4	0.9	0.2	0.0	0.6
Northern Div	2.0	0.9	0.9	2.0	1.8	0.2	0.0	0.7
Bulamogi	3.1	2.0	0.2	5.4	4.7	0.8	0.0	1.7
Nabitende	11.2	7.1	1.3	14.0	11.3	4.3	0.4	3.4
Nakalama	4.3	3.3	0.2	9.4	9.1	2.1	0.0	1.6
Nakigo	0.8	0.2	0.1	0.9	0.9	0.1	0.0	1.2
Nambale	6.0	4.1	0.8	9.8	6.1	0.9	0.1	2.1
Namung'alwe	2.5	0.9	0.2	2.0	1.8	0.4	0.0	1.1
Nawandala	2.1	0.8	0.2	2.8	2.3	0.6	0.0	0.6
Nawanyingi	10.1	10.1	1.7	16.4	15.3	2.5	0.4	3.0
<b>Total</b>	<b>4.6</b>	<b>3.1</b>	<b>0.5</b>	<b>6.8</b>	<b>5.6</b>	<b>1.3</b>	<b>0.1</b>	<b>1.7</b>

### 3.2.8 Plantains

The results from the table below reveal that Banana Food were the most commonly grown plantains in Iganga at an average of 41% and Banana beer as the least commonly grown crop at 15%. Nakigo Sub County had the highest proportion growing banana food and banana beer at 57% and 26% respectively. Banana sweet was mostly grown in Nawanyingi and Nambale subcounties

**Figure 7: Proportion of households growing Plantains by Sub County**



### 3.2.9 Sugar Cane, Vanilla and Cotton

According to the study results from the table below, Sugar cane was the most commonly grown crop by the households in all Sub Counties in the District. Vanilla was the least grown crop in all Sub Counties except for Central Division and Nakigo, where Cotton was the least commonly grown crop. Nawandala Sub County had the highest proportion of households growing Sugar Cane in the District at 24% while Nabitende had the highest proportion of households growing Cotton at 4.7%.

**Table 8: Proportion of households growing Vanilla, cotton and sugarcane**

Sub County	Vanilla	Cotton	Sugarcane
Central Div	0.4	0.2	10.6
Northern Division	0.0	0.2	11.9
Bulamogi	0.4	1.4	7.1
Nabitende	0.6	4.7	17.6
Nakalama	0.2	1.0	4.0
Nakigo	0.4	0.3	7.1
Nambale	0.3	4.5	9.8
Namungalwe	0.3	0.5	9.9
Nawandala	0.2	0.8	24.4
Nawanyingi	0.7	1.2	12.9
<b>Total</b>	<b>0.5</b>	<b>1.5</b>	<b>11.5</b>

### **3.3 Area under crops in acres.**

According to the Agriculture Annual Survey (AAS) 2018, the National Mean Plot Size (MPS) was estimated to be 0.3 Ha amongst the 10 ZARDIs. Iganga belongs to Buginyanya ZARDI with an estimated MPS of 0.2 Ha.

#### **3.3.1 Banana Food**

The area under banana food in the district was 1,972 ha. The estimated number of plots under Banana food was 9,862. Out of these 3,139 were of pure stand (31.8%) while 6,723 were of mixed stand (68.2%).

#### **3.3.2 Sweet Potatoes**

The area under sweet potatoes was 3,821 Ha. Table 17 shows that the estimated number of plots under Beans was 19,106. Out of these, 13,928 (72.9%) were of pure stand while 5,178 (27.1%) were of mixed stand.

#### **3.3.3 Beans**

The area under beans was 4,092 Ha. The estimated number of plots under Beans was 20,461. Out of these, 3,806 (18.6%) were of pure stand while 16,655 (81.4%) were of mixed stand.

#### **3.3.4 Rice**

The area under Rice was estimated to be 996.8 Ha. The estimated number of plots under Rice food was 4,984. Out of these, 4,024 were of pure stand (80.7%) while 960 (19.3%) were of mixed stand.

#### **3.3.5 Irish Potatoes**

The area under Irish Potatoes was 51 Ha. The estimated number of plots were 254. Out of these, 110 were of pure stand (43.3%) while 144 (56.7%) were of mixed stand.

#### **3.3.6 Ground Nuts**

The area under Ground Nuts was 2,984 Ha. Table 21 shows that the estimated number of plots under Ground Nuts was 14,918. Out of these, 4296 (28.8%) were of pure stand while 10,622 (71.2%) were of mixed stand.

**Table 9: Area under Crops**

<b>Crop</b>	<b>Pure</b>	<b>%Pure</b>	<b>Mixed</b>	<b>%Mixed</b>	<b>Total</b>	<b>Area(Ha)</b>	<b>Mean Plot Size (MPS) AAS,2018</b>
Banana	3,139	31.8	6,723	68.2	9,862	1,972	0.2
Sweet Potato	13,928	72.9	5,178	27.1	19,106	3,821	0.2
Beans	3,806	18.6	16,655	81.4	20,461	4,092	0.2
Rice	4,024	80.7	960	19.3	4,984	996.8	0.2
Irish Potato	110	43.3	144	56.7	254	51	0.2
Ground Nuts	4,296	28.8	10,622	71.2	14,918	2,984	0.2

## CHAPTER FOUR: AQUACULTURE

### 4.1 Introduction

There are 16 households practicing aquaculture farming in Iganga district.

### 4.2 Production Systems

#### 4.2.1 Fish Ponds

Fishponds were the most common type of fish production system in Iganga with 75% of the ponds being stocked. At Sub-County level, Nabitende and Northern Division had the highest number of fishponds in the district while Nambale had the lowest number of ponds.

**Table 10: Number and proportion of fishponds stocked**

Sub-Country	Ponds	
	Stocked	Un stocked
Central Division	4	1
Northern Division	4	2
Nabitende	2	1
Nakalama	2	2
Nambale	3	0
<b>Total</b>	<b>18</b>	<b>6</b>

#### 4.2.2 Fish Tanks and Cages

There were only two Fish tanks found in Nabitende Sub County and no cages found in the district.

### 4.3 Type of Fish Stocked

Tilapia was the most common type of fish stocked among aquaculture households. 62.5% of the households with ponds stock Tilapia.

80% of aquaculture farming households with tanks stocked them with Tilapia while 40% of households with ponds stocked them with Catfish and only 9% of households with ponds stocked them with Mirror carp. 33% of households with tanks stocked them with Catfish and 40% of households with tanks stocked them with Mirror carp.

**Table 11: Type of fish stocked**

Production System	Tilapia	Catfish	Mirror carp
Ponds	85	40	6
Tanks	80	33	40
<b>Total</b>	<b>84</b>	<b>39</b>	<b>8.1</b>

## CHAPTER FIVE: LIVESTOCK REARING

### 5.1 Introduction

Results from the farmer registration revealed that 16,825 of the farming households registered reported to keeping livestock with the majority keeping poultry (80%), followed by cattle and goats 52% and 50% respectively. However less than 10% of the farming households reported to keeping pigs, sheep, rabbits and dogs.

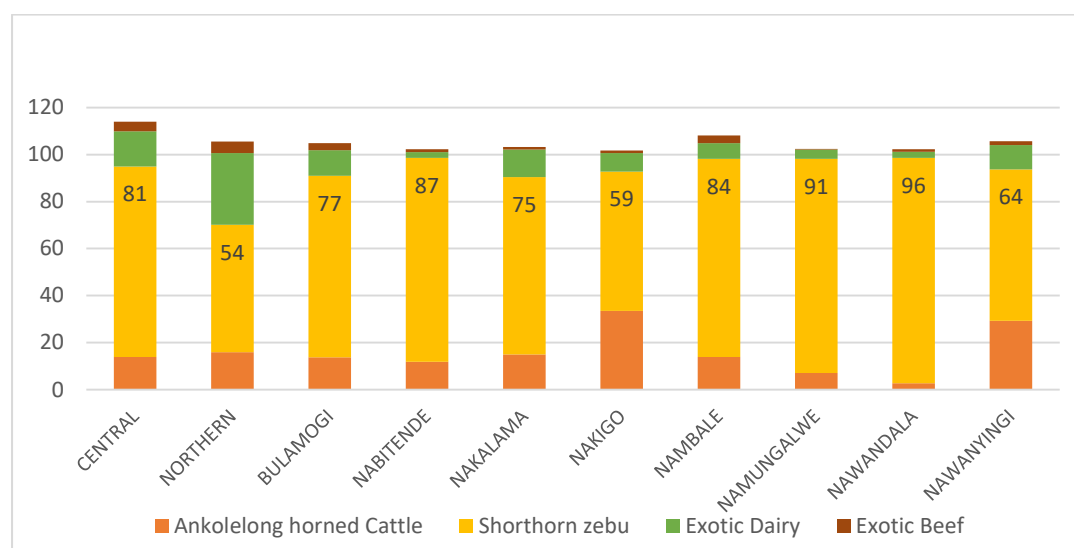
**Table 12: Number of households keeping livestock**

<b>Livestock Type</b>	<b>Cattle</b>	<b>Goats</b>	<b>Sheep</b>	<b>Pigs</b>	<b>Rabbits</b>	<b>Dogs</b>	<b>Poultry</b>
Central Div	294	413	36	28	10	28	635
Northern Div	144	162	10	26	5	9	355
Bulamogi	1,042	634	103	191	50	94	1,223
Nabitende	1,067	1,103	56	177	32	59	1,491
Nakalama	813	742	23	53	18	83	1,288
Nakigo	903	1,013	33	27	20	105	1,625
Nambale	1,228	1,075	65	136	35	130	1,724
Namungalwe	1,573	1,570	43	101	34	176	2,303
Nawandala	1,077	1,132	73	403	20	54	1,698
Nawanyingi	526	661	40	58	21	58	1,065
<b>Total</b>	<b>8,667</b>	<b>8,505</b>	<b>482</b>	<b>1,200</b>	<b>245</b>	<b>796</b>	<b>13,407</b>

### 5.2 Cattle Keeping

According to farmer registration results, over 80% of livestock keeping households in Nawandala, Namungalwe, Nambale, Nabitende and Central division keep short horn zebu. Nawanyingi and Nakigo were found to have a higher proportion of households keeping Ankole long horned cattle than other Sub counties. Northern Division had the highest proportion (31%) of households with exotic dairy. Exotic beef cattle was rare with central having the highest proportion of households at 5%.

**Figure 8: Proportion of Households keeping Cattle**



### 5.2.1 Cattle population by breed

Findings reveal that Farmers keep more numbers of indigenous cattle than exotic cattle. According to pilot study findings in Table below, there were more numbers of Short horned zebu than Ankole long horned cattle than Short Horned Zebu in all the Sub Counties. Namungalwe Sub County had the highest number of Short horned zebu with each household keeping on average 3 cattle while Nakigo had the highest number of Ankole long horned cattle: each household keeping on average 3 cattle.

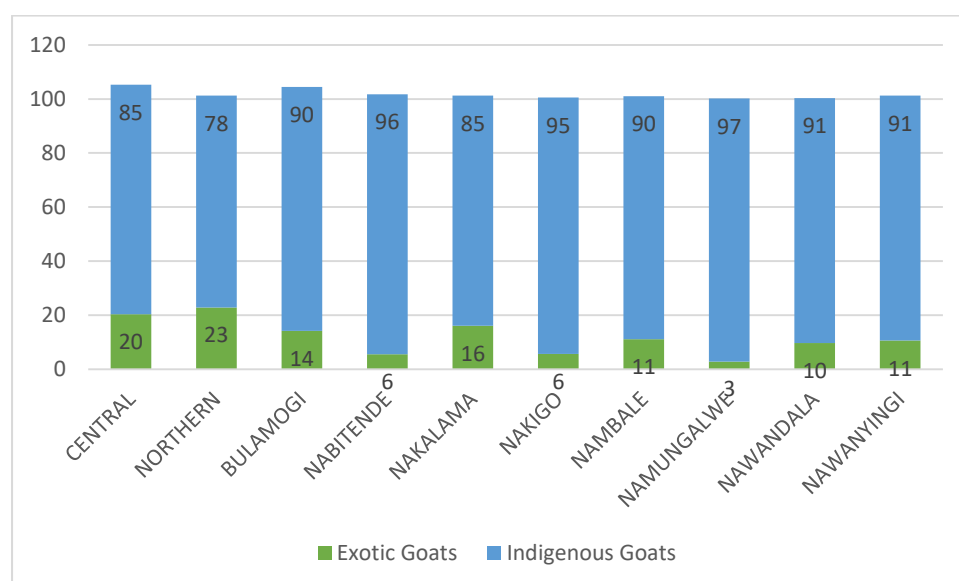
In the case of exotic cattle, more numbers of improved dairy cattle were recorded in all Sub Counties except for Nabitende where more numbers of improved beef breeds were recorded. On average, a household with improved dairy cattle reported to keeping four cattle and in the case of improved beef cattle breed, households also reported to keeping 4 cattle. Bulamogi recorded the highest number of Exotic dairy cattle each household keeping on average five cattle.

**Table 13: Cattle population**

Sub County	Ankole Long horned	Short Horn Zebu	Exotic Diary	Exotic Beef
Central Div	112	1252	175	39
Northern Div	55	305	176	17
Bulamogi	477	3333	600	75
Nabitende	321	1891	42	65
Nakalama	370	2576	284	57
Nakigo	771	1551	190	44
Nambale	395	2882	218	137
Namungalwe	228	3676	174	15
Nawandala	58	3195	57	29
Nawanyingi	322	1104	177	87
<b>Total</b>	<b>3109</b>	<b>21765</b>	<b>2093</b>	<b>565</b>

### 5.3 Goats

Farmer Registration results indicate that majority of the households with Goats in all Sub Counties reported to keeping indigenous breeds of goats at an average of 91%. Namungalwe had the highest number of households keeping indigenous goats at a proportion of 97% whereas Northern and central division reported the highest number of households keeping Exotic goats at 23% and 20% respectively.

**Figure 9: Proportion of Households keeping goats by Sub County**

### 5.3.1 Goat Population by breed

Generally, farmers keep high numbers of indigenous goats compared to exotic breeds were kept across all Sub Counties. Central Division had the highest number of exotic breeds (550) while Namungalwe had the highest number of indigenous breeds (4,519).

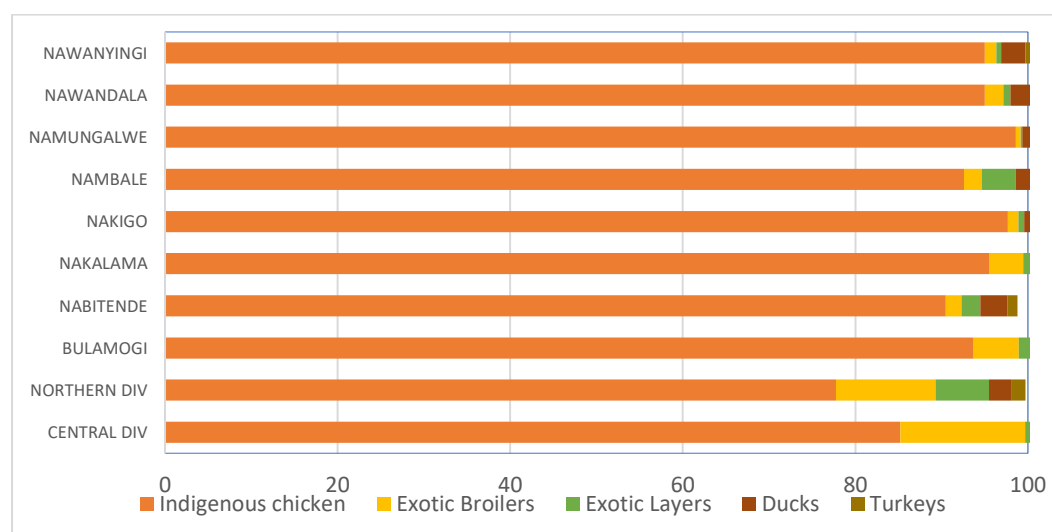
**Table 14: Goat population by breed**

Sub county	Improved	Indigenous	Total
Central Division	550	2,193	2,743
Northern Division	173	620	793
Bulamogi	410	3,749	4,159
Nabitende	484	3,198	3,682
Nakalama	398	2,259	2,657
Nakigo	182	3,212	3,394
Nambale	392	3,103	3,495
Namungalwe	117	4,519	4,636
Nawandala	427	3,341	3,768
Nawanyingi	212	1,815	2,027

### 5.4 Poultry

It can be seen from the table below a high number of households in all the Sub Counties keep indigenous chicken compared to other poultry breeds. Namungalwe had the highest number of households that keep indigenous poultry, each household keeping on average nine birds.

**Figure 10: Proportion of Households keeping Poultry**



#### 5.4.1 Poultry Population by breed

There were more numbers of indigenous poultry kept in all Sub Counties except for Central Division and Northern Division where more Exotic Broilers were kept than other poultry. Furthermore, Central Division had the highest numbers of Exotic Layers and Broilers in the district, each household on average keeping 141 Exotic broilers and 118 exotic layers.

**Table 15: Poultry Population by Sub County**

<b>Sub county</b>	<b>Poultry - Indigenous</b>	<b>Exotic - Broilers</b>	<b>Exotic - Layers</b>	<b>Breeders- Broilers</b>	<b>Breeders - Layers</b>	<b>Ducks</b>	<b>Turkeys</b>
Central Division	11,069	12,569	9,078	1,351	765	601	275
Northern Division	3,749	6,746	3,729	71	1,216	91	56
Bulamogi	17,574	3,623	544	265	248	495	120
Nabitende	9,790	119	433	95	839	210	121
Nakalama	18,440	769	208	240	56	334	122
Nakigo	17,014	391	922	32	82	401	245
Nambale	16,552	593	1,242	478	949	571	212
Namungalwe	20,602	207	310	404	15	363	95
Nawandala	27,629	504	385	12	74	386	301
Nawanyingi	7,484	868	163	84	998	305	232
<b>Total</b>	149,903	26,389	17,014	3,032	5,242	3,757	1,779

#### 5.5 Other livestock

It was reported that there were higher numbers of pigs being kept than other livestock in all Sub Counties except for Nakigo and Nawanyingi where there were higher numbers of sheep and rabbits respectively. There were more numbers of indigenous sheep kept in Central Division, Northern Division, Bulamogi, Nakigo, Nambale, Namungalwe, and Nawandala while there were more numbers of exotic sheep in Nabitende, Nakalama and Nawanyingi. Furthermore, Bulamogi reported the highest numbers of indigenous sheep; each household keeping an average of seven animals. A high number of Pigs were kept in Nawandala Sub County while Bulamogi and Namungalwe Sub Counties kept the highest numbers of rabbits and dogs respectively. On average, households in Iganga district keep 16 rabbits and 3 dogs. On average, a household with pigs had an average of six animals, and households with sheep had nine exotic breeds and five indigenous breeds.

**Table 16: Other livestock population**

<b>Sub county</b>	<b>Improved Sheep</b>	<b>Indigenous Sheep</b>	<b>Pigs</b>	<b>Rabbits</b>	<b>Dogs</b>
Central Division	81	184	927	167	110
Northern Division	9	37	228	125	18
Bulamogi	365	587	1,515	768	269
Nabitende	310	176	519	249	149
Nakalama	40	35	495	496	154
Nakigo	84	192	133	238	224
Nambale	75	164	581	386	223
Namungalwe	6	133	699	517	296
Nawandala	35	188	1,643	220	293
Nawanyingi	116	79	211	721	212
<b>Total</b>	<b>1,121</b>	<b>1,775</b>	<b>6,951</b>	<b>3,887</b>	<b>1,948</b>

## CHAPTER SIX: APICULTURE FARMING

### 6.1 Introduction

There were 6 (0.02%) households practicing apiculture farming. Bulamogi had the highest with 4 households and Namungalwe and Nawandala had 1 each.

### 6.2 Proportion and Number of beehives

Local beehives were the most common type of beehives in the Sub Counties as shown below. Seventy-six (76%) of the beehives were colonized at the time of registration. There were no Kenya top bar and Lang troth beehives found.

**Table 17: Proportion and Number of beehives by Sub-County**

Sub-County	Local	
	colonized	Un colonized
Bulamogi	8	0
Namungalwe	10	5
Nawandala	1	1
<b>Total</b>	<b>19</b>	<b>6</b>

## **CHAPTER SEVEN: ACCESS TO AGRICULTURE TECHNOLOGIES AND SERVICES**

### **7.1 Adoption of improved technologies**

From the farmer registration pilot study, results revealed that an average of 29% of the farming households accessed critical farm inputs (fertilizer, seed and pesticides). Of the households that accessed critical farm inputs, most of them were using pesticides.

At Sub-county level, Nakigo had the highest proportion of households with access to critical farm inputs (Fertilisers, Seeds and Pesticides) while Northern Division had the lowest proportion.

On average, 34% of households in Iganga district used ox-plough. The proportion of farmers who used tractors for on-farm activities was very low at 6%. Central Division had the highest proportion with access to Tractors (12.8%) while Nawanyingi had the lowest proportion (2.6%). Furthermore, 20% of households in Namung'alwe had access to Ox ploughs compared to only 1% of households in Northern Division

Results in table 18 further revealed that the proportion of households who used artificial insemination (4.6%) was still low. Results reveal that Nabitende Sub-County had the highest proportion of households with access to artificial insemination at either 9.4% the low adoption levels may be a result of the high cost involved or inadequate information flows on the service.

Results also showed that 11.2% of households in Iganga district used irrigation; Nakigo having the highest percentage with access to irrigation while Nambale had the lowest percentage of households with access to irrigation

**Table 18: Adoption of improved technologies**

<b>Sub- county</b>	<b>Tractor</b>	<b>Ox- plough</b>	<b>Milk- cooler</b>	<b>Irrigation</b>	<b>Organic fertilizer</b>	<b>Inorganic fertilizer</b>	<b>pesticide</b>	<b>improved seed</b>	<b>vaccination</b>	<b>AI</b>
Central Div	12.8	11.9	1.5	12.8	32.8	29.5	43.2	40.8	23.0	3.6
Northern Div	8.3	19.0	0.7	7.7	21.8	16.2	18.0	17.2	9.6	4.5
Bulamogi	9.8	24.1	3.1	12.1	28.8	23.9	45.4	47.2	17.9	5.0
Nabitende	2.8	35.1	3.3	11.8	21.0	20.2	26.0	19.7	22.8	9.4
Nakalama	5.4	24.1	3.0	8.6	19.6	14.7	32.5	27.7	16.5	4.2
Nakigo	4.3	41.6	1.2	21.7	38.2	37.8	54.4	45.9	21.6	3.3
Nambale	4.4	61.6	1.9	6.1	16.6	23.5	40.3	24.8	25.7	4.7
Namungalwe	3.2	48.5	1.7	13.7	23.1	28.2	45.6	43.0	35.3	3.0
Nawandala	7.6	26.9	1.4	7.3	21.7	16.1	20.3	24.0	19.4	3.0
Nawanyingi	2.6	15.2	2.0	7.1	29.3	15.4	25.3	21.8	14.6	4.2
<b>Total</b>	<b>5.5</b>	<b>34.5</b>	<b>2.1</b>	<b>11.2</b>	<b>24.7</b>	<b>23.0</b>	<b>36.6</b>	<b>32.3</b>	<b>22.2</b>	<b>4.6</b>

## 7.2 Access and Source of free/subsidized inputs

Results in table 19 revealed that a higher percentage (79%) of the households in Iganga district reported to not receiving free inputs. 88% of farmers in Nabitende Sub County reported to not having received free inputs.

Overall, 21% of households reported to receiving free inputs, with Bulamogi having the highest proportion of households in the district who reported to receiving the inputs. Of the households that reported to receiving free inputs, 81% received them from NAADS or OWC. Over 98% of households in Nawandala reported to receiving inputs from NAADS while only 34% of households in Nambale reported NAADS or OWC as the source of inputs.

The findings also revealed that a high proportion of households in Nambale (54%) reported Shops as the source of their inputs.

Furthermore, 17.5% of farmers in Nabitende reported NGOs as being the source of inputs while less than 2% of households in the district received free inputs from Cooperatives. Less than 1% of households received inputs from Politicians.

Further analysis on whether farmers used the free inputs showed that 96.3% of households used them fully. Less than 1% of households in the district reported to not having used the inputs.

**Table 19: Access and Source of free/subsidized inputs**

Sub-County	Received free/ inputs		Source of Inputs						Household use of inputs		
	Yes	No	Naads/ OwC	Cooperatives	NGOs	Shops	Politicians	Other	used	Used some	did not use
Central Div	20.3	79.7	84.05	1.89	1.08	11.35	1.62	0	89.19	8.92	1.89
Northern Div	21.54	78.46	57.51	0.86	1.72	36.91	2.15	0.86	99.14	0	0.86
Bulamogi	32.37	67.63	90.21	4.04	2.85	1.31	1.48	0.12	91.74	6.95	1.31
Nabitende	11.98	88.02	77.89	3.74	17.52	0.34	0.34	0.17	98.64	1.19	0.17
Nakalama	16.02	83.98	95.83	2.37	0.95	0.47	0.38	0	99.53	0.19	0.28
Nakigo	27.61	72.39	96.05	0.13	0.83	2.36	0.51	0.13	97.58	2.1	0.32
Nambale	20.26	79.74	34.01	1.74	9.72	54.13	0.39	0	96.91	2.42	0.67
Namungalwe	22.97	77.03	86.72	1.42	4.85	6.43	0.33	0.25	96.4	1	2.59
Nawandala	17.9	82.1	98.77	0.1	0.1	0.62	0.21	0.21	97.94	1.44	0.62
Nawanyingi	19.39	80.61	93.41	0.54	2.05	1.3	2.7	0	96.86	2.59	0.54
<b>Total</b>	<b>21.0</b>	<b>79.0</b>	<b>81.1</b>	<b>1.7</b>	<b>4.2</b>	<b>12.1</b>	<b>0.9</b>	<b>0.1</b>	<b>96.3</b>	<b>2.8</b>	<b>0.9</b>

### 7.2.1 Reason for non-use of inputs

The major reason cited for non-use of free inputs in the district was lack of rainfall. 65.1% of the farmers cited this as the main reason for non-use. The second major reason was the poor quality of inputs supplied to the farmers.

Nawandala Sub County cited the poor quality of inputs and lack of rainfall as the main reason for non-use of inputs while lack of rainfall was the major reason cited by households in Northern Division, Bulamogi, Nabitende, Nakigo, Nambale and Namungalwe and Nawanyingi. In Central Division, Nakalama and Nawandala, the main reason cited was lack of knowledge on how to use the inputs.

**Table 20: Reason for non-use of inputs**

Sub county	No knowledge	No rainfall	Poor quality	Not interested	Other
Central Division	43.75	18.7	25	12.5	0
Northern Division	0	100	0	0	0
Bulamogi	10.1	57.9	21	10.8	0
Nabitende	0	87.5	0	12.5	0
Nakalama	80	20	0	0	0
Nakigo	5.2	52.6	36	5.3	0
Nambale	5.4	89.1	0	1.8	3.6
Namungalwe	8.1	62.2	16.2	10.8	2.7
Nawandala	12.5	75	12.5	0	0
Nawanyingi	0	93.1	6.9	0	0
<b>Total</b>	<b>10.2</b>	<b>65.1</b>	<b>16.6</b>	<b>7.3</b>	<b>0.9</b>

### 7.3 Access to Agricultural support services.

From table 21 below, 34% of the farming, households received extension services and 15% of the households belonged to farmer groups. Only 7% accessed Agriculture credit. Bulamogi S/C had the highest proportion (41%) of farming households that accessed Extension services while Northern Division S/C had the least (10%). The results further revealed at least 30% of the farming households in central division and Nakigo 8% of the households belonged to farmer groups. Central division had the highest proportion of the farming households who accessed credit.

**Table 21: Proportion of Farming Households accessing Support services**

<b>Sub County</b>	<b>Farmer Group</b>	<b>Agric Credit</b>	<b>Extension Services</b>
Central Division	33	24	33
Northern Division	11	5	10
Bulamogi	12	3	41
Nabitende	9	4	36
Nakalama	6	4	16
Nakigo	38	6	49
Nambale	17	10	37
Namungalwe	17	4	28
Nawandala	6	12	37
Nawanyingi	4	3	31
<b>Total</b>	15	7	34

## **CHAPTER EIGHT: CHALLENGES, RECOMMENDATIONS, CONCLUSION**

### **8.1 Challenges**

- a) There was refusal and biased responses from some farmers, which slowed down data collection. This was mainly due to fear of taxation since the parish chiefs also collect data on taxation.
- b) It was identified that the workload for complete farmer registration was too much for some the parish chiefs, especially those that had a high number of villages. This was mainly seen in Nawandala Sub County where a parish chief had an average of 7 villages. This contributed to slow and incomplete data enumeration.
- c) Most of the parish chiefs were not able to either complete the exercise in time or complete the registration at all. For some the exercise was not of interest to them while others were too busy. Some parish Chiefs enumerated about 20% of the Households in their parishes.
- d) Some books were destroyed due to poor handling and others stolen from Parish Chiefs hence incomplete data entry.
- e) Lack of adequate equipment for data entry. The pilot was run with data collection being done through paper-based registers, which were later on entered by extension workers using tablets. However, the tablets were not enough and had to be shared which subsequently slowed down the whole process.

### **8.2 Recommendations**

- a) There is need to carry out rigorous sensitization of the farmers on the importance of the farmer registration exercise and the benefits therein for less resistance henceforward-easier data collection while in the field. There should be collaboration between MAAIF and the district teams (including political leadership) in carrying out these sensitization activities.
- b) Purchase of more tablets to be used by the enumerators such that data entry is done at the point of data collection. This shall eliminate the duplication of effort and inefficiency that has been observed during the pilot.
- c) Creating awareness and dissemination of the guidelines for the extension grant which clearly highlights the role of the extension staffs and parish chiefs in the data collection activities and facilitations for seasonal data collection. This will ensure / support

sustainability of the data collection processes and activities with in the Lower Local Governments.

- d) It is important to note that, several challenges were faced while using the parish chiefs in registering the farmers. However, the use of enumerators/research assistants can ensure prioritization of the farmer registration exercise by the parish chiefs while still carrying out their day-to-day activities. This can be achieved by enumerators undertaking the first complete enumeration of the farmers as a onetime activity and annual updates thereafter done by the parish chiefs routinely on the farmer register.
- e) The parish chiefs should be facilitated according the amount of work they have to undertake. This is attributed to the fact that some parishes have more villages than others.

### **8.3 Planned Way Forward**

- a) Dissemination of the farmer register report to the District Officers for input and ownership.
- b) Roll out the crop and livestock tools in the second season of 2020 in Iganga District. The tools are to be administered by the Parish Chief with support from Extension Workers and LC1 Chairpersons.
- c) Lessons learnt to be used during the Phased Data collection roll out to the other districts, which will involve Training Parish Chiefs, Extension Staff and Deployment of Parish Chiefs and Extension Staff.

### **8.4 Conclusion**

The design of RAADRS is a well thought put process that could solve the problem of regular data collection in the agricultural sector. However, the process needs to be incorporated not only the government structures but also in the “culture” of work within the Local Governments. This calls for a concerted effort from all relevant authorities right from the lowest level of administration up to MAAIF.

## ANNEX

### 9.1 Average Number of Animals

Livestock Type	Number
Cattle - Ankole Long Horned	3
Cattle - Short Horn Zebu	3
Cattle Exotic/Improved - Diary	4
Cattle Exotic/Improved - Beef	4
Goat - Exotic/Improved	4
Goat - Indigenous	4
Sheep - Exotic/Improved	9
Sheep - Indigenous	5
Pigs - Indigenous/Exotic/Improved	6
Rabbits	16
Dogs	3
Poultry - Indigenous	12
Poultry Exotic - Broilers	70
Poultry Exotic - Layers	65
Poultry Breeders- Broilers	33
Poultry Breeders - Layers	27
Ducks	7
Turkeys	7

## 9.2 Average Number of Animals by sex of Household Head

LIVESTOCK TYPE	SEX OF HH Head	Average Number
Ankole Long Cattle	Male	3
	Female	3
Short Horn Zebu Cattle	Male	3
	Female	3
Exotic Diary Cattle	Male	3
	Female	4
Exotic Beef Cattle	Male	4
	Female	4
Exotic Goat	Male	4
	Female	4
Indigenous Goat	Male	4
	Female	4
Exotic Sheep	Male	8
	Female	11
Indigenous Sheep	Male	4
	Female	5
Pigs	Male	6
	Female	7
Rabbits	Male	16
	Female	10
Dogs	Male	2
	Female	3
Indigenous Poultry	Male	12
	Female	12
Exotic Broilers	Male	77
	Female	64
Exotic Layers	Male	72
	Female	55
Breeders Broilers	Male	28
	Female	41
Breeders Layers	Male	25
	Female	31
Ducks	Male	7
	Female	8
Turkeys	Male	7
	Female	6