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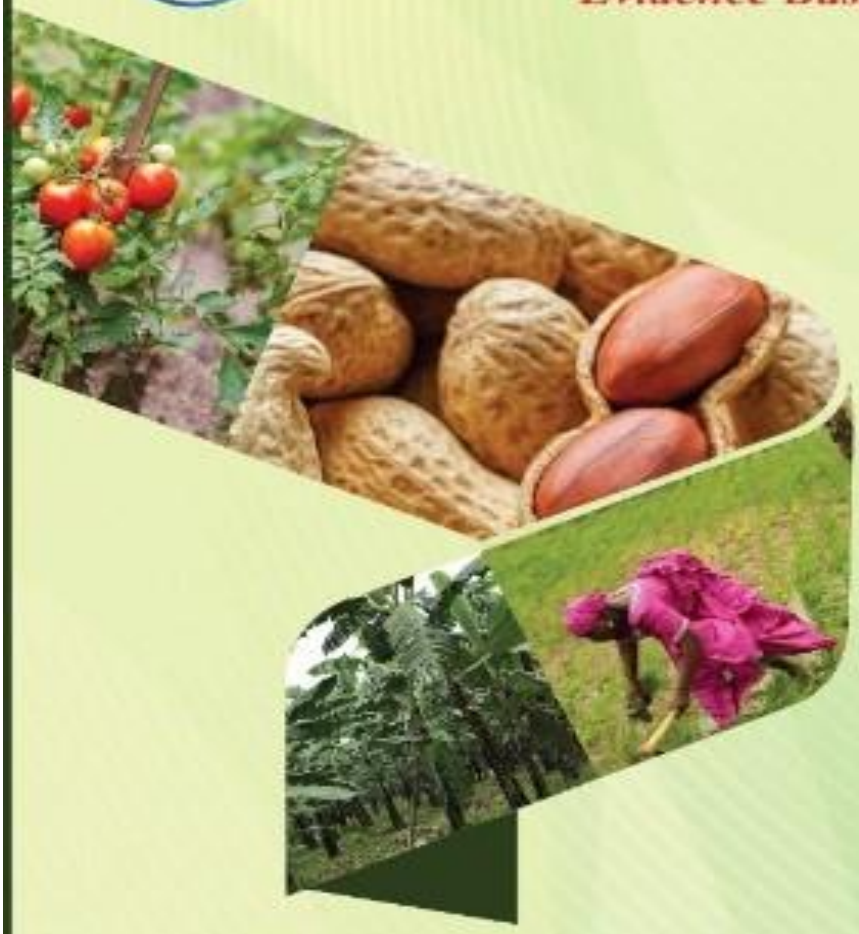

ANNUAL AGRICULTURE SURVEY(AAS) 2020

Food and Agriculture Organization of the United Nations

USAID FROM THE AMERICAN PEOPLE

50x2030

December 2022

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Foreward

The intent of the vision 2040 is to transform Ugandan society from a peasant to a modern and prosperous country within a period of 30 years. The vision of the Strategic Plan for Agricultural Statistics 2018/19 – 2024/25 is to provide quality data generated from an integrated and coordinated agricultural and rural statistics system. The data is critical for measuring the transformative agenda of the various development frameworks. The Annual Agricultural Survey is one of the initiatives aimed at achieving the sustainable development and production of agricultural statistics that are essential to inform planning and decision-making on agriculture, in the country.

The Uganda Bureau of Statistics in collaboration with the Food and Agriculture Organization (FAO) of the United Nations is pleased to present the findings from the Uganda Annual Agriculture Survey of the year 2020. This survey is the fourth in a series of surveys conducted since 2017 by Uganda Bureau of Statistics (UBOS) in collaboration with the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), and FAO. Prior to the Annual Agriculture Survey (AAS) series, several agriculture censuses were conducted.[1] The annual agricultural surveys are important in providing agricultural statistics necessary for tracking and monitoring performance of key micro- and macro-indicators. They, too, provide evidence to inform the country's agricultural development policies.

This survey was conducted by UBOS in close collaboration with the MAAIF and the FAO. Unlike in the 2018 and 2019 Annual Agricultural Surveys, that adopted the Agricultural Integrated Survey (AGRIS) methodology, the scope of the current analysis is less ambitious as the AAS 2020 adopted a reduced approach, due to survey implementation challenges faced during the COVID-19 pandemic.

The Uganda Bureau of Statistics welcomes comments from stakeholders that aim to enhance the quality of future publications. Soft copies of this report are available at both UBOS and FAO websites.[2]

It is our sincere hope that the statistical information in this publication will be useful to make future informed decisions.

Chris N. Mukiza (PhD)

EXECUTIVE DIRECTOR

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[1] *An* Agriculture *Census was conducted in 1963/65: a National Census of Agriculture and Livestock in 1990/91, by the Ministry of Agriculture*; a Uganda Livestock Census in 2008; and a Uganda Census *of Agriculture 2008/9.*

[2] See https://www.ubos.org/?pagename=explore-publications&p_id=2

Acknowledgements

The Annual Agricultural Survey 2020 was conducted with financial support of the Government of Uganda, USAID and the *50x2030 Initiative to Close the Agricultural Data Gap*, a multi-partner programme implemented by FAO, the International Fund for Agricultural Development (IFAD) and the World Bank, to bridge the agricultural data gap in 50 countries by 2030.

The survey was implemented in close collaboration with the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF). Under the umbrella of the 50x2030 Initiative, UBOS received technical support from FAO during the survey design, data processing and data analysis.

The Bureau appreciates the financial support received from development partners, the technical assistance provided by FAO and the continued cooperation with MAAIF. Similarly, UBOS is grateful to its staff that worked in the office and field, MAAIF, local governments and all the respondents for their support in the development of this publication.

Acronyms and abbreviations

AAS	Annual Agricultural Survey
ACF	Agricultural Credit Facility
AI	Agro-industrialisation
Ag HH	Agricultural Household
Ag HHs	Agricultural Households
CAADP	Comprehensive Africa Agriculture Development Programme
CAPI	Computer Assisted Personal Interview
EA	Enumeration Area
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross domestic product
GOU	Government of Uganda
GPS	Global Positioning System
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MDI	Micro Deposit-Taking Institution
NARO	National Agricultural Research Organization
NFA	National Forestry Authority
NGO	Non-Governmental Organisation
NSA	Non-State Actors
NDP	National Development Plan
PFI	Participating Financial Institution
PSU	Primary Sampling Unit
SACCO	Savings and Credit Cooperative Society
SDG	Sustainable Development Goal
SSU	Secondary Sampling Unit
TLU	Tropical Livestock Unit

UBOS	Uganda Bureau of Statistics
UCA	Uganda Census of Agriculture
UGX	Ugandan Shillings
UDBL	Uganda Development Bank Ltd
UNHS	Uganda National Household Survey
ZARDI	Zonal Agricultural Research and Development Institutes

Executive summary

Importance of the agricultural sector – crops and livestock

The findings of the AAS 2020 reaffirm the agriculture sector's key position as the main employer and revenue earner in Uganda's economy. About 7.18 million households are engaged in agricultural activities, including crop production and livestock keeping, and in 2020, there was a four percent increase compared to 6.9 million agricultural households in 2019. The majority of the agricultural households are in the South Buganda (11.8 percent) and North Buganda (11.6 percent) sub-regions, while Karamoja sub-region (2.7 percent) has the lowest percentage of agricultural households (Ag HHs).

Characteristics of agricultural households

Among the agricultural households, about 77 percent are male headed and both countrywide as well as within each sub-region, apart from Karamoja (65 percent), are literate. Further, literacy levels of the household heads are generally high across the country where about 70 percent of household heads can read and write. A notable exception however is that of Karamoja where about 90 percent of female agricultural household heads are illiterate. Disaggregated analysis of literacy by gender shows that more male than female heads are literate across all sub-regions.

Slightly over a third of all household heads (37 percent) are in the 45-64 years age bracket, and nearly a quarter (24 percent) are in the 35-44 age bracket. Household heads under 35 years constitute a quarter of all agricultural household heads, while those aged above 64 make up 16 percent.

An analysis of the age dependency ratio shows that for every working-age person, there are 9.3 dependents. Across the sub-regions, the ratio is nearly similar to the national average except for that of Karamoja, where each working person has 13 dependents, indicating a relatively high dependency ratio.

Skewed land distribution

The distribution of agricultural parcels size among Ugandan farm households varies widely from 0.2 hectares in Kigezi to 1.2 hectares in Teso, on average. The average operated parcel size in the country is 0.6 hectares and each household operated two parcels on average per season. Farmers in Acholi (1.3 ha) and Teso (1.2 ha), North Buganda (0.8 ha) and Bunyoro (0.8 ha) sub-regions have larger parcel sizes than the national average (0.6 ha). With regard to total landholding, the average size per agricultural household land size ranges from 0.5 hectares in Karamoja, Bukedi and Teso (each 0.6 ha) to 4.3 hectares in Acholi, with the national average at 1.2 hectares. The total planted area is however lower, with a national average of 0.8 hectares. The sub-regions of Bunyoro, Lango, Acholi, and Teso cultivated at least 1.0 hectares on average, while farmers in Kigezi cultivated less than half of a hectare (0.4 ha).

Countrywide, on average, 40 percent of agricultural households have landholdings of less than 0.5 hectares, and only 13 percent hold over 2.0 hectares. In Karamoja and Kigezi, over 90 percent and about 69 percent, respectively, of agricultural households hold less than 0.5 hectares. Within Acholi, 63 percent of agricultural

households have landholdings of more than 2.0 hectares on average. Across the country, households own about 78 percent of agricultural parcels, and the rest are either rented or borrowed for use.

Management of production activities

Farmers' crop production practices show a marginal preference for the first season to the second, and for cultivating crops in "pure stand" rather than under a mixed cropping system. In the second season, nearly 22 million plots with an area of approximately 12.8million acres were cultivated while in the first season, 18 million plots covering nearly 11.6 million acres were cropped. On the one hand, most of the land under cultivation in both seasons was in the Zonal Agricultural Research and Development Institutes (ZARDIs) of North Buganda, Bunyoro, South Buganda and Busoga, while on the other, Kigezi and the semi-arid and pastoralist Karamoja sub-regions had the least amount of land under crops. In each of the two seasons, at least 60 percent of the total cropped plots were in a pure stand cropping system, countrywide.

Extension services

Agricultural households' access to extension services is generally low with only 14 percent having accessed the services in the year 2020. Among those agricultural households that accessed extension services, 44 percent received the services from the local government, 27 percent from Non-Governmental Organisations and 21 percent from input suppliers. Of the three principal topics, households sought extension advice on crop production which was the most popular and sought by 56 percent of farm households that received extension services, followed by animal health and management (20 percent), and input use (12 percent). Extension services are largely provided free of charge and only about two percent of agricultural households that received the service, had paid for it.

Production estimates for five key crops

In both the first and the second seasons, maize, beans, sweet potatoes, cassava and banana food (matooke) were the five key crops produced in the 2020 cropping year.

In the first and second seasons, 52 percent and 57 percent of agricultural households, respectively, produced **maize**. We estimated maize production at approximately 3.5 metric tons (MT) in an area of approximately 2.0 million hectares, and a productivity of 2.2 metric tons per hectare (MT/ha).

Beans were produced by 45 percent and 53 percent of agricultural households in the first and second seasons, respectively. Bean production was estimated at approximately 670,000 MT in 1.13 million hectares and an estimated yield of 0.8 MT/ha on average.

Sweet potatoes were cultivated by 22 percent of agricultural households in the first season and 36 percent in the second. The production of sweet potatoes was approximately 1.2 million MT in about 466,000 hectares and the yield was estimated at 5.0 MT/ha.

Approximately 44 percent and 55 percent of agricultural households produced **cassava** in the first and second seasons, respectively. About 1.7 million MT of cassava was produced in approximately 740,000 hectares and the yield was about 2.3 MT/ha.

Banana-food, also commonly known as matooke**,** was produced by 56 percent of agricultural households in the first season and 59 percent in the second. Approximately 11.1 million MT of banana-food were produced in about 722,000 hectares, and the yield was estimated to be 15.4 MT/ha.

Robusta coffee was cultivated by 24 percent of agricultural households in the first season and 25 percent in the second season in approximately 369,000 hectares, with a total production of 233,000 MT and a yield of 0.6 MT/ha.

Arabica coffee is more prominent in the highland areas of Uganda, i.e. Tororo and Elgon sub-regions. Overall, seven percent of agricultural households produced coffee arabica in about 82,000 hectares. Arabica coffee's production in 2020 was 43,000 MT with a yield of 0.5 MT/ha.

1 INTRODUCTION

1.1: Background

Agriculture is a key sector in Uganda's economy. According to the Uganda National Household Survey (UNHS) 2019/20, the highest percentage of the working population (68.1 percent) work in the agricultural sector. Agriculture is the third most important sector, contributing about 24.1 percent to Gross Domestic Product (GDP) at current prices in 2021/22. The Uganda National Population and Housing Census (NPHC 2014) indicates that approximately 90 percent of the population resides in rural areas and 80 percent of Ugandan households are engaged in agriculture.

The National Development Plan III (NDP III) identifies agriculture as a driver of key growth opportunities with great potential to generate employment with positive multiplier effects on other sectors, including manufacturing and services. Under the plan, commercialization of agriculture is expected to increase production and productivity along the value chains, agro-processing and marketing, and to serve as a launching pad for industrialization.

Although agriculture plays a significant role in poverty reduction, it is also considered a contributor to: global warming, water scarcity, pollution and land degradation, all resulting from attempts to increase production to feed the growing world population. It is critical that quality agricultural statistics are provided for evidence-based decision-making and policy development, to improve the performance of the sector so that it meets national food security needs and reduces poverty through employment creation. Furthermore, updated statistics are needed to better understand cross-cutting issues, such as population growth, impact on natural resources, competing use of food crops, gender disparities and climate change, and their effects on food security and poverty.

The objective of this publication, the fourth in a series of Annual Agricultural Survey reports, is to provide high-quality statistics for the implementation and monitoring of development programmes and policies, such as the NDP III, the Comprehensive Africa Agriculture Development Programme (CAADP) 2015-2025 and the United Nations 2030 Agenda for Sustainable Development.

The publication contains statistical information on a wide range of agricultural production indicators, including agricultural holder characteristics (e.g. sex and level of education), crop area, production and yield, seeds application, farmer training, livestock and other agricultural practices.

1.2: Objectives

The overall objective of the Annual Agricultural Survey (AAS) is to provide high-quality and current agricultural statistics on priority core macro and micro development indicators.

The specific objectives of the AAS are to provide timely data and information:

a. on crop and livestock production, agricultural land area, values of agricultural outputs and inputs, market information, farm income, food security, gender and environment.
b. for assessing the adoption of appropriate agricultural production practices in different agro ecological zones in Uganda.
c. on the adoption and use of livestock production technologies.

1.3: Scope and coverage

The AAS 2020 collects data for an agricultural year (from January to December 2020). In Uganda, the agricultural year consists of two seasons. The first season is from January to June and the second season runs from July to December. Each season, agricultural households (Ag HHs) are interviewed twice: during visits carried out in the post-planting and the post-harvesting periods.

The AAS covers the ten agroecological zones, or ZARDIs (Zonal Agricultural Research and Development Institute), in Uganda and the 14 statistical sub-regions. These ZARDIs are characterized by similar climatic conditions, land use and cropping patterns. Below are maps of the sub-regions and ZARDIs. A detailed list of the districts within each ZARDI and sub-region is available in Annex I, Table 1- 1.

The AAS 2020 covered only household sector holdings, i.e. agricultural households. The non-household sector holdings will be covered in subsequent years. The survey covered both crop and livestock farming households and collected data on various structural characteristics of the agricultural holding, such as:

a. number and size of holding.
b. land tenure system.
c. demographic and socio-economic characteristics of the household members and non-structural statistics, such as:

    - crop area, production and disposition.
    - crop sales and value of crop production.
    - livestock numbers and livestock production.

Figure 0:1. Map of the ZARDIs in Uganda

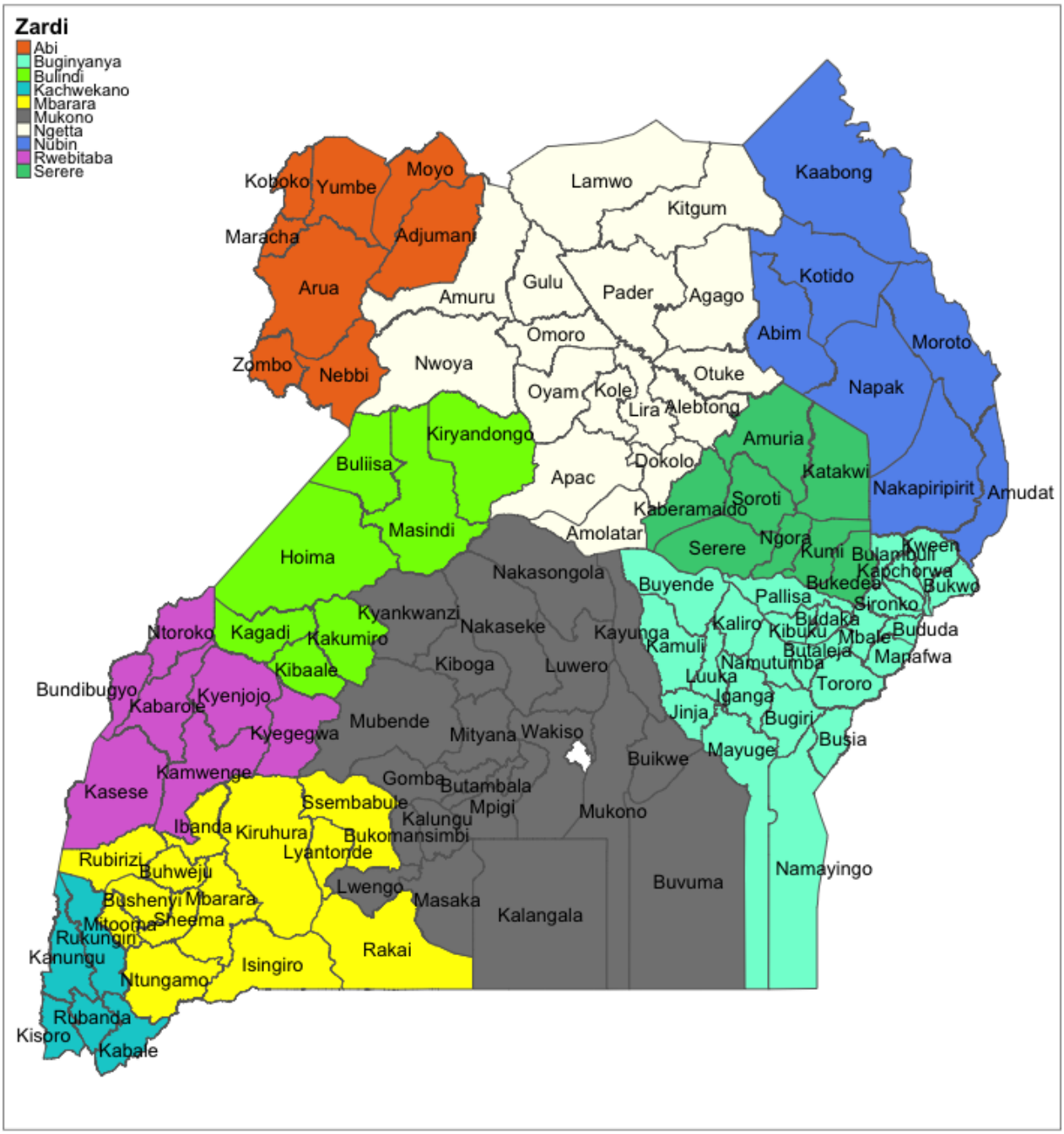
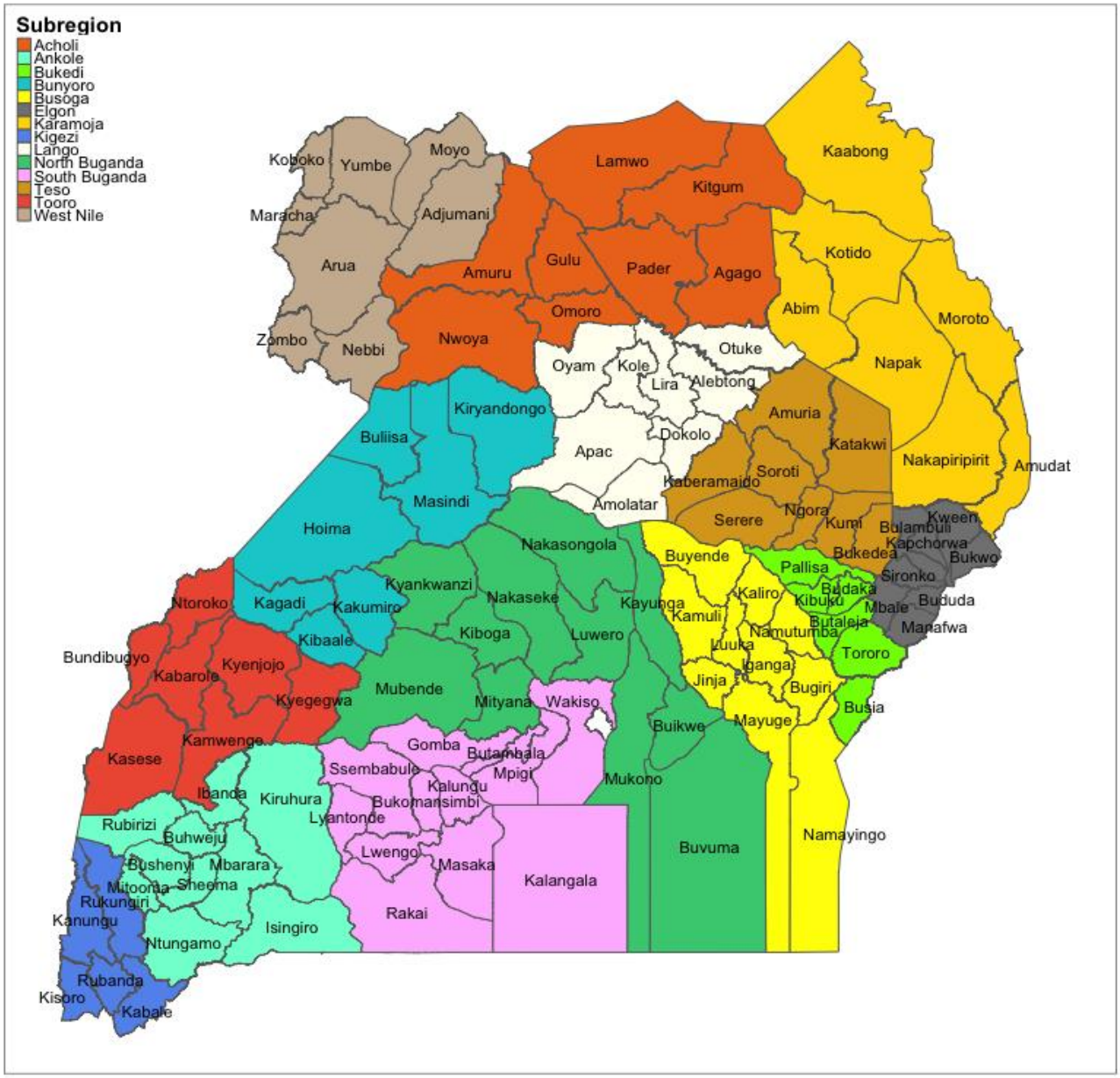


Figure 0:2. Map of the sub-regions in Uganda



1.4: Survey methodology

To ensure high-quality output, the survey adopted a rigorous statistical process. The main activities undertaken included survey organisation; sampling design; tabulation and plan preparation; design of survey questionnaires; training of trainers/supervisors and enumerators; data collection; field supervision and consistency checks; and data processing.

1.4.1: Survey organisation and data collection

The Annual Agricultural Survey for the year 2020 was implemented by the Uganda Bureau of Statistics in collaboration with the Ministry of Agriculture, Animal Industries and Fisheries, and the Food and Agriculture Organization of the United Nations. It was funded by the Government of Uganda and the *50x2030 Initiative to Close the Agricultural Data Gap.*[1]

The headquarter team had the responsibility of overseeing the planning, operation and management of the entire survey process. The team included staff from the department of production and environment statistics of Uganda Bureau of Statistics. A centralized approach to data collection was used. This entailed dispatching 14 field teams to different sub-regions from which enumeration areas had been sampled. Each team consisted of, on average, one supervisor, three enumerators and a driver.

The Annual Agricultural Survey (AAS 2020) adopted three main questionnaires: the post-planting (PP), the post-harvest (PH) and the livestock and holding questionnaires. Normally, the PP and PH questionnaires are administered each season, while the livestock and holding questionnaire is administered at the end of the second season and covers the entire agricultural year. Nonetheless, in the AAS 2020, a different survey calendar was adopted due to movement limitations imposed as a result of the COVID-19 pandemic.

The dates of data collection were:

First visit	from November 2020 to February 2021
Second visit	from March to May 2021

The first visit collected the post-planting and post-harvest data for the first season and post-planting data of the second season. The second visit collected post-harvest data for the second season and the annual modules (including livestock). A detailed description of the questionnaire can be found in section 1.4.5.

The interviewing technique used for data collection was the Computer Assisted Personal Interview.

1.4.2: Sampling design

A two-stage sampling design was adopted for the AAS 2020. To increase the efficiency of the sample design, the sampling frame was stratified in ten Zonal Agricultural Research and Development Institutes. In each stratum, the first stage involved the selection of the Primary Sampling Units, which are the enumeration areas

[1] *The 50x2030 Initiative is a multi-partner effort that seeks to bridge the global agricultural data gap by transforming country data systems across 50 countries in Africa, Asia, the Middle East and Latin America by 2030. Building on the best practices promoted by the FAO's AGRIS methodology and the World Bank's LSMS-ISA approach, the 50x2030 Initiative aims to establish efficient agricultural statistical systems in partner countries as a response to the need for better, cost-effective and timely statistical data in the agricultural and rural sector.*

and the second stage dealt with the selection of the Secondary Sampling Units, which are the agricultural households.

The survey covered households cultivating crops and/or raising livestock. No minimum threshold on the amount of land cultivated or animals raised was set. Therefore, the survey also covered households cultivating few crops or raising a limited number of animals.

The survey did not aim to generate estimates concerning aquaculture, forestry and fisheries.

1.4.3: Sample size

The survey generates estimate representative at national, regional and sub-regional levels (for instance, the Zonal Agricultural Research and Development Institutes and the statistical sub-regions). A sample of 593 enumeration areas (EAs) and an average of 12 agricultural households (Ag HHs) were selected from each Enumeration Area.

1.4.4: Response rate

Overall, a sample of 7,115 Ag HHs were selected for the Annual Agricultural Survey for the year 2020 (AAS 2020). The response rate was approximately 95 percent of the households that were visited.

Table 0:1. Response rate by visit and sub-region*

Sub-region	Both visits	Visit 1 only	Visit 2 only	Complete non-response	Total expected	Response rate (%)
South Buganda	428	43	28	100	599	83.3
North Buganda	553	15	11	21	600	96.5
West Nile	459	34	10	25	528	95.3
Lango	435	5	3	1	444	99.8
Acholi	377	12	19	12	420	97.1
Kigezi	453	14	8	5	480	99.0
Bunyoro	439	50	15	36	540	93.3
Tooro	522	3	0	15	540	97.2
Busoga	396	52	29	99	576	82.8
Teso	393	13	9	17	432	96.1
Bukedi	434	11	11	12	468	97.4
Elgon	414	15	16	23	468	95.1
Karamoja	353	2	5	0	360	100.0
Ankole	601	20	17	22	660	96.7
Uganda	**6,257**	**289**	**181**	**388**	**7,115**	**94.5**

Notes: **Calculated from the post-planting and post-harvest data of each season. The figures are un weighted.*

1.4.5: Survey questionnaires

1. The AAS 2020 **post-planting questionnaire** collected information on:

- household member socio-demographic characteristics.

- agricultural enterprises undertaken by the household in the current agricultural season.
- land use (parcel and plots used by the agricultural households, land area, seed/seedlings utilization, etc).

The main objective of post-planting questionnaire was to estimate land areas for crops planted. This was done by combining objective measurements (for instance, the Global Positioning System) on the plots and parcels, and collecting the share of land area covered by each crop on each plot, based on the farmer's assessment.

2. The Annual Agricultural Survey for the year 2020 **post-harvest questionnaire** collected information on:

- household member socio-demographic characteristics (only for new household members).
- crop production and disposition (use).

The main objective of the post-harvest questionnaire was to collect data on the crops harvested by the agricultural households based on farm declarations.

3. The **livestock and holding** characteristics questionnaire collected information on:

- animals raised on the holding.
- livestock production and dispositions.
- access to agricultural information.
- access to means of transport.
- access to storage facilities.
- access to extension services.

The main objective of the livestock and holding characteristics questionnaire was to collect data on livestock capital, animal production and inputs over a 12-month reference period. It covered the entire agricultural year 2020. In addition, it collected data concerning household and holding characteristics, such as access to markets and information.

The questionnaires were first designed in a paper format and then transformed into an electronic version, using survey solutions. The electronic version of the questionnaires was pre-tested and refined before data collection.

1.4.6: Training and fieldwork

After recruitment of field staff, the supervisors and enumerators were provided training on the relevant concepts and definitions, the interview process and how to use CAPI for data collection. The training involved field tests of the questionnaires to ensure the collection of high-quality data.

To ensure high data quality, the headquarter team also monitored the field activities closely through field supervision to provide technical backstopping. The leaders/supervisors electronically reviewed all interviews

conducted daily, to ensure consistency before synchronizing the findings. These interviews were subsequently reviewed at the headquarters before being approved.

1.4.7: Data processing and management

All the data captured from the field were stored in a cloud storage system with a local backup. Editing and validation was carried out electronically using STATA software. Before analysis, dummy tables were prepared based on a predesigned tabulation plan. Final tables were run using the STATA package.

1.4.8: Sampling error estimates

The accuracy of the survey results depends on the sampling and the non-sampling errors. The AAS 2020 had a sufficiently large and representative sample which helped limit sampling errors. On the other hand, the non-sampling errors that arise during data collection were controlled through the training of the data collectors, field supervision by the headquarter team, and a well-developed CAPI programme. The coefficients of variation and confidence intervals for selected indicators at national, ZARDI and sub-regional levels are presented in the Annex tables.

1.5: Structure of the report

The report comprises seven chapters, namely: (1) Introduction (2) Agricultural Households and Holding Characteristics (3) Agricultural Land (4) Agricultural Practices and Inputs (5) Agricultural Services (6) Farmer Groups and Trainings (6) and (7) Crop Area, Production and Disposition. An update of this edition, including data on livestock and livestock production, will be released at a later date.

2 AGRICULTURAL HOUSEHOLDS AND HOLDING CHARACTERISTICS

2.1: Introduction

This chapter provides information on the distribution of agricultural households across the country; distribution of agricultural household heads by sex, educational level and literacy; the economic activities of agricultural household members; and youth employment and training in agriculture. Details are also provided on the distribution of agricultural households (Ag HHs) in the first and second agricultural seasons of the year 2020, and in both seasons combined. Social and demographic characteristics for Ag HHs refer to the first agricultural season.

2.2: Distribution of Agricultural Households by sub-region

The estimated number of Agricultural Households for the year 2020 was 7.18 million. This was a 3.5 percent increment from the 6.94 million Ag HHs estimated in the year 2019. In 2020, the highest percentage of agricultural households were in South Buganda (11.8 percent), followed by North Buganda (11.6 percent) while the lowest was in Karamoja (2.7 percent).

In the first season, the total number of Ag HHs was approximately 6.81 million. Among the sub-regions, North Buganda had the highest percentage of Ag HHs (11.8 percent), followed by South Buganda (11.6 percent) while the lowest was in Karamoja (2.7 percent).

In the second season, the number of Ag HHs increased by approximately 4.4 percent to 7.11 million. Among the sub-regions, the highest percentage of agricultural households in the second season was in South Buganda (11.9 percent) and the lowest was in Karamoja (2.2 percent). Details of the results are shown in Table 2:1 and Annex 2, Tables 2- 1 and 2- 2.

Table 2:1. Distribution of agricultural households by sub-region

Sub-region	2019 Ag year	2020 Ag year	Percentage (2020)
South Buganda	832,647	848,590	11.8
North Buganda	806,354	829,960	11.6
Busoga	725,688	794,024	11.1
Ankole	611,471	620,959	8.6
Tooro	582,410	606,480	8.4
West Nile	505,252	517,545	7.2
Bunyoro	487,860	505,176	7.0
Lango	445,133	458,390	6.4
Bukedi	378,931	393,920	5.5
Elgon	387,595	401,508	5.6
Teso	363,324	379,790	5.3
Acholi	318,145	324,632	4.5
Kigezi	304,803	308,540	4.3
Karamoja	187,169	192,428	2.7
Uganda	**6,936,782**	**7,181,943**	**100.0**

Note: **Table extracted from the post-planting and post-harvest data for each season of the 2020 agricultural year.*

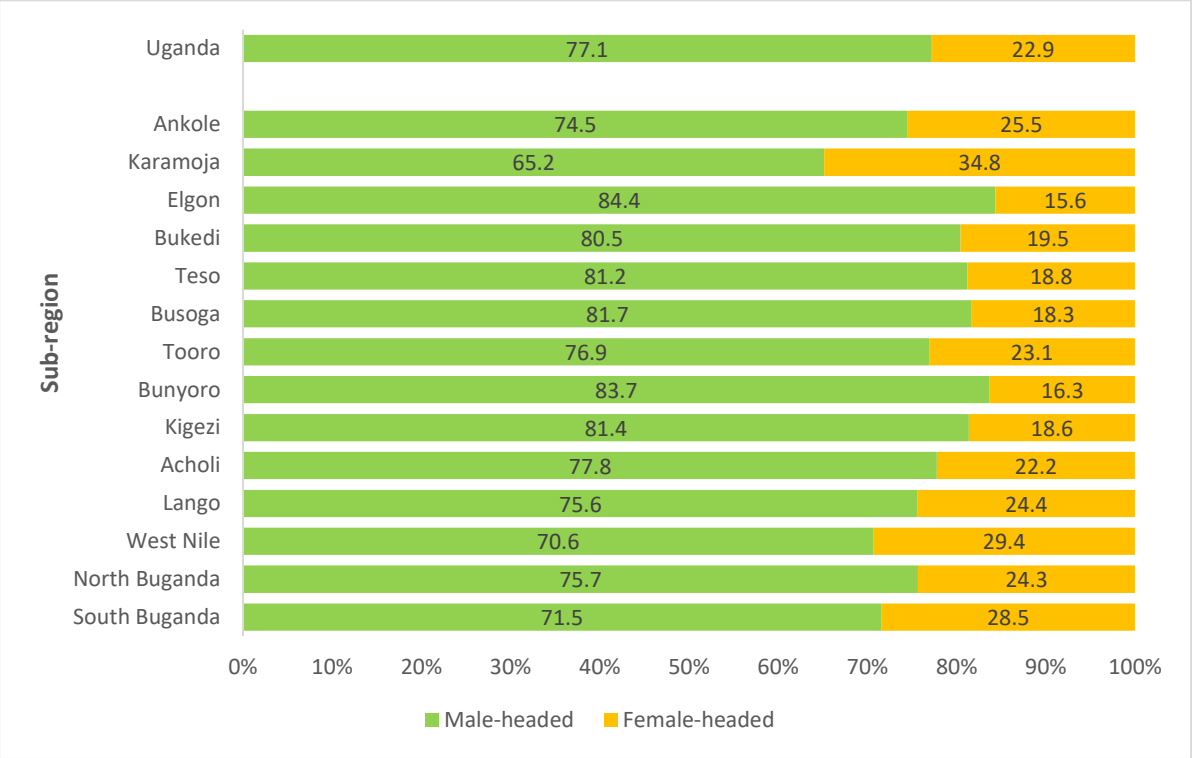
2.3: Percentage of Agricultural Households by sex of the head and sub-region

In the first season of the year 2020, approximately 77.1 percent of agricultural households in Uganda were headed by males and 22.9 percent by females.

Across the sub-regions, the highest percentage of male-headed households was registered in Elgon (84.4 percent) while the lowest percentage was in Karamoja (65.2 percent).

The details are provided in Figure 2:1 and Annex 2, Tables 2-3 and 2-4.

Figure 2:1. Percentage distribution of Agricultural Households by sex of the head and sub-region*



Note: * *Figures in this table have been computed using data from both post-planting and post-harvest visits of the first season.*

2.4: Percentage distribution of literate Ag HH heads by sex and sub-region

As part of the AAS 2020, data was collected on the literacy of Ag HH heads. Literacy refers to the ability of an individual to read and write with understanding in any language.

The sub-regional distribution of the literate Ag HH heads indicated more than 70 percent of the male heads able to read and write. The highest percentage of literate males was recorded in South Buganda (88.7 percent) and the lowest in Karamoja (26.8 percent). In contrast, the percentage of literate female heads among the sub-regions was low, with the highest percentage being in South Buganda (68.1 percent) and the lowest being in Karamoja (9.2 percent).

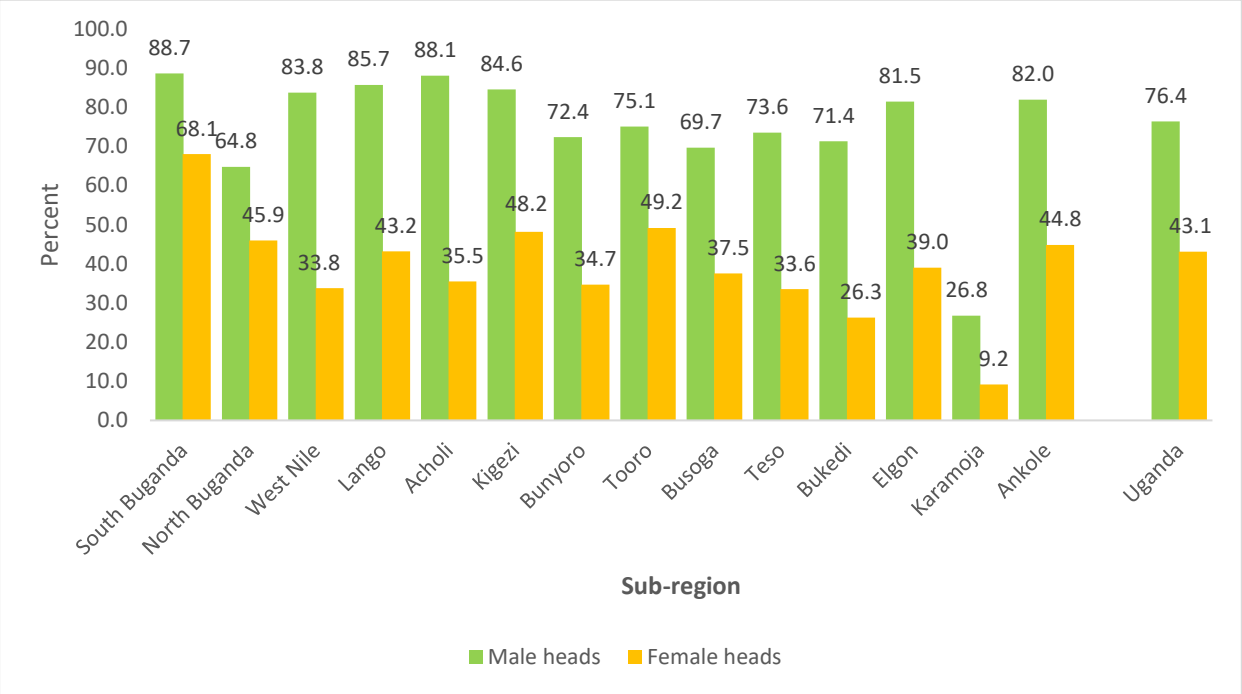
Overall, 69 percent of Ag HH heads were able to read and write in any language, and 77 percent of male Ag HH heads were literate as compared to 43 percent of the female Ag HH heads.[2]

The details are provided in

Figure 2:2 and in Annex 2, Tables 2- 5 and 2- 6**.**

[2] This is specific to agricultural household heads. The national literacy rate (for persons aged 10 years and above) is 76 percent (UBOS, 2021).

Figure 2:2. Percentage distribution of Agricultural Household heads who can read and write by sex and sub-region



Note*: * Figures in this table have been computed using data of the first season post- planting and post-harvest visits*.

2.5: Education level attained by Agricultural Household heads by sex and sub-region

The survey collected information on the highest level of education completed by Agricultural Household heads. Data was collected based on the following categories: those who had never been to school, had attained primary level, secondary level and beyond.

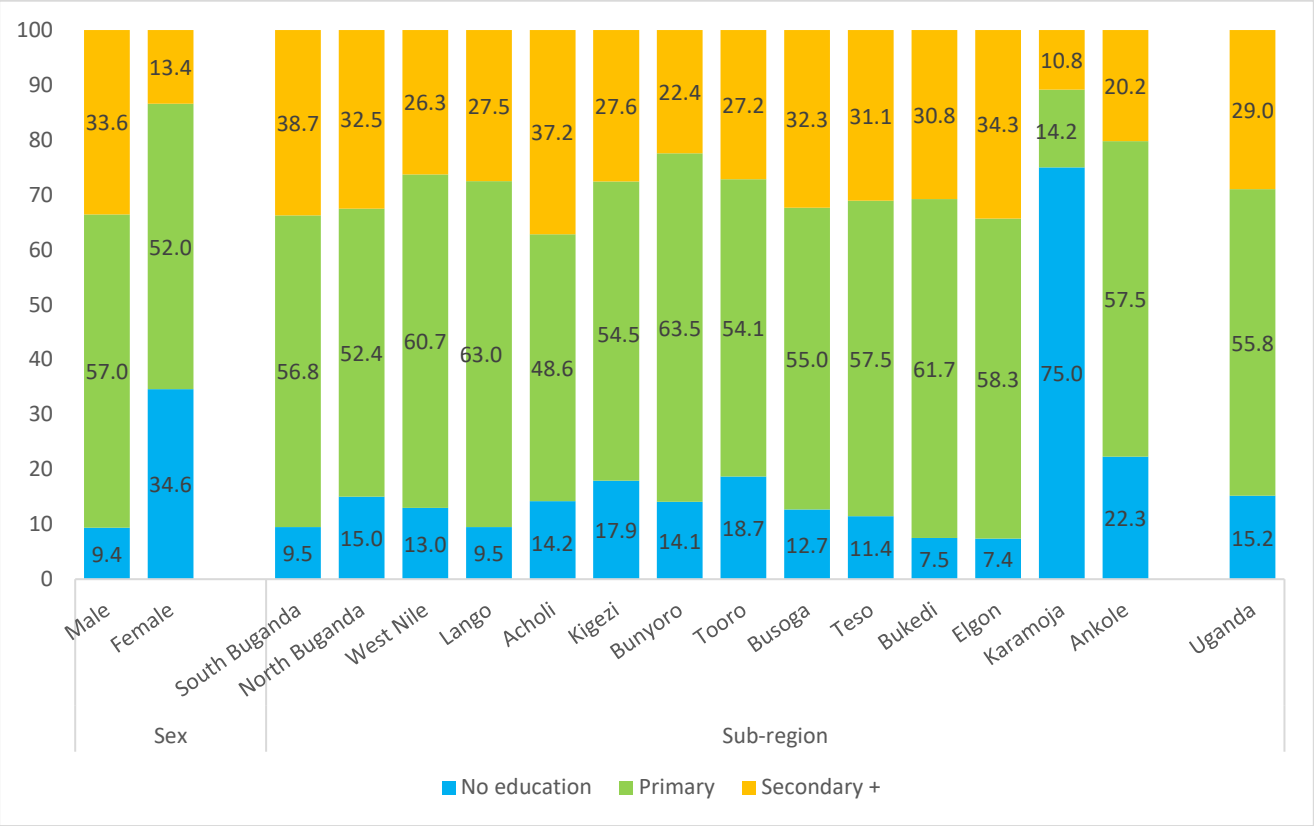
Primary education was the highest level attained by most of the Ag HH heads (55.8 percent) while 29.0 percent attained a secondary education and above, and 15.2 percent did not attain any education. The percentage of the Ag HH heads with no education was substantially unchanged in the year 2020 compared with the previous year.

Disaggregation by sex shows that the proportion of female heads with no formal education (34.6 percent) was almost four times their male counterparts (9.4 percent). Further, the male heads who had attained a secondary education and beyond (33.6 percent) were more than twice the female heads (13.4 percent).

The survey shows more than 50 percent adult Ag HH heads within each sub-region having attained a primary level of education, apart from Acholi (48.6 percent) and Karamoja (14.2 percent). In addition, the percentage of those who had attained secondary education and beyond was quite high, mostly exceeding 25 percent,

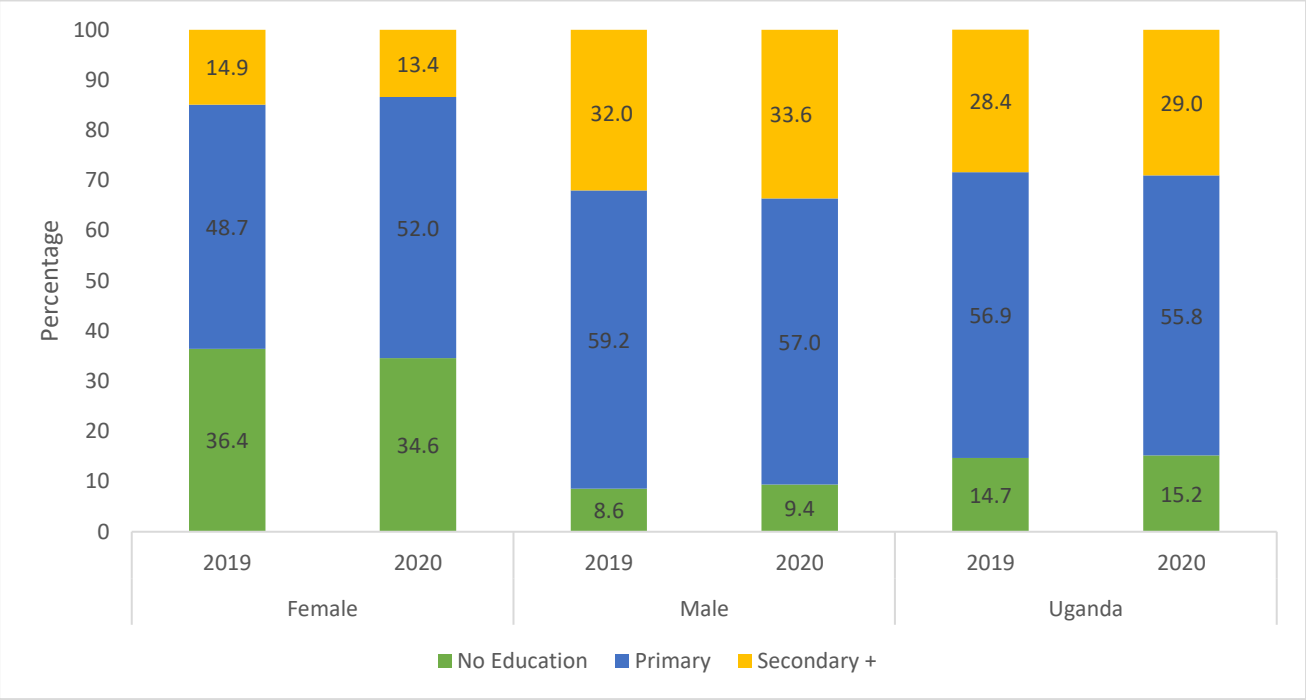
except for Ankole (20.2 percent) and Karamoja (10.8 percent) sub-regions. The highest percentage of adult Ag HH heads that had never been to school was recorded in Karamoja (75.0 percent), followed by Ankole (22.3 percent). Notably, some household heads did not respond to questions pertaining to their highest education level. The details are provided in Table 2:4, Figure 2:3 and Annex 2, Table 2- 5.

Figure 2:3. Percentage distribution of Agricultural Household heads by highest educational level attained, by sex and sub-region*



Note: **Figures in this table have been computed using data of the first season post-planting and post-harvest visits.*

Figure 2:4. Level of education attained by Agricultural Household head and sex



2.6: Age distribution of Agricultural Household heads

The survey reveals Agricultural Household heads aged between 45 and 64 (37 percent) were the largest age group, followed by those aged between 35 and 44 (24 percent), and those under 25 years old (4 percent) were the smallest age group.

Among the male Ag HH heads, 35.4 percent were aged 45 to 64 years, followed by those aged 25 to 34 years (25.8 percent), 35 to 44 years (23.2 percent), 65 years and above (10.6 percent), and those below 25 years (5.0 percent).

Among the female Ag HH heads, the largest age group was between 45 and 64 years (42.1 percent), followed by those aged 65 years and over (32.4 percent), 35 to 44 years (17.1 percent), 25 to 34 years (7.2 percent) and less than 25 years (1.2 percent). The details are provided in Table 2:2 and in Annex 2, Tables 2-9 and 2-10.

Table 2:2. Percentage distribution of Agricultural Households head, by age, sex and sub-region*

Sub-region		Age classes					Total	
		0-24	25-34	35-44	45-64	65+		
		%	%	%	%	%	N	%
South Buganda	Male	2.0	17.7	31.2	36.5	12.7	563,596	100.0
	Female	0.6	1.7	19.1	46.5	32.1	224,219	100.0
	Total	1.6	13.1	27.7	39.3	18.2	787,814	100.0
North Buganda	Male	4.3	21.1	20.7	45.8	8.1	609,088	100.0
	Female	0.8	2.3	15.0	44.4	37.4	195,793	100.0
	Total	3.4	16.5	19.3	45.5	15.2	804,882	100.0
West Nile	Male	7.2	27.0	23.8	31.3	10.7	343,778	100.0
	Female	1.4	11.4	14.7	43.6	28.8	142,863	100.0
	Total	5.5	22.4	21.1	34.9	16.0	486,641	100.0
Lango	Male	7.3	25.3	27.4	29.0	11.1	337,108	100.0
	Female	1.3	14.1	24.4	33.4	26.8	108,601	100.0
	Total	5.8	22.6	26.7	30.0	14.9	445,709	100.0
Acholi	Male	3.7	30.1	21.7	34.0	10.4	239,720	100.0
	Female	1.1	4.1	16.3	53.5	25.0	68,403	100.0
	Total	3.1	24.4	20.5	38.3	13.7	308,123	100.0
Kigezi	Male	2.2	24.6	31.8	28.3	13.2	242,038	100.0
	Female	0.0	9.9	7.3	37.1	45.7	55,423	100.0
	Total	1.8	21.8	27.2	30.0	19.3	297,461	100.0
Bunyoro	Male	9.8	24.0	23.9	33.6	8.6	380,075	100.0
	Female	0.0	14.3	26.3	45.0	14.5	73,932	100.0
	Total	8.2	22.4	24.3	35.5	9.6	454,007	100.0
Tooro	Male	3.7	24.8	26.2	37.3	8.0	459,107	100.0
	Female	1.5	5.6	17.8	43.7	31.3	137,833	100.0
	Total	3.2	20.4	24.3	38.8	13.4	596,940	100.0
Busoga	Male	6.6	24.8	26.1	33.0	9.5	597,287	100.0
	Female	1.8	5.4	22.8	41.4	28.6	133,738	100.0
	Total	5.7	21.3	25.5	34.5	13.0	731,025	100.0
Teso	Male	1.8	25.3	28.9	34.0	10.0	296,308	100.0
	Female	0.0	3.4	13.5	59.6	23.5	68,611	100.0
	Total	1.5	21.2	26.0	38.8	12.5	364,919	100.0
Bukedi	Male	5.8	26.6	24.1	32.9	10.6	305,422	100.0
	Female	1.6	5.7	15.8	33.9	43.0	74,215	100.0
	Total	5.0	22.5	22.5	33.1	16.9	379,637	100.0

Sub-region		Age classes					Total	
		0-24	25-34	35-44	45-64	65+		
		%	%	%	%	%	N	%
Elgon	Male	7.6	17.5	24.6	38.5	11.7	321,115	100.0
	Female	0.0	11.1	9.4	35.9	43.6	59,570	100.0
	Total	6.4	16.5	22.2	38.1	16.7	380,685	100.0
Karamoja	Male	7.7	26.6	25.9	24.6	15.2	118,249	100.0
	Female	5.0	15.1	17.8	36.4	25.7	63,219	100.0
	Total	6.8	22.6	23.1	28.7	18.8	181,468	100.0
Ankole	Male	2.5	19.0	26.5	38.3	13.8	442,876	100.0
	Female	1.5	10.0	12.7	33.0	42.8	151,544	100.0
	Total	2.2	16.7	22.9	36.9	21.2	594,420	100.0
Uganda	**Male**	**5.0**	**23.2**	**25.8**	**35.4**	**10.6**	**5,255,080**	**100.0**
	Female	**1.2**	**7.2**	**17.1**	**42.1**	**32.4**	**1,557,964**	**100.0**
	Total	**4.1**	**19.5**	**23.8**	**36.9**	**15.6**	**6,813,044**	**100.0**

Notes: * *Figures in this table have been computed using data of the first season post-planting and post-harvest visits.*

2.7: Dependency ratio

Age dependency ratio (or dependency rate) compares the number of dependents aged zero to 13 years and over 65 years, with the population aged 14 to 64 years. A higher value for a country means that employed people must support more non-working members of the population, either young or old.

The dependency ratio for Uganda in the year 2020 was 93 dependents per 100 working-age population among the Agricultural Households. This was a reduction from the 95 dependents per 100 working-age population among Ag HHs reported in the year 2019. The dependency ratio varies among sub-regions. Karamoja had the highest dependency ratio of 130 while Teso had the lowest with 85 dependents per 100 working-age population.

Data is shown as the proportion of dependents per 100 working-age population.

The details are provided in Table 2:3 and in Annex 2, Tables 2- 11 and 2- 12**.**

Table 2:3.: Dependency rate by sub-region*

Sub-region	% age of individuals aged 0-13 or 65+	% age of individuals aged 14-64	Dependency rate (%) **	Total Population
South Buganda	49.5	50.5	97.8	4,572,678
North Buganda	49.6	50.4	98.3	4,717,086
West Nile	47.8	52.2	91.6	3,027,218
Lango	46.0	54.0	85.3	2,337,428
Acholi	47.0	53.0	88.6	1,970,488
Kigezi	46.2	53.8	86.0	1,626,586
Bunyoro	47.5	52.5	90.4	2,777,650
Tooro	46.8	53.2	88.0	3,371,767
Busoga	50.5	49.5	102.0	4,329,051
Teso	45.8	54.2	84.5	2,596,149
Bukedi	50.0	50.0	100.1	2,289,022
Elgon	46.8	53.2	87.9	2,214,772
Karamoja	56.5	43.5	130.0	904,867
Ankole	46.3	53.7	86.3	3,418,841
Uganda	**48.2**	**51.8**	**93.0**	**40,153,601**

Notes*: *The Table generated from the post-planting and post-harvest of the first season data. ** Dependency rate is the ratio of the number of dependents aged zero to 13 years and over 65 years to the population aged 14 to 64 years.*

2.8: Main activity for Agricultural Household heads

Economic activity refers to the work people do to enhance their quality of life. This involves production of goods and services for sale or own consumption. A person may be engaged in more than one activity. In such cases, the most important activity is the activity in which the individual spends most of his/her time.

The AAS 2020 collected information on activities of household members aged ten years and above. Activities were categorized as mainly engaged in agricultural activities or in non-agricultural activities.

Findings show most of the Ag HH heads (75.9 percent) mainly engaged in agriculture. The survey results also indicate the percentage of female Ag HH heads engaged in agricultural activities (86.7 percent) was higher compared to male Ag HH heads (72.6 percent).

Teso sub-region had the highest percentage of male Ag HH heads mainly engaged in agricultural activities (91.6 percent), followed by West Nile (87.6 percent) and Tooro (84.4 percent). South Buganda had the lowest percentage of male Ag HH heads engaged in agricultural activities (51.9 percent). In contrast, West Nile, Teso and Karamoja had the highest percentage of female Ag HH heads engaged in agricultural activities, at 96.0 percent, 95.3 percent and 94.2 percent, respectively. South Buganda (70.8 percent) and Busoga (83.3 percent) sub-regions had the lowest percentages of females mainly engaged in agriculture.

Serere and Abi had the highest percentage of Ag HH heads mainly engaged in agricultural activities (92.3

percent and 90.1 percent, respectively). Serere had the highest percentage of male Agricultural Household heads mainly engaged in agricultural activities (91.2 percent), followed by Abi and Rwebitaba (87.6 percent and 84.4 percent, respectively). Mukono had the least percentage of male Ag HH heads engaged in agricultural activities (62.2 percent). In contrast, Abi, Serere and Nabuin had the highest percentage of female Ag HH heads engaged in agricultural activities, at 96.0 percent, 95.3 percent and 94.2 percent, respectively. Mukono had the least percentage of females mainly engaged in agriculture (77.8 percent).

The details are provided in Table 2:4 and in Annex 2, Tables 2- 13 and 2- 14**.**

Table 2:4. Percentage distribution of Ag HH heads, by main economic activity and sub-region*

Sub-region	Male heads			Female heads			All heads		
	Agriculture	Out of agriculture	Total	Agriculture	Out of agriculture	Total	Agriculture	Out of agriculture	Total
South Buganda	51.9	48.1	100.0	70.8	29.2	100.0	57.3	42.7	100.0
North Buganda	70.9	29.1	100.0	86.9	13.1	100.0	74.8	25.2	100.0
West Nile	87.6	12.4	100.0	96.0	4.0	100.0	90.1	9.9	100.0
Lango	79.1	20.9	100.0	91.4	8.6	100.0	82.1	17.9	100.0
Acholi	80.4	19.6	100.0	85.1	14.9	100.0	81.4	18.6	100.0
Kigezi	63.7	36.3	100.0	87.4	12.6	100.0	68.1	31.9	100.0
Bunyoro	80.1	19.9	100.0	87.8	12.2	100.0	81.4	18.6	100.0
Tooro	84.4	15.6	100.0	92.5	7.5	100.0	86.3	13.7	100.0
Busoga	63.5	36.5	100.0	83.3	16.7	100.0	67.1	32.9	100.0
Teso	91.6	8.4	100.0	95.3	4.7	100.0	92.3	7.7	100.0
Bukedi	65.6	34.4	100.0	86.9	13.1	100.0	69.8	30.2	100.0
Elgon	67.7	32.3	100.0	90.9	9.1	100.0	71.3	28.7	100.0
Karamoja	82.5	17.5	100.0	94.2	5.8	100.0	86.6	13.4	100.0
Ankole	72.5	27.5	100.0	87.1	12.9	100.0	76.2	23.8	100.0
Uganda	**72.6**	**27.4**	**100.0**	**86.7**	**13.3**	**100.0**	**75.9**	**24.1**	**100.0**

Note: **This table is extracted from the first season PP and PH data sets.*

2.9: Status of main activity

The Annual Agricultural Survey for the year 2020 asked Agricultural Household heads about their status within their main activity. Findings in Table 2.5 indicated that during the first season, majority (86.4 percent) of adult Ag HH heads in Uganda were own account workers, followed by salaried workers at 6.7 percent. The least Ag HH heads were members of a cooperative and trainee/volunteers with 0.02 percent and 0.03 percent, respectively.

Among the sub-regions, Teso and West Nile have the highest percentages of own account workers at 93.3 percent and 92.0 percent, respectively. Kigezi has the lowest percentage of own account workers (68.7 percent).

Among the Zonal Agricultural Research and Development Institutes (ZARDIs), Serere and Abi had the highest percentages of own account workers, at 93.3 percent and 92.0 percent, respectively. Kachwekano had the lowest percentage of own account workers (68.7 percent). The details are provided in Table 2:5 and Annex 2, Tables 2- 15 and 2- 16.

Table 2:5. Percentage distribution of Agricultural Household heads by employment status, sex and sub-region

	Own account	Employer	Salaried worker	Task worker	Unpaid family member	Trainee/ volunteer/ intern	Member of cooperative	Total
Sex								
Male	83.9	1.1	8.1	5.5	1.4	0.0	0.0	100.0
Female	94.9	0.4	2.2	0.5	2.0	0.0	0.0	100.0
Sub-region								
South Buganda	87.7	2.2	4.7	5.1	0.2	0.0	0.2	100.0
North Buganda	90.4	0.6	7.3	1.7	0.0	0.0	0.0	100.0
West Nile	92.0	0.1	4.8	1.5	1.5	0.0	0.0	100.0
Lango	84.6	0.0	6.7	1.7	7.0	0.0	0.0	100.0
Acholi	91.4	0.0	5.8	2.8	0.0	0.0	0.0	100.0
Kigezi	68.7	4.7	12.5	13.4	0.7	0.0	0.0	100.0
Bunyoro	90.8	1.8	5.6	1.8	0.0	0.0	0.0	100.0
Tooro	90.0	2.8	5.3	2.0	0.0	0.0	0.0	100.0
Busoga	87.2	0.0	8.2	4.3	0.0	0.3	0.0	100.0
Teso	93.3	0.0	5.3	0.5	0.9	0.0	0.0	100.0
Bukedi	83.7	0.3	9.8	6.3	0.0	0.0	0.0	100.0
Elgon	69.7	0.0	7.7	7.3	15.2	0.0	0.0	100.0
Karamoja	95.6	0.0	2.5	1.1	0.8	0.0	0.0	100.0
Ankole	78.9	0.2	8.3	12.7	0.0	0.0	0.0	100.0
Uganda	**86.4**	**0.9**	**6.7**	**4.4**	**1.5**	**0.0**	**0.0**	**100.0**

Note: **This table is extracted from the post-planting data of the first season data sets.*

3 AGRICULTURAL LAND

3.1: Introduction

This chapter presents information on land ownership; number and size of parcels; average holding size; and parcel use rights for all parcels used by farmers during the year 2020. These attributes have important implications for Agricultural Households' attitudes towards land use. For example, the type of land use rights will directly affect the types of Ag HH investments made on land, which, in turn, will affect land productivity.

3.2: Agricultural land

Agricultural land is the total of cropland,[3] permanent meadows and permanent pastures (FAO, 2015). According to the National Forestry Authority, approximately 43 percent of the total land area in Uganda, in the year 2015 was agricultural land. Because of the importance of land in agriculture and the growing population of the country living in rural areas, increased pressure is likely to be felt on the existing agricultural land. Accordingly, the Annual Agricultural Survey (AAS) collects information on access to agricultural land, the structure of the agricultural land and agricultural practices used on land holdings, with the objective to inform and support efforts in order to formulate and monitor policies and programmes related to land use.

3.2.1: Number and size of parcels

A parcel is any piece of land of one land tenure type, surrounded entirely by other land, water, road, forest or other features not forming part of the holding, or forming part of the holding under a different land tenure type (FAO, 2015). An Agricultural Household may use one or more land parcels located in the same or in separate areas, or in the same or different administrative units.[4,] As part of the Annual Agricultural Survey year 2020, Ag HHs were asked to list all the parcels they were using within their enumeration area (including parcels used for farmhouses, stables, storehouses and other uses),[5] and parcels located elsewhere. Land owned by members of an Ag HH but rented to others was not included. Conversely, land not owned by members of an Ag HH but rented from others for agricultural production purposes was included among the parcels.

Information obtained in the AAS 2020 indicates at national level, that Ag HHs used on average, two parcels per season with an average size of 0.6 hectares per parcel. Among the sub-regions, Ag HHs in Acholi (3.2 ha), Kigezi (2.8 ha) and West Nile (2.6 ha) used the highest average number of parcels. The average size per parcel was 0.6 hectare per parcel. See Table 3:1 **and Annex 3, Tables 3- 1 and 3- 2** for details.

[3] Cropland includes land under temporary and permanent crops, land temporarily fallow and land under temporary meadows and pastures (FAO, 2015).

[4]This definition of parcel may not be consistent with that used in cadastral work.

[5] Parcels may be used for different types of activities and very frequently Agricultural Households use their own dwelling for living and for storing agricultural inputs and outputs.

Table 3:1. Physical characteristics of the holdings* by sub-region

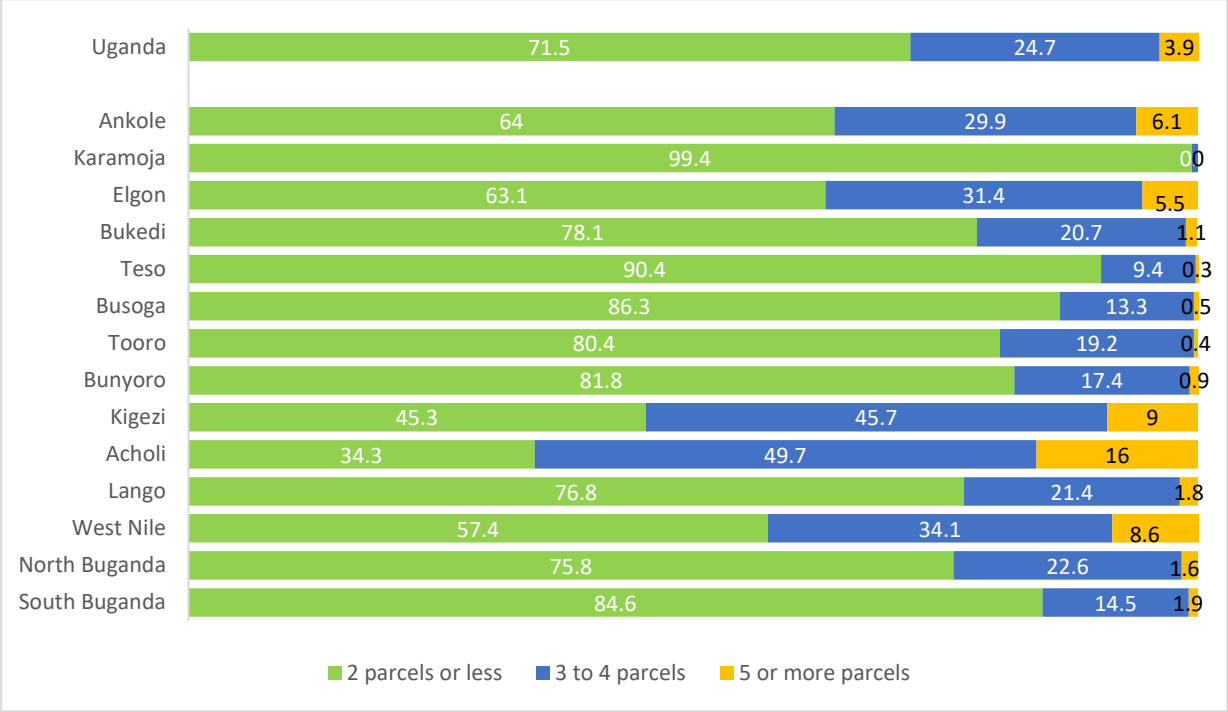
Sub-region	Parcels		
	Total number	Average number	Average size (ha)
S. Buganda	1,276,486	1.6	0.5
N. Buganda	1,554,906	1.9	0.8
West Nile	1,334,970	2.6	0.6
Lango	889,662	2.0	0.7
Acholi	992,071	3.2	1.3
Kigezi	838,597	2.8	0.2
Bunyoro	862,533	1.9	0.8
Tooro	1,122,543	1.9	0.4
Busoga	1,268,999	1.7	0.5
Teso	590,025	1.6	1.2
Bukedi	733,085	1.9	0.3
Elgon	862,492	2.3	0.3
Karamoja	87,179	1.0	0.6
Ankole	1,401,861	2.3	0.5
Uganda	**13,815,410**	**2.0**	**0.6**

Note*: *AAS 2020-PP and PH second season data.*

3.2.2: Parcels owned

Overall, 71.5 percent of Ag HHs had two or less parcels, 24.7 percent had three to four parcels while 3.9 percent of Ag HHs held five or more parcels. Among the sub-regions, Karamoja sub-region reported the highest number of Ag HHs having two or less parcels (99.4 percent), followed by Teso sub-region (90.4 percent). For details, see Figure 3:1.

Figure 3:1. Percentage distribution of Agricultural Households by number of parcels owned and sub-region



3.2.3: Holding size

Among the sub-regions, the average holding size for Agricultural Households was 1.2 hectares of land. The highest average holding size was recorded in the Acholi sub-region (4.3 ha per Ag HH) and the smallest average sizes were recorded in Kigezi (0.5 ha) and in Karamoja, Elgon and Bukedi. These regions recorded an average size of 0.6 hectares. See

Table 3:2, Annex 3, Table 3- 3.

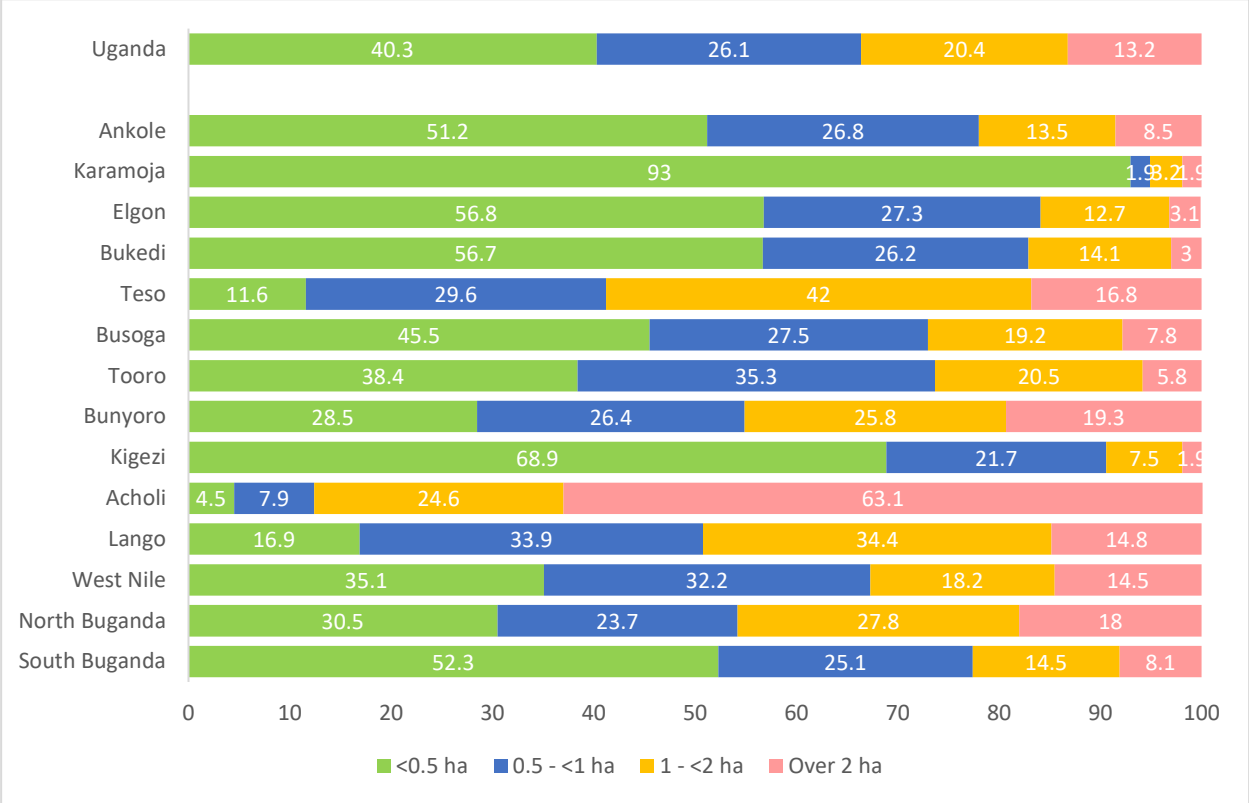
Table 3:2. Physical characteristics of holdings * by holding size, planted area and sub-region

Sub-region	Holding size (ha)		Planted area (ha)	
	Average	Total	Average	Total
South Buganda	0.9	677,555	0.6	502,749
North Buganda	1.5	1,199,583	1.0	799,699
West Nile	1.5	745,427	0.7	351,171
Lango	1.3	597,268	1.0	443,970
Acholi	4.3	1,324,215	1.3	408,300
Kigezi	0.5	159,921	0.4	114,044
Bunyoro	1.5	670,780	1.1	515,699
Tooro	0.8	488,269	0.7	433,705
Busoga	0.8	593,304	0.7	490,819
Teso	1.9	692,084	1.0	388,777
Bukedi	0.6	238,474	0.6	211,078
Elgon	0.6	223,611	0.5	185,861
Karamoja	0.6	50,675	0.9	7,604
Ankole	1.2	721,853	0.6	337,617
Uganda	**1.2**	**8,383,019**	**0.8**	**5,191,093**

*Note: * AAS 2020 - PP and PH second season data.*

Overall distribution of holding size indicates 40.4 percent of Ag HHs had less than 0.5 hectare (ha) of land, 26.1 percent had between 0.5 and 1.0 ha while 13.2 percent held more than 2.0 ha. Among the sub-regions, Karamoja reported the highest percentage of Ag HHs with less than 0.5 ha (93.0 percent), followed by Kigezi (68.9 percent) while Acholi had the least (4.5 percent). The majority of Ag HHs in Acholi held over 2.0 ha (63.1 percent). See Figure 3:2 and Annex 3, Tables 3-1 and 3- 2.

Figure 3:2. Percentage distribution of Agricultural Households by size of holding and sub-region



3.2.4: Parcel use rights

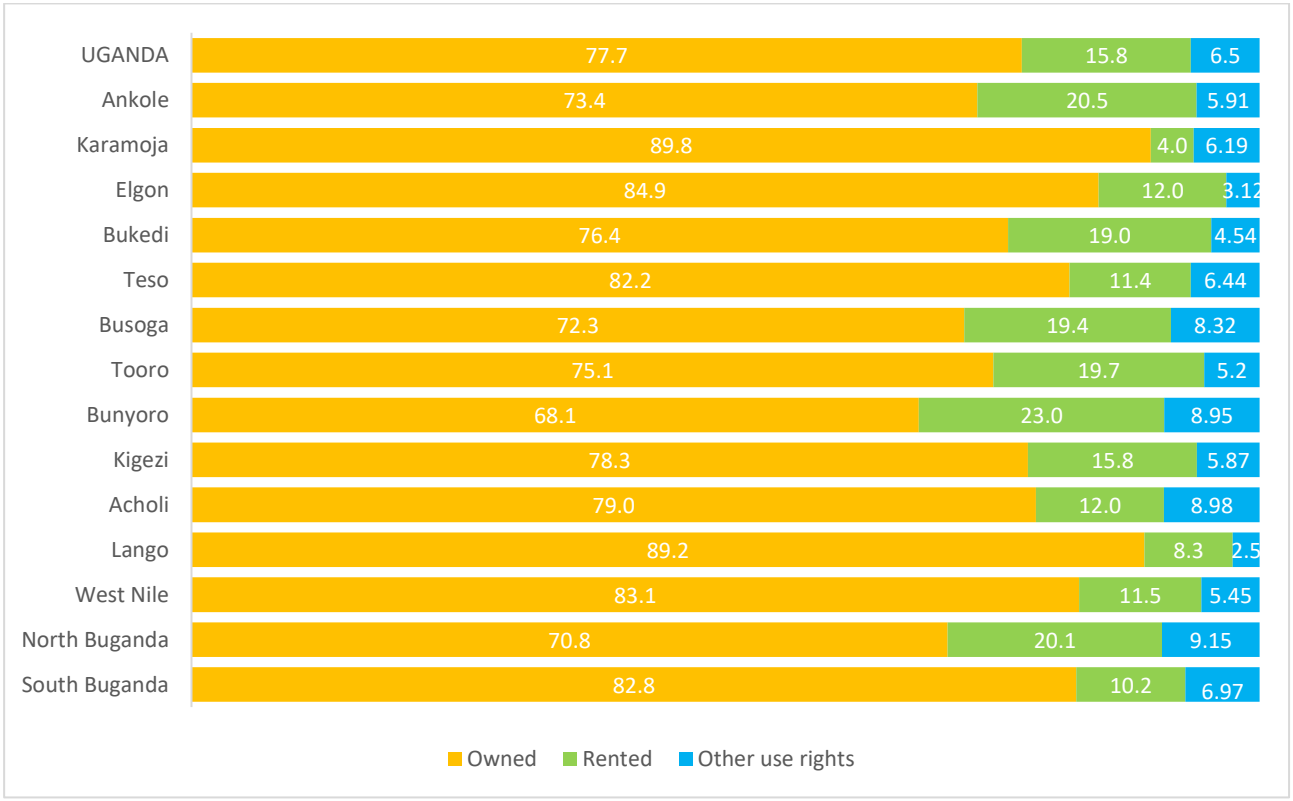
Land use rights refer to the right to use or access land property even though the one using it is not the owner of the property. Although the right to use land does not necessarily transfer the actual ownership of the land, it does grant specific use entitlements over the property. The type of use rights granted affects the type of investment an Agricultural Household can make in relation to a given parcel.

Information obtained in the AAS 2020 indicates at the national level, 78 percent of the parcels used by Ag HHs were owned and about 16 percent rented.[6]

The highest percentage of parcels owned by Ag HHs were in the Karamoja sub-region (90 percent), followed by Lango sub-region (89 percent), Elgon sub-region (85 percent), North Buganda and South Buganda sub-regions (83 percent), respectively. The highest number of parcels rented was in Bunyoro sub-region (23 percent) and the lowest was recorded in Karamoja (4 percent). Details are provided in Annex 3, Tables 3- 5 and 3- 6.

[6] *Parcels for Agricultural Household heads were for an agreed amount of money or exchange of services.*

Figure 3:3. Percentage distribution of parcels by use right and sub-region



4 AGRICULTURAL PRACTICES AND INPUTS

4.1: Introduction

As is the case in the rest of sub-Saharan Africa, small-scale producers who engage in either food or cash crop production, horticulture, fishing and/or livestock farming dominate agricultural production in Uganda. They use few modern inputs and thus frequently experience low agricultural productivity despite a nationally-driven policy to increase agricultural productivity. For instance, the objectives of the Uganda National Agriculture Policy,[7] and the National Development Plan III,[8] are to achieve food and nutrition security and improve the income of agricultural households through coordinated interventions that focus on increasing sustainable agricultural productivity, value addition and commercialization. Generally, there is a consensus in agricultural development literature that sustains agricultural growth, as necessary to spur economic transformation results from the adoption of modern inputs such as improved seeds, fertilizers, agro-chemicals, mechanization, and irrigation and soil management practices.

In the current chapter, we present the analysis carried out on farm households' management of agricultural production activities. This includes an analysis by gender of persons tasked with crop management, systems of production (whether in pure stand or in mixed crop plots) adopted by producers, the average size of plots under production and quantity of seeds used per hectare for selected crops. During the work carried out on the Annual Agricultural Survey for the year 2020, time constraints resulting from the lockdown and cessation of movement within Uganda because of the COVID-19 pandemic, necessitated the implementation of a reduced survey. Consequently, information on the use of other inputs of production such as organic and inorganic fertilizers, agro-chemicals, improved seeds, labour input, irrigation and adoption of soil management practices was not collected and, therefore, not included in the current analysis.

The analysis covers two agricultural seasons of 2020. The first agricultural season refers to the period between January and June, while the second agricultural season refers to the period between July and December. Data for the crop production module was gathered at the plot level.[9]

4.2: Agricultural practices

4.2.1: Plot managers

The design of the survey's crop production module allows us to assess gender-related differences in the management of cropping activities. For each agricultural season, information on crop production is available for each household at the plot level and for each plot, there is information on the main person that managed the crops including their gender.

[7] https://agriculture.go.ug/wp-content/uploads/2019/04/National-Agriculture-Policy.pdf
[8] http://www.npa.go.ug/wp-content/uploads/2020/08/NDPIII-Finale_Compressed.pdf
[9] A plot was defined as a contiguous piece of land within a parcel on which a specific crop or a crop mixture is grown.

It is important to note that “the manager of the plot” refers to the key decision-maker on pre-planting and post-harvest activities, and not necessarily the implementer of specific production activities. Generally, there exists inter-gender differences in the implementation of agricultural production activities. For example, heavier activities such as hand ploughing may be more male-dominated while lighter activities such as weeding are often female-dominated.

The results from the survey indicate an overall, of about 18.3 million plots in the first season and nearly 22.8 million in the second season of the reference year.[10] In terms of sub-regions, North Buganda with about 2.2 million and subsequently about 2.6 million, had the highest number of crop plots in the first season and second seasons, respectively as seen in

[10] Weighted number of plots.

Table 4:1.

Regarding the management of plots by gender, findings show that there were more crop plots managed by males than females. More than half of the plots were managed by males in both agricultural seasons (55.7 percent in first season and 57.6 percent in second season).

More plots were managed by females in Busoga (56.3 percent), Bukedi (53.1 percent), Karamoja (66.6 percent) and Ankole (62 percent) during the first season, while in the second season they managed more crop plots than males in the sub-regions of Kigezi (62.2 percent), Busoga (53.5 percent), Bukedi (52.7 percent) and Ankole (61.5 percent). For details see

Table 4:1.

Results at ZARDI level revealed that females managed more plots in Kachwekano (61.4 percent), Nabuin (66.7 percent), Mbarara (58.6 percent) during the first season, while in the second season they managed more crop plots than males in the Zonal Agriculture and Research Development Institutes (ZARDIs) of Kachwekano (62.2 percent) and Mbarara (56.5 percent). See Annex 4, Table 4-1.

Table 4:1. Percentage distribution of crop plots by sex of the plot manager and sub-region

Sub-region	First season			Second season		
	Number of plots	% plots managed by males	% plots managed by females	Number of plots	% plots managed by males	% plots managed by females
South Buganda	1,545,357	53.4	46.6	1,768,514	57.6	42.4
North Buganda	2,184,781	57.4	42.6	2,635,135	57.8	42.2
West Nile	1,340,825	64.7	35.3	2,137,858	63.9	36.1
Lango	1,387,572	59.6	40.4	1,545,205	64.3	35.7
Acholi	1,169,177	62.2	37.8	1,303,251	62.8	37.2
Kigezi	908,280	38.6	61.4	1,199,883	37.8	62.2
Bunyoro	1,283,411	67.8	32.2	1,669,776	69.6	30.4
Tooro	1,573,912	56.9	43.1	2,017,163	58.5	41.5
Busoga	1,900,040	43.7	56.3	2,058,410	46.5	53.5
Teso	1,188,015	77.1	22.9	1,453,674	77.7	22.3
Bukedi	1,013,086	46.9	53.1	1,115,105	47.3	52.7
Elgon	1,006,350	68.2	31.8	993,604	71.0	29.0
Karamoja	305,768	33.4	66.6	13,720	74.1	25.9
Ankole	1,538,227	38.0	62.0	1,937,776	38.5	61.5
Uganda	**18,344,802**	**55.7**	**44.3**	**21,849,074**	**57.6**	**42.4**

Additionally, we find that there were more plots under crop production in the second season than the first one, despite the first season being generally considered to be the main cropping season due to a longer duration of rains. See Annex 4, Tables 4-1 and 4-2.

4.2.2: Cropping system

The cropping systems mainly adopted by Ugandan agricultural households are pure stand versus mixed crop,[11] and the two systems are applied on relatively similar average sizes of plots per cropping season across the sub-regions.

Figure 4:1 summarizes the cropping systems adopted. The findings indicate over 60 percent of the total crop plots in Uganda were cultivated in pure stand in both the agricultural seasons of the year 2020. In comparison to the year 2019, 56 percent and 65 percent of crop plots in the first and second seasons, respectively, were cultivated in pure stand.

[11] A pure stand plot referred to one where a single crop was cultivated in a field while a mixed-crop plot referred to a plot where more than one crop species were cultivated simultaneously in the same field, for the whole or part of their growing period (see Vandermeer, 1989 for the description).

In the first season, results show that all the sub-regions had over 50 percent of their plots grown in pure stand except for Elgon sub-region, which had about 31 percent of its plots grown in that category (see Figure 4:1). The second season results show the sub-regions of South Buganda (51.5 percent), North Buganda (52.5 percent) and Elgon (52.7 percent) having cultivated more plots in mixed crop than in pure stand, as seen in Figure 4:2.

Across the ZARDIs, we note both the first and second seasons having at least 70 percent of crop plots in Abi, Kachwekano, Ngetta, Nabuin and Serere cultivated in pure stand. It implies a preference for a monocrop production system to intercropping. See Annex 4, Table 4.-1b. Studies on technology adoption identify a number of factors determining production systems, including resource endowments (such as landholding, labour, livestock and farm equipment); access to markets and credit; risk and uncertainty; topographic factors (for example, slope, soil type and location); and farmer characteristics (such as age and experience, exposure to agricultural advisory services and education) (Doss, 2006; Feder et al., 1985; and Lee, 2005).

Figure 4:1. Percentage distribution of plots by cropping system and sub-region (first season)

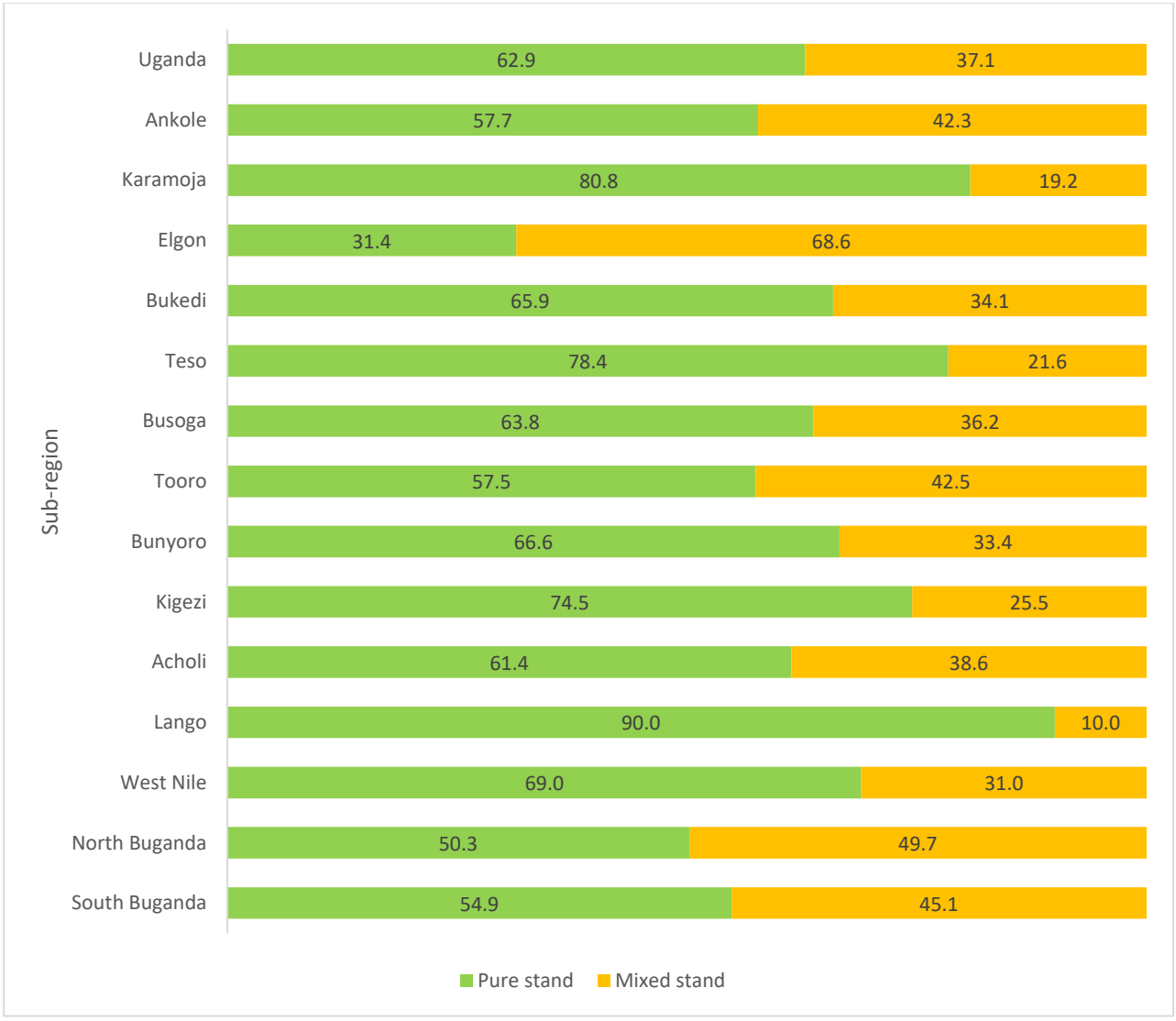
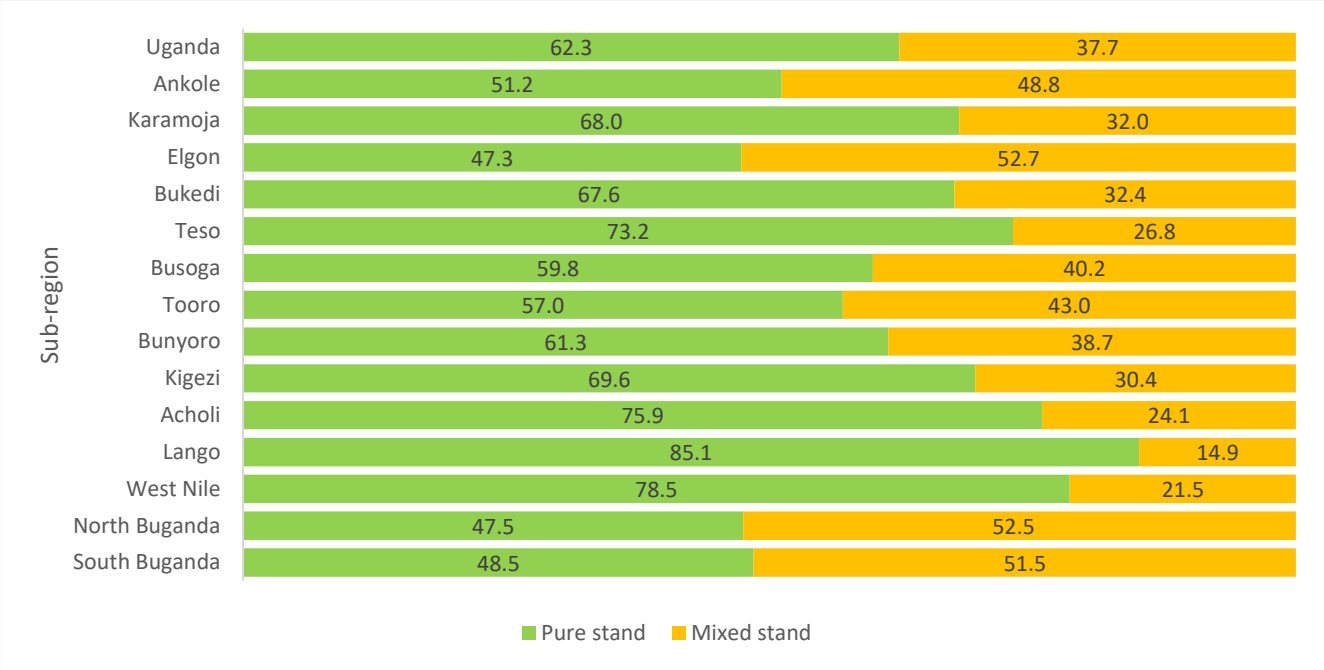


Figure 4:2. Percentage distribution of plots by cropping system and sub-region (second season)



4.2.3: Area under plots by crop stand and average plot size (acres)

The total crop plot area in the first and second seasons in Uganda was estimated to be 11.6 million and 12.8 million acres, respectively. In the first season, 62 percent was in pure stand and 38 percent was in mixed crop stand, while in the second season 60.3 percent of the area was in pure stand and 39.7 percent was in mixed crop stand.

In terms of sub-regions, Lango (1,037,060 acres) and North Buganda (883,519 acres) had the largest acreage in pure and mixed stand, respectively, in first season and the trend was observed in the second season. See

Table 4:2

The Zonal Agricultural Research and Development Institutes (ZARDIs) of Mukono, Buginyanya and Ngetta had the largest total planted areas, respectively. Nabuin, which is a predominantly livestock production ZARDI and in a semi-arid agro ecological zone, had the least amount of total land under cropping activities. In the aggregate, the total cropped land is larger in the second than in the first season, and similarly across ZARDIs with the exception of Buginyaya, Kachwekano and Nabuin. See Annex 4, Table 4-2.

Table 4:2. Total plot areas in acres by cropping system, season and sub-region

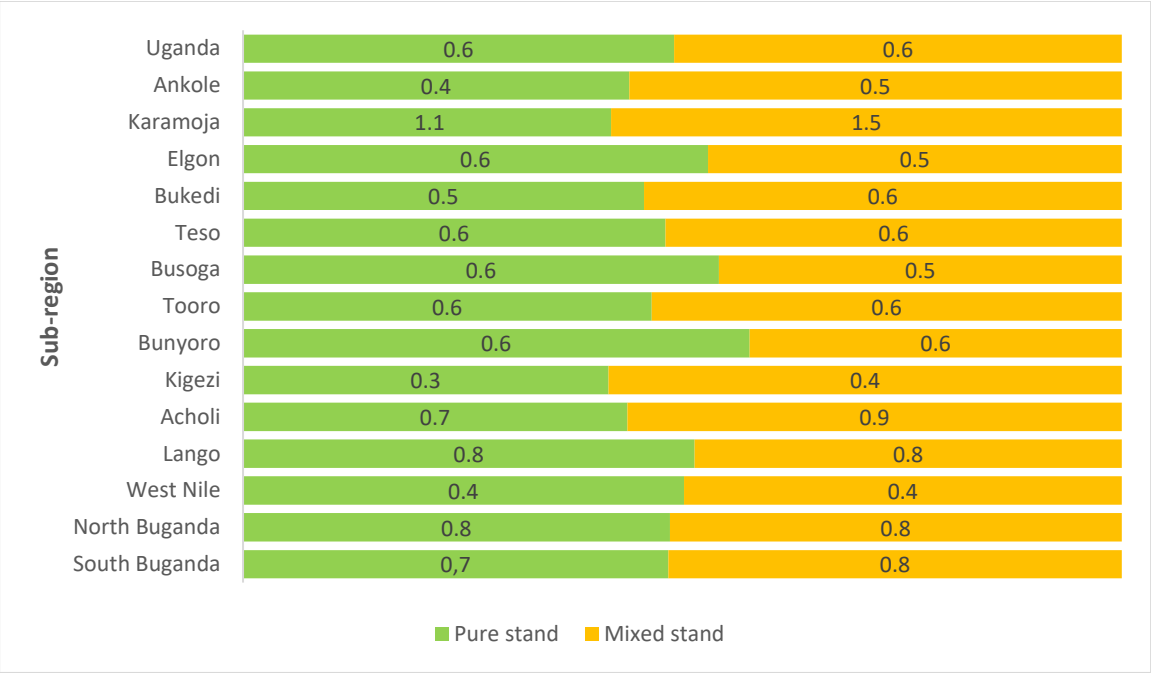
Sub-region	First season		Second season	
	Pure	Mixed	Pure	Mixed
South Buganda	630,989	553,400	580,483	661,949
North Buganda	843,094	883,519	868,729	1,107,476
West Nile	390,156	174,281	684,229	183,573
Lango	1,037,060	108,793	931,266	165,851
Acholi	478,907	388,050	722,381	286,641
Kigezi	191,711	92,012	176,270	105,554
Bunyoro	679,615	250,499	873,143	401,228
Tooro	504,414	429,439	542,312	529,483
Busoga	749,937	360,541	731,410	481,560
Teso	529,717	157,307	713,730	252,183
Bukedi	346,019	213,386	344,621	176,987
Elgon	187,844	364,715	214,006	245,329
Karamoja	259,704	85,364	11,006	7,785
Ankole	380,200	355,083	346,036	488,260
Uganda	**7,209,366**	**4,416,388**	**7,739,623**	**5,093,859**

4.2.4: Average/mean plot size

The first season's average size of plots in pure stand (meaning plot size-pure stand) in Uganda was 0.6 acres, and this was the same size for the mixed crop stand in the same season.

Karamoja sub-region had the highest average plot size in the first season for pure (1.1 acres) and mixed (1.5 acres) stands. Other sub-regions with notably high average plot sizes in the reference season for pure stand included Bunyoro, Lango and North Buganda (each with 0.8 acres). In terms of mixed stand, the other sub-regions with highest average plot size included Lango, North Buganda and South Buganda (all with 0.8 acres) as seen in Table 4:3. Results for the ZARDIs are in Annex 4, Table 4-3.

Figure 4:3. Average plot size/mean plot size (hectare) in the first season by sub-region



4.3: Agricultural inputs

4.3.1: Seeds

Information on the quantity of seeds planted in each plot under crop production was gathered in the Annual Agricultural Survey for the year 2020 to assess seed use among farm households. We focus our analysis on the seed quantity applied per acre for selected key crops such as maize, rice, sorghum, millet, soybeans, beans, groundnuts and simsim.[12]

Table 4:3 presents the median seed rate for selected crops at national level and across the sub-regions. At the national level, the seed rates for all of the crops presented are slightly higher in the second season than in the first, excluding sorghum. In the last two rows of Table 4:3, we compare the seed rates applied at national level against the seed rates recommended by the Uganda National Agricultural Research Organization (NARO). This comparison shows no discernable pattern in the difference between the applied and recommended seed rate for the selected crops nor across seasons. For example, in the first season, the applied seed rate is higher than the recommended seed rate for maize, sorghum and millet; it is, however,

[12] Due to the quality and skewness of data on the seed rate (seed quantity in kilogram per area of cropped land in acres), outliers were identified. To do this, we applied a natural log transformation process to induce normality and then set a threshold for detecting outliers (at three standard deviations from the median). Seed rates flagged as outliers were then imputed with the sample's median within each type of crop. For details on the outlier detection procedure, see a detailed explanation in Belotti, F., Mancini, G., and Vecchi, G. 2021. *Outlier Detection for Welfare Analysts using Stata*. Mimeo. https://econpapers.repec.org/software/bocbocode/s458932.htm

lower for rice, soybeans and simsim, and similar for beans and groundnuts. Yet in the second season, it is higher for maize, sorghum, millet, beans and groundnuts, and lower only for rice, while similar for soybeans and simsim.

In terms of sub-regions, results show that more than half of the sub-regions used a seed rate above that recommended by the NARO for maize, rice, sorghum, millet, beans and groundnuts in the first season. The same pattern occurred in the second season, except for rice.

Table 4:3. Median quantity of seeds applied per acre (kg/acre) by type of crop and sub-region

	First season								Second season							
Sub-region	Maize	Rice	Sorghum	Millet	Soya beans	Beans	Ground nuts	Sim sim	Maize	Rice	Sorghum	Millet	Soya beans	Beans	Ground nuts	Sim sim
South Buganda	11.1	100.0	3.3	20.0	12.0	33.3	33.3		14.1		7.5	10.1	8.2	41.7	40.4	
North Buganda	15.0	40.0	4.0	8.0	25.0	33.3	28.3	4.0	16.2	56.8	9.0	8.3	29.5	39.4	31.2	9.7
West Nile	9.7	33.3	18.9	19.0	33.3	40.0	28.3	8.8	10.5	26.1	19.2	4.0	25.3	40.4	30.1	5.3
Lango	9.4	16.2	14.0	7.6	22.5	16.0	21.0	4.0	9.1	33.5	18.0	36.5	27.0	30.0	24.0	5.1
Acholi	9.2	17.9	10.2	9.0	26.0	23.3	22.5	4.0	9.9	19.6	6.8	4.6	25.3	31.5	29.4	4.6
Kigezi	16.7	80.0	13.5	16.0	16.7	40.0	28.3		22.0	100.0	26.2	22.2	104.2	55.0	39.0	0.0
Bunyoro	13.1	60.0	18.0	1.0	20.0	33.3	33.3	4.5	13.3	57.5	10.9	4.0	25.3	37.0	36.6	7.8
Tooro	14.3	16.2	15.3	20.0	12.5	32.4	27.0	2.8	16.8	34.2	16.9	13.5	18.4	41.7	29.5	6.7
Busoga	13.3	24.0	7.2	8.9	16.7	27.8	28.3	5.0	14.2	27.4	9.0	6.4	25.2	27.4	32.1	7.4
Teso	9.4	16.2	7.5	2.0	19.5	31.0	22.2	5.4	10.0	16.2	6.1	3.7	20.0	32.4	28.3	5.1
Bukedi	11.4	21.0	6.1	8.0	16.7	26.7	25.0	5.1	14.7	27.4	7.2	14.3	17.5	32.4	30.6	7.1
Elgon	13.3	32.0	36.0	8.0	20.0	40.0	28.3	10.0	12.6	34.5	5.7	8.3	13.7	40.4	32.8	5.1
Karamoja	10.0	30.0	7.7	10.0	26.7	30.0	20.0	3.8	10.7		6.5	3.3			12.5	
Ankole	20.0		12.0	12.0	19.2	37.5	28.3		24.3		19.3	18.2	41.7	50.4	41.7	
Uganda	**12.0**	**20.0**	**9.7**	**6.7**	**20.3**	**32.4**	**28.3**	**4.6**	**13.9**	**28.5**	**9.0**	**13.9**	**25.3**	**40.4**	**32.1**	**5.1**
NARO	**10.0**	**30.0**	**6.0**	**4.0**	**25.0**	**32.0**	**28.0**	**5.0**	**10.0**	**30.0**	**6.0**	**4.0**	**25.0**	**32.0**	**28.0**	**5.0**

5 AGRICULTURAL EXTENSION SERVICES

5.1: Introduction

In developing countries, farmers often rely on generally accepted methods of production that are deeply rooted in traditions, attitudes, or experience, among others. However, with exposure to new knowledge, they can be willing to change and adopt new practices. Agricultural extension and training, therefore, plays an important role in the dissemination of production and marketing knowledge to farmers. Through extension services, producers can learn and put into practice new ideas, skills, techniques and inputs to improve production.

In Uganda, the guidelines for agricultural extension services are outlined in the Ministry of Agriculture, Animal Industry and Fisheries' National Agricultural Extension Policy.[13] The guidelines are intended to effectively and efficiently provide agricultural extension services that support the sustained progression of smallholder farmers from subsistence agriculture to market-oriented and commercial farming. Agricultural extension services refer to advice offered by either the government or private sector to famers and other value chain actors. The service facilitates the receivers' access to production knowledge, information and technologies; mediates in their interaction with other players; and assists them in developing their technical and management capacities in agriculture and family life.

In the Annual Agricultural Survey for the year 2020, data was gathered on extension service providers (such as local government, NGOs, input suppliers, model farmers, farmer associations and private sector providers); topics of extension advice (such as on crop and livestock production, post-harvest crop management, input use, marketing and produce value addition); and demand and payment for extension services.

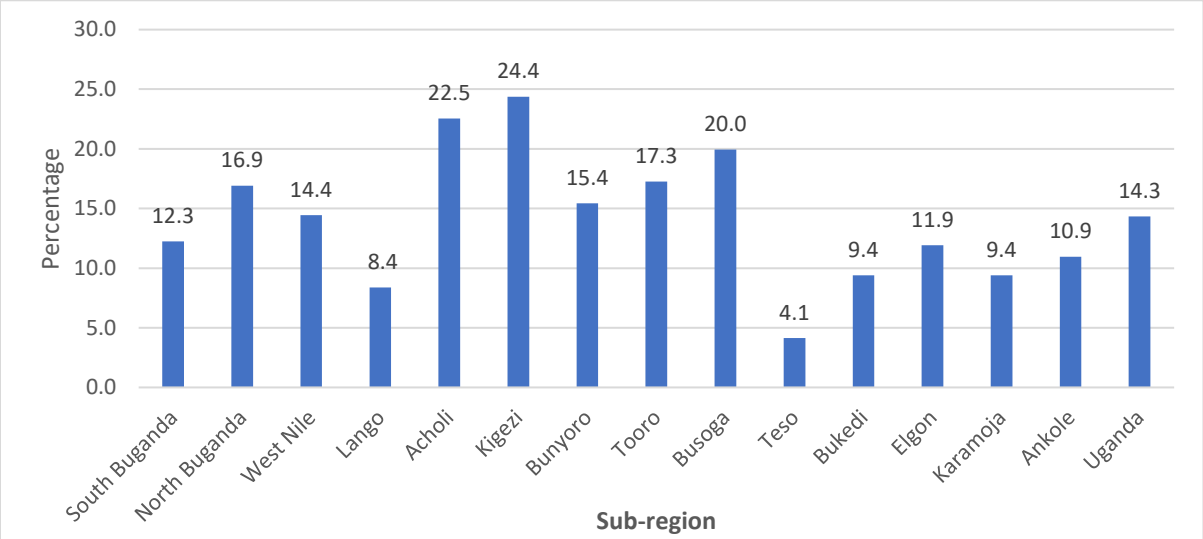
5.2: Agricultural extension services received by Agricultural Households

This sub-section highlights access to agricultural advisory services, including extension advice and training, by agricultural households in Uganda. The analysis assesses the distribution of agricultural extension services both nationally and within the Zonal Agricultural Research and Development Institutes (ZARDIs) with respect to coverage, service providers, topics of extension advice, receivers' perception of the quality of the service, demand-driven requests for the services and gender differences in the recipients of agricultural advice.

13 See *Extension Guidelines and Standards*, MAAIF (available at https://www.agriculture.go.ug/wp-content/uploads/2019/04/Agricultural-Extension-Services-Guide lines.pdf).

Figure 5:1 shows the percentage of farming households where at least one member received agricultural extension advice over time (2018-2020). In the year 2020, 14.3 percent of Agricultural Households received extension services compared to only five percent in the year 2019. Movement restrictions resulting from the COVID-19 pandemic could have had possible impacts on provision of extension services in the year 2019. Across the survey years, over ten percent of agricultural households received extension services in the years 2018 (11.7 percent) and 2020 (14.3 percent). Furthermore, the findings show low access to extension services in the sub-regions of Teso and Lango while Kigezi had the highest percentage of beneficiary households in both years 2018 and 2020. Generally, the findings imply a low level of access to agricultural extension services in Uganda. See Annex 5, Tables 5-1 and 5- 2 for details on sub-regions and ZARDIs.

Figure 5:1. Percentage distribution of Agricultural Households that received agricultural extension services in selected years by sub-region



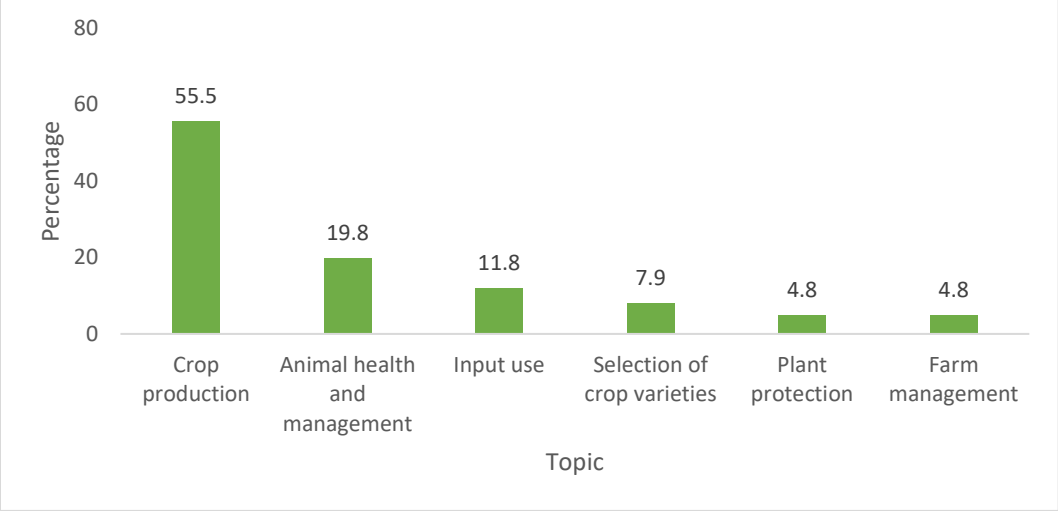
5.2.1: Agricultural extension services received by selected topics

Through access to extension services, farmers received diverse information covering crop and livestock production and management practices, inputs use, marketing, value addition and mechanization, among others. Figure 5:2 highlights the top six topics covered by the extension services, and the percentage of households that received training on each topic among all of the agricultural households that had access to extension services.

From the findings, of all agricultural households that accessed extension services, over half received extension advice on crop production (56 percent), 20 percent on animal health management and 12 percent on inputs use. For all other topics, extension advice was offered to less than 10 percent of all Ag HHs that accessed the services. A more granular analysis on the percentage distribution of agricultural

households that received agricultural services on each topic, and within the sub-regions and ZARDIs, is presented in Annex 5, Tables 5-3 and 5-4, respectively.

Figure 5:2. Percentage distribution of Agricultural Households that received agricultural extension services by selected topics

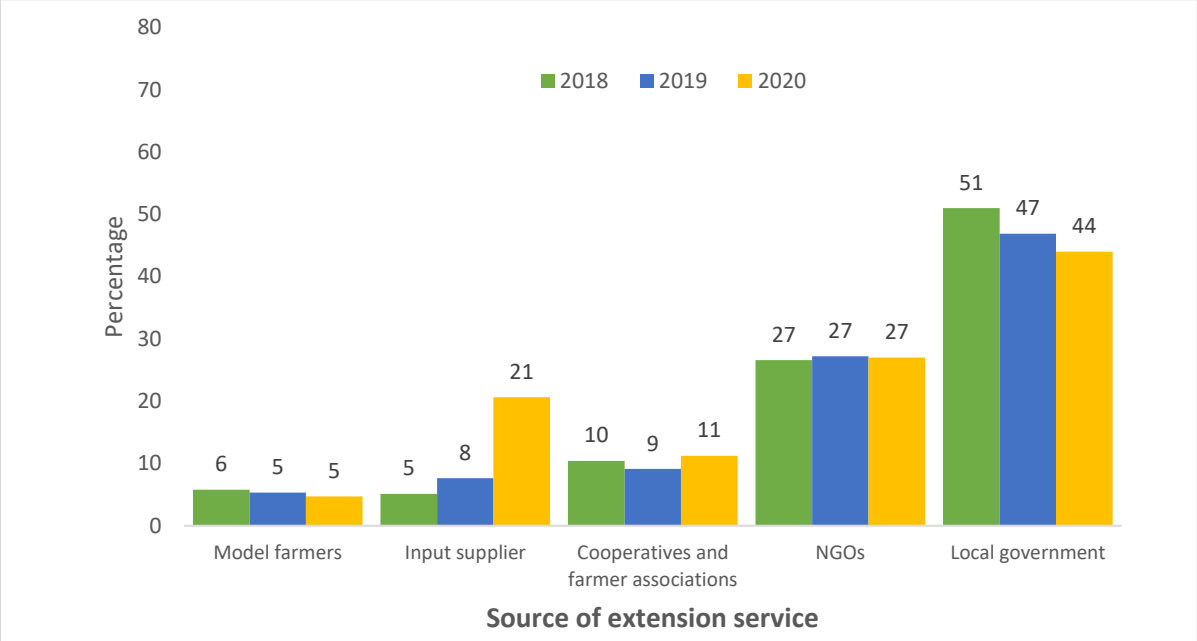


5.2.2: Source of agricultural extension services

Figure 5:3 shows the top five agricultural extension service providers and the percentage of households (inclusive Household Heads) that received agricultural extension advice from each provider, and across different survey years. A detailed analysis with an extended list of all service providers, categorized by sub-region and ZARDI, is presented in Annex 5, Table 5- 5 and Table 5-6.

In addition, Figure 5:3 shows government extension officers as the key source among the topmost sources of extension services and that across the three years the survey was conducted, over 40 percent of agricultural households that had access to extension services received advice from government agencies. Due to the important role of agricultural advisory and extension services in the improvement of agricultural production practices and food security, the government is often the main provider of extension services in most developing countries (Kidd et al., 2000 and Anderson and Feder, 2004), and especially to the farmers unable to afford private extension services.

Figure 5:3. Distribution of Agricultural Households that received agricultural extension services by source/service provider



Source: AAS 2018, 2019 and 2020

As depicted in Figure 5:3, Non-Governmental Organisations are an important source that benefitted slightly above a quarter of the agricultural households that had access to extension services. Whereas less than ten percent of agricultural households received services from all the other sources of extension advice (see Annex 5, Tables 5-5 and 5-6 for the percentage distribution of agricultural households that received advisory services by an extended list of service providers). The results underscore the importance of both the government and non-profit and private sectors (*including input suppliers, model farmers, large-scale farmers, commercial officers and cooperatives/farmer associations*) in the provision of agricultural advisory services, including extension. That is why there is the need to invest in both non-profit and private sectors in order to reach more farmers.

5.2.3: Payment for agricultural extension services

Figure 5:4 shows that among agricultural households that accessed agricultural extension services, on average, about two percent paid for the service, and this was also the case within the sub-regions. This finding indicates agricultural extension services are generally offered at no cost. While some farmers may pay for extension advice, it is likely to hinder cash-constrained households from accessing the service and deter adoption of better methods of farming and ways of living. See
Figure 5:4 and Figure 5:5 for details.

Figure 5:4. Percentage of Agricultural Households that paid for agricultural extension services by sub-region

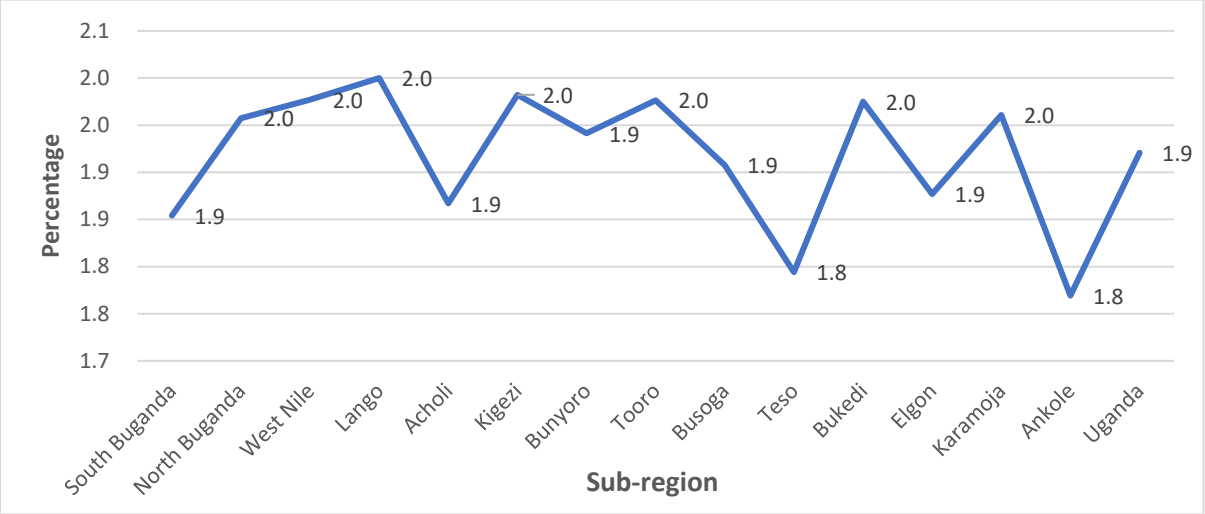
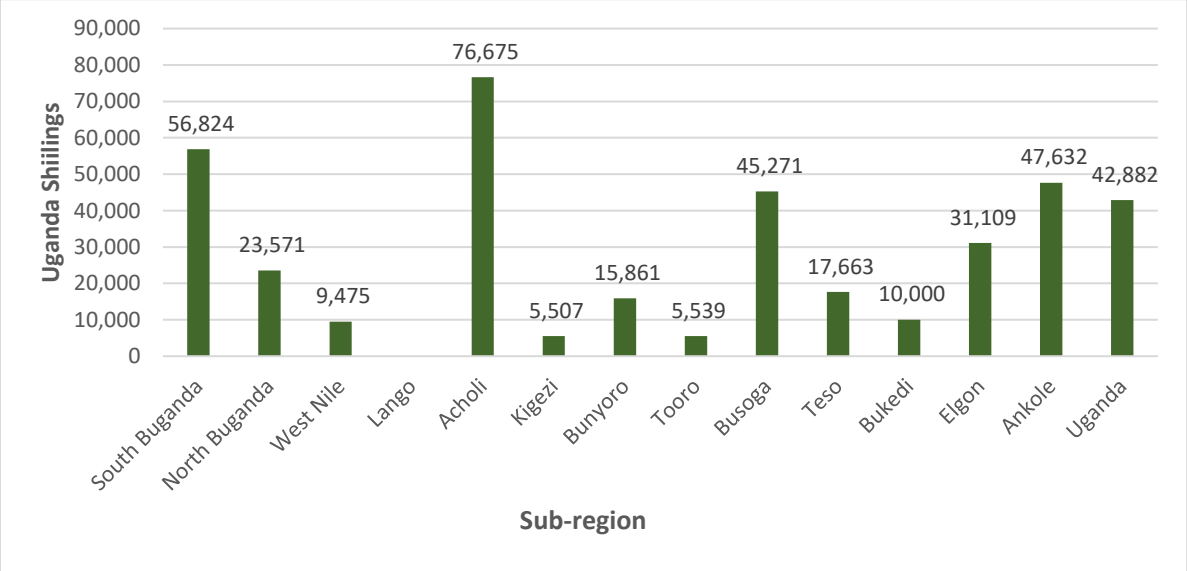


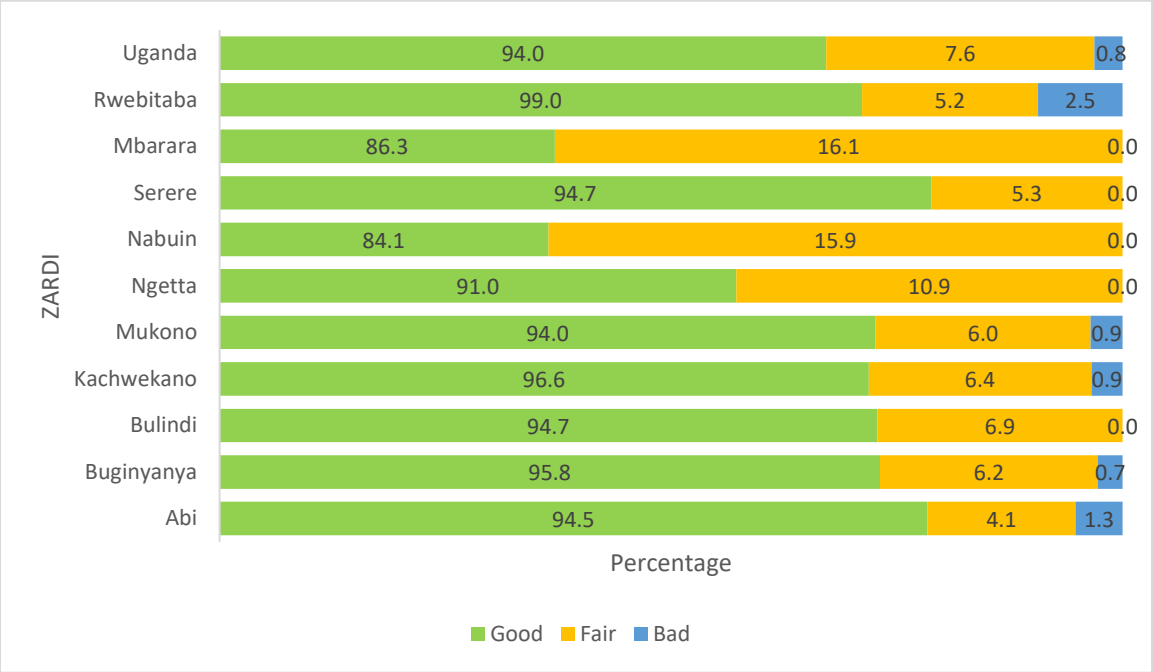
Figure 5:5. Average amount paid (UGX) for agricultural extension services by sub-region



5.2.4: Level of satisfaction of agricultural extension service received

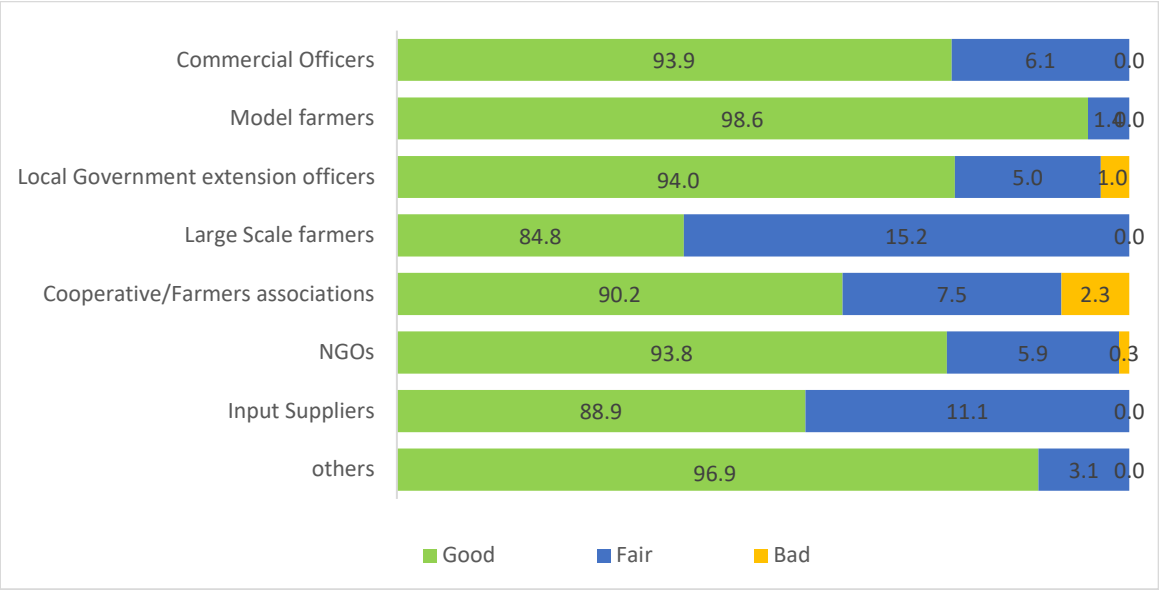
For the Annual Agricultural Survey 2020, beneficiaries of agricultural extension services were prompted to rank the quality of advisory services using a three-point scale: “good”,” bad” and “fair”. Across the sub-regions, extension services were largely ranked as “good”, thus indicating beneficiaries’ general contentment with the quality of services (see Figure 5:6).

Figure 5:6. Percentage distribution of Agricultural Households that received agricultural extension services by level of satisfaction



In Figure 5:7, we assess the beneficiaries' perception of the quality of agricultural extension services provided by each of the service providers. For all service providers, the quality of service is assessed as "good" by 85 percent or more of the households that used their services. The findings imply that despite a low access to agricultural extension services, those who have access receive good quality service from all service providers.

Figure 5:7. Percentage distribution of responses to quality of agricultural extension services by level of satisfaction and source

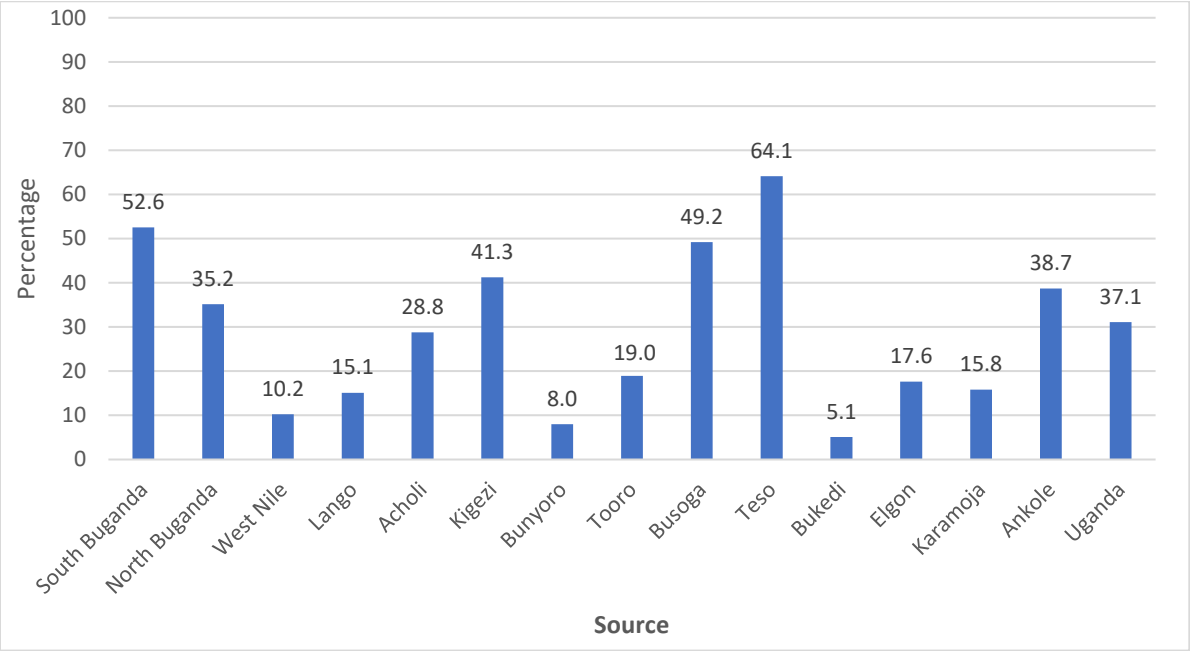


5.2.5: Request for agricultural services with regard to receipt of service

Figure 5:8 shows the percentage of agricultural households that sought extension services. Further, we present the average number of visits by someone from an extension provider over a one-year period (January to December of 2020) for households that had sought the services.

Results show that among agricultural households that accessed agricultural extension services, slightly over one-third (37 percent) made a request for the service. Within the sub-regions, the percentage ranges from eight percent in Bunyoro to 64 percent in Teso (see Figure 5:8).

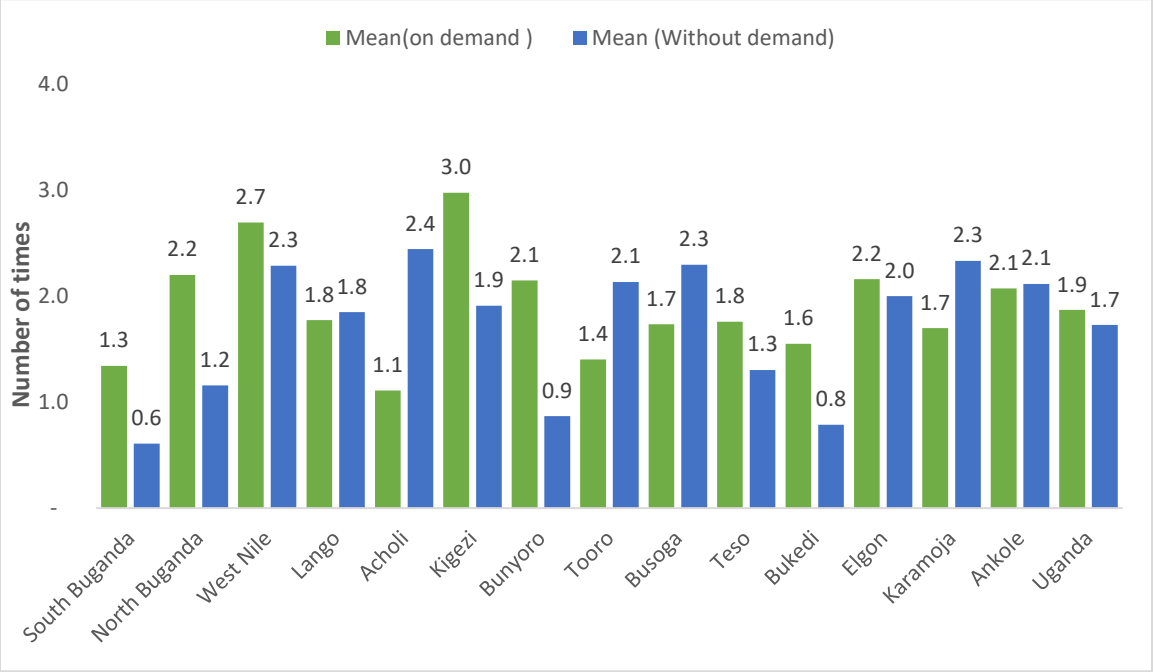
Figure 5:8. Percentage distribution of Agricultural Households that received agricultural extension services on request/demand



Note: *Percentages computed for those that received extension services*

A look at the average number of times an Ag HH obtained a service indicates that, on average, there were two visits for both the agricultural households that sought the service and those that had not (see Figure 5:9). The Kigezi and West Nile sub-regions had the highest number of times that an Ag HH received visits (about three times) in response to requests for an agricultural extension service. On average, South Buganda, Acholi and Tooro sub-regions received a service visit once upon request.

Figure 5:9. Average number of times an Agricultural Household received extension services with or without requesting (demanding)

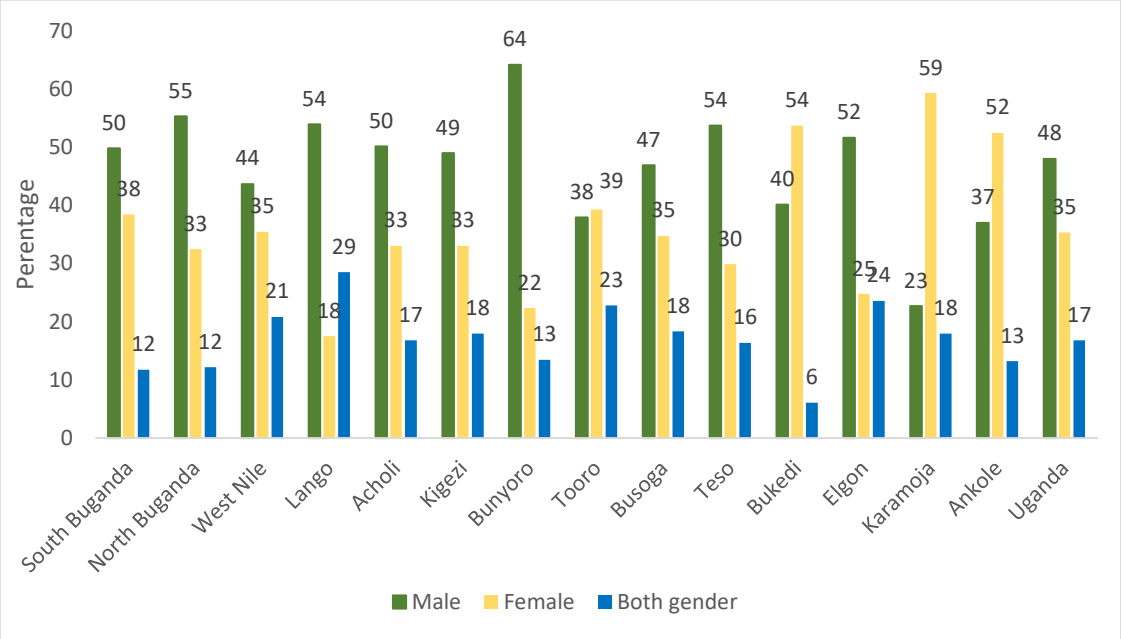


5.2.6: Ag HHs that received extension services by gender of adult Household members

Figure 5:10 illustrates the percentage of agricultural households that had access to agricultural extension services by sub-region, and categorized by the gender of the adult recipients in those households.[14] The results show that, among all households that accessed extension services, male recipients of the service made up 48 percent while 35 percent were female recipients and 17 percent had both genders as recipients. The results imply a gender imbalance in the access of agricultural extension services, as in nearly half of the recipient households were male.

[14] Adult recipients refer to those aged 15 years and above.

Figure 5:10. Percentage distribution of Agricultural Households where adult members received extension services by gender and sub-region



Across the sub-regions, more of the agricultural households had only male recipients of the extension services with the exception of Bukedi, Karamoja and Ankole. In the latter three sub-regions, the recipients of agricultural extension services were only females in over half of the agricultural households.

6 AREA, PRODUCTION AND DISPOSITION OF MAJOR CROPS

6.1: Introduction

The Annual Agricultural Survey for the year 2020 collected information on crop area and production for the two seasons of the agricultural year, but collected crop disposition (use) in the second season. To facilitate crop area estimation, parcels and plots cultivated with crops were measured using GPS devices in order to determine their area. When crops are cultivated in "pure stand", the crop areas correspond to the plot areas. When crops are mixed, the crop areas are estimated using the plot areas and the farmer-declared proportion of the plot occupied by the crops. In the AAS 2020, production is collected through the farmers' declarations. Farmers report the harvests in different states and conditions and using local units of measurement. Such quantities are transformed in tonnes at the analysis stage using available conversion factors.

This chapter presents data on the major temporary and permanent crops. For each selected crop, the chapter presents seasonal and annual production, total crop area, yield and disposition (use) by ZARDI and sub-region.[15] For the seasonal crops, the annual crop areas are simply the sum of the seasonal values as the crops are planted every season. For the permanent crops and cassava, the annual areas are assumed to be equal to the second season areas. This is because these crops are not replanted at the onset of a new season.[16] The yield for seasonal crops is based on area harvested while that of permanent crops is based on area planted.[17]

Annex 6 provides further data on area planted, area harvested and production including the coefficients of variation (CVs). Because of the limited number of observations, some sub-national estimates have a CV that is higher than 40 percent, indicating high variability. The narrative below focuses on the values with coefficients of variation lower than 40, which are more reliable.

6.1.1: Main crops

The graphs presented in this section show the percentage of agricultural households that grew a particular crop disaggregated by season and by type of crop. As in the previous agricultural year, maize, beans, sweet potatoes, cassava and banana-food remained the main crops cultivated in the agricultural year 2020, for both the first and second seasons (see Figure 6:1).

[15] The disaggregation by sub-region aims to facilitate comparison with previous reports.

[16] Other common strategies, such as using the area of the first season or calculating the average of the areas for the two season areas would lead to similar results.

[17] The yield based on area harvested is the ratio between production (MT) and area (ha) calculated only on observations where production is available (not missing) and higher than zero. Thus, the Ag HHs that had not started the harvest at the time of the interview or whose harvest was destroyed, are not included in the calculation. The yield based on area planted includes all observations.

Figure 6:1. Percentage of Agricultural Households (Ag HHs) growing selected temporary crops in the first season of the years 2019 and 2020

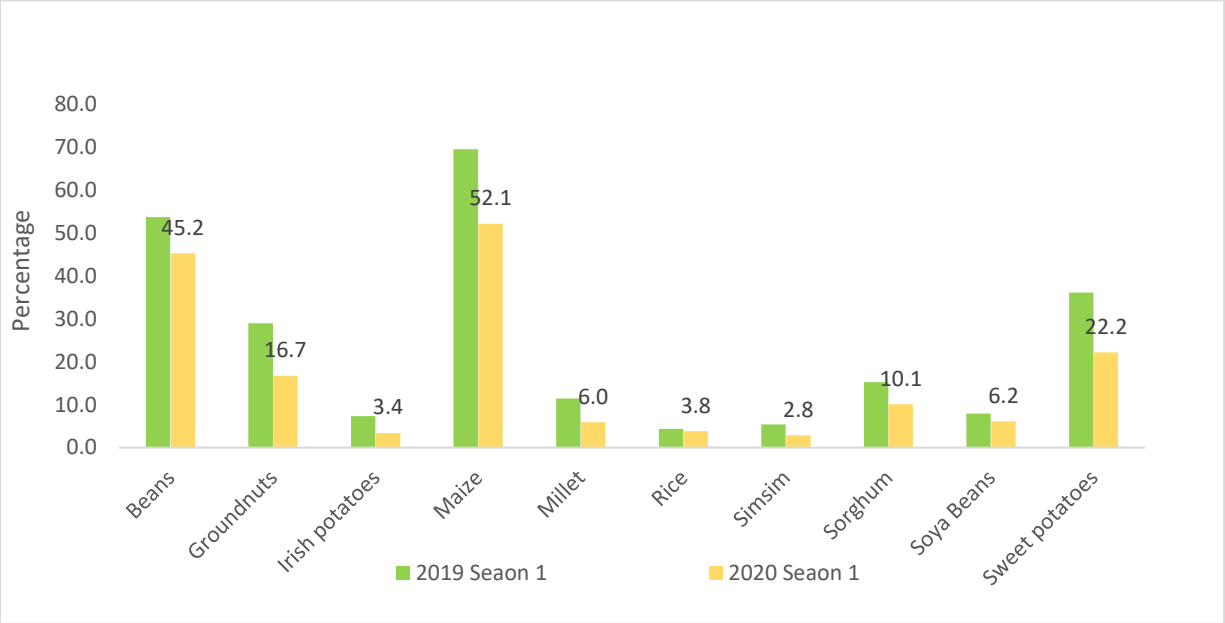


Figure 6:2. Percentage of Ag HHs growing selected temporary crops in the second seasons of 2019 and 2020

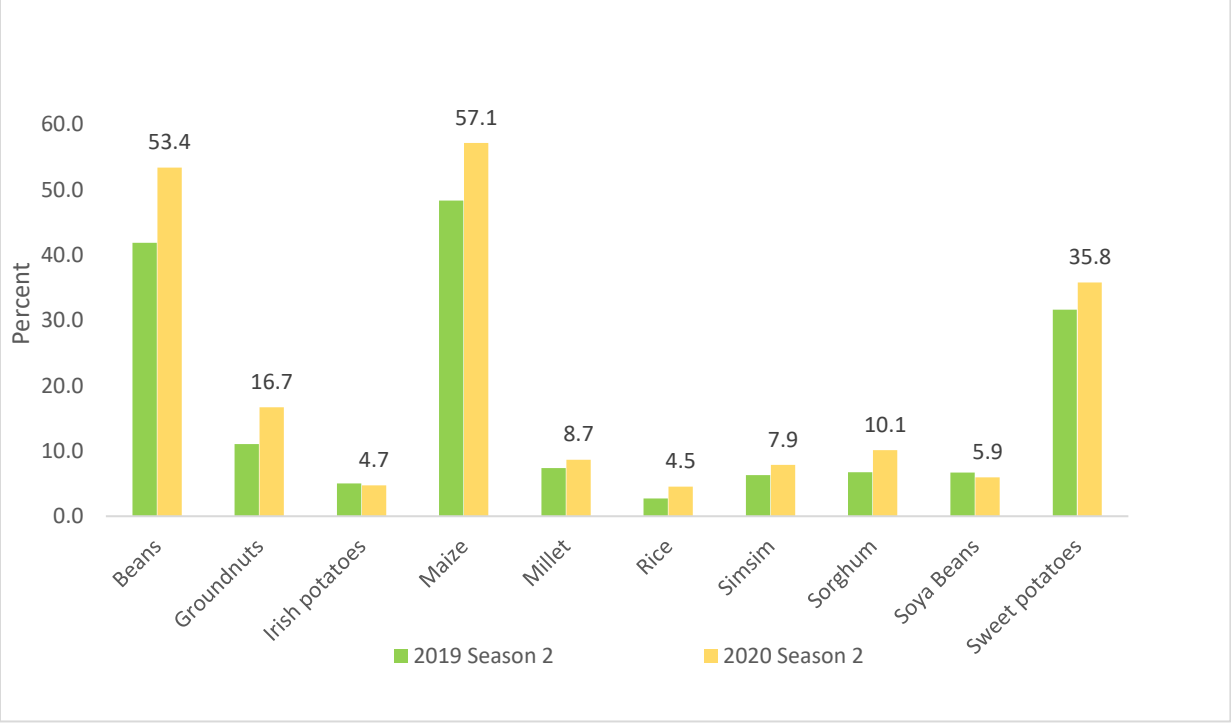


Figure 6:3. Percentage of Agricultural Households growing permanent crops in thefirst season of the years 2019 and 2020

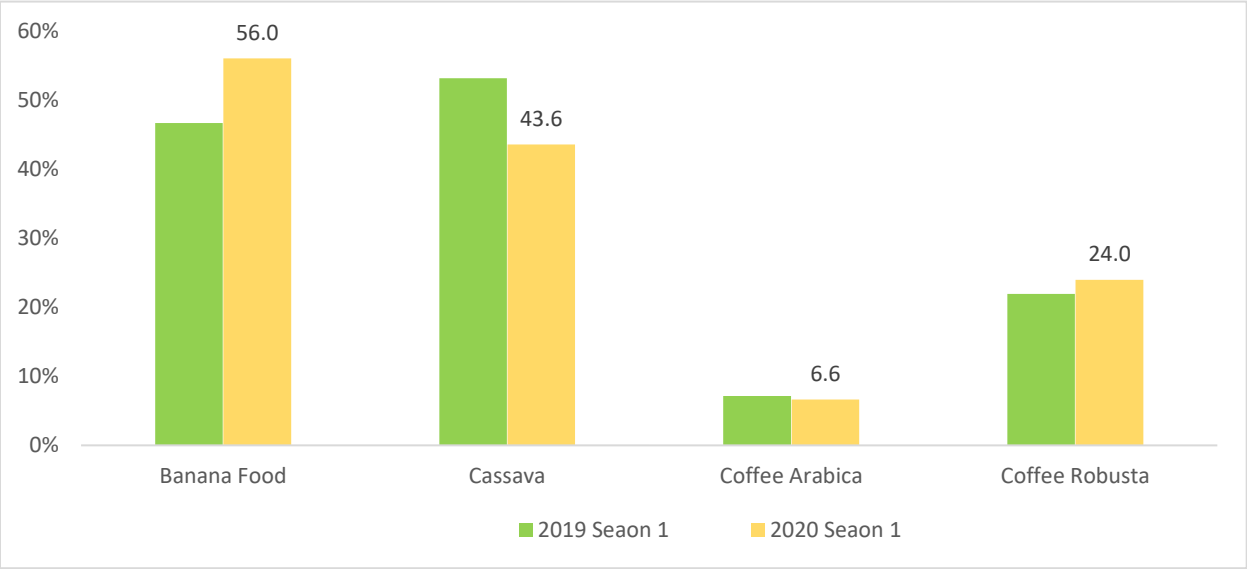
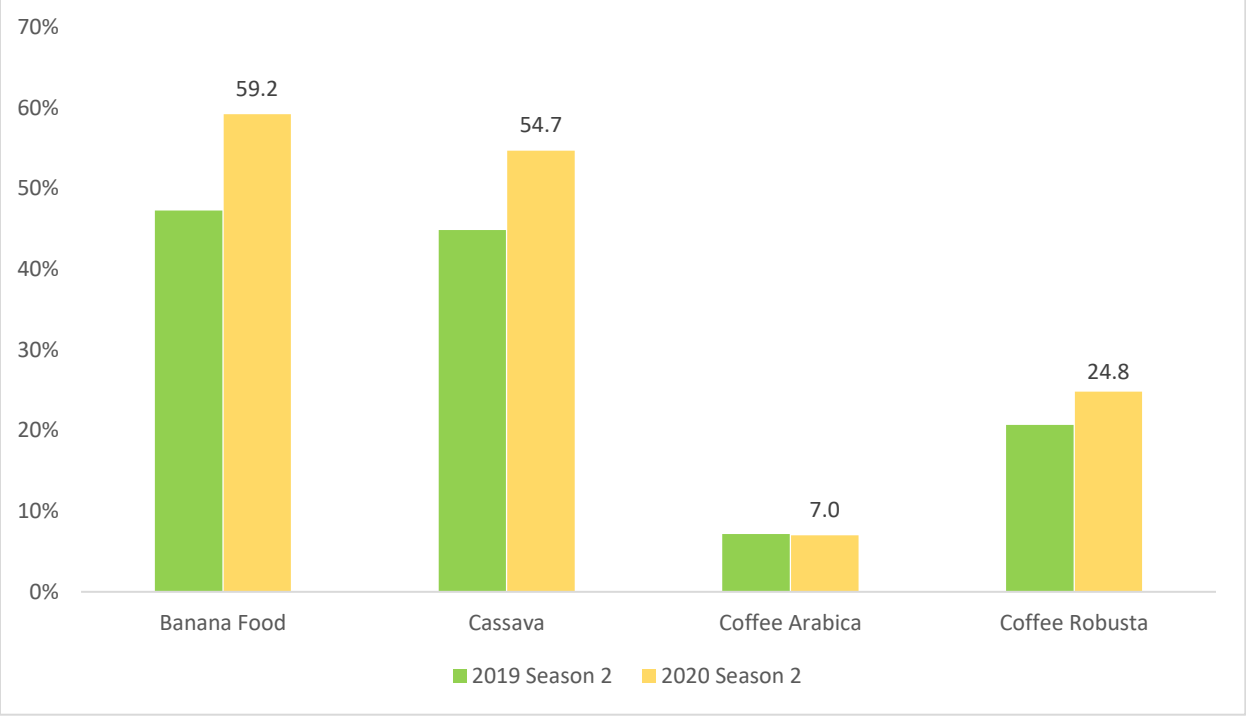


Figure 6:4. Percentage of Agricultural Households growing permanent crops in the second season of the years 2019 and 2020



6.2: Maize

Maize is one of the ten priority commodities identified in the National Development Plan III (NPA, 2020), because of its importance to food security and nutrition. Most small-scale farmers in Uganda grow maize either for their own consumption or to generate income. In recent years, maize and maize products have become increasingly important in the export market. Maize is also an industrial crop for the animal feed industry and has high potential for value addition to support the agro-processing industry.

The AAS 2020 results indicate 52 percent of Ag HHs cultivated maize during the first season and 57 percent in the second season. The total production of maize in Uganda in the agricultural year 2020 was estimated to be approximately 3.5 million metric tonnes (MT) from an estimated planted area of approximately 2.0 million hectares (ha). In the first season, a slightly higher production (approximately 1.9 million MT) was recorded compared to the second season (1.6 million MT). At national level, the annual yield was 22 MT/ha (see Annex 6, **Table 6-1).**

A look at the sub-regional level indicates North Buganda has the highest annual production at 849,000 MT, followed by Bunyoro (686,000 MT). The sub-regions with the lowest annual production are Karamoja (28,000 metric tonnes) and Kigezi (24,000 metric tonnes). Tooro and Ankole reported the highest annual yield of 3.6 metric tonnes per hectare and 3.5 MT/ha, respectively. Elgon followed with 2.7 MT/ha and the lowest yield was in Karamoja and Teso at 1.4 MT/ha. See Figure 6:5 and Annex 6, Table 6-1.

The ZARDI level indicates Mukono with the highest annual production at 1.14 million metric tonnes, followed by Bulindi (686,000 MT) and Buginyanya (604,000MT). The ZARDIs with the lowest annual production are Abi (60,000 MT) and Kachwekano (24,000 MT). Rwebitaba and Kachwekano reported the highest annual yield of 3.6 metric tonnes per hectare and 3.0 MT/ha, respectively. The lowest yield was in Abi and Serere at 1.5 MT/ha and 1.4 MT/ha, respectively. See Annex 6, Table 6-2.

The production trend shows a steady increase in maize production between the years 1999/2000 and 2018, a decrease in the year 2019 and then an increase between the years 2019 and 2020 of 750 MT, corresponding to 27.2 percent of the year 2019 production (Figure 6:7). The increase in production appears to be a result of increased planting and higher yield. Indeed, the area planted with maize increased in the year 2020 by eight percent compared to the previous year. The yield of the survey year 2020 was 2.2 MT/ha compared to 1.6 MT/ha in the year 2019 (see Annex 6, Table 6-1).

Finally, the data on use (disposition) of maize production reveals close to half of the maize produced was sold unprocessed (48 percent). This is lower than the year 2019 when 63 percent of the total maize harvest was sold unprocessed. Nonetheless, a great deal of maize was still in storage at the time of enumeration (31 percent). For details see Figure 6:8.

Figure 6:5. Maize area (ha), production (MT) and yield (MT/ha) by sub-region

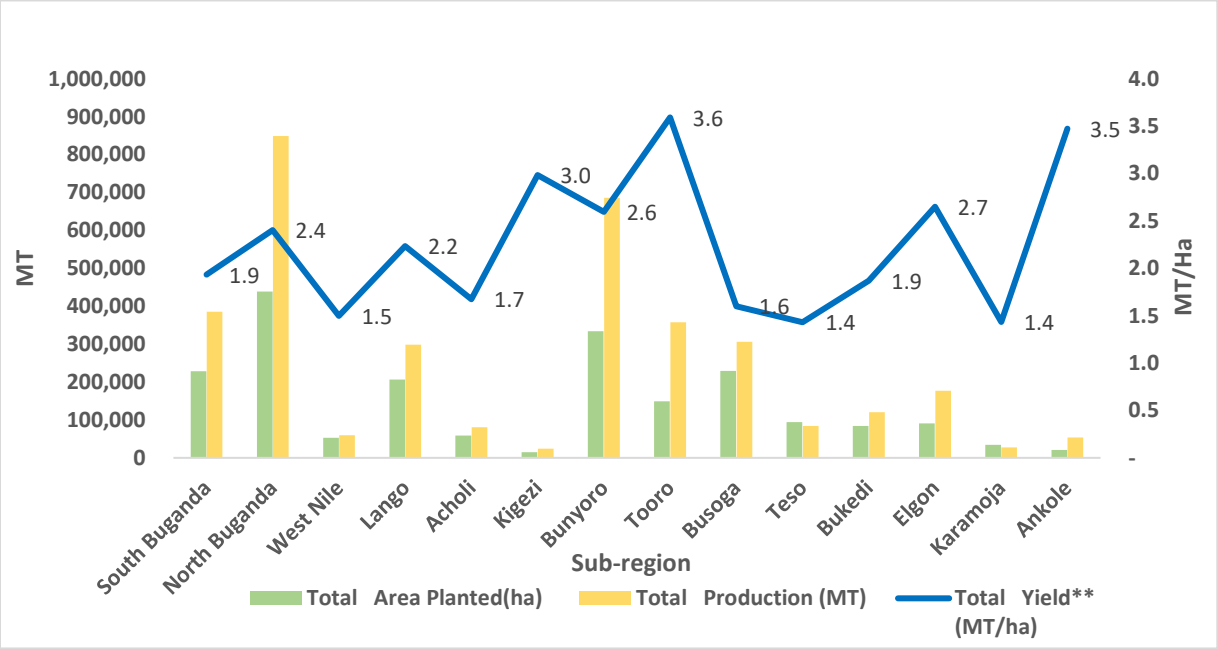


Figure 6:6. Maize area (Ha), production (MT) and yield (MT/ha) by ZARDI

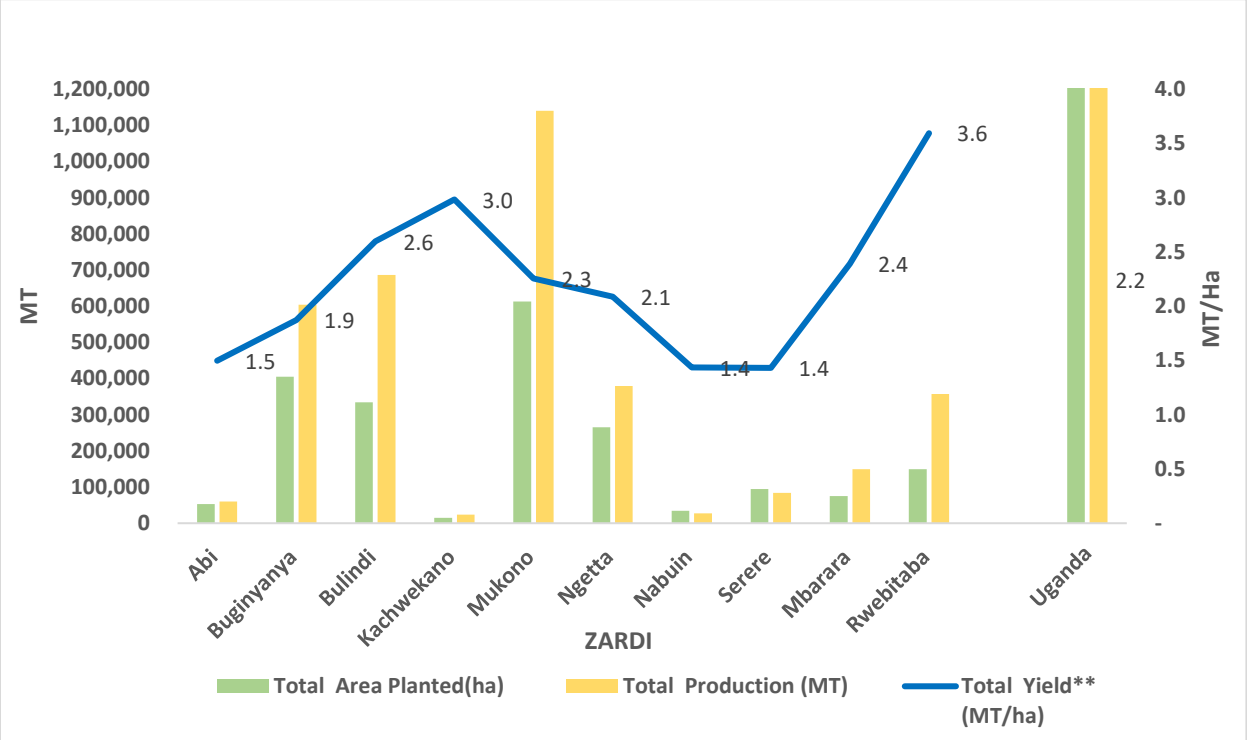


Figure 6:7. Maize production trend ('000 Metric Tonnes) for the years 1999/2000-2020

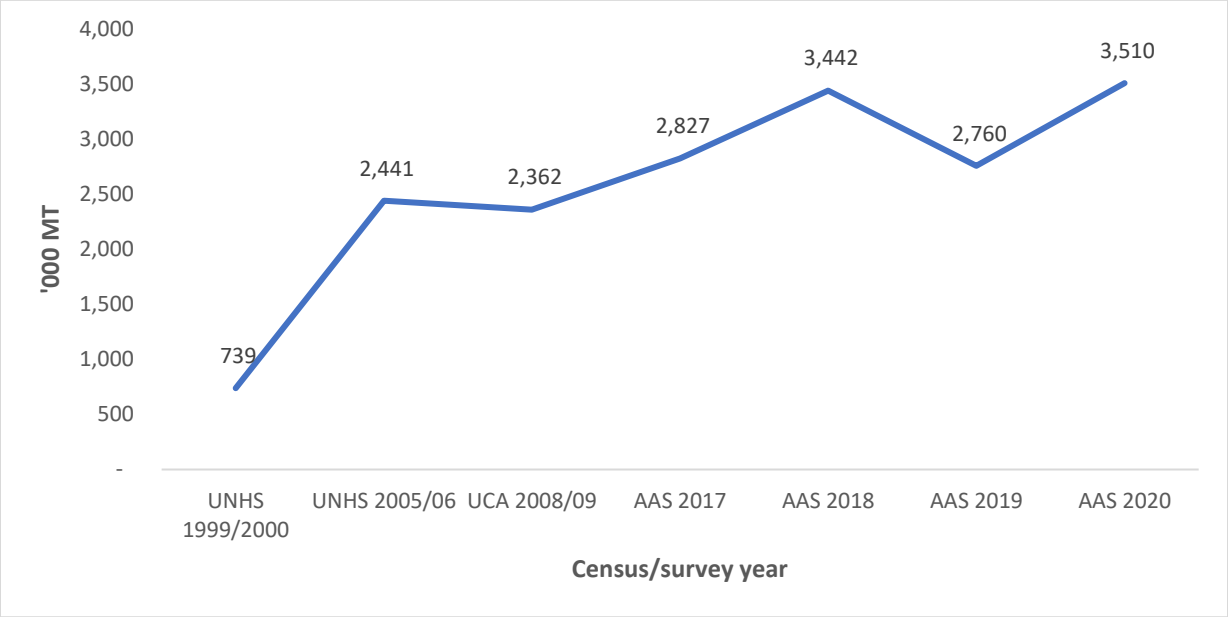
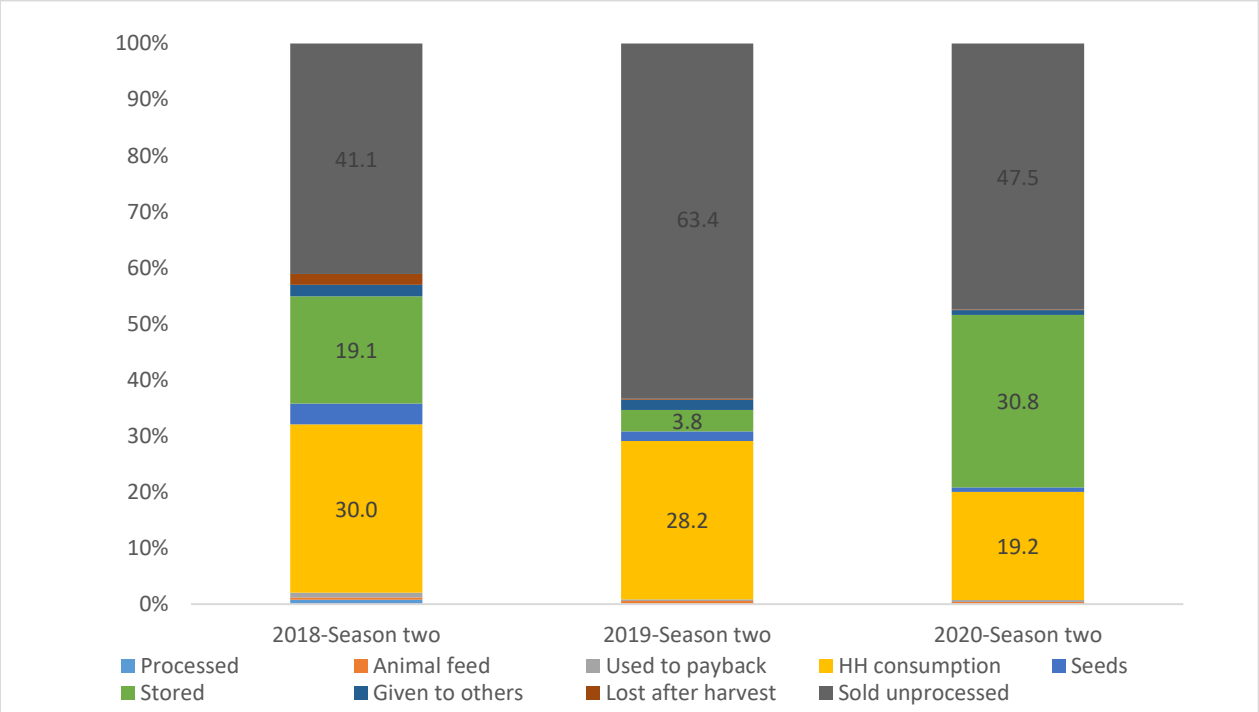


Figure 6:8. Distribution of maize production (2nd season) in the years 2018, 2019 and 2020 by use



6.3: Millet

The Annual Agricultural year 2020 results indicate six percent of Agricultural Households cultivated millet during the first season and nine percent in the second season. The total millet production in the agricultural year 2020 was estimated to be approximately 66,000 metric tonnes (MT) from an estimated plant area of approximately 200,000 hectares (ha). First and second seasons registered a similar amount of production, for instance 33,000 metric tonnes. At national level, the yield was 0.3 MT/ha in the first season and 0.7 MT/ha in the second season (**Annex 6, Tables 6- 3 and 6-4).**

The data collected at sub-regional level indicates Ankole had the highest annual millet production at 16,000 MT, followed by Acholi (12,000 MT). The sub-regions with the lowest annual production are West Nile (1,100 MT) and Bunyoro (580 MT). Tooro (1.0 MT/ha) and Kigezi (0.9 MT/ha) reported the highest annual yield, followed by Ankole (0.7 MT). The lowest annual yield was in Acholi, Lango and Teso (each with 0.3 MT/ha). See Figure 6:9 and **Annex 6, Table 6- 3**.

The ZARDI level indicates Ngetta with the highest annual production at 19,000 MT, followed by Mbarara (16,000 MT). The ZARDIs with the lowest annual production are Mukono (1,100 MT) and Bulindi (580 MT). Rwebitaba and Kachwekano reported the highest annual yields of 1.0 metric tonnes per hectare and 0.9 MT/ha, respectively. The lowest yields were in Serere and Ngetta at 0.3 MT/ha each (Annex 6, Table 6-4).

The production trend shows a steady decrease in millet production since the years 2008/2009. Millet production reduced from 73,000 MT in the year 2019 to 66,000 MT in the year 2020, corresponding to about ten percent of the year 2019 production (see Figure 6:11). The decrease in production appears to be a result of reduced planting since the annual national yield remained stable. In fact, the area planted with millet decreased by 13 percent in the year 2020 compared to the previous year. The annual national yield of survey year 2020 remained at 0.4 MT/ha (see Annex 6, Table 6-3).

Finally, the data on the use (disposition) of millet production reveals that at the time of enumeration, much crop of the second season was still stored (49 percent) while some had been used for own consumption (29 percent) or sold unprocessed (15 percent). S**ee** Figure 6:12**.**

Figure 6:9. Millet area (ha), production (MT) and yield (MT/ha), by sub-region

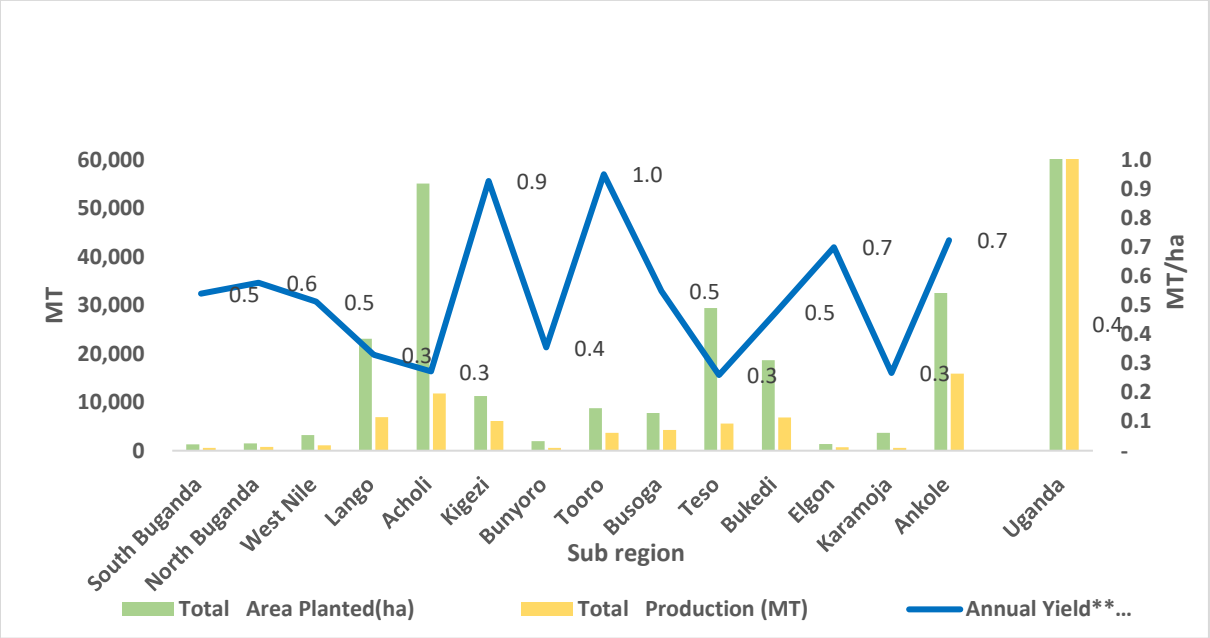


Figure 6:10. Millet area (ha), production (MT) and yield (MT/ha) by ZARDI

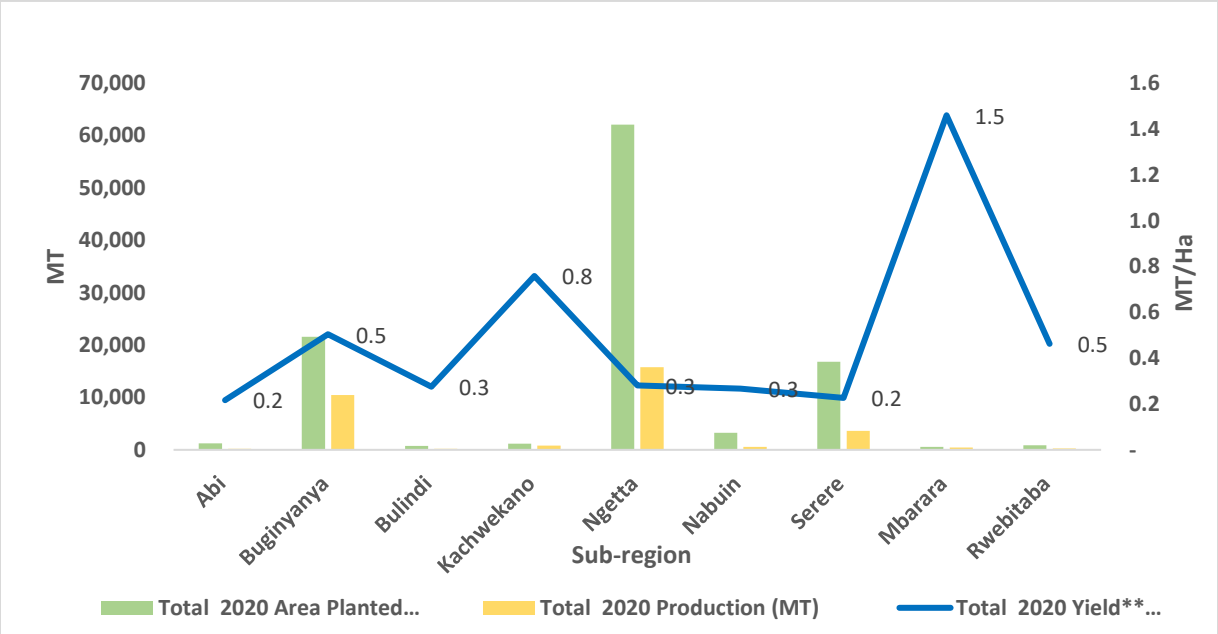


Figure 6:11. Millet production trend ('000 Metric Tonnes) in the years 1999/2000-2020

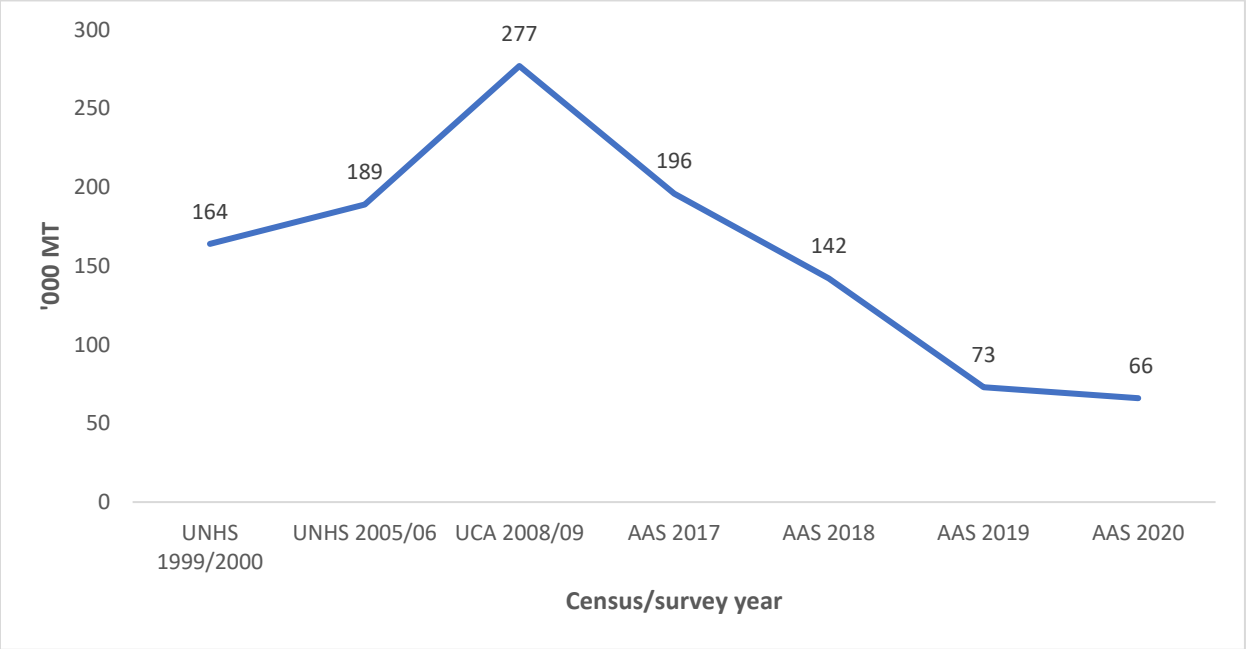
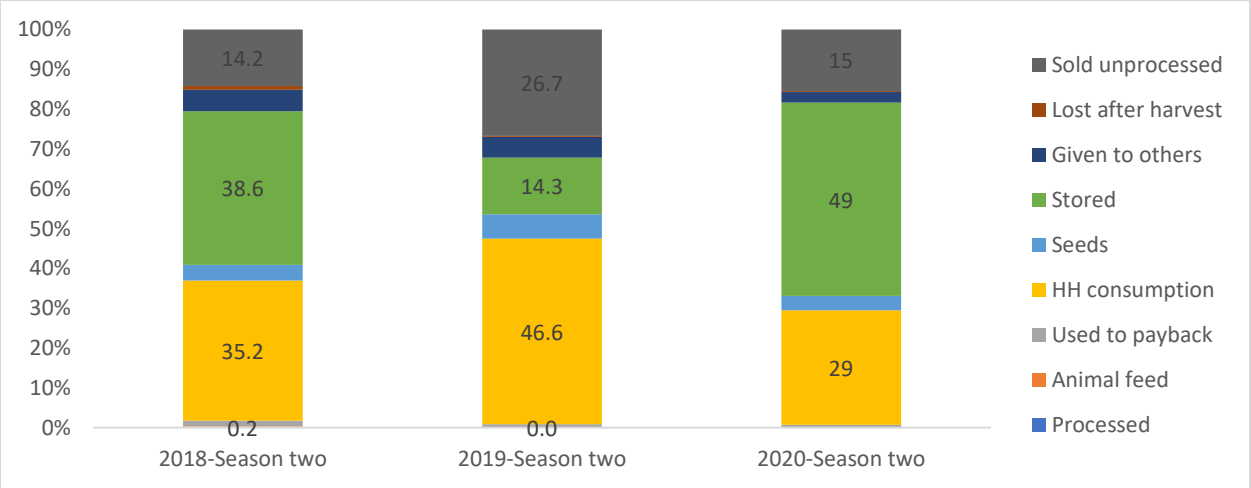


Figure 6:12. Distribution of millet production (2nd season) in the years 2018, 2019 and 2020 by use



6.4: Sorghum

Sorghum is a staple food that has increasingly become a source of income and a non-traditional export crop similar to maize. It is also used as a raw material in the brewing industry.

The Annual Agricultural Survey for the year 2020 results indicate ten percent of Agricultural Households cultivated sorghum during the first and second seasons. The total sorghum production in the 2020 agricultural year was estimated to be approximately 160,000 metric tonnes (MT) from an estimated plant area of approximately 374,000 hectares (ha). In the first season, a slightly lower production (approximately 55,000 MT) was recorded compared to the second season (105,000 MT). At national level, the yield was 0.7 metric tonnes per hectare in the first season and 1.1 MT/ha in the second season. See Annex 6, Table 6-5**.**

A look at the sub-regional level indicates Acholi had the highest annual production at 59,000 MT, followed by Teso (31,000 MT) and Kigezi (18,000 MT). The sub-regions with the lowest annual production were Ankole (5,900 MT) and Bukedi (4,000 MT). Lango (1.2 MT/ha) and West Nile (1.1 MT/ha) reported the highest annual yield, followed by Acholi (1.0 MT/ha); the lowest annual yield was 0.6 MT/ha, reported by Busoga, Teso, Bukedi and Karamoja. (Figure 6:13 and Annex 6, **Table 6-5**).

The ZARDI level indicates that Ngetta has the highest annual production, at 66,000 MT, followed by Serere (31,000 MT). The ZARDIs with the lowest annual production are Mbarara (6,500 MT) and Buginyanya (5,900 MT). Mukono (2.1MT/ha) and Ngetta, Mbarara, and Abi reported the highest annual yields of 1.1 MT/ha each; the lowest yields were in Buginyanya (0.7MT/ha) and Nabuin (0.6 MT/ha) (see Annex 6, Table 6- 5a).

The production trend shows fluctuations but with an overall decrease in sorghum production since the years 2008/2009. Sorghum production increased from 97,000 MT in the years 2019 to 160,000 MT in the year 2020, corresponding to about 65 percent increase (Figure 6:15). The increase in production appears to be a result of increased planting and yield. Actually, the area planted with sorghum increased by 15 percent in the year 2020 compared to that in the previous year. The annual national yield of the survey 2020 was 0.9 MT/ha compared to 0.6 MT/ha in the year 2019 (Annex 6, Table 6- 5).

Finally, the data on the use (disposition) of sorghum production reveals that, at the time of enumeration, much crop of the second season was still stored (59 percent) while some had been used for own consumption (26 percent) or sold unprocessed (12 percent). S**ee** Figure 6:16.

Figure 6:13. Sorghum area (ha), production (MT) and yield (MT/ha) by sub-region

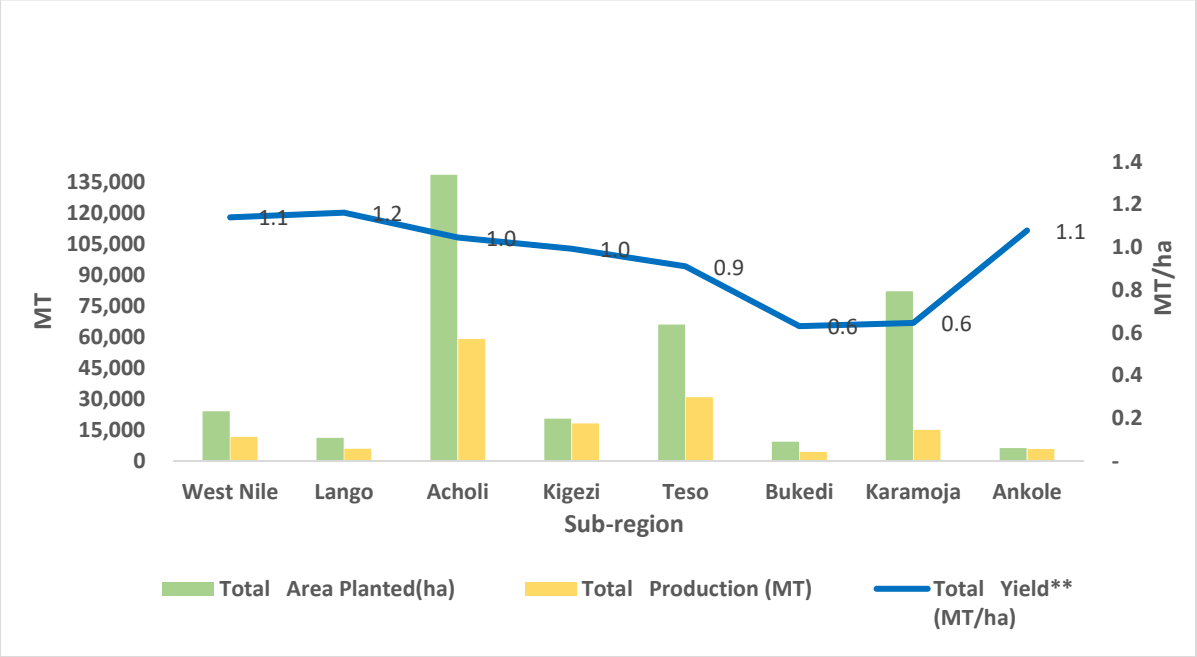


Figure 6:14. Sorghum area (ha), production (MT) and yield (MT/ha) by ZARDI

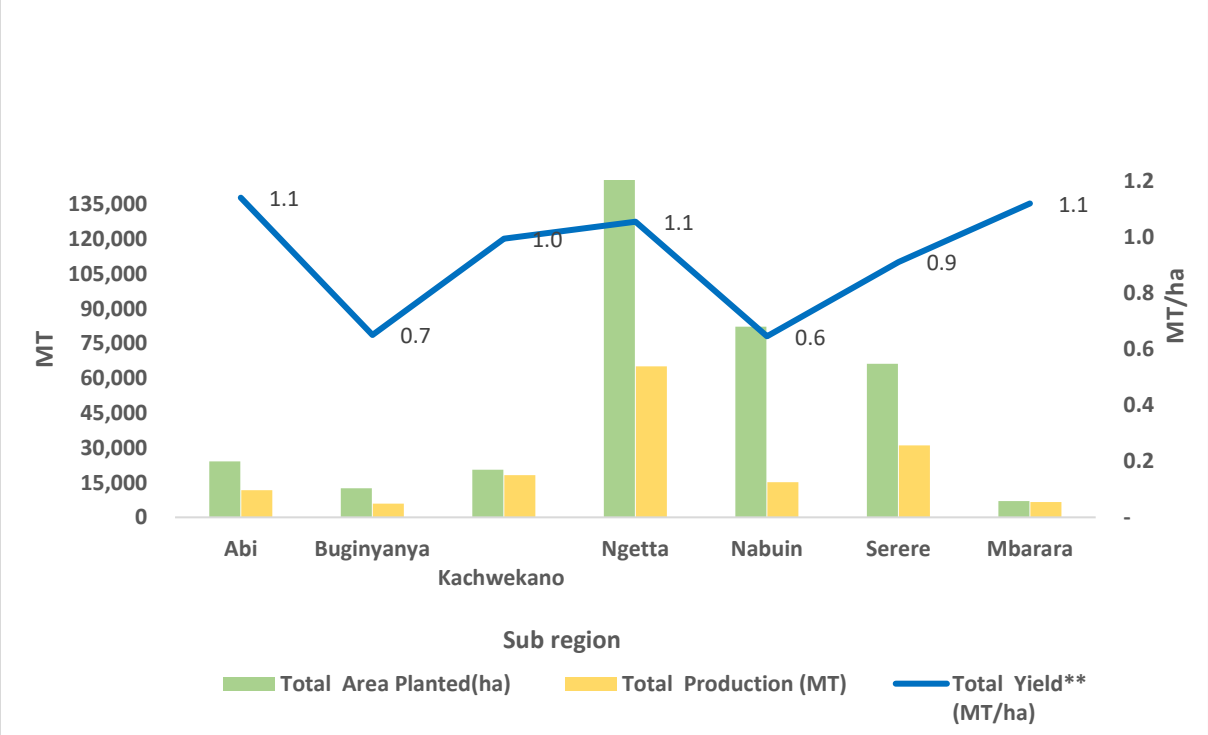


Figure 6:15. Sorghum production trend ('000 MT) in the years 1999/2000-2020

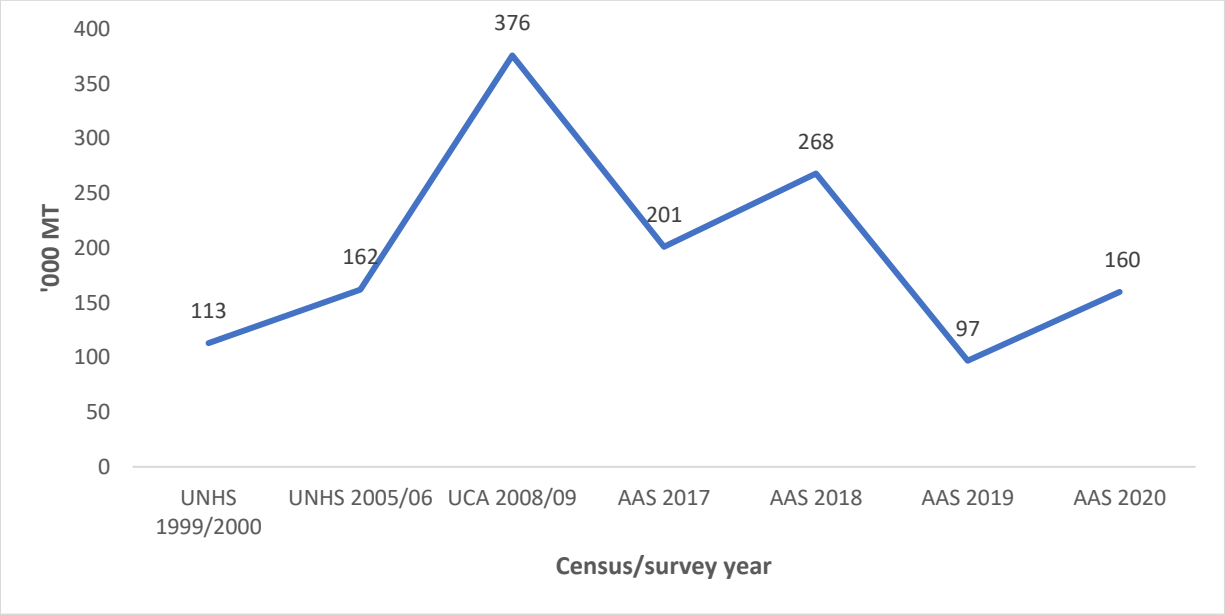
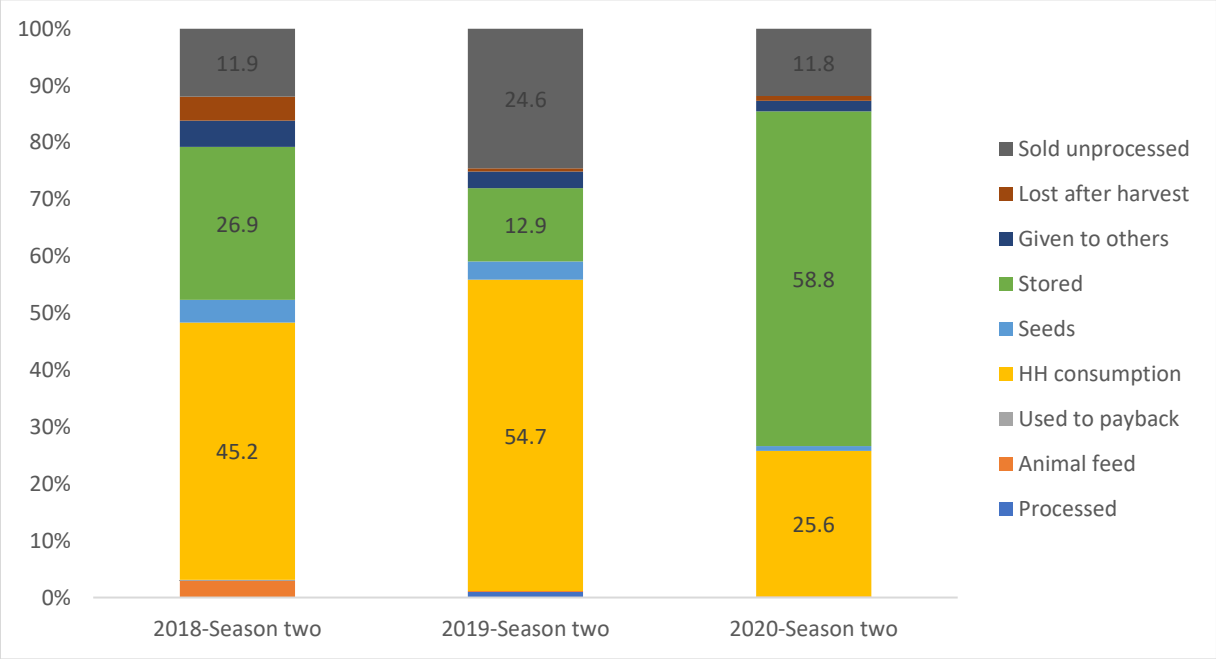


Figure 6:16. Distribution of sorghum production (2nd season) in in the years 2018, 2019 and 2020



6.5: Rice

Until recently, rice consumed in Uganda was mainly imported. However, nowadays farmers grow rice for both consumption and income. Two types of rice are grown in the country, paddy rice and upland rice. Paddy rice, which is more common than upland rice, requires wetlands to grow properly.

The Annual Agricultural Survey for the yrear 2020 results indicate four percent Agricultural Households cultivated rice during the first season and five percent in the second season. The total rice production in the agricultural year 2020 was estimated to be approximately 275,000 metric tonnes (MT) from an estimated plant area of approximately 221,000 hectares (ha). In the first season, a slightly higher production (approximately 156,000 MT) was recorded compared to the second season (119,000 MT). At national level, the yield was 1.5 MT/ha in the first and second seasons (Annex 6, Table 6-**7**)**.**

The data collected at the sub-regional level indicates Busoga had the highest annual production at 59,000 MT, followed by Bukedi (52,000 MT). The sub-region with the lowest annual production was West Nile (8,400 MT). Busoga (1.7 MT/ha), followed by Bunyoro (1.6 MT/ha), reported the highest annual yields. The lowest annual yields were in Lango (1.3 MT/ha) and Teso (1.2 MT/ha). See Figure 6:17 and Annex 6, **Table 6-7**).

The ZARDI level data indicates Buginyanya with the highest annual production at 137,000 MT, followed by Serere (15,000 MT). The ZARDIs with the lowest annual production are Bulindi (13,500 MT) and Abi (8,400 MT). Bulindi and Buginyanya reported the highest annual yields of 1.6 MT/ha each. The lowest yield was in Mukono (0.9MT/ha). See Annex 6, Table 6-8.

The production trend shows a stable level of rice production since the year 2005. Rice production increased from 167,000 metric tonnes in the year 2019 to 275,000 MT in the year 2020, corresponding to about 65 percent of the year 2019 production (Figure 6:19). The increase in production appears to be a result of increased planting and an increase in the annual national yield. Indeed, the area planted with rice increased by 24 percent in the year 2020 compared to the previous year, and the annual national yield of the year 2020 was 1.5 MT/ha compared to 1.3 MT/ha in the year 2019 (Annex 6, Table 6-7).

Finally, the data on use (disposition) of rice production reveals that, at the time of enumeration, much crop of the second season was sold unprocessed (65 percent) while some had been stored (16 percent), and nine percent had been used for own consumption (Figure 6:20**).**

Figure 6:17. Rice area (ha), production (MT) and yield (MT/ha) by sub-region

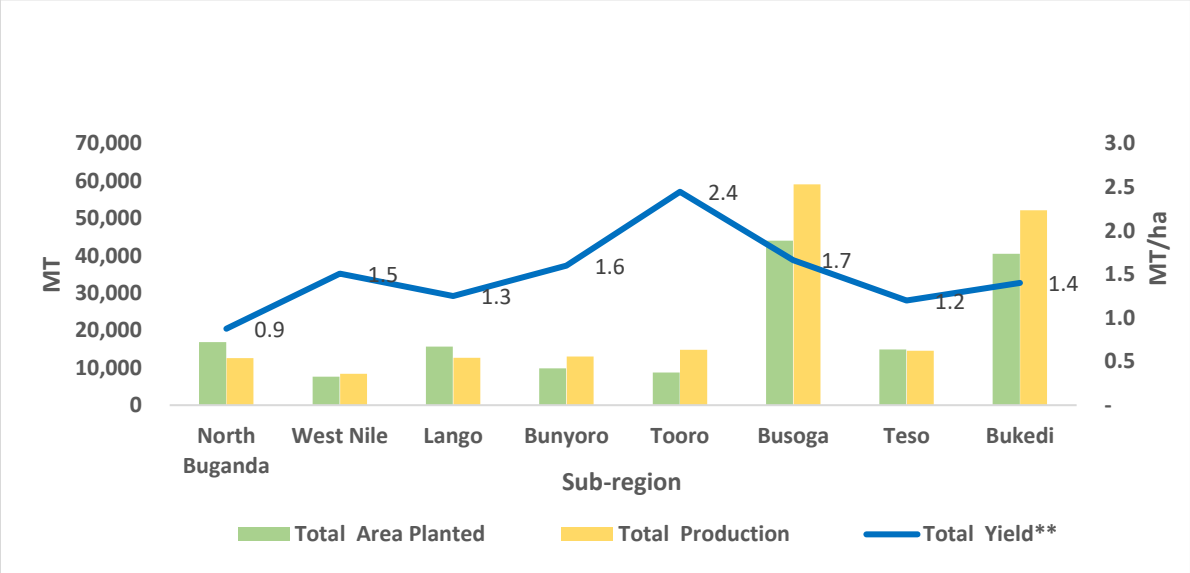


Figure 6:18. Rice area (ha), production (MT) and yield (MT/ha) by Zonal Agricultural Research and Development Institutes (ZARDIs)

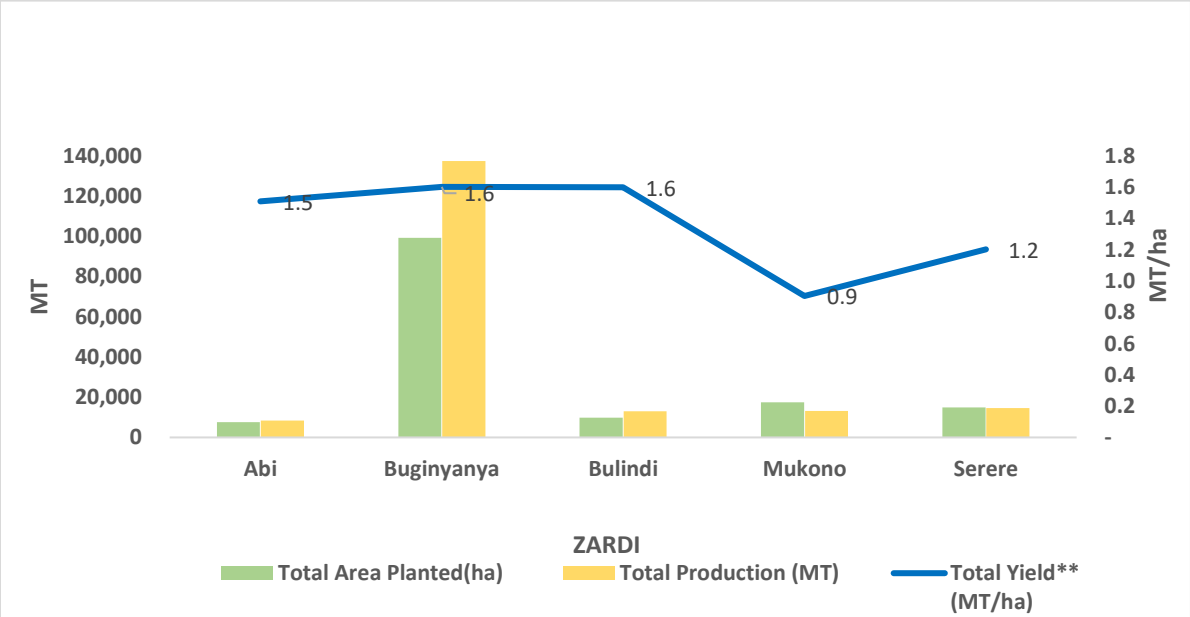


Figure 6:19. Rice production trend ('000 MT) in the years 2005/2006-2020

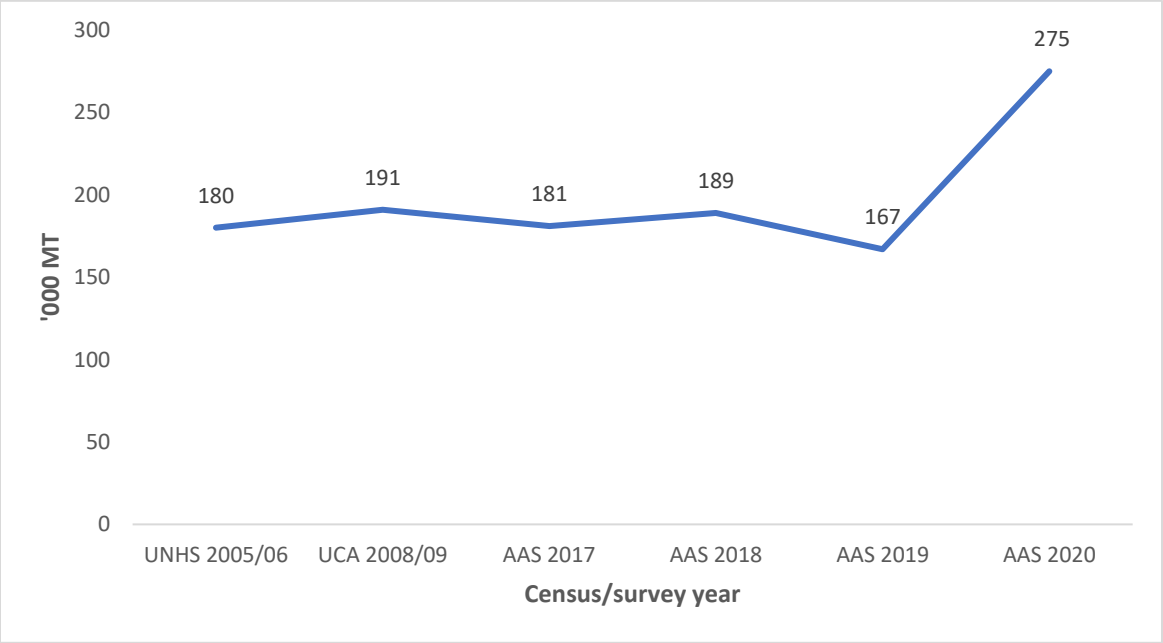
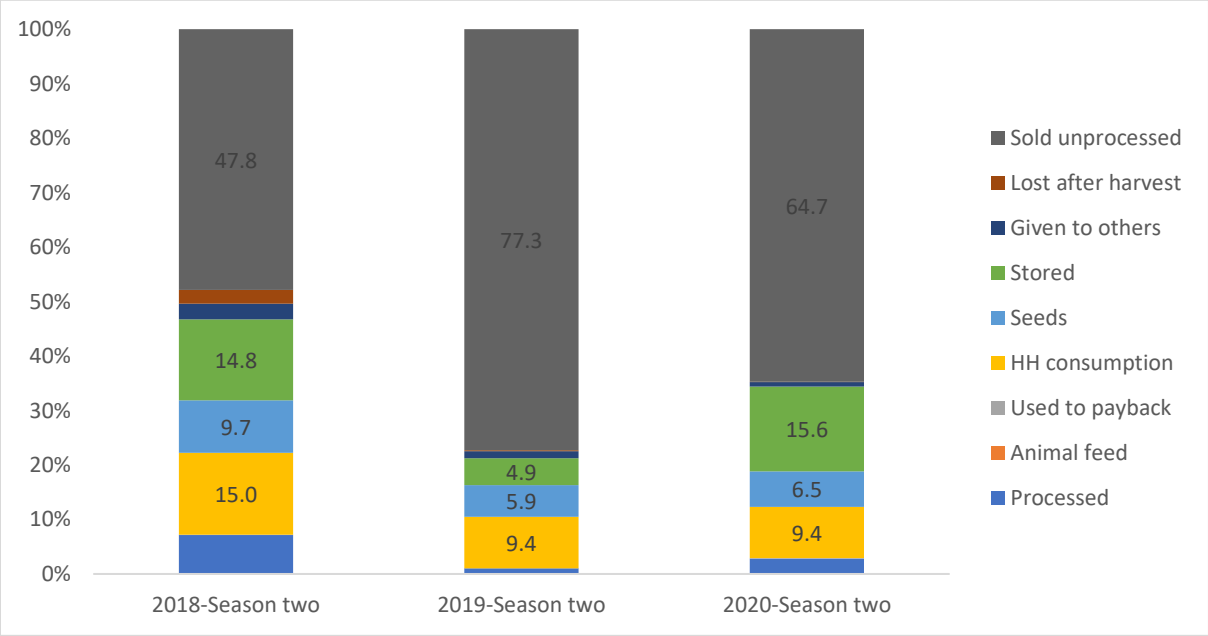


Figure 6:20. Distribution of rice production (2nd season) in the years 2018, 2019 and 2020



6.6: Beans

Beans are a major source of protein for most households in Uganda and are widely grown throughout the country. The year 2020 data shows 39 percent of Agricultural Households cultivated beans during the first season and 46 percent in the second season.

The Annual Agricultural Survey for the year 2020 results indicate 45 percent of Ag HHs cultivated beans during the first season and 53 percent in the second season. The total beans production in the agricultural year 2020 was estimated to be approximately 670,000 metric tonnes (MT) from an estimated plant area of approximately 1.1 million hectares (ha). In the first season, a slightly lower production (approximately 320,000 MT) was recorded compared to the second season (350,000 MT). At national level, the yield was 0.6 MT/ha in the first season and 1.1 MT/ha in the second season (**Annex 6, Table 6-9**).

A look at the sub-regional level indicates North Buganda had the highest annual production at 120,000 MT, followed by Bunyoro (111,000 MT). The sub-regions with the lowest annual production were Teso (7,100 MT) and Bukedi (6,100 MT). Bunyoro and Ankole reported the highest annual yield (1.0 MT/ha). The lowest annual yields were in Bukedi (0.6 MT/ha) and Teso (0.5 MT/ha). See Figure 6:21 and **Annex 6, Table 6-9**.

The data at the ZARDI level indicates Mukono had the highest annual production at 169,000 MT, followed by Mbarara (112,000 MT) and Bulindi (111,000 MT). The ZARDIs with the lowest annual production were Abi (12,100 MT) and Serere (7,100 MT). Bulindi (1.0 MT/ha), Mbarara and Kachwekano reported the highest annual yields (0.9 MT/ha). The lowest annual yields were in Ngetta (0.6 MT/ha) and Serere (0.5 MT/ha). See **Annex 6, Table 6-10**.

The production trend shows a decrease in beans production since the years 2008/2009, followed by an increase in the year 2020. Beans production increased by 53 percent to 670,000 MT in the year 2020 from 438,000 MT in the year 2019 (Figure 6:23). The increase in production appears to be a result of increased planting and a slight increase in the national yield. In fact, the area planted with beans increased by 31 percent in the year 2020 compared to the previous year, and the annual national yield of the year 2020 was 0.8 metric tonnes per hectare compared to 0.6 MT/ha in the year 2019. (Annex 6, **Table 6- 9).**

Finally, the data on the use (disposition) of beans production reveals most beans were sold unprocessed (41 percent). This is slightly lower than the year 2019 in which the second season proportion of beans harvest was sold unprocessed. Nonetheless, a large amount of beans were still in storage at the time of enumeration (31 percent). Furthermore, 27 percent had been consumed by the producing households and 19 percent of the second season production of the survey 2020 was set aside as seed for the following season (Figure 6:24).

Figure 6:21. Beans area (ha), production (MT) and yield (MT/ha) by sub-region

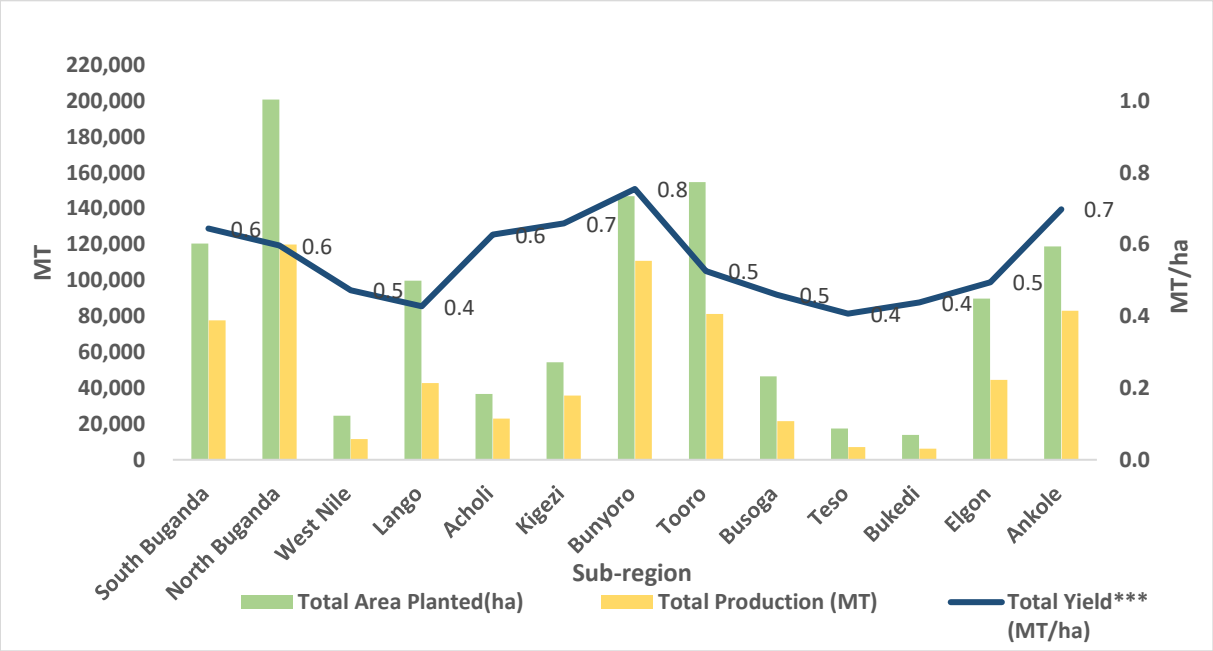


Figure 6:22. Beans area (ha), production (MT) and yield (MT/ha) by ZARDI

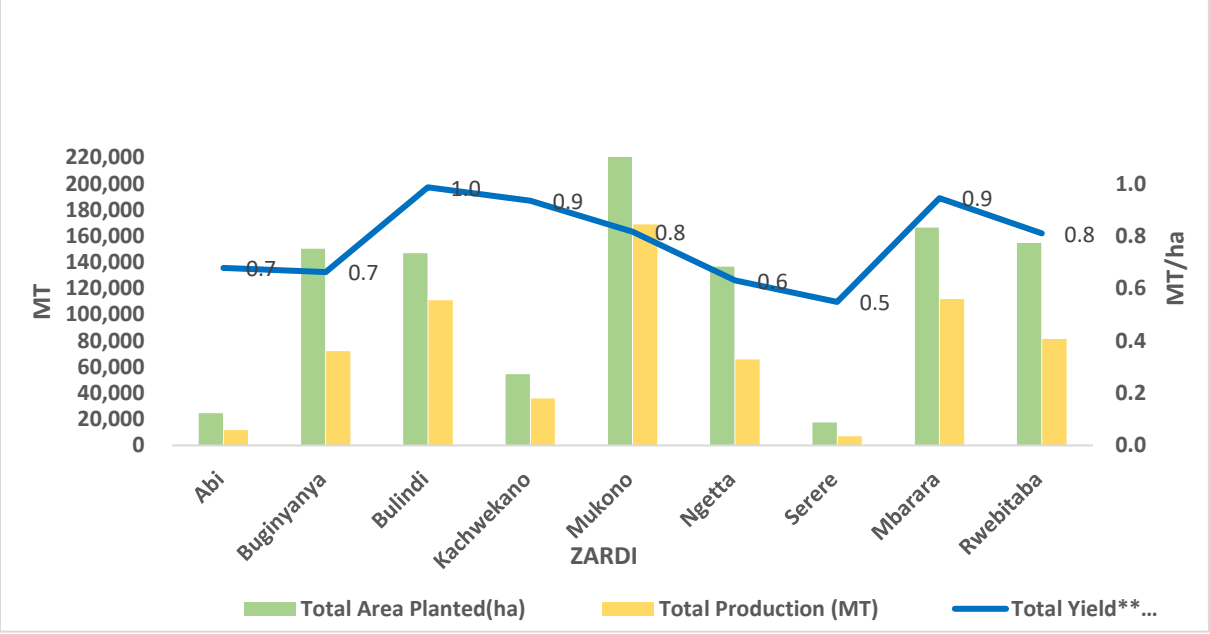


Figure 6:23. Beans production (‘000 MT) in the years 1999/2000-2020

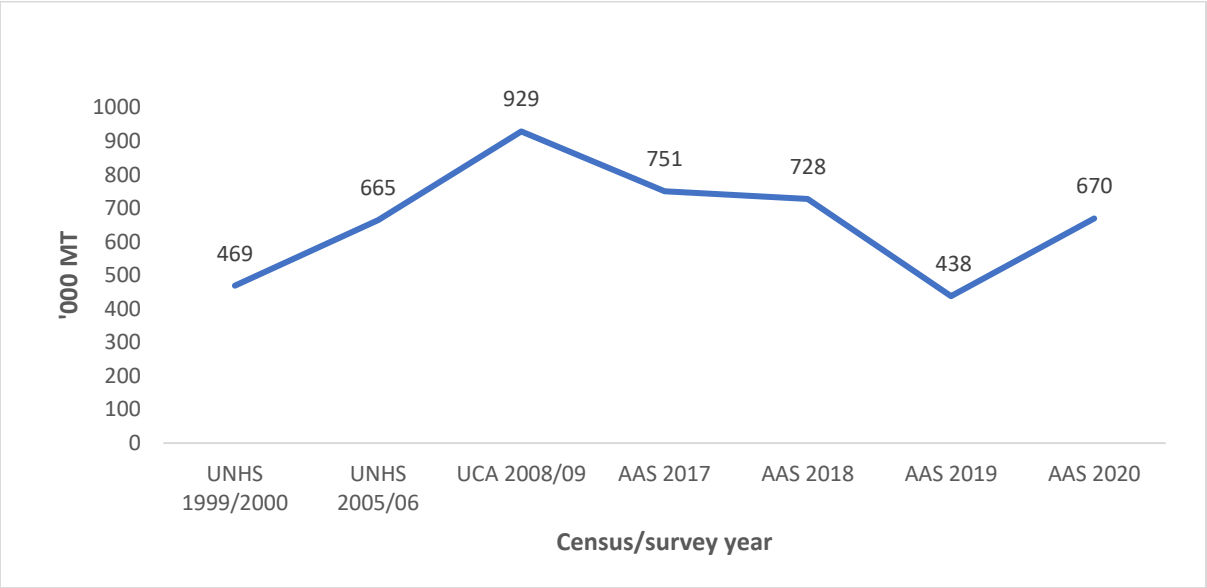
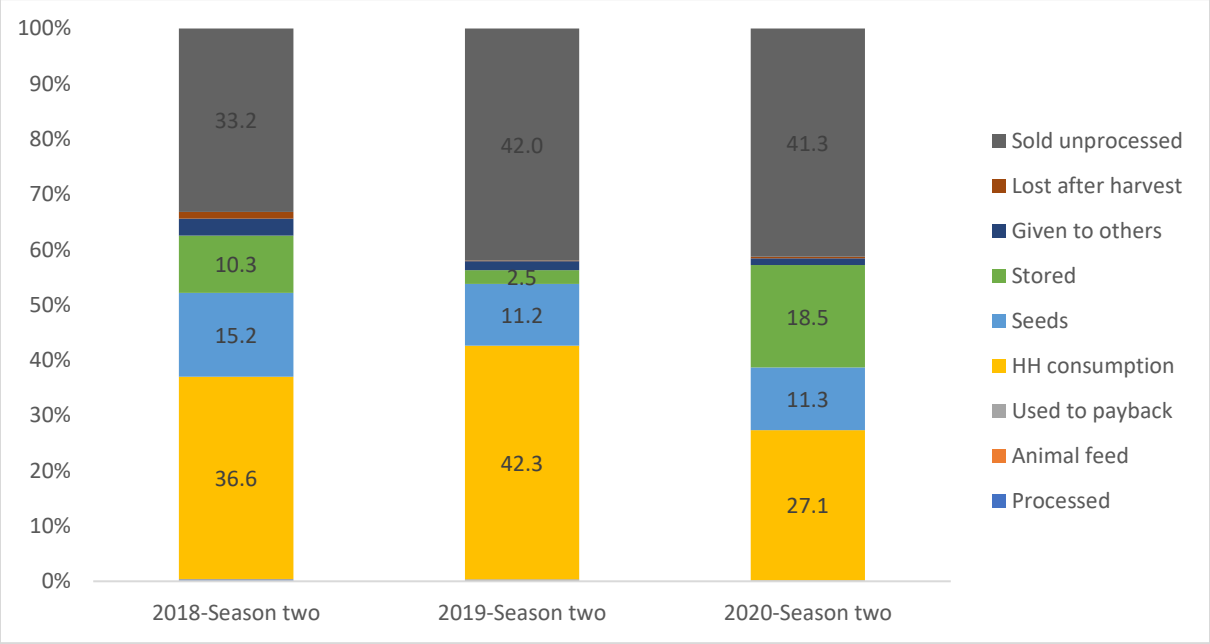


Figure 6:24. Distribution of beans production (2nd season) in the years 2018, 2019, and 2020 by use



6.7: Soya beans

Soya beans are a major source of protein and used in the production of oil. They are very useful as a cover crop to increase soil fertility. Information collected during the Annual Agricultural Survey for the year 2020 indicates six percent Agricultural Households cultivated soya beans during the first and second season.

The total production of soya beans in the agricultural year 2020 was estimated to be approximately 138,000 metric tonnes (MT) from an estimated plant area of approximately 225,000 hectares (ha). In the first season, a higher production (approximately 100,000 MT) was recorded compared to the second season (37,000 MT). At national level, the yield was 0.8 MT/ha (Annex 6, Table 6-11).

The sub-regional level data indicates Lango had the highest annual production at 89,000 MT, followed by Acholi at 22,000 MT. The sub-regions with the lowest annual production were Bunyoro (1,900 MT) and North Buganda (980 MT). Acholi (1.1 MT/ha) and Lango (0.8 MT/ha) reported the highest annual yields while North Buganda, Busoga, and Teso (all at 0.5 MT/ha) had the lowest annual yields (Figure 6:25 **and Annex 6, Table 6-11**).

The Zonal Agricultural Research and Development Institutes (ZARDIs) level data indicates Ngetta had the highest annual production at 111,000 MT, followed by Buginyanya at 16,000 MT. The ZARDIs with the lowest annual production were Abi (1,100 MT) and Mukono (980 MT). Ngetta (0.8 MT/ha), and Abi and Bulindi (0.7 MT/ha each) reported the highest annual yields while Buginyanya and Serere (both at 0.5 MT/ha) had the lowest (**Annex 6, Table 6-12**). The production trend shows a steady increase in the production of soya beans from the years 2005/2006 to 2008/2009, followed by a more than a threefold increase from the years 2008/2009 to 2017, with a steady increase until the survey year 2020. The increase in production appears to be a result of slight increases in both yield and area planted. The yield increased from 0.6 metric tonnes per hectare in the year 2019 to 0.8 MT/ha in the year 2020 while areas planted increased from 216,000 ha in the year 2019 to 225,000 ha in the year 2020 (corresponding to four percent). See Figure 6:27.

The data on the use (disposition) of soya beans, reveals most soya beans were sold unprocessed (78 percent). This was about the same proportion of soya beans harvested in the second season of the year 2019. Nonetheless, some soya beans (about 6.4 percent) were still in storage at the time of enumeration while 6.4 percent had been consumed by the producing households and another seven percent of the second season production of the survey year 2020 had been set aside as seed for the following season (Figure 6:28)

Figure 6:25. Soya beans area (ha), production (MT) and yield (MT/ha) by sub-region

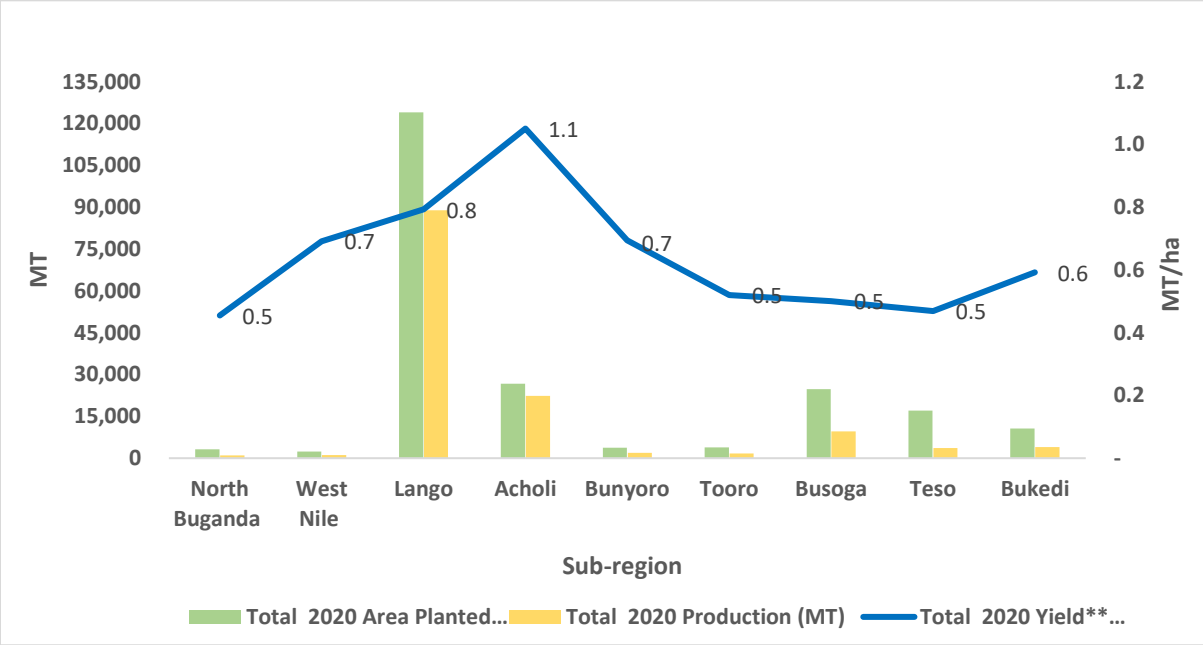


Figure 6:26. Soya beans area (ha), production (MT) and yield (MT/ha) by ZARDI

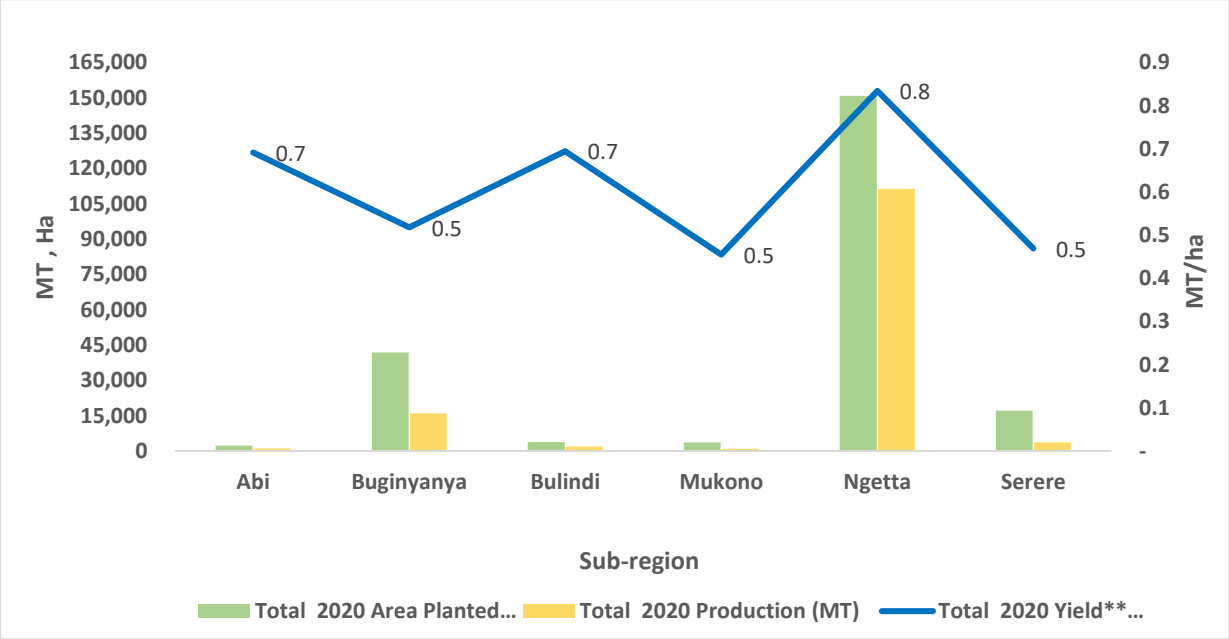


Figure 6:27. Soya bean production trend ('000 Metric Tonnes) in the years 2005/2006-2020

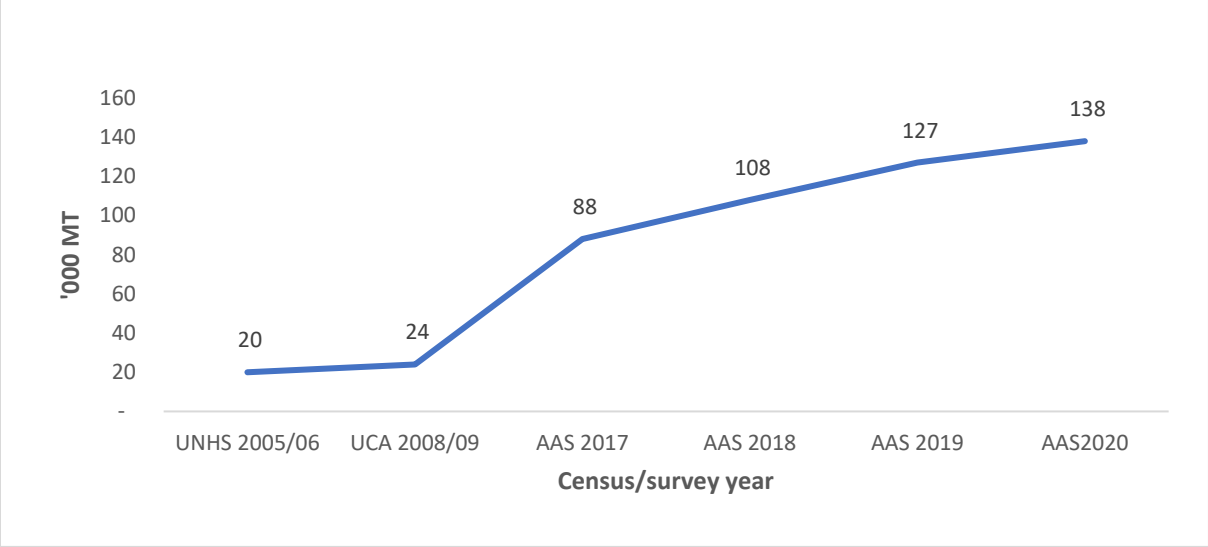
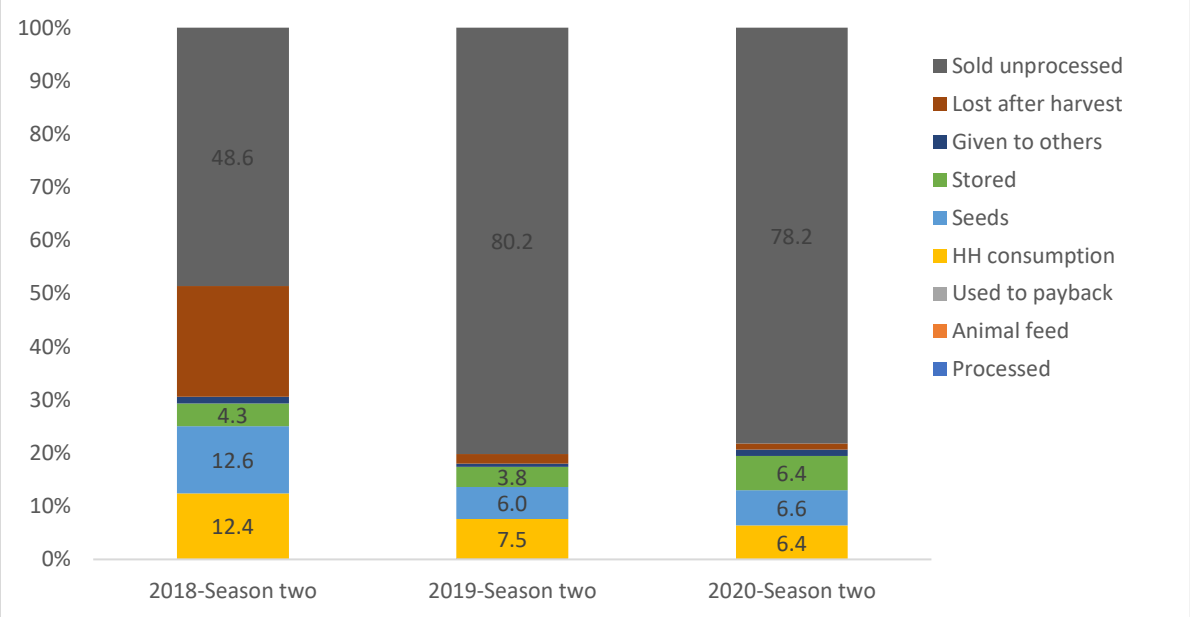


Figure 6:28. Distribution of soya bean production (2nd season) in the years 2018, 2019 and 2020, by use



6.8: Sweet potatoes

Sweet potatoes are widely grown across Uganda. The Annual Agricultural Survy for the year 2020 results indicate 22 percent of Agricultural Households cultivated sweet potatoes during the first season and 36 percent in the second season.

The total production of sweet potatoes in the agricultural year 2020 was estimated to be approximately 1.2 million metric tonnes (MT) from an estimated plant area of approximately 466,000 hectares (ha). In the first season, a lower production (approximately 443,000 MT) was recorded compared to the second season (764,000 MT). At national level, the yield was 3.4 MT/ha in the first season and 7.0 MT/ha in the second (Annex 6, **Table 6- 13**)**.**

A look at the sub-regional level indicates Busoga (194,000 MT) with the highest sweet potato production, followed by North Buganda (187,000 MT). The sub-regions with the lowest annual production were Ankole (40,000 MT) and Tooro (39,000 MT). Acholi (12.2 MT/ha) and Lango (7.5 MT/ha) reported the highest annual yields. The lowest annual yields were in Busoga (3.7 MT/ha) and Elgon (3.4 MT/ha). See Figure 6:29 and Annex 6, **Table 6- 13**.

At the ZARDI level, Buginyanya (288,000 MT) reported the highest sweet potato production followed by Mukono (254,000 MT). The ZARDIs with the lowest annual production were Bulindi (41,000 MT) and Rwebitaba (39,000 MT). Ngetta (9.4 MT/ha) and Abi (8.3 MT/ha) reported the highest annual yields; the lowest annual yields were in Mukono (4.1 MT/ha) and Buginyanya (3.9 MT/ha). See Annex 6, **Table 6-14**).

The production trend shows some fluctuation, but ultimately, a general decrease in sweet potato production since the year 2000 and an increase in the year 2020. Sweet potato production increased by 13 percent to 1.2 million MT in the year 2020 compared to 1.1 million MT in the year 2019 (Figure 6:31). The increase in production appears to be a result of an increase in the national yield and not the area planted. In fact, the area planted with sweet potatoes decreased from 504,000 ha in the year 2019 to 466,000 ha in the year 2020 while the annual national yield of the year 2020 was 5.0 metric tonnes per hectare and 2.8 MT/ha in the year 2019 (Annex 6, Table 6-13).

Finally, the data on the use (disposition) of sweet potato production reveals a large proportion of sweet potatoes cultivated were consumed by the producing households (78 percent). This was similar to the percentage consumed by the producing households in the second season of the year 2019. Some of the sweet potatoes were still in storage at the time of enumeration (about six percent) while nine percent had been sold unprocessed and seven percent of the second season production of the survey year 2020 was given to others (Figure 6:32).

Figure 6:29. Sweet potatoes area (ha), production (MT) and yield (MT/ha) by sub-region

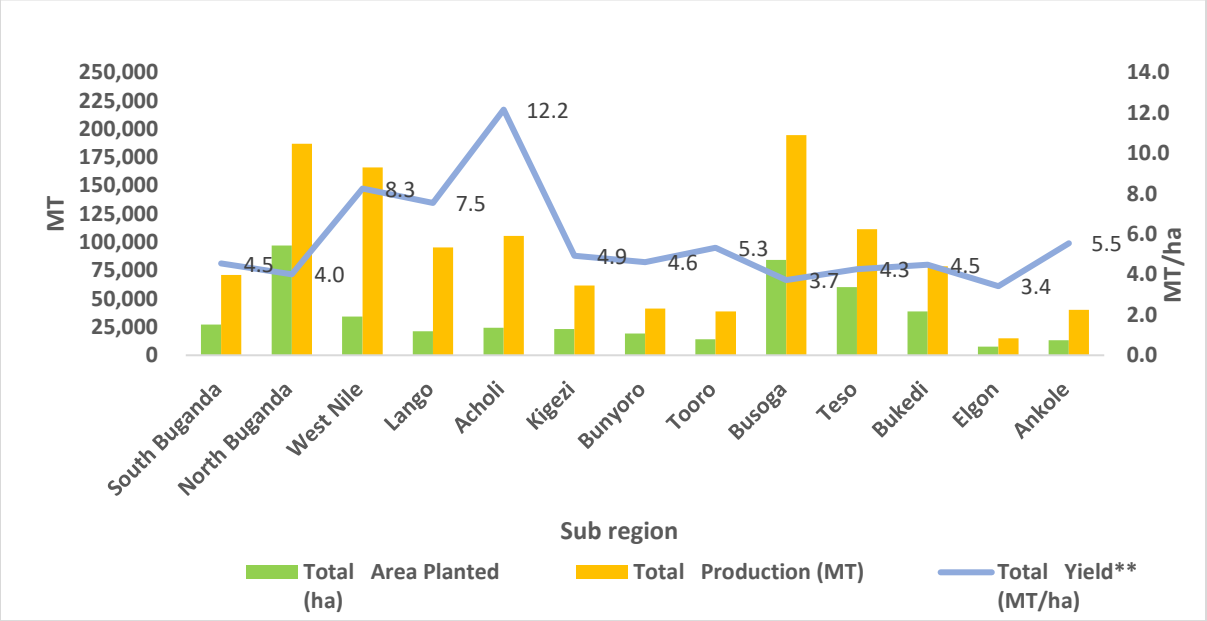


Figure 6:30. Sweet potatoes area (ha), production (MT) and yield (MT/ha) by ZARDI

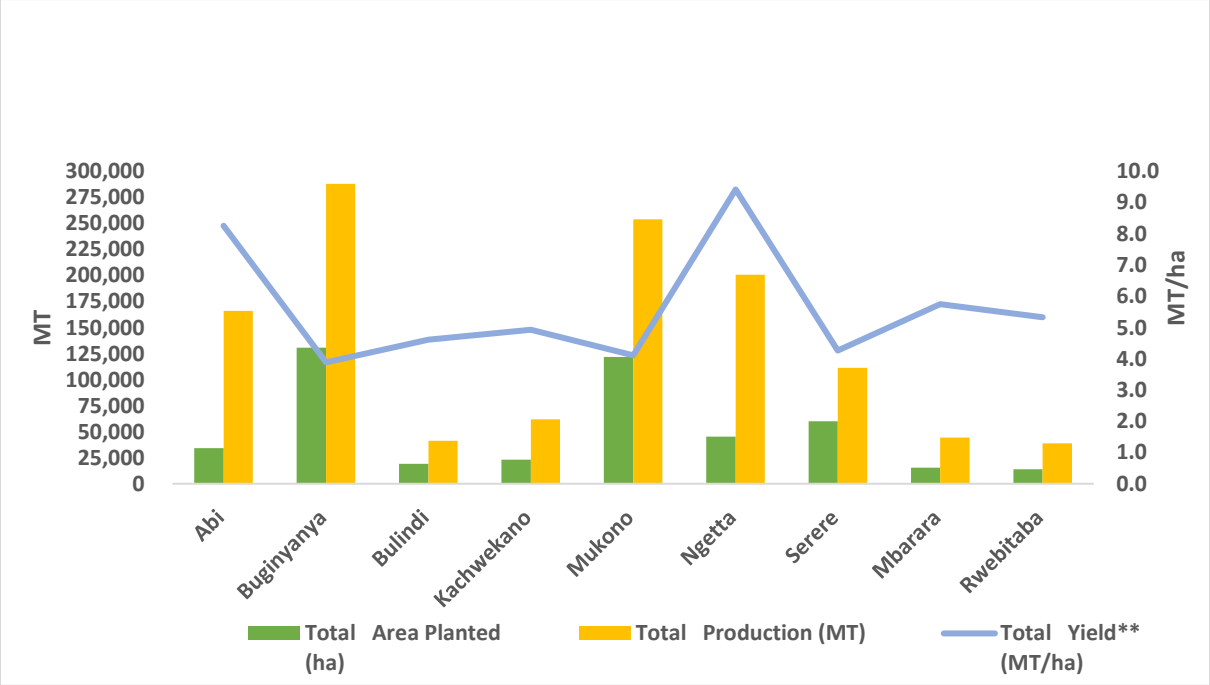


Figure 6:31. Sweet potato production trend ('000 Metric Tonnes) in the years 1999/2000-2020

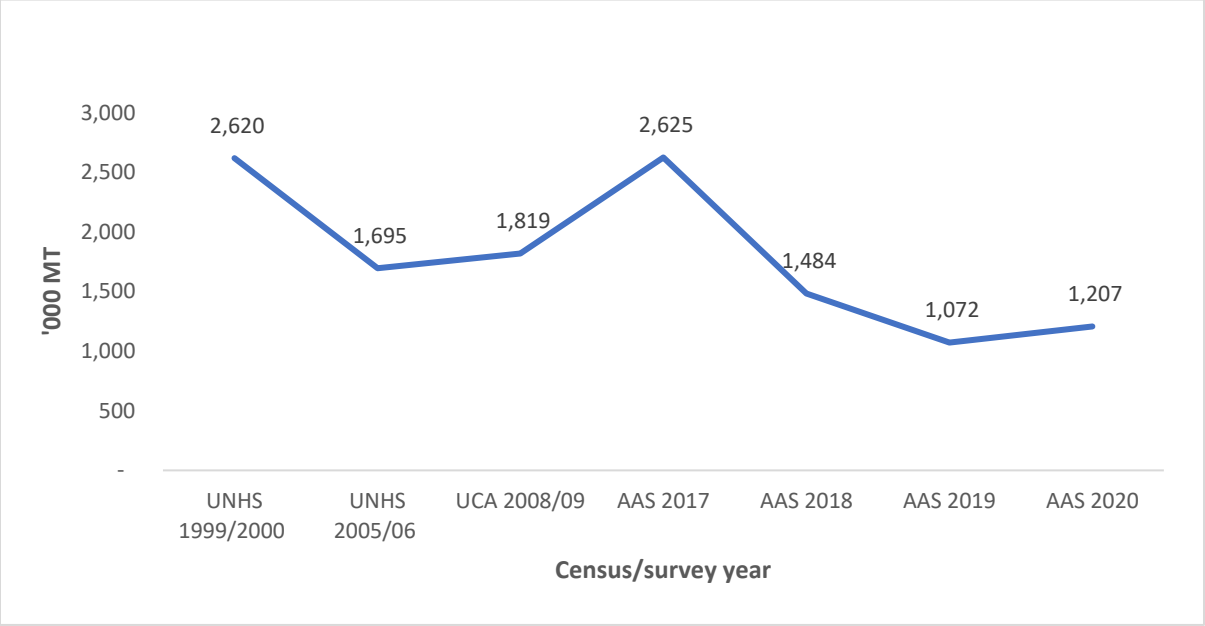
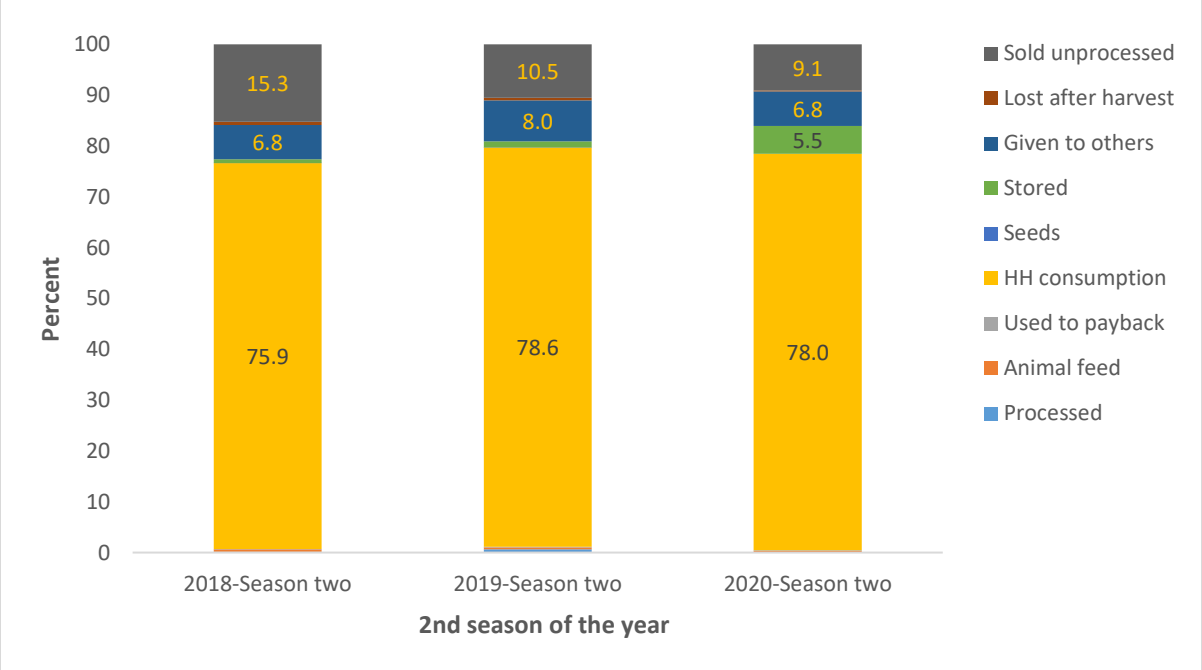


Figure 6:32. Distribution of sweet potato production (2nd season) in the years 2018, 2019 and 2020, by use



6.9: Irish potatoes

Traditionally, Irish potatoes were mainly grown in Western Uganda and in the Elgon area. Recently, many farmers in North Buganda started to grow Irish potatoes. The Annual Agricultural Survey year 2020 results indicate three percent of Agricultural Households cultivated Irish potatoes during the first season and five percent in the second season.

The total Irish potato production in the agricultural year 2020 was estimated to be approximately 224,000 metric tonnes (MT) from an estimated plant area of approximately 81,000 hectares (ha). In the first season, a slightly lower production (approximately 110,000 MT) was recorded compared to the second season (114,000 MT). At the national level, the yield was 3.4 MT/ha in first season and 5.4 MT/ha in second season (Annex 6, **Table 6-15**)**.**

The sub-regional level data indicates Kigezi with the highest annual production at 65,000 MT, followed by Tooro (58,000 MT) and South Buganda (36,000 MT). The sub-regions with the lowest annual production were North Buganda (13,000 MT) and Ankole (10,000 MT). Kigezi reported the highest annual yield (6.4 MT/ha), followed by South Buganda (4.5 MT/ha) and North Buganda (4.2 MT/ha). The lowest annual yield was in Bunyoro (2.5 MT/ha). See Figure 6:33 and Annex 6, Table 6-**15**.

The Zonal Agricultural Research and Development Institutes (ZARDIs)'s results indicate Kachwekano with the highest annual production at 65,000 MT, followed by Rwebitaba (58,000 MT). The ZARDIs with the lowest annual production were Mukono (21,000 MT) and Bulindi (16,000 MT). Kachwekano reported the highest annual yield (6.4 MT/ha), followed by Mukono and Mbarara (each with 4.3 MT/ha). The lowest annual yield was in Bulindi (2.5 MT/ha). See Annex 6, Table 6-**16**.

The production trend shows a steady decrease in Irish potato production over the past two years. Irish potato production reduced from 261,000 MT in the year 2019 to 224,000 MT in the year 2020, corresponding to about 14 percent of the year 2019 production (Figure 6:35). The decrease in production appears to be a result of decreased planting. In fact, the area planted with Irish potatoes decreased by 17 percent in the year 2020 compared to the previous year. The annual national yield of the survey year 2020 was 4.2 MT/ha compared 3.0 MT/ha in the year 2019 (Annex 6, Table 6-15).

Finally, the data on use (disposition) of Irish potato production reveals that, at the time of enumeration, much crop of the second season had been sold unprocessed (47 percent) while some had been used for own consumption (25 percent) or set aside for seed (19 percent). See Figure 6:36**).**

Figure 6:33. Irish potatoes area (ha), production (MT) and yield (MT/ha) by sub-region

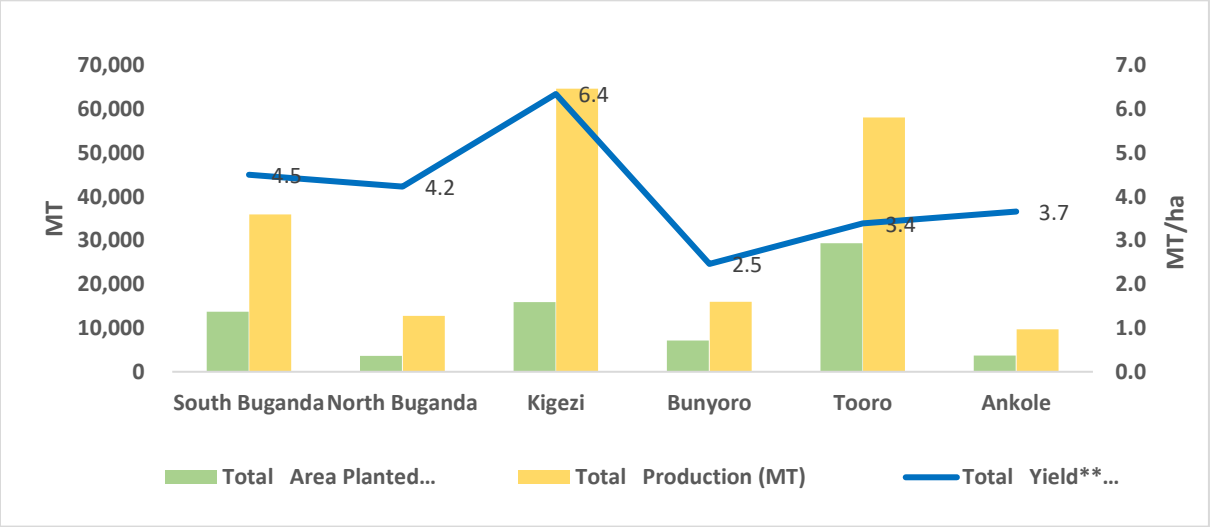


Figure 6:34. Irish potatoes area (ha), production (MT) and yield (MT/ha) by Zonal Agricultural Research and Development Institutes

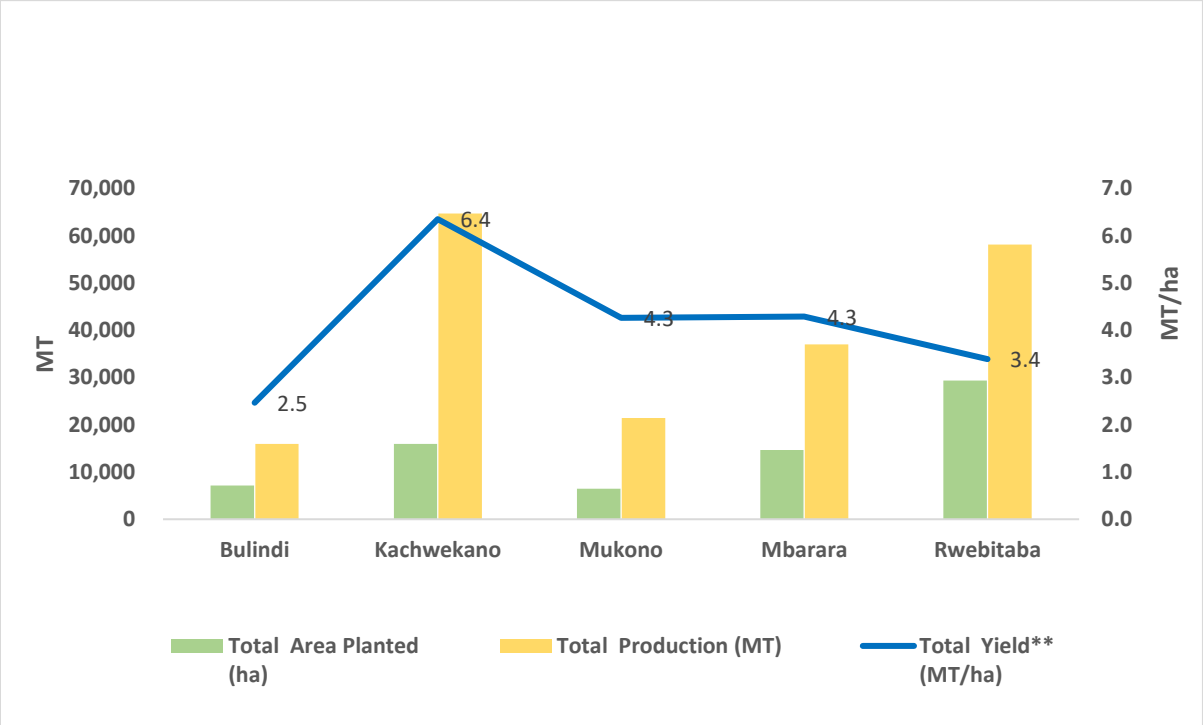


Figure 6:35. Irish potato production trend ('000 MT) in the years 2005/06-2020

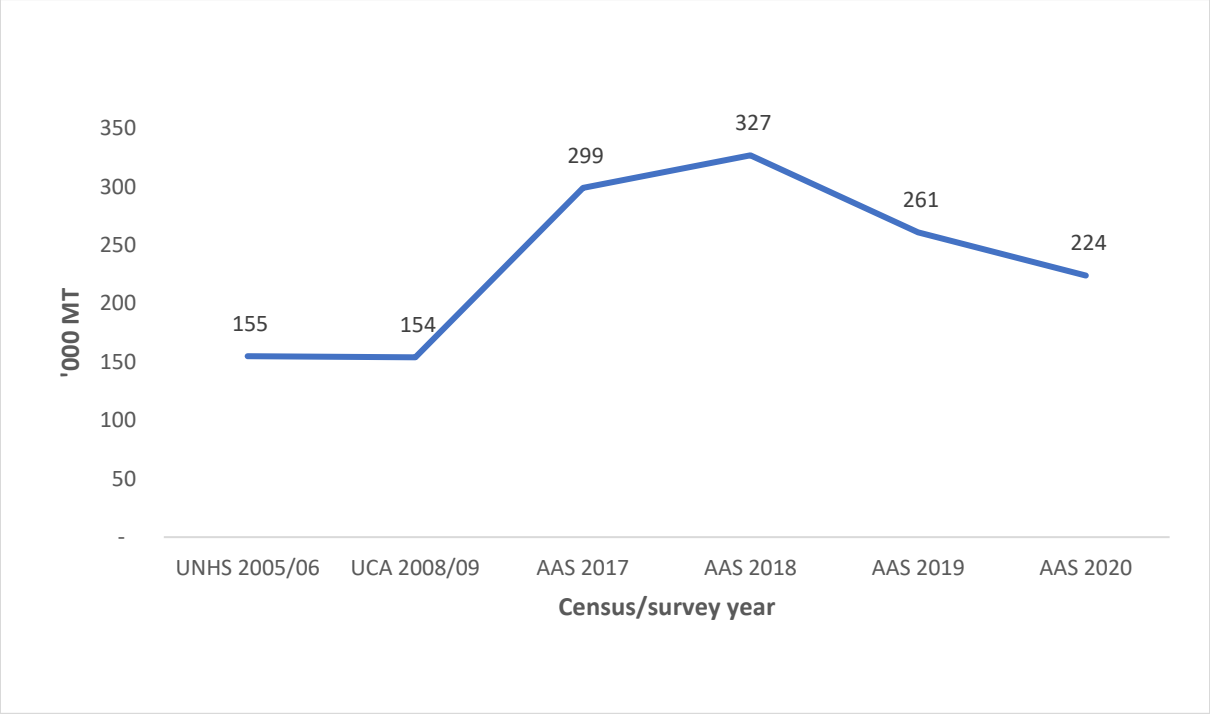
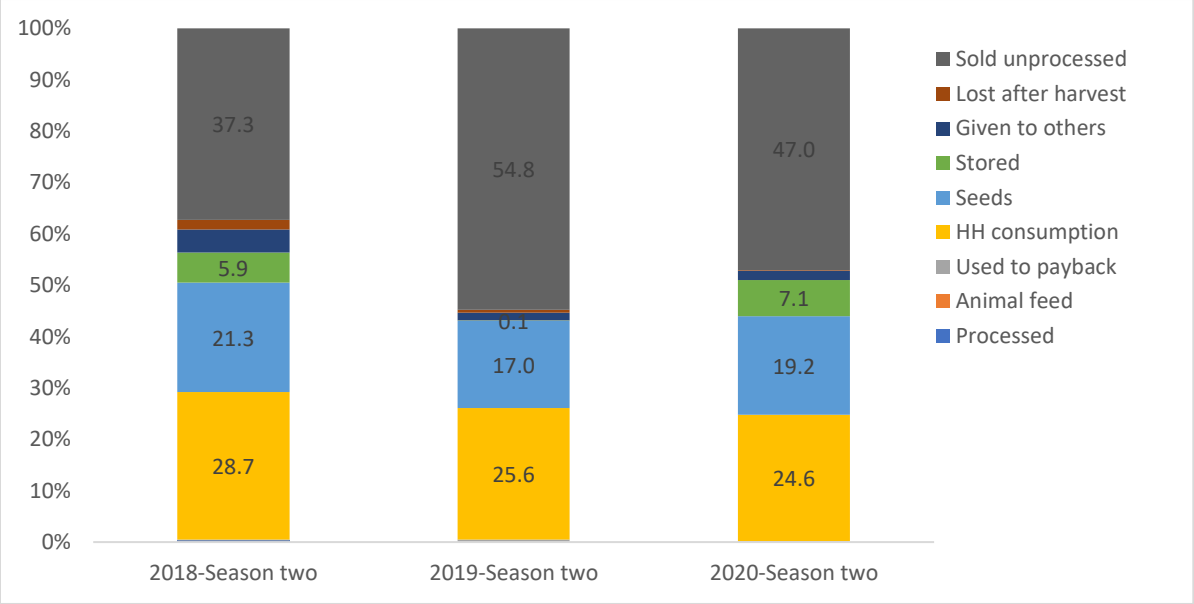


Figure 6:36. Distribution of Irish potato production (2nd season) in the years 2018, 2019 and 2020 by use



6.10: Simsim

Simsim, also known as sesame is mainly grown in the warmer areas of Northern Uganda. Under area-based and agri-business development, the cultivation of simsim has been prioritized in the Acholi sub-region. Simsim is useful in the manufacture of vegetable oil, and it is a source of both human food and animal feed.

The Annual Agricultural Survey for the year 2020 results indicate three percent Agricultural Households cultivated simsim during the first season and eight percent in the second season. The total simsim production in the agricultural year 2020 was estimated to be approximately 57,000 metric tonnes (MT) from an estimated plant area of approximately 243,000 hectares (ha). In the first season, a slightly lower production (approximately 18,000 MT) was recorded compared to the second season (39,000 MT). At national level, the yield was 0.3 MT/ha in the first and 0.4 MT/ha in the second seasons (Annex 6, Table 6-**17**)**.**

A glance at the sub-regional level indicates Acholi with the highest annual production at 19,000 metric tonnes, followed by Lango (17,000 MT). The sub-region with the lowest annual production was Teso (4,800 MT). Teso sub-region reported the highest yield of simsim (0.5 MT/ha) while Acholi reported the lowest at 0.3 MT/ha (Figure 6:37 and Annex 6, Table 6-**17**).

The ZARDIs indicate Ngetta with the highest annual production at 36,000 MT, followed by Abi (8,600 MT). The ZARDIs with the lowest annual production were Serere (4,800 MT) and Buginyanya (860 MT). Serere ZARDI reported the highest yield of simsim (0.5 MT/ha) while Ngetta, Abi and Buginyanya reported the lowest annual yields of 0.4 MT/ha (Annex 6, Table 6-**18**).

The production trend shows a steady increase in simsim production since the year 2008/2009 with an increase in production from 44,000 MT in the year 2019 to 57,000 MT in the year 2020. This corresponds to an approximate 30 percent increase on the year 2019 production (Figure 6:39**)**. The increase in production appears to be a result of increased planting. Indeed, the area planted with simsim increased by nine percent in the survey year 2020 compared to the previous year. The annual national yield of the year 2020 was 0.4 MT/ha compared to 0.3 MT/ha recorded in the year 2019 (Annex 6, Table 6-17).

Lastly, the data on use (disposition) of simsim production reveals that, at the time of enumeration, much crop harvested in the second season was in storage (39 percent) while some had been sold unprocessed (31 percent) or had been used for own consumption (21 percent). S**ee** Figure 6:40**.**

Figure 6:37. Simsim area (ha), production (MT) and yield (MT/ha) by sub-region

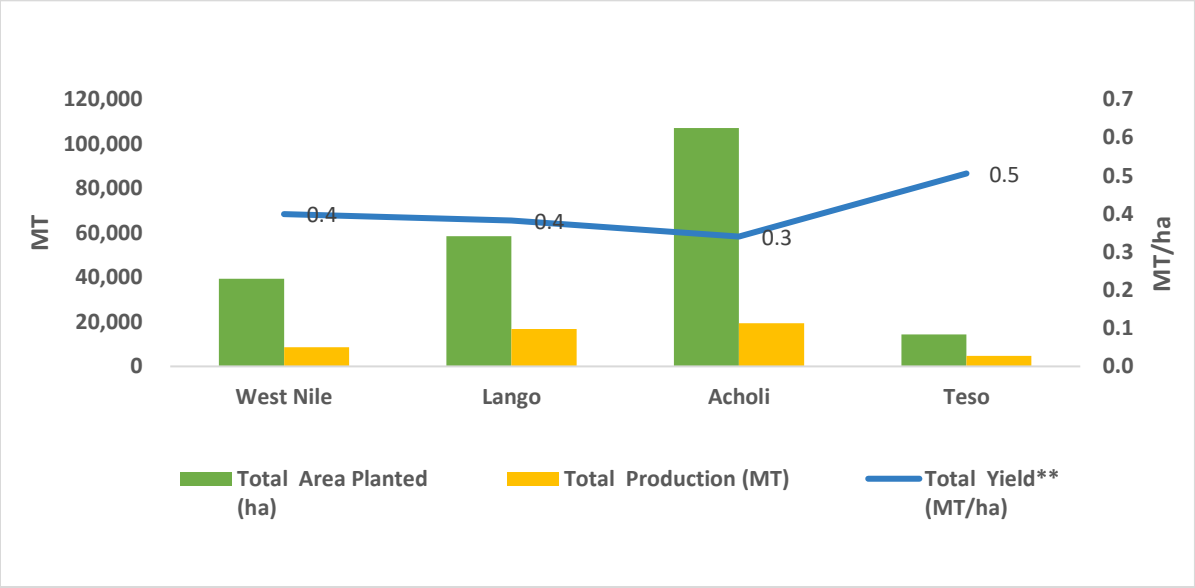


Figure 6:38. Simsim area (ha), production (MT) and yield (MT/ha) by ZARDI

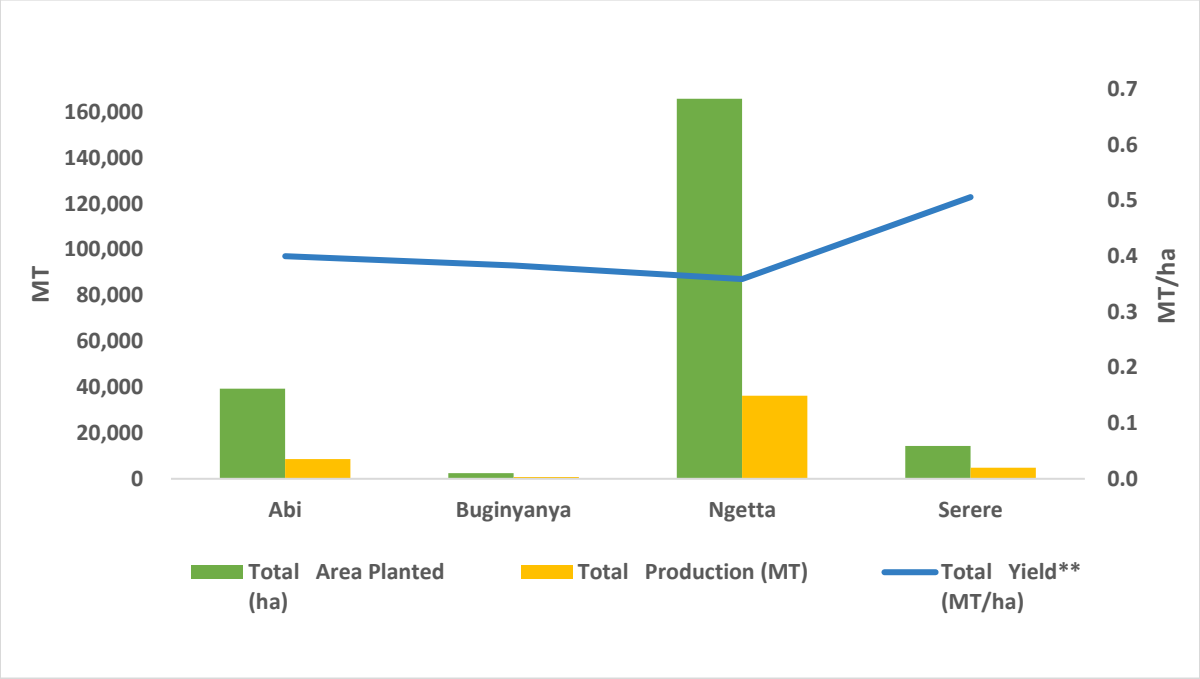


Figure 6:39. Simsim production trend ('000 MT) in the years 2005/2006-2020

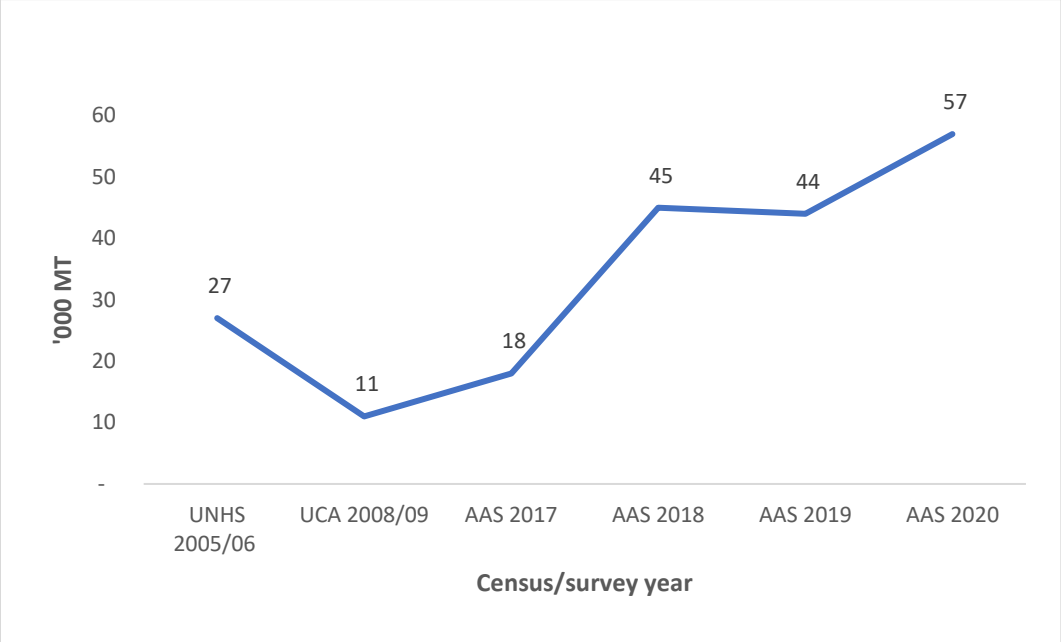
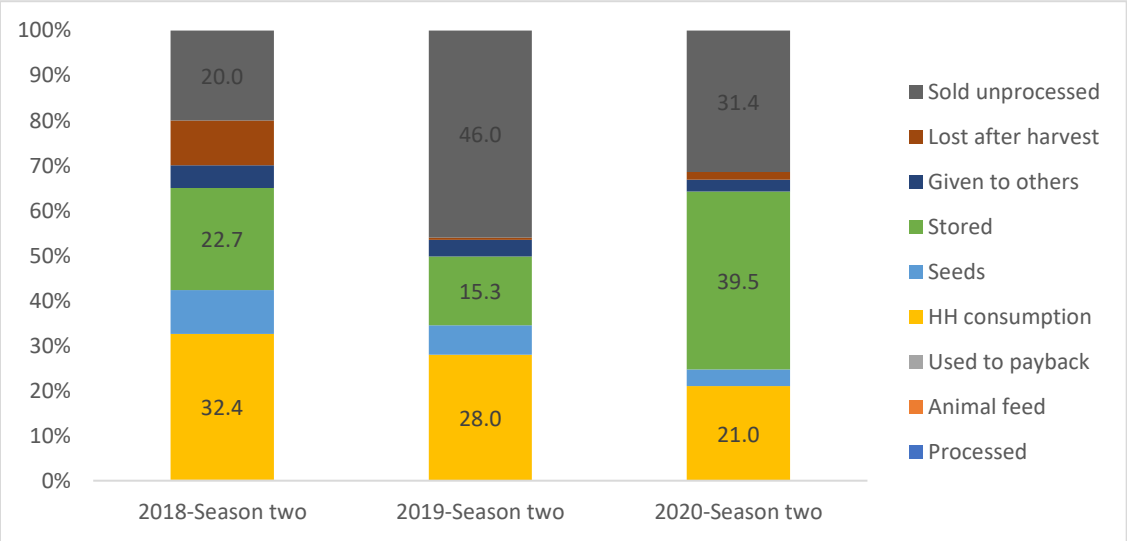


Figure 6:40. Distribution of simsim production (2nd season) in the years 2018, 2019 and 2020



6.11: Groundnuts

Groundnuts are commonly grown throughout Uganda. The Annual Agricultural Survey 2020 results show 17 percent Agricultural Households cultivated groundnuts during the first and second season.

The estimated groundnut production in the agricultural year 2020 was approximately 176,000 metric tonnes (MT) from an estimated plant area of about 458,000 hectares (ha). Production was approximately 108,000 MT in the first season and 68,000 MT in the second season. The national level yield was 0.4 MT/ha in the first season and 0.6 MT/ha in the second season (

Figure 6:41. and Annex 6, Table 6-19).

A look at the sub-regional level indicates Acholi with the highest annual production at 31,000 MT, followed by Teso (22,000 MT). The sub-regions with the lowest annual production were South Buganda (4,700 MT) and Elgon (2,100 MT). South Buganda (0.8 MT/ha) and Bunyoro (0.7 MT/ha) reported the highest annual yields. The lowest yields were in Teso and Lango at 0.4 MT/ha (

Figure 6:41 and Annex 6, **Table 6-19**).

Results from the ZARDIs show Ngetta with the highest annual production at 42,000 MT, followed by Serere (22,000 MT). The ZARDIs with the lowest annual production were Rwebitaba (10,000 MT) and Mbarara (9,000 MT). Bulindi (0.7 MT/ha) reported the highest annual yield. The lowest yields were in Mbarara (0.5 MT/ha) and Serere (0.4 MT/ha) (Annex 6, **Table 6-20**).

The production trend shows a steady increase in groundnut production between the years 1999/2000 and 2018, followed by a decrease in the year 2019 and an increase between the years 2019 and 2020, corresponding to a 32 percent increase in the year 2019 production data (Figure 6:43). The increase in production appears to be a result of increased planting and a higher yield. In fact, the area planted with groundnuts increased in the year 2020 by nine percent compared to the previous year. The yield of the year 2020 was 0.5 MT/ha compared to 0.4 MT/ha in the year 2019 (Annex 6, Table 6-19).

In conclusion, the data on use (disposition) of groundnut production reveals most groundnuts were in storage (36 percent) at the time of enumeration and 29 percent were sold unprocessed. This is lower than the year 2019 when 40 percent of the total groundnut harvest was sold unprocessed. Nonetheless, a significant amount of groundnuts were consumed by the producing households (19 percent). See Figure 6:44.

Figure 6:41. Groundnuts area (Ha), production (MT) and yield (MT/Ha)

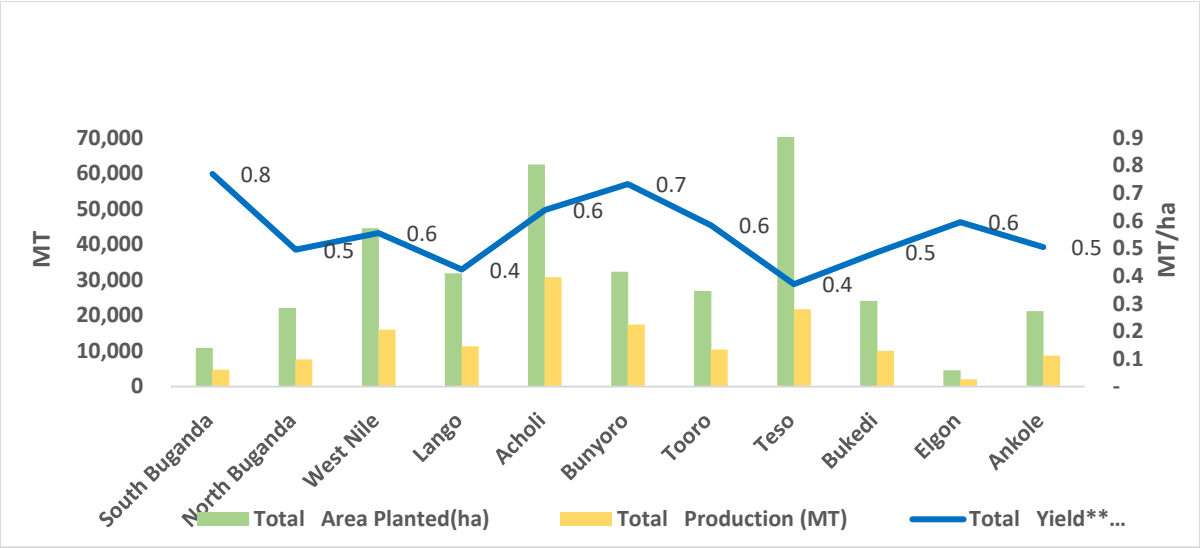


Figure 6:42. Groundnuts area (ha), production (MT) and yield (MT/Ha)

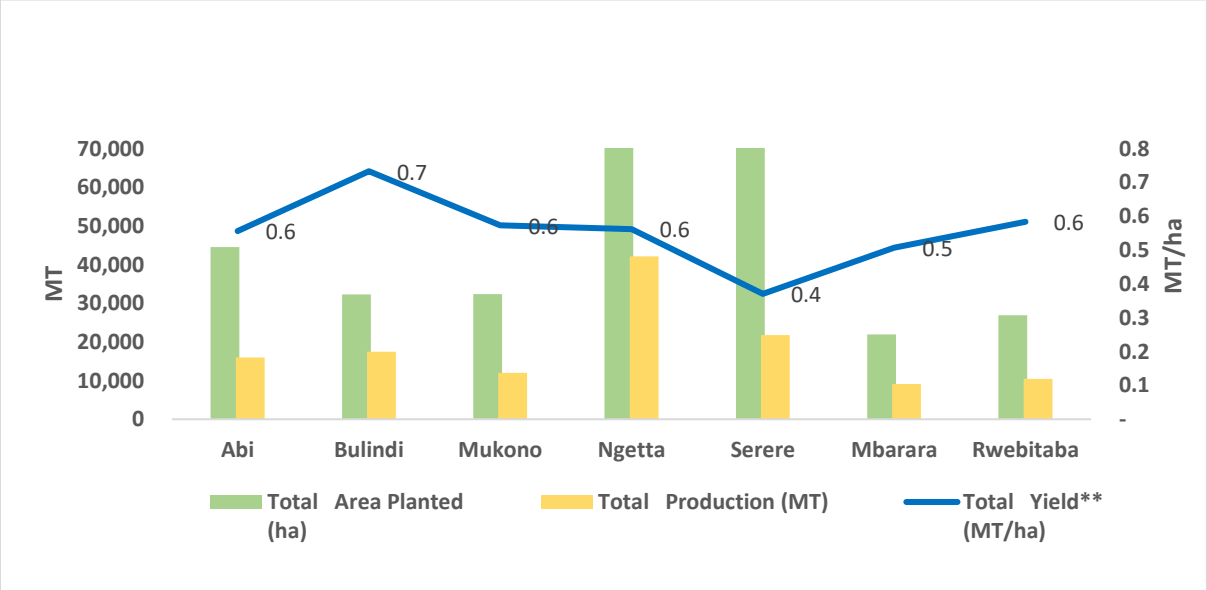


Figure 6:43. Groundnut production trend ('000MT) in the years 1999/2000-2020

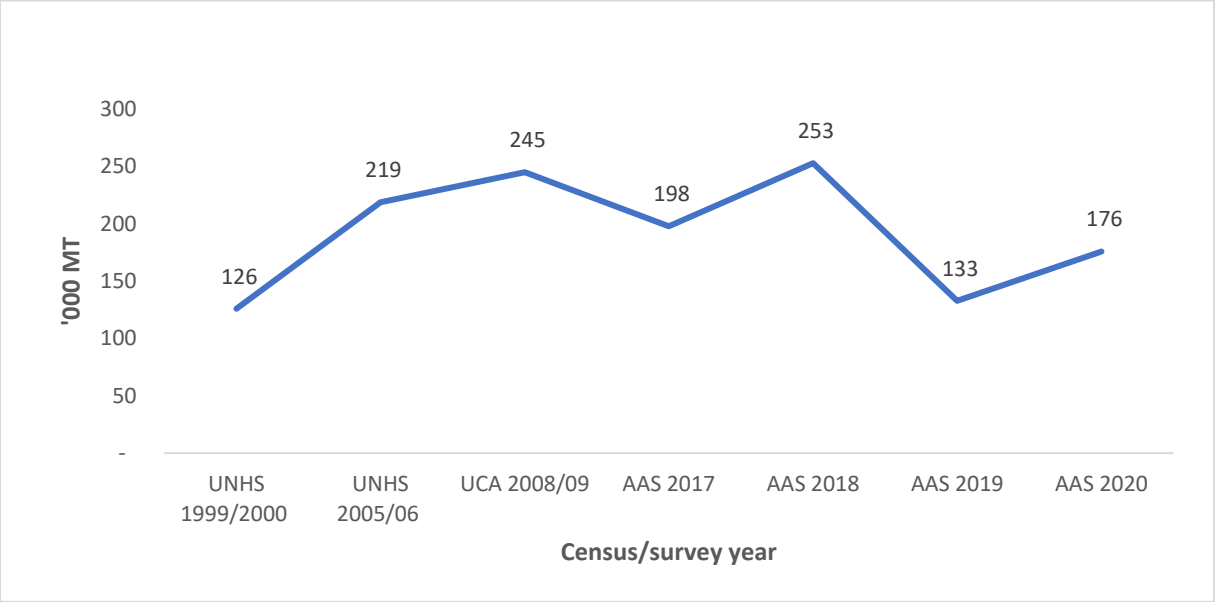
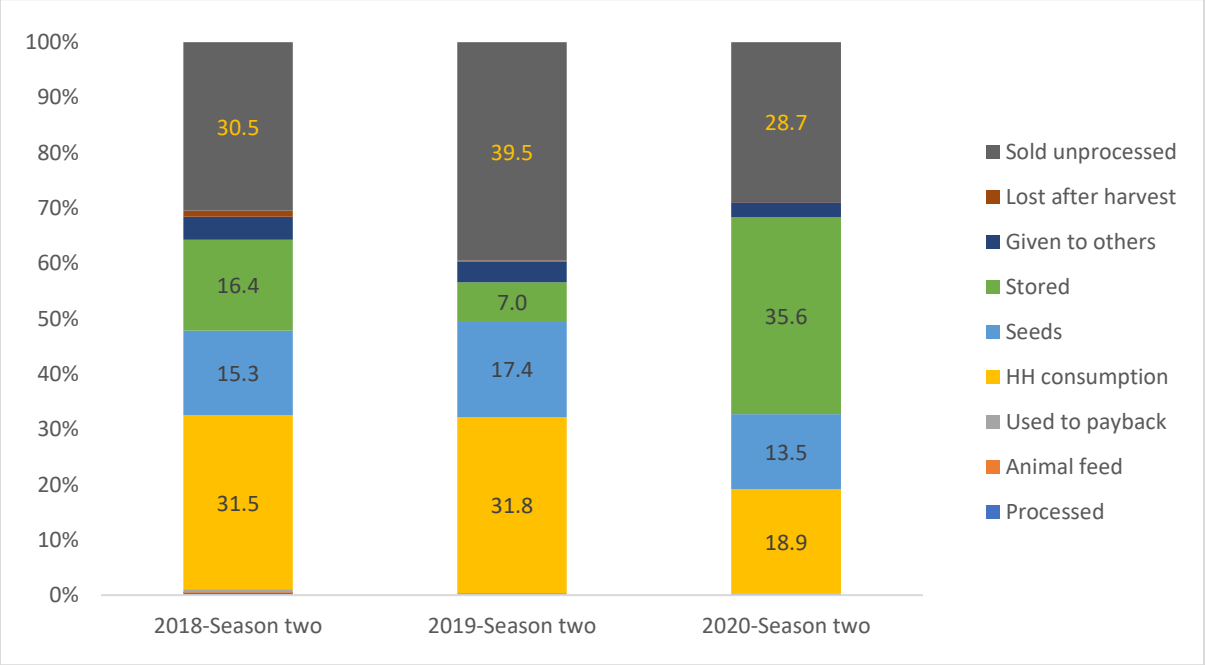


Figure 6:44. Distribution of groundnuts production (2nd season) in the years 2018, 2019 and 2020



6.12: Banana food

Banana food (matooke) is one of the main contributors to overall food production in Uganda. Matooke is a staple food that has increasingly become a source of income and an important non-traditional export crop.

The Annual Agricultural Survey for the year 2020 indicates approximately 56 percent of Agricultural Households cultivated banana-food during the first season and 59 percent in the second season. The total production of banana-food was estimated at approximately 11.1 million Metric Tonnes (MT) from an estimated plant area of approximately 722,000 ha.[18] Banana-food production was higher in the first season (approximately 6.1 million MT) compared to the second season (approximately 5.0 million MT). At national level, the banana-food yield was 15.4 MT/ha in the year 2020 (Figure 6:45 and Annex 6, Table 6-21).

The data collected at the sub-regional level shows Ankole with the highest annual production at 3.3 million MT, followed by South Buganda (2.2 million MT). The sub-regions with the lowest annual banana-food production were Lango (13,000 MT) and Acholi (11,000 MT). Ankole and Tooro reported the highest annual yields of 21 MT/ha and 17 MT/ha, respectively. The lowest yield was in Teso at (2.2 MT/ha). See Figure 6:45 and Annex 6, Table 6-23.

Data from the ZARDIs indicate that Mbarara with the highest annual production at 4.1 million MT, followed by Mukono (3.0 million MT). The ZARDIs with the lowest annual banana-food production were Serere (31,000 MT) and Ngetta (24,000 MT). Mbarara and Kachwekano reported the highest annual yields of 20.3 metric tonnes per hectare and 18.5 MT/ha, respectively. The lowest yield was in Serere at 2.2 MT/ha (Annex 6, **Table 6- 22**.

The production trend shows a steady increase in banana-food production from the years 2008/2009 to 2020. There was an increase in banana production in the year 2020 to 11.1 million MT, corresponding to 18 percent of the year 2019 production (Figure 6:47**)**. The increase in production was apparently a result of increased planting. In fact, the area planted with banana-food increased in the year 2020 by 22 percent compared to the previous year. The yield of the year 2020 was 15.4 MT/ha compared to 17.1 MT/ha in the year 2019 (Annex 6, Table 6-21).

Lastly, the data on use (disposition) of banana production reveals most banana food was consumed by producing households while 24 percent was sold unprocessed. This is lower than the year 2019 figure when 32 percent of the total banana harvest was sold unprocessed (Figure 6:48**).**

[18] Being a permanent crop, banana-food occupies almost the same area in both seasons.

Figure 6:45. Banana-food area (ha), production (MT) and yield (MT/ha) by sub-region

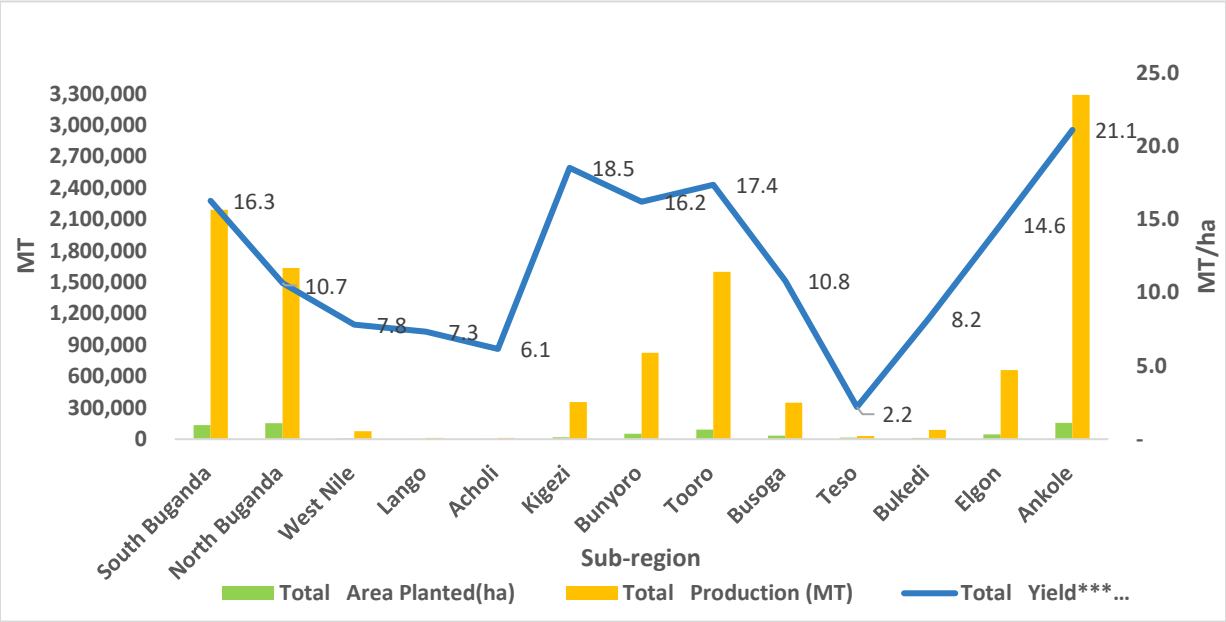


Figure 6:46. Banana-food area (ha), production (MT) and yield (MT/ha) by ZARDI

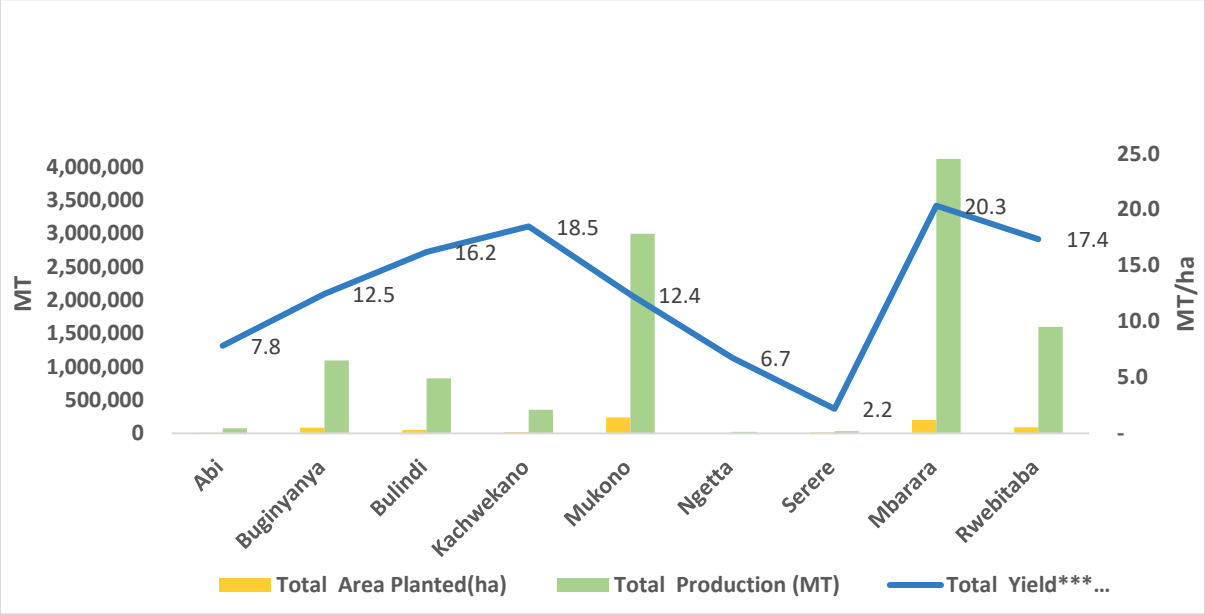


Figure 6:47. Banana food production trend ('000 MT) in the years 1999/2000-2020

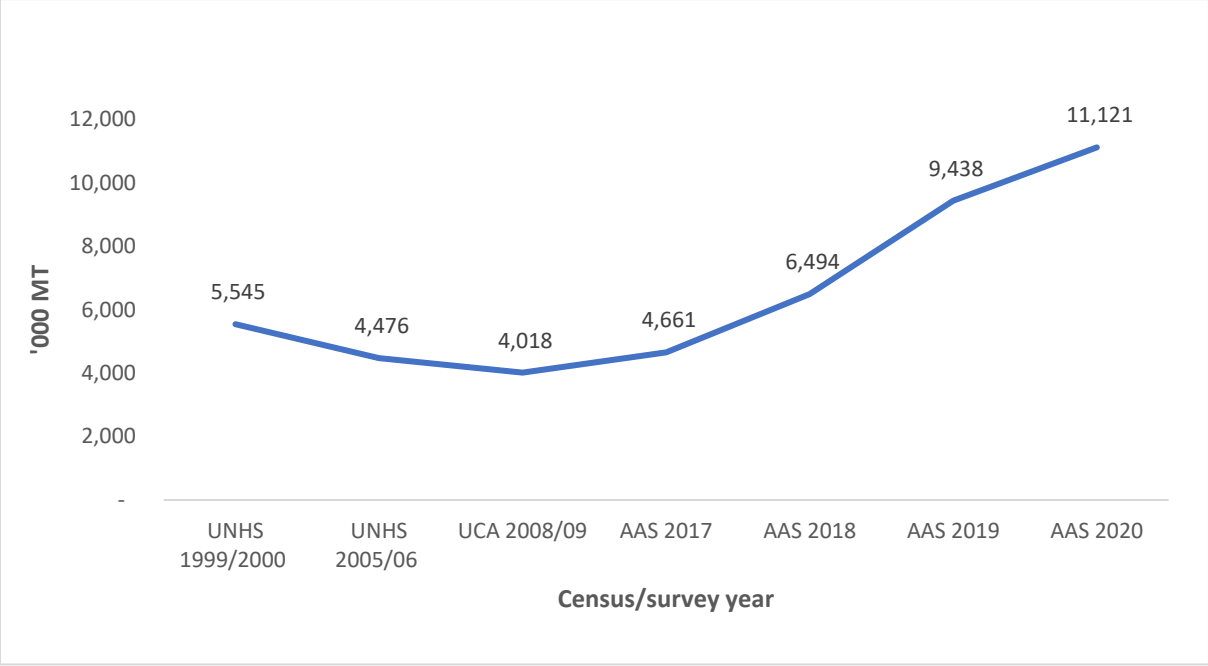
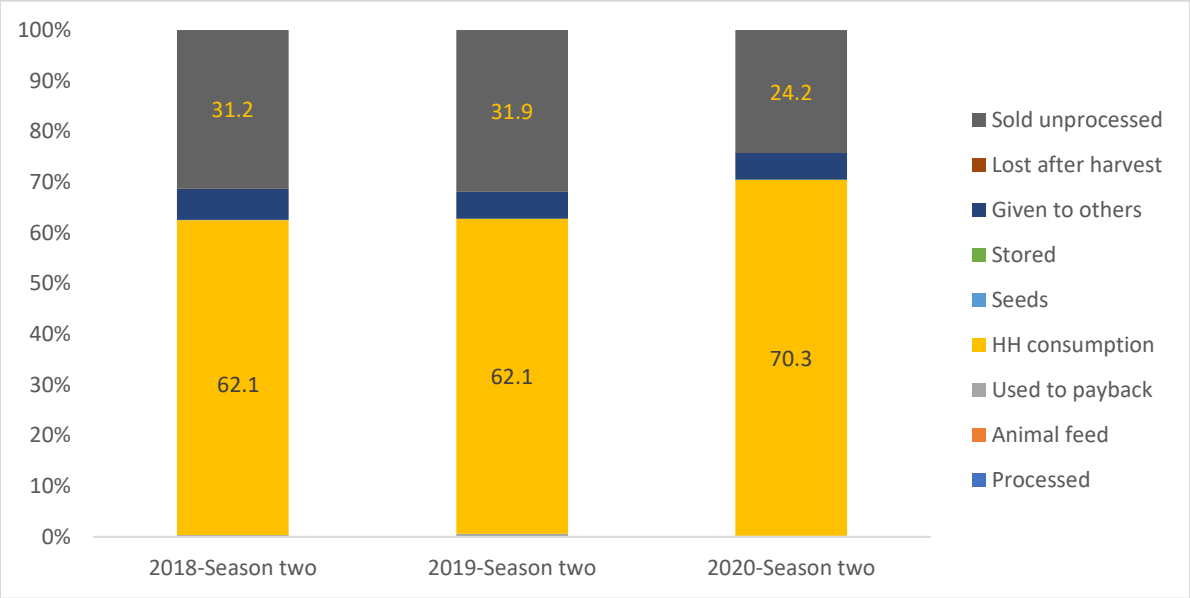


Figure 6:48. Distribution of banana-food production (2nd season) in the years 2018, 2019 and 2020



6.13: Cassava

Cassava is one of the ten commodities prioritized by the Government of Uganda (GoU) to foster agro-industrialisation. It can be produced massively, is drought resistant, has potential for multi-industrial uses and is key for food security. Once mature, cassava can stay underground for up to two years, which is an essential feature in mitigating adverse seasonal effects.[19] Cassava is widely grown across Uganda.

The Annual Agricultural Survey for the year 2020 indicates 44 percent Agricultural Households cultivated cassava during the first season and 55 percent during the second season. During the agricultural year 2020, cassava production was approximately 1.7 million Metric Tonnes from an estimated plant area of about 740,000 Ha. Production was much lower in the first season (approximately 601,000 MT) than in the second season (1.1 million MT). At national level, the annual yield of cassava was 2.3 MT/ha (Annex 6, Table 6-27).

At the sub-regional level, the highest annual production was reported in West Nile (268,000 MT), followed by Lango with about 246,000 MT while the lowest were Elgon (27,000 MT), Ankole (26,000) and Kigezi with 9,100 MT. The highest annual yields were reported in Ankole (7.1 MT/ha) and Kigezi (4.6 MT/ha). The lowest yields were in Tooro (1.3 MT/ha), Elgon, Teso and Bunyoro (the latter three were at 1.6 MT/ha). See Figure 6:49 and Annex 6, Table 6- 27.

As for the data collected at ZARDI level, the highest annual production was reported in Buginyanya (409,000 MT), followed by Ngetta with about 381,000 MT while the lowest were Rwebitaba (37,000 MT) and Kachwekano (9,100 MT). The highest annual yields were reported in Mbarara (10.5 MT/ha) and Kachwekano (4.6 MT/ha). The lowest yield was in Rwebitaba (1.3 MT/ha), Serere and Bulindi (both with 1.6 MT/ha). See Annex 6, Table 6-28).

The production trend, over time, shows cassava production fluctuates significantly. Between the years 1999/2000 and 2005/2006, it declined from 2.2 million MT to 1.7 million MT, rose to 2.9 million MT in the years 2008/2009, decreased to 1.9 million MT in the year 2017, more than doubled to 4.4 million MT in the year 2018 and then declined sharply to 1.7 MT in the survey 2020 (Figure 6:51 and Annex 6, Table 6-27).

Finally, the data on use (disposition) of cassava production indicates most cassava produced (67 percent) was consumed by producing households while 16 percent was sold unprocessed. This is lower than the 2009 figure when 28 percent of the total cassava harvest was sold unprocessed (Figure 6:52).

[19] National Development Plan III, 2020

Figure 6:49. Cassava area (ha), production (MT) and yield (MT/ha) by sub-region

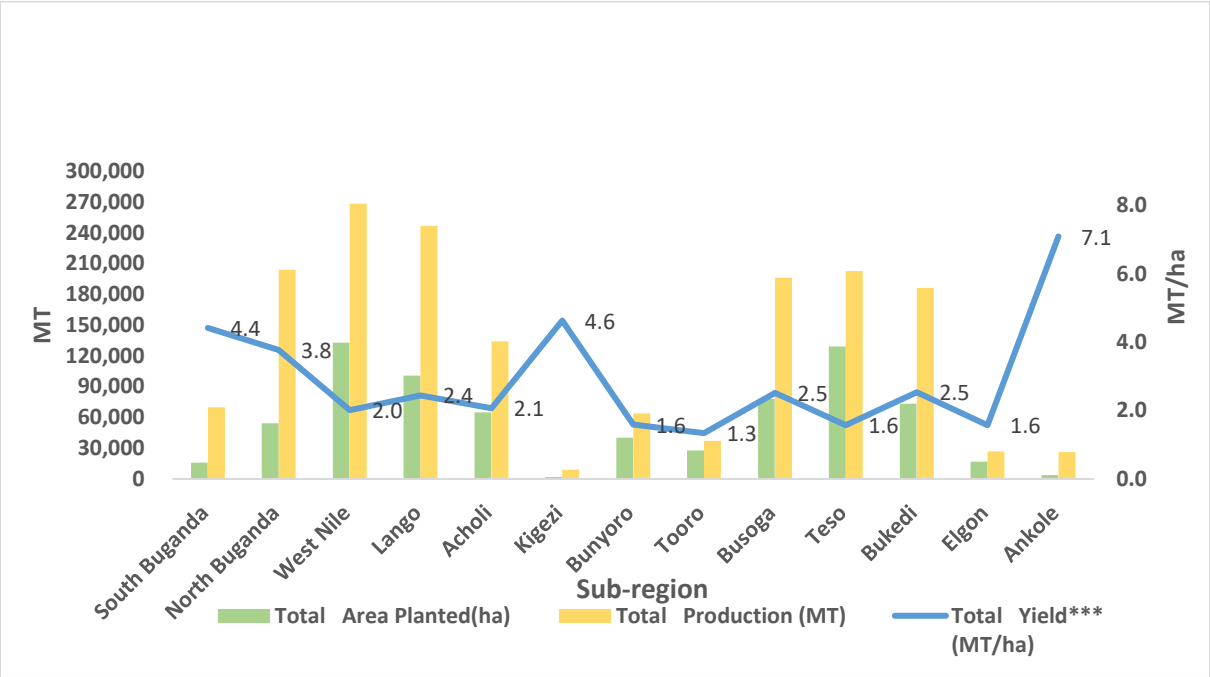


Figure 6:50. Cassava area (ha), production (MT) and yield (MT/ha) by ZARDI

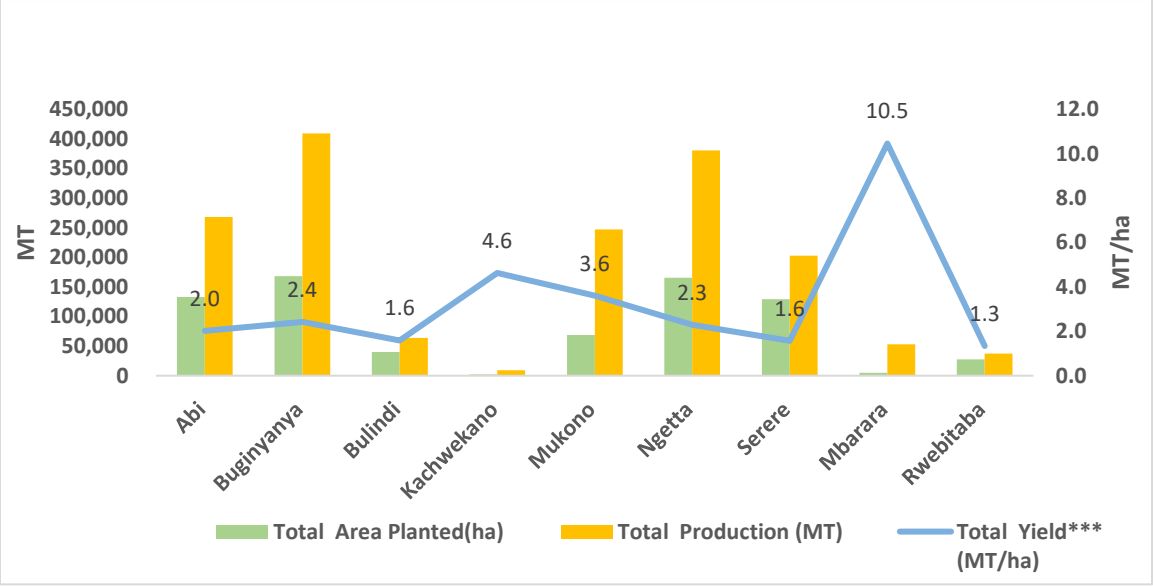


Figure 6:51. Cassava production trend ('000 MT) in the years 1999/2000-2020

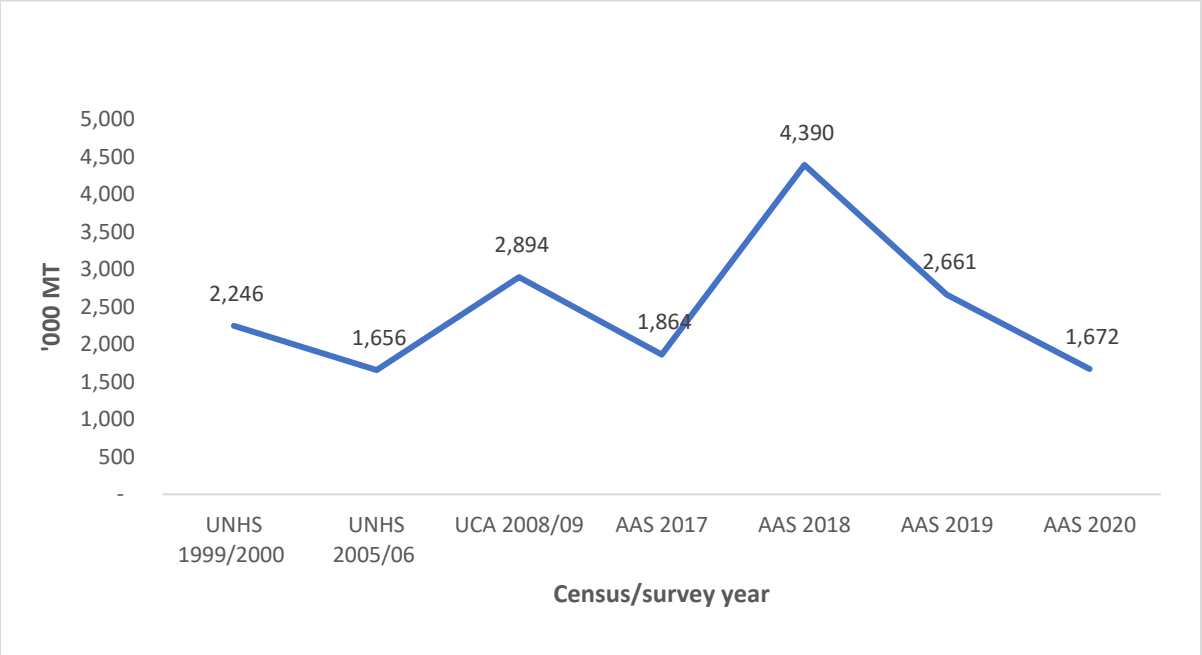
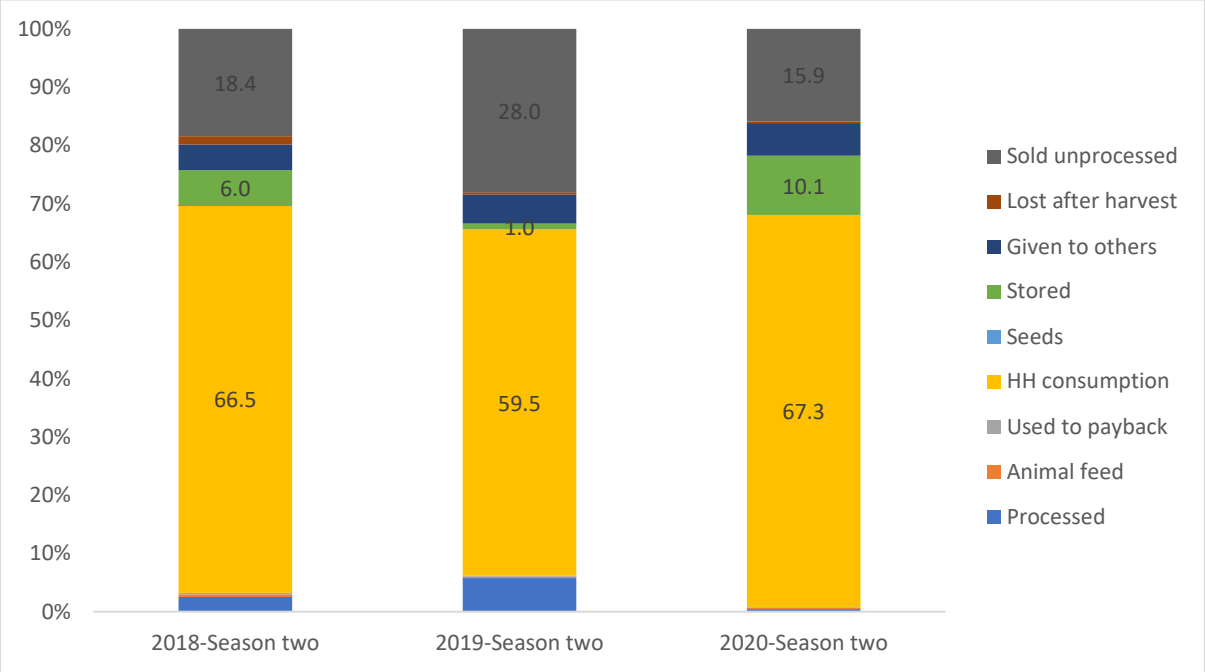


Figure 6:52. Distribution of cassava production (2nd season) in the years 2018, 2019 and 2020



6.14: Coffee robusta

Coffee (robusta and arabica) is a major agricultural export from Uganda. Coffee robusta is traditionally grown in the sub-regions of Buganda, Ankole, Tooro and Kigezi. The results of the Annual Agricultural Survey for the year 2020 indicate 24 percent Agricultural Households cultivated coffee robusta during the first season and 25 percent in the second season.

Coffee robusta production in the survey year 2020 totalled approximately 233,000 Metric Tonnes (MA) from an estimated plant area of about 369,000 hectares (ha). Production of coffee robusta production increased by 19 percent from 192,000 MT in the year 2019 (Annex 6, Table 6-29). A slightly higher production was reported in the first season (approximately 129,000 MT) compared to the second season (104,000 MT). At national level, the coffee robusta yield was 0.6 MT/ha (**Annex 6, Table 6-29).**

A glance at the sub-regional level data indicates South Buganda with the highest annual production at 95,000 MT, followed by North Buganda (64,000 MT) and Ankole (35,000 MT). The sub-regions with the lowest annual production were Kigezi (7,600 MT) and Tooro (5,400 MT). Kigezi (0.8 MT/ha) reported the highest annual yield, followed by South Buganda and Ankole (both 0.7 MT/ha) while the lowest annual yields were in North Buganda, Tooro and Busoga (each with 0.5 MT/ha) (Figure 6:53 and **Annex 6, Table 6-29**).

At the ZARDI level, results indicate Mukono with the highest annual production at 126,000 MT, followed by Mbarara (69,000 MT) and Ankole (35,000 MT). The ZARDIs with the lowest annual production were Kachwekano (7,600 MT) and Rwebitaba (5,400 MT). Kachwekano (0.8 MT/ha) and Mbarara (0.7 MT/ha) reported the highest annual yields, followed by Mukono (0.6 MT/ha). The lowest annual yields were in Buginyanya, Rwebitaba and Bulindi (each with 0.5 MT/ha) (**Annex 6, Table 6-30**).

Results from previous annual agricultural surveys indicate over 90 percent of the coffee produced by farmers is sold unprocessed. Therefore, no information was collected for the survey year 2020 on the disposition of coffee.

Figure 6:53. Coffee robusta area (ha), production (MT) and yield (MT/ha) by sub-region

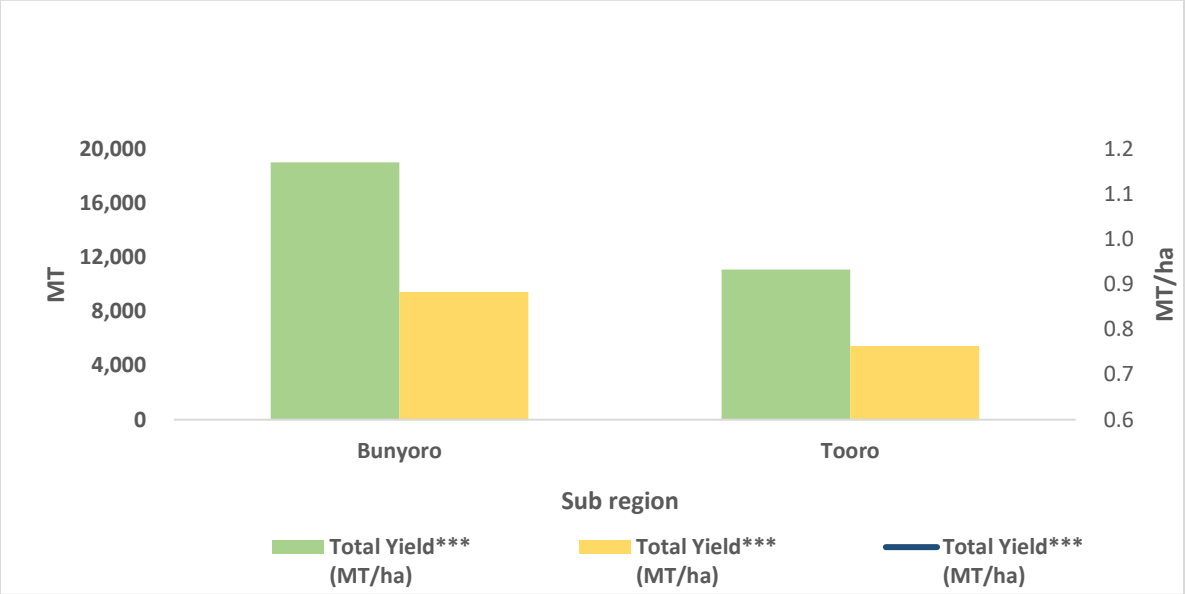


Figure 6:54. Coffee Robusta area (ha), production (MT) and yield (MT/ha) by ZARDI

6.15: Coffee arabica

Coffee arabica is mainly grown in the highland areas of the sub-regions of Elgon, Rwenzori and Kigezi (Muhabura). In the agricultural year 2020, the Annual Agricultural Survey for the year 2020 indicates seven percent Agricultural Households cultivated coffee arabica in both seasons.

The total production of coffee arabica in Uganda in the agricultural year 2020 was estimated to be approximately 43,000 metric tonnes (MT) from an estimated plant area of approximately 88,000 hectares (ha). In the first season, a slightly higher production (approximately 22,000 MT) was recorded compared to the second season (21,000 MT). At national level, the annual yield was 0.5 MT/ha (**Annex 6, Table 6-31).**

A look at the sub-regional level indicates Tooro had the highest annual production at 24,000 MT, followed by Elgon (9,700 MT). The sub-region with the lowest annual production of coffee Arabia was Bunyoro (2,900 MT). Bunyoro reported the highest annual yield (0.6 MT/ha) while the lowest annual yield was in Elgon with 0.4 MT/ha (Figure 6:55 and **Annex 6, Table 6-31**).

The results from the ZARDI data indicate Rwebitaba with the highest annual production at 24,000 MT, followed by Buginyanya (11,000 MT). The ZARDI with the lowest annual production was Bulindi (2,900 MT). Bunyoro (0.6 MT/ha) reported the highest annual yield while the lowest annual yield was in Elgon with 0.4 metric tonne per hectare (**Annex 6, Table 6-32**).

Results from previous annual agricultural surveys indicate over 90 percent of the coffee produced by farmers is sold unprocessed. Therefore, for the AAS 2020, no information was collected on disposition of coffee.

Figure 6:55. Coffee arabica area (ha), production (MT) and yield (MT/ha) by sub-region

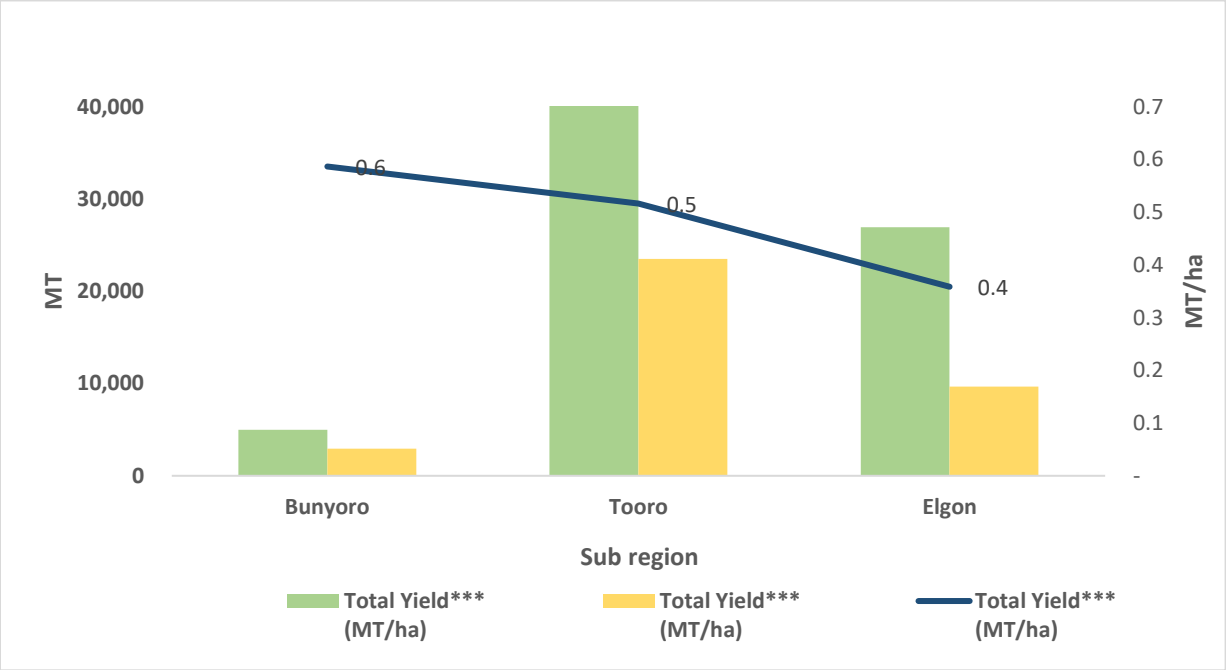
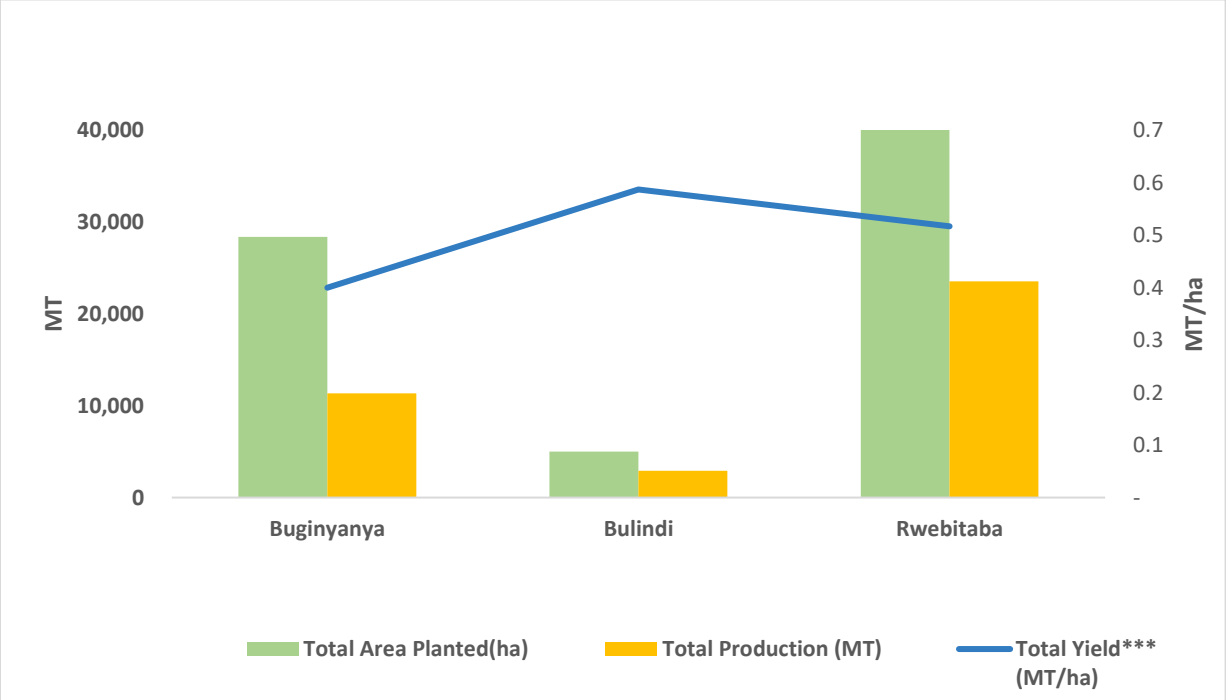


Figure 6:56. Coffee arabica area (ha), production (MT) and yield (MT/ha) by ZARDI



Annexes

Annex 1

Annex 1.

Table 1-1: List of districts within the ZARDIs

Abi	Buginyanya	Bulindi	Kachwekano	Mukono	Ngetta	Nabuin	Serere	Mbarara	Rwebitaba
Adjumani	Bugiri	Hoima	Kabale	Kalangala	Apac	Kotido	Katakwi	Rakai	Bundibugyo
Arua	Busia	Kibaale	Kisoro	Kiboga	Gulu	Moroto	Kumi	Ssembabule	Kabarole
Moyo	Iganga	Masindi	Rukungiri	Luwero	Kitgum	Nakapiripirit	Soroti	Lyantonde	Kasese
Nebbi	Jinja	Buliisa	Kanungu	Masaka	Lira	Abim	Kaberamaido	Bushenyi	Kamwenge
Yumbe	Kamuli	Kiryandongo	Rubanda	Mpigi	Pader	Kaabong	Amuria	Mbarara	Kyenjojo
Koboko	Kapchorwa	Kagadi		Mubende	Amolatar	Amudat	Bukedea	Ntungamo	Kyegegwa
Maracha	Mbale	Kakumiro		Mukono	Amuru	Napak	Ngora	Ibanda	
Zombo	Pallisa			Nakasongola	Dokolo		Serere	Isingiro	
	Tororo			Kayunga	Oyam			Kiruhura	
	Mayuge			Wakiso	Agago			Buhweju	
	Sironko			Mityana	Alebtong			Mitooma	
	Budaka			Nakaseke	Kole			Rubirizi	
	Bududa			Buikwe	Lamwo			Sheema	
	Bukwo			Bukomansimbi	Nwoya				
	Butaleja			Butambala	Otuke				
	Kaliro			Buvuma	Omoro				
	Manafwa			Gomba					
	Namutumba			Kalungu					
	Bulambuli			Kyankwanzi					
	Buyende			Lwengo					
	Kibuku								
	Kween								
	Luuka								

Table 1-2: List of districts within the sub-regions

S. Buganda	N. Buganda	West Nile	Lango	Acholi	Kigezi	Bunyoro	Tooro	Busoga	Teso	Bukedi	Elgon	Karamoja	Ankole
Kalangala	Kiboga	Adjumani	Apac	Gulu	Kabale	Hoima	Bundibugyo	Bugiri	Katakwi	Busia	Kapchorwa	Kotido	Bushenyi
Masaka	Luwero	Arua	Lira	Kitgum	Kisoro	Kibaale	Kabarole	Iganga	Kumi	Pallisa	Mbale	Moroto	Mbarara
Mpigi	Mubende	Moyo	Amolatar	Pader	Rukungiri	Masindi	Kasese	Jinja	Soroti	Tororo	Sironko	Nakapiripirit	Ntungamo
Rakai	Mukono	Nebbi	Dokolo	Amuru	Kanungu	Buliisa	Kamwenge	Kamuli	Kaberamaido	Budaka	Bududa	Abim	Ibanda
Ssembabule	Nakasongola	Yumbe	Oyam	Agago	Mitooma	Kiryandongo	Kyenjojo	Mayuge	Amuria	Butaleja	Bukwo	Kaabong	Isingiro
Wakiso	Kayunga	Koboko	Alebtong	Lamwo	Rubirizi	Kagadi	Kyegegwa	Kaliro	Bukedea	Kibuku	Manafwa	Amudat	Kiruhura
Lyantonde	Mityana	Maracha	Kole	Nwoya	Rubanda	Kakumiro		Namutumba	Ngora		Bulambuli	Napak	Buhweju
Bukomansimbi	Nakaseke	Zombo	Otuke	Omoro				Buyende	Serere		Kween		Sheema
Butambala	Buikwe							Luuka					
Gomba	Buvuma							Namayingo					
Kalungu	Kyankwanzi												
Lwengo													

Table 1-3: Response rate by visit and ZARDI*

ZARDI	Both visits	Post-planting only	Post-harvesting only	Complete non-response	Total	Response rate
Abi	488	19	4	17	528	95.3
Buginyanya	1,166	92	117	137	1,512	91.1
Bulindi	464	22	22	32	540	93.3
Kachwekano	416	18	21	25	480	99.0
Mukono	783	79	51	106	1,019	90.6
Ngetta	781	16	23	44	864	98.5
Nabuin	291	10	26	33	360	100.0
Serere	369	17	20	26	432	96.1
Mbarara	698	34	36	72	840	94.4
Rwebitaba	505	4	5	26	540	97.2
Uganda	**5,961**	**311**	**325**	**518**	**7,115**	**94.5**

Notes: **Calculated from the post-planting and post-harvest data of the first season. The figures are un weighted.*

Table 1-4: Response rate by visit and sub-region*

ZARDI	Both visits	Post-planting only	Post-harvesting only	Complete non-response	Total	Response rate
South Buganda	428	43	28	100	599	83.3
North Buganda	553	15	11	21	600	96.5
West Nile	459	34	10	25	528	95.3
Lango	435	5	3	1	444	99.8
Acholi	377	12	19	12	420	97.1
Kigezi	453	14	8	5	480	99.0
Bunyoro	439	50	15	36	540	93.3
Tooro	522	3	0	15	540	97.2
Busoga	396	52	29	99	576	82.8
Teso	393	13	9	17	432	96.1
Bukedi	434	11	11	12	468	97.4
Elgon	414	15	16	23	468	95.1
Karamoja	353	2	5	0	360	100.0
Ankole	601	20	17	22	660	96.7
Uganda	**6,257**	**289**	**181**	**388**	**7,115**	**94.5**

Notes: **Calculated from the post-planting and post-harvest data of the first season. The figures are un weighted.*

Annex 2.

Table 2-1: Distribution of agricultural households by ZARDI *

	2020		2020		2020		2019
	First season		Second season		Ag. year		Ag. year
	Number	%	Number	%	Number	%	Number
Abi	486,641	7.1	517,545	7.3	517,545	7.2	505,252
Buginyanya	1,491,347	21.9	1,575,308	22.2	1,589,452	22.1	1,492,213
Bulindi	454,007	6.7	502,204	7.1	505,176	7.0	487,860
Kachwekano	297,461	4.4	305,390	4.3	308,540	4.3	304,804
Mukono	1,355,424	19.9	1,413,533	19.9	1,421,480	19.8	1,382,610
Ngetta	753,832	11.1	782,196	11.0	783,022	10.9	763,278
Nabuin	181,468	2.7	152,961	2.2	192,428	2.7	187,169
Serere	364,232	5.3	379,790	5.3	379,790	5.3	363,324
Mbarara	831,691	12.2	876,586	12.3	878,029	12.2	867,862
Rwebitaba	596,940	8.8	605,182	8.5	606,480	8.4	582,410
Uganda	**6,813,044**	**100.0**	**7,110,695**	**100.0**	**7,181,943**	**100.0**	**6,936,782**

Note*: *Calculated on the post-planting and post-harvest data for each season*

Table 2-2: Distribution of agricultural households, by sub-region*

Sub-region	First season		Second season		Ag. year	
	Total number	%	Total number	%	Total number	%
South Buganda	787,814	11.6	845,564	11.9	848,590	11.8
North Buganda	804,882	11.8	823,596	11.6	829,960	11.6
West Nile	486,641	7.1	517,545	7.3	517,545	7.2
Lango	445,709	6.5	458,390	6.4	458,390	6.4
Acholi	308,123	4.5	323,806	4.6	324,632	4.5
Kigezi	297,461	4.4	305,390	4.3	308,540	4.3
Bunyoro	454,007	6.7	502,204	7.1	505,176	7.0
Tooro	596,940	8.8	605,182	8.5	606,480	8.4
Busoga	731,025	10.7	790,640	11.1	794,024	11.1
Teso	364,232	5.3	379,790	5.3	379,790	5.3
Bukedi	379,637	5.6	393,920	5.5	393,920	5.5
Elgon	380,685	5.6	390,748	5.5	401,508	5.6
Karamoja	181,468	2.7	152,961	2.2	192,428	2.7
Ankole	594,420	8.7	620,959	8.7	620,959	8.6
Uganda	**6,813,044**	**100.0**	**7,110,695**	**100.0**	**7,181,943**	**100.0**

Note*: * Calculated on the post-planting and post-harvest data for each season.*

Table 2-3: Percentage distribution of Agricultural Households by sex of household head and ZARDI*

Zardi	Male-headed HHs	Female-headed HHs	Total
Abi	70.6	29.4	100.0
Buginyanya	82.1	17.9	100.0
Bulindi	83.7	16.3	100.0
Kachwekano	81.4	18.6	100.0
Mukono	73.5	26.5	100.0
Ngetta	76.5	23.5	100.0
Nabuin	65.2	34.8	100.0
Serere	81.2	18.8	100.0
Mbarara	74.4	25.6	100.0
Rwebitaba	76.9	23.1	100.0
Uganda	**77.1**	**22.9**	**100.0**

Note: **Obtained from the post-planting and post-harvest data of the first season*

Table 2- 4: Percentage distribution of Ag HHs, by sex of household head and sub-region*

Sub-region	Male-headed HHs	Female-headed HHs	Total
South Buganda	71.5	28.5	100.0
North Buganda	75.7	24.3	100.0
West Nile	70.6	29.4	100.0
Lango	75.6	24.4	100.0
Acholi	77.8	22.2	100.0
Kigezi	81.4	18.6	100.0
Bunyoro	83.7	16.3	100.0
Tooro	76.9	23.1	100.0
Busoga	81.7	18.3	100.0
Teso	81.2	18.8	100.0
Bukedi	80.5	19.5	100.0
Elgon	84.4	15.6	100.0
Karamoja	65.2	34.8	100.0
Ankole	74.5	25.5	100.0
Uganda	**77.1**	**22.9**	**100.0**

Note: **Obtained from the post-planting and post-harvest data of the first season*

Table 2-5: Percentage distribution of literate Agricultural Household heads by sex and ZARDI*

ZARDI	Sex	Literate	Illiterate	Total	% Literate
	Male	288,058	55,720	343,778	83.8
Abi	Female	48,295	94,569	142,863	33.8
	Total	336,353	150,289	486,641	69.1
	Male	895,922	324,476	1,220,398	73.4
Buginyanya	Female	92,935	174,588	267,523	34.7
	Total	988,857	499,063	1,487,921	66.5
	Male	275,269	104,806	380,075	72.4
Bulindi	Female	25,622	48,311	73,932	34.7
	Total	300,890	153,117	454,007	66.3
	Male	204,713	37,325	242,038	84.6
Kachwekano	Female	26,709	28,714	55,423	48.2
	Total	231,422	66,039	297,461	77.8
	Male	746,482	249,885	996,367	74.9
Mukono	Female	211,129	147,927	359,057	58.8
	Total	957,612	397,812	1,355,424	70.7
	Male	500,129	76,699	576,828	86.7
Ngetta	Female	71,187	105,817	177,003	40.2
	Total	571,316	182,516	753,832	75.8
	Male	31,644	86,605	118,249	26.8
Nabuin	Female	5,791	57,428	63,219	9.2
	Total	37,435	144,033	181,468	20.6
	Male	217,296	78,325	295,621	73.5
Serere	Female	23,044	45,566	68,611	33.6
	Total	240,340	123,892	364,232	66.0
	Male	511,086	108,106	619,192	82.5
Mbarara	Female	99,370	113,129	212,499	46.8
	Total	610,456	221,235	831,691	73.4
	Male	344,836	114,271	459,107	75.1
Rwebitaba	Female	67,761	70,073	137,833	49.2
	Total	412,597	184,344	596,940	69.1
	Male	**4,015,435**	**1,236,219**	**5,251,654**	**76.5**
Uganda	**Female**	**671,843**	**886,121**	**1,557,964**	**43.1**
	Total	**4,687,278**	**2,122,340**	**6,809,618**	**68.8**

Note: **Obtained from the post-planting and post-harvest data of the first season. Some Ag HH heads did not respond as to whether they could write or not.*

Table 2-6: Percentage distribution of literate Agricultural Household heads by sex and sub-region*

Sub-region	Sex	Literate	Illiterate	Total	% Literate
South Buganda	Male	499,724	63,872	563,596	88.7
	Female	152,609	71,609	224,219	68.1
	Total	652,333	135,481	787,814	82.8
North Buganda	Male	394,719	214,369	609,088	64.8
	Female	89,947	105,846	195,793	45.9
	Total	484,666	320,215	804,882	60.2
West Nile	Male	288,058	55,720	343,778	83.8
	Female	48,295	94,569	142,863	33.8
	Total	336,353	150,289	486,641	69.1
Lango	Male	288,961	48,147	337,108	85.7
	Female	46,890	61,711	108,601	43.2
	Total	335,851	109,858	445,709	75.4
Acholi	Male	211,168	28,552	239,720	88.1
	Female	24,297	44,106	68,403	35.5
	Total	235,465	72,658	308,123	76.4
Kigezi	Male	204,713	37,325	242,038	84.6
	Female	26,709	28,714	55,423	48.2
	Total	231,422	66,039	297,461	77.8
Bunyoro	Male	275,269	104,806	380,075	72.4
	Female	25,622	48,311	73,932	34.7
	Total	300,890	153,117	454,007	66.3
Tooro	Male	344,836	114,271	459,107	75.1
	Female	67,761	70,073	137,833	49.2
	Total	412,597	184,344	596,940	69.1
Busoga	Male	416,311	179,948	596,259	69.8
	Female	50,177	83,561	133,738	37.5
	Total	466,488	263,509	729,997	63.9

Sub-region	Sex	Literate	Illiterate	Total	% Literate
Teso	Male	217,983	78,325	296,308	73.6
	Female	23,044	45,566	68,611	33.6
	Total	241,027	123,892	364,919	66.0
Bukedi	Male	217,949	87,473	305,422	71.4
	Female	19,515	54,699	74,215	26.3
	Total	237,464	142,172	379,637	62.6
Elgon	Male	261,662	57,055	318,716	82.1
	Female	23,243	36,328	59,570	39.0
	Total	284,904	93,382	378,287	75.3
Karamoja	Male	31,644	86,605	118,249	26.8
	Female	5,791	57,428	63,219	9.2
	Total	37,435	144,033	181,468	20.6
Ankole	Male	363,125	79,750	442,876	82.0
	Female	67,943	83,601	151,544	44.8
	Total	431,069	163,351	594,420	72.5
Uganda	**Male**	**4,016,122**	**1,236,219**	**5,252,341**	**76.5**
	Female	**671,843**	**886,121**	**1,557,964**	**43.1**
	Total	**4,687,965**	**2,122,340**	**6,810,305**	**68.8**

Note: **Obtained from the post-planting (PP) and post-harvest (PH) data of the first season. Some Ag HH heads did not respond as to whether they could write or not.*

Table 2-7: Percentage distribution of Agricultural Households by highest educational level, by sex and ZARDI*

ZARDI		No Education		Primary		Secondary +		Total	
		N	%	N	%	N	%	N	%
Abi	Males	11,118	3.2	225,051	65.5	107,609	31.3	343,778	100.0
	Females	52,047	36.4	70,425	49.3	20,391	14.3	142,863	100.0
	Total	63,165	13.0	295,476	60.7	128,000	26.3	486,641	100.0
Buginyanya	Males	81,181	6.7	683,859	56.0	455,357	37.3	1,220,398	100.0
	Females	67,840	25.4	172,296	64.4	27,387	10.2	267,523	100.0
	Total	149,021	10.0	856,156	57.5	482,744	32.4	1,487,921	100.0
Bulindi	Males	35,082	9.2	248,726	65.4	96,267	25.3	380,075	100.0
	Females	28,784	38.9	39,504	53.4	5,645	7.6	73,932	100.0
	Total	63,865	14.1	288,230	63.5	101,912	22.4	454,007	100.0
Kachwekano	Males	27,245	11.3	137,162	56.7	77,631	32.1	242,038	100.0
	Females	26,073	47.0	24,934	45.0	4,417	8.0	55,423	100.0
	Total	53,317	17.9	162,096	54.5	82,048	27.6	297,461	100.0
Mukono	Males	86,591	8.7	520,355	52.2	389,421	39.1	996,367	100.0
	Females	80,390	22.4	203,037	56.5	75,629	21.1	359,057	100.0
	Total	166,981	12.3	723,392	53.4	465,051	34.3	1,355,424	100.0
Ngetta	Males	24,854	4.3	333,677	57.8	218,298	37.8	576,828	100.0
	Females	61,114	34.5	97,012	54.8	18,878	10.7	177,003	100.0
	Total	85,967	11.4	430,688	57.1	237,176	31.5	753,832	100.0
Nabuin	Males	82,886	70.1	18,542	15.7	16,821	14.2	118,249	100.0
	Females	53,200	84.2	7,183	11.4	2,836	4.5	63,219	100.0
	Total	136,086	75.0	25,725	14.2	19,658	10.8	181,468	100.0
Serere	Males	20,201	6.8	171,434	58.0	103,985	35.2	295,621	100.0
	Females	21,571	31.4	38,395	56.0	8,644	12.6	68,611	100.0
	Total	41,773	11.5	209,829	57.6	112,630	30.9	364,232	100.0
Mbarara	Males	64,121	10.4	399,481	64.5	155,590	25.1	619,192	100.0
	Females	97,455	45.9	88,013	41.4	27,030	12.7	212,499	100.0
	Total	161,577	19.4	487,494	58.6	182,620	22.0	831,691	100.0
Rwebitaba	Males	61,712	13.4	253,620	55.2	143,775	31.3	459,107	100.0
	Females	50,040	36.3	69,377	50.3	18,415	13.4	137,833	100.0
	Total	111,752	18.7	322,997	54.1	162,191	27.2	596,940	100.0
Uganda	**Males**	**494,991**	**9.4**	**2,991,907**	**57.0**	**1,764,756**	**33.6**	**5,251,654**	**100.0**
	Females	**538,514**	**34.6**	**810,176**	**52.0**	**209,274**	**13.4**	**1,557,964**	**100.0**
	Total	**1,033,505**	**15.2**	**3,802,084**	**55.8**	**1,974,029**	**29.0**	**6,809,618**	**100.0**

Notes: * *Obtained from the PP and PH of the first season - Some household heads did not respond as to their highest education level.*

Table 2-8: Percentage distribution of Ag HH heads by highest educational level, sex and sub-region*

Sub-region	Sex	No Education		Primary		Secondary +		Total	
		N	%	N	%	N	%	N	%
South Buganda	Males	28,710	5.1	319,244	56.6	215,641	38.3	563,596	100.0
	Females	46,158	20.6	127,849	57.0	50,212	22.4	224,219	100.0
	Total	74,869	9.5	447,092	56.8	265,853	33.7	787,814	100.0
North Buganda	Males	69,095	11.3	313,391	51.5	226,603	37.2	609,088	100.0
	Females	51,969	26.5	108,747	55.5	35,078	17.9	195,793	100.0
	Total	121,063	15.0	422,138	52.4	261,681	32.5	804,882	100.0
West Nile	Males	11,118	3.2	225,051	65.5	107,609	31.3	343,778	100.0
	Females	52,047	36.4	70,425	49.3	20,391	14.3	142,863	100.0
	Total	63,165	13.0	295,476	60.7	128,000	26.3	486,641	100.0
Lango	Males	10,947	3.2	216,456	64.2	109,706	32.5	337,108	100.0
	Females	31,311	28.8	64,375	59.3	12,914	11.9	108,601	100.0
	Total	42,258	9.5	280,831	63.0	122,620	27.5	445,709	100.0
Acholi	Males	13,907	5.8	117,220	48.9	108,593	45.3	239,720	100.0
	Females	29,802	43.6	32,637	47.7	5,963	8.7	68,403	100.0
	Total	43,709	14.2	149,857	48.6	114,556	37.2	308,123	100.0
Kigezi	Males	27,245	11.3	137,162	56.7	77,631	32.1	242,038	100.0
	Females	26,073	47.0	24,934	45.0	4,417	8.0	55,423	100.0
	Total	53,317	17.9	162,096	54.5	82,048	27.6	297,461	100.0
Bunyoro	Males	35,082	9.2	248,726	65.4	96,267	25.3	380,075	100.0
	Females	28,784	38.9	39,504	53.4	5,645	7.6	73,932	100.0
	Total	63,865	14.1	288,230	63.5	101,912	22.4	454,007	100.0
Tooro	Males	61,712	13.4	253,620	55.2	143,775	31.3	459,107	100.0
	Females	50,040	36.3	69,377	50.3	18,415	13.4	137,833	100.0
	Total	111,752	18.7	322,997	54.1	162,191	27.2	596,940	100.0
Busoga	Males	57,754	9.7	319,042	53.5	219,463	36.8	596,259	100.0
	Females	34,972	26.1	82,204	61.5	16,563	12.4	133,738	100.0
	Total	92,726	12.7	401,246	55.0	236,025	32.3	729,997	100.0
Teso	Males	20,201	6.8	171,434	57.9	104,672	35.3	296,308	100.0
	Females	21,571	31.4	38,395	56.0	8,644	12.6	68,611	100.0
	Total	41,773	11.4	209,829	57.5	113,317	31.1	364,919	100.0
Bukedi	Males	9,587	3.1	181,574	59.5	114,261	37.4	305,422	100.0
	Females	18,828	25.4	52,729	71.0	2,657	3.6	74,215	100.0
	Total	28,415	7.5	234,303	61.7	116,918	30.8	379,637	100.0
Elgon	Males	13,840	4.3	183,243	57.5	121,634	38.2	318,716	100.0
	Females	14,040	23.6	37,363	62.7	8,167	13.7	59,570	100.0

Sub-region	Sex	No Education		Primary		Secondary +		Total	
		N	%	N	%	N	%	N	%
	Total	27,880	7.4	220,606	58.3	129,801	34.3	378,287	100.0
Karamoja	Males	82,886	70.1	18,542	15.7	16,821	14.2	118,249	100.0
	Females	53,200	84.2	7,183	11.4	2,836	4.5	63,219	100.0
	Total	136,086	75.0	25,725	14.2	19,658	10.8	181,468	100.0
Ankole	Males	52,908	11.9	287,201	64.8	102,767	23.2	442,876	100.0
	Females	79,718	52.6	54,455	35.9	17,370	11.5	151,544	100.0
	Total	132,626	22.3	341,656	57.5	120,137	20.2	594,420	100.0
Uganda	**Males**	**494,991**	**9.4**	**2,991,907**	**57.0**	**1,764,756**	**33.6**	**5,251,654**	**100.0**
	Females	**538,514**	**34.6**	**810,176**	**52.0**	**209,274**	**13.4**	**1,557,964**	**100.0**
	Total	**1,033,505**	**15.2**	**3,802,084**	**55.8**	**1,974,029**	**29.0**	**6,809,618**	**100.0**

Notes: * *Obtained from the PP and PH of the first season. Some household heads did not respond as to their highest education level.*

Table 2-9: Percentage distribution of Agricultural Household heads by age, sex and ZARDI*

ZARDI	Sex	0-24 years old		25-34 years old		35-44 years old		45-64 years old		65 years +		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
Abi	Males	24,808	7.2	92,862	27.0	81,657	23.8	107,562	31.3	36,889	10.7	343,778	100.0
	Females	2,056	1.4	16,331	11.4	20,948	14.7	62,314	43.6	41,215	28.8	142,863	100.0
	Total	26,864	5.5	109,193	22.4	102,604	21.1	169,876	34.9	78,104	16.0	486,641	100.0
Buginyanya	Males	81,645	6.7	285,685	23.3	308,590	25.2	421,031	34.4	126,872	10.4	1,223,824	100.0
	Females	3,574	1.3	18,098	6.8	47,741	17.8	101,993	38.1	96,117	35.9	267,523	100.0
	Total	85,219	5.7	303,784	20.4	356,331	23.9	523,024	35.1	222,989	15.0	1,491,347	100.0
Bulindi	Males	37,387	9.8	91,309	24.0	90,846	23.9	127,758	33.6	32,775	8.6	380,075	100.0
	Females	0	0.0	10,546	14.3	19,443	26.3	33,241	45.0	10,702	14.5	73,932	100.0
	Total	37,387	8.2	101,856	22.4	110,289	24.3	160,998	35.5	43,477	9.6	454,007	100.0
Kachwekano	Males	5,211	2.2	59,423	24.6	76,862	31.8	68,542	28.3	32,001	13.2	242,038	100.0
	Females	0	0.0	5,514	9.9	4,040	7.3	20,550	37.1	25,320	45.7	55,423	100.0
	Total	5,211	1.8	64,936	21.8	80,901	27.2	89,092	30.0	57,321	19.3	297,461	100.0
Mukono	Males	27,682	2.8	187,384	18.8	247,386	24.8	437,243	43.9	96,672	9.7	996,367	100.0
	Females	2,995	0.8	5,156	1.4	61,486	17.1	157,545	43.9	131,874	36.7	359,057	100.0
	Total	30,677	2.3	192,540	14.2	308,872	22.8	594,788	43.9	228,546	16.9	1,355,424	100.0
Ngetta	Males	33,430	5.8	157,437	27.3	144,398	25.0	179,067	31.0	62,495	10.8	576,828	100.0
	Females	2,157	1.2	18,192	10.3	37,652	21.3	72,848	41.2	46,154	26.1	177,003	100.0
	Total	35,588	4.7	175,629	23.3	182,050	24.1	251,916	33.4	108,649	14.4	753,832	100.0
Nabuin	Males	9,130	7.7	31,431	26.6	30,633	25.9	29,108	24.6	17,946	15.2	118,249	100.0
	Females	3,140	5.0	9,568	15.1	11,244	17.8	23,024	36.4	16,243	25.7	63,219	100.0
	Total	12,270	6.8	40,999	22.6	41,877	23.1	52,132	28.7	34,190	18.8	181,468	100.0
Serere	Males	5,431	1.8	74,998	25.4	85,679	29.0	99,984	33.8	29,530	10.0	295,621	100.0
	Females	0	0.0	2,331	3.4	9,260	13.5	40,915	59.6	16,105	23.5	68,611	100.0
	Total	5,431	1.5	77,328	21.2	94,939	26.1	140,899	38.7	45,635	12.5	364,232	100.0
Mbarara	Males	20,340	3.3	125,115	20.2	171,706	27.7	216,597	35.0	85,435	13.8	619,192	100.0
	Females	2,302	1.1	18,257	8.6	29,957	14.1	83,838	39.5	78,144	36.8	212,499	100.0
	Total	22,642	2.7	143,372	17.2	201,663	24.2	300,435	36.1	163,579	19.7	831,691	100.0
Rwebitaba	Males	16,871	3.7	113,775	24.8	120,463	26.2	171,279	37.3	36,719	8.0	459,107	100.0
	Females	2,114	1.5	7,747	5.6	24,537	17.8	60,244	43.7	43,192	31.3	137,833	100.0
	Total	18,984	3.2	121,521	20.4	145,000	24.3	231,524	38.8	79,911	13.4	596,940	100.0
Uganda	**Males**	**261,934**	**5.0**	**1,219,419**	**23.2**	**1,358,220**	**25.8**	**1,858,171**	**35.4**	**557,336**	**10.6**	**5,255,080**	**100.0**
	Females	**18,338**	**1.2**	**111,739**	**7.2**	**266,307**	**17.1**	**656,513**	**42.1**	**505,066**	**32.4**	**1,557,964**	**100.0**
	Total	**280,272**	**4.1**	**1,331,158**	**19.5**	**1,624,528**	**23.8**	**2,514,684**	**36.9**	**1,062,402**	**15.6**	**6,813,044**	**100.0**

Note**: ***Obtained from the PP and PH of the first season*

Table 2-10: Percentage distribution of Agricultural Household heads by age, sex and sub-region*

Sub-region	Sex	0-24 years		25-34 years		35-44 years		45-64 years		65 years +		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
South Buganda	Males	11,132	2.0	99,512	17.7	175,847	31.2	205,505	36.5	71,600	12.7	563,596	100.0
	Females	1,373	0.6	3,905	1.7	42,770	19.1	104,308	46.5	71,863	32.1	224,219	100.0
	Total	12,504	1.6	103,417	13.1	218,616	27.7	309,813	39.3	143,463	18.2	787,814	100.0
North Buganda	Males	26,033	4.3	128,724	21.1	126,103	20.7	278,918	45.8	49,311	8.1	609,088	100.0
	Females	1,622	0.8	4,421	2.3	29,451	15.0	86,991	44.4	73,308	37.4	195,793	100.0
	Total	27,656	3.4	133,145	16.5	155,554	19.3	365,909	45.5	122,619	15.2	804,882	100.0
West Nile	Males	24,808	7.2	92,862	27.0	81,657	23.8	107,562	31.3	36,889	10.7	343,778	100.0
	Females	2,056	1.4	16,331	11.4	20,948	14.7	62,314	43.6	41,215	28.8	142,863	100.0
	Total	26,864	5.5	109,193	22.4	102,604	21.1	169,876	34.9	78,104	16.0	486,641	100.0
Lango	Males	24,531	7.3	85,201	25.3	92,292	27.4	97,597	29.0	37,487	11.1	337,108	100.0
	Females	1,422	1.3	15,353	14.1	26,496	24.4	36,272	33.4	29,057	26.8	108,601	100.0
	Total	25,953	5.8	100,554	22.6	118,788	26.7	133,869	30.0	66,544	14.9	445,709	100.0
Acholi	Males	8,899	3.7	72,236	30.1	52,106	21.7	81,470	34.0	25,009	10.4	239,720	100.0
	Females	735	1.1	2,839	4.1	11,156	16.3	36,576	53.5	17,097	25.0	68,403	100.0
	Total	9,634	3.1	75,075	24.4	63,262	20.5	118,047	38.3	42,105	13.7	308,123	100.0
Kigezi	Males	5,211	2.2	59,423	24.6	76,862	31.8	68,542	28.3	32,001	13.2	242,038	100.0
	Females	0	0.0	5,514	9.9	4,040	7.3	20,550	37.1	25,320	45.7	55,423	100.0
	Total	5,211	1.8	64,936	21.8	80,901	27.2	89,092	30.0	57,321	19.3	297,461	100.0
Bunyoro	Males	37,387	9.8	91,309	24.0	90,846	23.9	127,758	33.6	32,775	8.6	380,075	100.0
	Females	0	0.0	10,546	14.3	19,443	26.3	33,241	45.0	10,702	14.5	73,932	100.0
	Total	37,387	8.2	101,856	22.4	110,289	24.3	160,998	35.5	43,477	9.6	454,007	100.0
Tooro	Males	16,871	3.7	113,775	24.8	120,463	26.2	171,279	37.3	36,719	8.0	459,107	100.0
	Females	2,114	1.5	7,747	5.6	24,537	17.8	60,244	43.7	43,192	31.3	137,833	100.0
	Total	18,984	3.2	121,521	20.4	145,000	24.3	231,524	38.8	79,911	13.4	596,940	100.0
Busoga	Males	39,337	6.6	148,203	24.8	155,983	26.1	196,815	33.0	56,949	9.5	597,287	100.0
	Females	2,380	1.8	7,235	5.4	30,425	22.8	55,429	41.4	38,268	28.6	133,738	100.0
	Total	41,717	5.7	155,439	21.3	186,409	25.5	252,244	34.5	95,217	13.0	731,025	100.0
Teso	Males	5,431	1.8	74,998	25.3	85,679	28.9	100,670	34.0	29,530	10.0	296,308	100.0
	Females	0	0.0	2,331	3.4	9,260	13.5	40,915	59.6	16,105	23.5	68,611	100.0
	Total	5,431	1.5	77,328	21.2	94,939	26.0	141,586	38.8	45,635	12.5	364,919	100.0
Bukedi	Males	17,807	5.8	81,176	26.6	73,601	24.1	100,500	32.9	32,338	10.6	305,422	100.0
	Females	1,194	1.6	4,260	5.7	11,704	15.8	25,180	33.9	31,876	43.0	74,215	100.0
	Total	19,001	5.0	85,436	22.5	85,305	22.5	125,680	33.1	64,214	16.9	379,637	100.0
Elgon	Males	24,501	7.6	56,306	17.5	79,006	24.6	123,716	38.5	37,586	11.7	321,115	100.0
	Females	0	0.0	6,603	11.1	5,612	9.4	21,384	35.9	25,972	43.6	59,570	100.0
	Total	24,501	6.4	62,909	16.5	84,617	22.2	145,100	38.1	63,558	16.7	380,685	100.0

Sub-region	Sex	0-24 years		25-34 years		35-44 years		45-64 years		65 years +		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
Karamoja	Males	9,130	7.7	31,431	26.6	30,633	25.9	29,108	24.6	17,946	15.2	118,249	100.0
	Females	3,140	5.0	9,568	15.1	11,244	17.8	23,024	36.4	16,243	25.7	63,219	100.0
	Total	12,270	6.8	40,999	22.6	41,877	23.1	52,132	28.7	34,190	18.8	181,468	100.0
Ankole	Males	10,857	2.5	84,263	19.0	117,143	26.5	169,417	38.3	61,195	13.8	442,876	100.0
	Females	2,302	1.5	15,088	10.0	19,222	12.7	50,084	33.0	64,847	42.8	151,544	100.0
	Total	13,160	2.2	99,351	16.7	136,365	22.9	219,502	36.9	126,042	21.2	594,420	100.0
Uganda	**Males**	**261,934**	**5.0**	**1,219,419**	**23.2**	**1,358,220**	**25.8**	**1,858,171**	**35.4**	**557,336**	**10.6**	**5,255,080**	**100.0**
	Females	**18,338**	**1.2**	**111,739**	**7.2**	**266,307**	**17.1**	**656,513**	**42.1**	**505,066**	**32.4**	**1,557,964**	**100.0**
	Total	**280,272**	**4.1**	**1,331,158**	**19.5**	**1,624,528**	**23.8**	**2,514,684**	**36.9**	**1,062,402**	**15.6**	**6,813,044**	**100.0**

Note**: ***Obtained from the PP and PH of the first season*

Table 2-11: Dependency rate by ZARDI*

ZARDI	Individuals aged 0-14 or 65+		Individuals aged 15-64		Dependency	Total population
	Number	%	Number	%	%	
Abi	1,447,638	47.8	1,579,580	52.2	91.6	3,027,218
Buginyanya	4,367,057	49.4	4,465,787	50.6	97.8	8,832,844
Bulindi	1,318,577	47.5	1,459,073	52.5	90.4	2,777,650
Kachwekano	752,184	46.2	874,401	53.8	86.0	1,626,586
Mukono	3,922,670	49.4	4,013,486	50.6	97.7	7,936,156
Ngetta	2,001,668	46.5	2,306,248	53.5	86.8	4,307,916
Nabuin	514,020	56.6	394,529	43.4	130.3	908,549
Mbarara	1,186,129	45.8	1,403,152	54.2	84.5	2,589,281
Rwebitaba	2,258,979	47.3	2,512,625	52.7	89.9	4,771,605
Serere	1,577,942	46.8	1,793,824	53.2	88.0	3,371,767
Uganda	**19,347,826**	**48.2**	**20,805,775**	**51.8**	**93.0**	**40,153,601**

Note: ***Obtained from the PP and PH of the first season.***

Table 2-12: Dependency rate by sub-region*

Sub-region	Individuals aged 0-14 or 65+		Individuals aged 15-64	Dependency rate		Total
	Number	%	Number	%	%	population
South Buganda	2,261,299	49.5	2,311,379	50.5	97.8	4,572,678
North Buganda	2,337,911	49.6	2,379,175	50.4	98.3	4,717,086
West Nile	1,447,638	47.8	1,579,580	52.2	91.6	3,027,218
Lango	1,075,841	46.0	1,261,587	54.0	85.3	2,337,428
Acholi	925,827	47.0	1,044,661	53.0	88.6	1,970,488
Kigezi	752,184	46.2	874,401	53.8	86.0	1,626,586
Bunyoro	1,318,577	47.5	1,459,073	52.5	90.4	2,777,650
Tooro	1,577,942	46.8	1,793,824	53.2	88.0	3,371,767
Busoga	2,185,887	50.5	2,143,164	49.5	102.0	4,329,051
Teso	1,188,876	45.8	1,407,272	54.2	84.5	2,596,149
Bukedi	1,145,027	50.0	1,143,994	50.0	100.1	2,289,022
Elgon	1,036,143	46.8	1,178,629	53.2	87.9	2,214,772
Karamoja	511,390	56.5	393,477	43.5	130.0	904,867
Ankole	1,583,283	46.3	1,835,559	53.7	86.3	3,418,841
Uganda	**19,347,826**	**48.2**	**20,805,775**	**51.8**	**93.0**	**40,153,601**

Note: ***Obtained from the PP and PH of the first season***

Table 2-13: Percentage distribution of Agricultural Household heads by sex, main economic activity and ZARDI*

ZARDI	Male headed			Female headed			All heads		
	Mainly in agriculture	Mainly in non-agriculture	Total	Mainly in agriculture	Mainly in non-agriculture	Total	Mainly in agriculture	Mainly in non-agriculture	Total
Abi	87.6	12.4	100.0	96.0	4.0	100.0	90.1	9.9	100.0
Buginyanya	65.1	34.9	100.0	86.0	14.0	100.0	68.9	31.1	100.0
Bulindi	80.1	19.9	100.0	87.8	12.2	100.0	81.4	18.6	100.0
Kachwekano	63.7	36.3	100.0	87.4	12.6	100.0	68.1	31.9	100.0
Mukono	62.2	37.8	100.0	77.8	22.2	100.0	66.4	33.6	100.0
Ngetta	79.6	20.4	100.0	89.0	11.0	100.0	81.8	18.2	100.0
Nabuin	82.5	17.5	100.0	94.2	5.8	100.0	86.6	13.4	100.0
Serere	91.6	8.4	100.0	95.3	4.7	100.0	92.3	7.7	100.0
Mbarara	68.8	31.2	100.0	85.3	14.7	100.0	73.0	27.0	100.0
Rwebitaba	84.4	15.6	100.0	92.5	7.5	100.0	86.3	13.7	100.0
Uganda	**72.6**	**27.4**	**100.0**	**86.7**	**13.3**	**100.0**	**75.9**	**24.1**	**100.0**

Note: **This table is extracted from the first season PP and PH data sets.*

Table 2-14: Percentage distribution of Agricultural Household heads by sex, main economic activity and sub-region*

Sub-region	Male headed			Female headed			All heads		
	Mainly in agriculture	Mainly in non-agriculture	Total	Mainly in agriculture	Mainly in non-agriculture	Total	Mainly in agriculture	Mainly in non-agriculture	Total
South Buganda	51.9	48.1	100.0	70.8	29.2	100.0	57.3	42.7	100.0
North Buganda	70.9	29.1	100.0	86.9	13.1	100.0	74.8	25.2	100.0
West Nile	87.6	12.4	100.0	96.0	4.0	100.0	90.1	9.9	100.0
Lango	79.1	20.9	100.0	91.4	8.6	100.0	82.1	17.9	100.0
Acholi	80.4	19.6	100.0	85.1	14.9	100.0	81.4	18.6	100.0
Kigezi	63.7	36.3	100.0	87.4	12.6	100.0	68.1	31.9	100.0
Bunyoro	80.1	19.9	100.0	87.8	12.2	100.0	81.4	18.6	100.0
Tooro	84.4	15.6	100.0	92.5	7.5	100.0	86.3	13.7	100.0
Busoga	63.5	36.5	100.0	83.3	16.7	100.0	67.1	32.9	100.0
Teso	91.6	8.4	100.0	95.3	4.7	100.0	92.3	7.7	100.0
Bukedi	65.6	34.4	100.0	86.9	13.1	100.0	69.8	30.2	100.0
Elgon	67.7	32.3	100.0	90.9	9.1	100.0	71.3	28.7	100.0
Karamoja	82.5	17.5	100.0	94.2	5.8	100.0	86.6	13.4	100.0
Ankole	72.5	27.5	100.0	87.1	12.9	100.0	76.2	23.8	100.0
Uganda	**72.6**	**27.4**	**100.0**	**86.7**	**13.3**	**100.0**	**75.9**	**24.1**	**100.0**

Note: **This table is extracted from the first season PP and PH data sets.*

Table 2-15: Percentage distribution of Agricultural Household heads by employment status, sex and ZARDI*

ZARDI	Sex	Own account worker	Employer	Salaried worker	Task worker	Unpaid family member	Trainee/ volunteer	Member of a cooperative	Total
Abi	Males	90.0	0.2	6.1	2.2	1.5	0.0	0.0	100.0
	Females	96.7	0.0	1.6	0.0	1.6	0.0	0.0	100.0
	Total	92.0	0.1	4.8	1.5	1.5	0.0	0.0	100.0
Buginyanya	Males	79.4	0.1	9.9	6.7	3.7	0.2	0.0	100.0
	Females	93.1	0.0	2.1	0.0	4.8	0.0	0.0	100.0
	Total	81.9	0.1	8.5	5.5	3.9	0.1	0.0	100.0
Bulindi	Males	90.1	1.5	6.3	2.1	0.0	0.0	0.0	100.0
	Females	94.0	3.7	2.2	0.0	0.0	0.0	0.0	100.0
	Total	90.8	1.8	5.6	1.8	0.0	0.0	0.0	100.0
Kachwekano	Males	63.1	5.5	14.8	16.3	0.3	0.0	0.0	100.0
	Females	93.9	1.2	1.9	0.5	2.5	0.0	0.0	100.0
	Total	68.7	4.7	12.5	13.4	0.7	0.0	0.0	100.0
Mukono	Males	87.0	0.5	8.0	4.3	0.1	0.0	0.1	100.0
	Females	97.9	0.4	1.7	0.0	0.0	0.0	0.0	100.0
	Total	89.7	0.5	6.4	3.2	0.1	0.0	0.1	100.0
Ngetta	Males	86.2	0.0	8.1	2.5	3.2	0.0	0.0	100.0
	Females	91.1	0.0	0.6	1.0	7.3	0.0	0.0	100.0
	Total	87.3	0.0	6.3	2.1	4.2	0.0	0.0	100.0
Nabuin	Males	94.9	0.0	3.0	1.7	0.5	0.0	0.0	100.0
	Females	96.8	0.0	1.7	0.0	1.6	0.0	0.0	100.0
	Total	95.6	0.0	2.5	1.1	0.8	0.0	0.0	100.0
Serere	Males	92.5	0.0	5.8	0.6	1.1	0.0	0.0	100.0
	Females	96.7	0.0	3.3	0.0	0.0	0.0	0.0	100.0
	Total	93.3	0.0	5.3	0.5	0.9	0.0	0.0	100.0
Mbarara	Males	76.7	2.7	7.8	12.9	0.0	0.0	0.0	100.0
	Females	93.1	0.0	4.1	2.9	0.0	0.0	0.0	100.0
	Total	80.8	2.0	6.9	10.4	0.0	0.0	0.0	100.0
Rwebitaba	Males	88.3	3.2	6.0	2.5	0.0	0.0	0.0	100.0
	Females	95.8	1.4	2.8	0.0	0.0	0.0	0.0	100.0
	Total	90.0	2.8	5.3	2.0	0.0	0.0	0.0	100.0
	Males	**83.9**	**1.1**	**8.1**	**5.5**	**1.4**	**0.0**	**0.0**	**100.0**
	Females	**94.9**	**0.4**	**2.2**	**0.5**	**2.0**	**0.0**	**0.0**	**100.0**
Uganda	**Total**	**86.4**	**0.9**	**6.7**	**4.4**	**1.5**	**0.0**	**0.0**	**100.0**

Notes*: *Table extracted from the PP first season data set.*

Table 2-16: Percentage distribution of Agricultural Household heads by employment status, sex and sub-region*

Sub-region	Sex	Own account worker	Employer	Salaried worker	Task worker	Unpaid family member	Trainee/ volunteer	Member of a cooperative	Total
South Buganda	Males	84.0	3.0	5.6	6.9	0.2	0.0	0.2	100.0
	Females	97.4	0.0	2.2	0.4	0.0	0.0	0.0	100.0
	Total	87.7	2.2	4.7	5.1	0.2	0.0	0.2	100.0
North Buganda	Males	88.4	0.6	8.8	2.2	0.0	0.0	0.0	100.0
	Females	97.2	0.8	2.0	0.0	0.0	0.0	0.0	100.0
	Total	90.4	0.6	7.3	1.7	0.0	0.0	0.0	100.0
West Nile	Males	90.0	0.2	6.1	2.2	1.5	0.0	0.0	100.0
	Females	96.7	0.0	1.6	0.0	1.6	0.0	0.0	100.0
	Total	92.0	0.1	4.8	1.5	1.5	0.0	0.0	100.0
Lango	Males	84.3	0.0	8.5	1.7	5.5	0.0	0.0	100.0
	Females	85.5	0.0	1.0	1.6	11.9	0.0	0.0	100.0
	Total	84.6	0.0	6.7	1.7	7.0	0.0	0.0	100.0
Acholi	Males	88.9	0.0	7.5	3.6	0.0	0.0	0.0	100.0
	Females	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
	Total	91.4	0.0	5.8	2.8	0.0	0.0	0.0	100.0
Kigezi	Males	63.1	5.5	14.8	16.3	0.3	0.0	0.0	100.0
	Females	93.9	1.2	1.9	0.5	2.5	0.0	0.0	100.0
	Total	68.7	4.7	12.5	13.4	0.7	0.0	0.0	100.0
Bunyoro	Males	90.1	1.5	6.3	2.1	0.0	0.0	0.0	100.0
	Females	94.0	3.7	2.2	0.0	0.0	0.0	0.0	100.0
	Total	90.8	1.8	5.6	1.8	0.0	0.0	0.0	100.0
Tooro	Males	88.3	3.2	6.0	2.5	0.0	0.0	0.0	100.0
	Females	95.8	1.4	2.8	0.0	0.0	0.0	0.0	100.0
	Total	90.0	2.8	5.3	2.0	0.0	0.0	0.0	100.0
Busoga	Males	84.9	0.0	9.5	5.2	0.0	0.4	0.0	100.0
	Females	97.7	0.0	2.3	0.0	0.0	0.0	0.0	100.0
	Total	87.2	0.0	8.2	4.3	0.0	0.3	0.0	100.0
Teso	Males	92.5	0.0	5.7	0.6	1.1	0.0	0.0	100.0
	Females	96.7	0.0	3.3	0.0	0.0	0.0	0.0	100.0
	Total	93.3	0.0	5.3	0.5	0.9	0.0	0.0	100.0
Bukedi	Males	79.8	0.3	12.1	7.7	0.0	0.0	0.0	100.0
	Females	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
	Total	83.7	0.3	9.8	6.3	0.0	0.0	0.0	100.0
Elgon	Males	68.8	0.0	8.4	8.7	14.1	0.0	0.0	100.0
	Females	74.6	0.0	4.1	0.0	21.3	0.0	0.0	100.0
	Total	69.7	0.0	7.7	7.3	15.2	0.0	0.0	100.0

Sub-region	Sex	Own account worker	Employer	Salaried worker	Task worker	Unpaid family member	Trainee/ volunteer	Member of a cooperative	Total
Karamoja	Males	94.9	0.0	3.0	1.7	0.5	0.0	0.0	100.0
	Females	96.8	0.0	1.7	0.0	1.6	0.0	0.0	100.0
	Total	95.6	0.0	2.5	1.1	0.8	0.0	0.0	100.0
Ankole	Males	74.4	0.2	9.7	15.7	0.0	0.0	0.0	100.0
	Females	92.7	0.0	3.8	3.5	0.0	0.0	0.0	100.0
	Total	78.9	0.2	8.3	12.7	0.0	0.0	0.0	100.0
	Males	**83.9**	**1.1**	**8.1**	**5.5**	**1.4**	**0.0**	**0.0**	**100.0**
	Females	**94.9**	**0.4**	**2.2**	**0.5**	**2.0**	**0.0**	**0.0**	**100.0**
Uganda	**Total**	**86.4**	**0.9**	**6.7**	**4.4**	**1.5**	**0.0**	**0.0**	**100.0**

Notes*: *Table extracted from the PP first season data set*

Annex 3.

Note:
All the tables in this Annex were extracted from data collected in the second season of the agricultural year 2020 and, therefore, refer to the second season.

Table 3-1: Number of parcels and average parcel size (Hectare) by ZARDI *

	Average number of parcels				Total number of parcels				Average parcel size			
ZARDI	Mean	SE**	Lower 95	Upper 95	Total	SE**	Lower 95	Upper 95	Mean	SE**	Lower 95	Upper 95
Abi	2.61	0.09	2.43	2.79	1,334,970	83,476	1,171,012	1,498,928	0.56	0.08	0.41	0.71
Buginyanya	1.93	0.04	1.85	2.00	2,864,577	124,354	2,620,330	3,108,824	0.37	0.02	0.34	0.40
Bulindi	1.87	0.05	1.77	1.97	862,533	64,241	736,355	988,710	0.78	0.07	0.65	0.91
Kachwekano	2.78	0.10	2.57	2.98	838,597	48,544	743,251	933,943	0.19	0.03	0.13	0.25
Mukono	1.81	0.04	1.73	1.89	2,448,466	144,837	2,163,987	2,732,945	0.68	0.07	0.55	0.81
Ngetta	2.47	0.06	2.35	2.58	1,881,733	100,408	1,684,519	2,078,948	1.02	0.11	0.81	1.23
Nabuin	1.02	0.01	0.99	1.04	87,179	10,337	66,876	107,482	0.58	0.39	-0.19	1.35
Serere	1.58	0.05	1.49	1.67	590,025	33,197	524,822	655,229	1.17	0.19	0.81	1.54
Mbarara	2.13	0.07	2.00	2.25	1,784,787	108,719	1,571,248	1,998,325	0.52	0.08	0.36	0.68
Rwebitaba	1.86	0.06	1.74	1.98	1,122,543	74,289	976,630	1,268,457	0.43	0.02	0.39	0.48
Uganda	**2.04**	**0.02**	**2.00**	**2.07**	**13,815,410**	**254,079**	**13,500,000**	**14,500,000**	**0.61**	**0.03**	**0.56**	**0.66**

Notes: ***** The *Table is extracted from the PP and PH second season data set.* ****** Standard error*

Table 3-2: Number of parcels and average parcel size (Hectare) by sub-region *

Sub-region	Average number of parcels				Total number of parcels				Average parcel size			
	Mean	SE**	Lower 95	Upper 95	Total	SE**	Lower 95	Upper 95	Mean	SE**	Lower 95	Upper 95
S. Buganda	1.61	0.05	1.50	1.71	1,276,486	69,814	1,139,362	1,413,610	0.53	0.06	0.42	0.64
N. Buganda	1.94	0.05	1.85	2.04	1,554,906	100,642	1,357,232	1,752,580	0.77	0.10	0.58	0.96
West Nile	2.61	0.09	2.43	2.79	1,334,970	83,476	1,171,012	1,498,928	0.56	0.08	0.41	0.71
Lango	1.96	0.07	1.83	2.09	889,662	49,184	793,058	986,266	0.67	0.06	0.56	0.78
Acholi	3.21	0.09	3.03	3.39	992,071	87,537	820,137	1,164,005	1.33	0.19	0.97	1.70
Kigezi	2.78	0.10	2.57	2.98	838,597	48,544	743,251	933,943	0.19	0.03	0.13	0.25
Bunyoro	1.87	0.05	1.77	1.97	862,533	64,241	736,355	988,710	0.78	0.07	0.65	0.91
Tooro	1.86	0.06	1.74	1.98	1,122,543	74,289	976,630	1,268,457	0.43	0.02	0.39	0.48
Busoga	1.74	0.04	1.67	1.81	1,268,999	90,487	1,091,272	1,446,727	0.47	0.03	0.41	0.52
Teso	1.58	0.05	1.49	1.67	590,025	33,197	524,822	655,229	1.17	0.19	0.81	1.54
Bukedi	1.91	0.05	1.80	2.02	733,085	43,733	647,188	818,983	0.33	0.02	0.29	0.36
Elgon	2.31	0.14	2.04	2.58	862,492	73,235	718,649	1,006,336	0.26	0.02	0.22	0.30
Karamoja	1.02	0.01	0.99	1.04	87,179	10,337	66,876	107,482	0.58	0.39	-0.19	1.35
Ankole	2.34	0.06	2.23	2.45	1,401,861	61,876	1,280,327	1,523,395	0.51	0.10	0.32	0.71
Uganda	**2.04**	**0.02**	**2.00**	**2.07**	**13,815,410**	**254,079**	**13,500,000**	**14,500,000**	**0.61**	**0.03**	**0.56**	**0.66**

Note*: * The Table is extracted from the PP and PH second season data set. ** Standard error*

Table 3-3: Number of plots and average plot size (ha) *

ZARDI	Average number of plots per parcel				Total number of plots				Average plot size			
	Mean	SE**	Lower 95	Upper 95	Total	SE**[*]	Lower 95	Upper 95	Mean	SE**[*]	Lower 95	Upper 95
Abi	2	0.06	1.88	2.13	2,488,037	118,838	2,254,630	2,721,445	0.27	0.02	0.23	0.32
Buginyanya	1.78	0.04	1.71	1.85	5,002,529	187,857	4,633,562	5,371,497	0.37	0.02	0.34	0.41
Bulindi	2.93	0.11	2.71	3.16	2,294,658	163,646	1,973,244	2,616,072	0.85	0.08	0.69	1.01
Kachwekano	1.65	0.04	1.56	1.73	1,388,001	85,346	1,220,374	1,555,627	0.15	0.01	0.12	0.18
Mukono	2.07	0.06	1.96	2.18	4,900,780	273,993	4,362,634	5,438,926	0.58	0.03	0.51	0.65
Ngetta	2.51	0.07	2.37	2.64	4,625,260	208,271	4,216,199	5,034,321	0.96	0.07	0.84	1.09
Nabuin	1.26	0.04	1.18	1.35	481,024	43,747	395,102	566,946	0.51	0.03	0.45	0.56
Serere	3.43	0.14	3.16	3.7	2,240,104	103,537	2,036,749	2,443,460	0.74	0.06	0.63	0.85
Mbarara	1.86	0.04	1.78	1.94	3,533,047	232,665	3,076,074	3,990,020	0.65	0.16	0.34	0.96
Rwebitaba	2.3	0.09	2.12	2.49	2,584,316	165,224	2,259,802	2,908,831	0.39	0.02	0.35	0.43
Uganda	**2.12**	**0.02**	**2.08**	**2.16**	**29,537,757**	**486,102**	**28,600,000**	**30,500,000**	**0.55**	**0.03**	**0.5**	**0.6**

Notes**: *** *The Table extracted from the PP and PH second season data set.* ** *Standard error*

Table 3-4: Percentage distribution of Agricultural Household by number of parcels and ZARDI*

ZARDI	2 parcels or less	3 to 4 parcels	5 or more parcels	Total
Abi	57.4	34.1	8.6	100.0
Buginyanya	76.0	21.7	2.3	100.0
Bulindi	81.8	17.4	0.9	100.0
Kachwekano	45.3	45.7	9.0	100.0
Mukono	79.5	19.2	1.4	100.0
Ngetta	57.0	34.6	8.4	100.0
Nabuin	99.4	0.6	0.0	100.0
Serere	90.4	9.4	0.3	100.0
Mbarara	67.3	27.6	5.1	100.0
Rwebitaba	80.4	19.2	0.4	100.0
Uganda	71.5	24.7	3.9	100.0

Note: * *Calculated from the post-planting and post-harvest data of second season*

Table 3-5: Percentage distribution of Agricultural Household by number of parcels and sub-region*

Sub-region	2 parcels or less	3 to 4 parcels	5 or more parcels	Total
South Buganda	84.6	14.5	0.9	100.0
North Buganda	75.8	22.6	1.6	100.0
West Nile	57.4	34.1	8.6	100.0
Lango	76.8	21.4	1.8	100.0
Acholi	34.3	49.7	16.0	100.0
Kigezi	45.3	45.7	9.0	100.0
Bunyoro	81.8	17.4	0.9	100.0
Tooro	80.4	19.2	0.4	100.0
Busoga	86.3	13.3	0.5	100.0
Teso	90.4	9.4	0.3	100.0
Bukedi	78.1	20.7	1.1	100.0
Elgon	63.1	31.4	5.5	100.0
Karamoja	99.4	0.6	0.0	100.0
Ankole	64.0	29.9	6.1	100.0
Uganda	**71.5**	**24.7**	**3.9**	**100.0**

Note: * *Calculated from the post-planting and post-harvest data of second season*

Table 3- 6: Percentage distribution of Agricultural Households by number of plots and ZARDI*

ZARDI	Number of plots per parcel			Total
	1 or 2 plots	3 to 5 plots	6 or more plots	
Abi	68.4	26.9	4.7	100.0
Buginyanya	79.4	19.8	0.8	100.0
Bulindi	63.7	29.6	6.7	100.0
Kachwekano	78.9	19.5	1.7	100.0
Mukono	76.1	21.8	2.1	100.0
Ngetta	64.9	31.7	3.4	100.0
Nabuin	96.8	3.3	0.0	100.0
Serere	42.4	37.0	20.6	100.0
Mbarara	81.3	17.1	1.7	100.0
Rwebitaba	67.0	30.0	3.0	100.0
Uganda	**72.5**	**24.1**	**3.3**	**100.0**

Note: **Calculated from the post-planting and post-harvest data of second season*

Table 3-7: Percentage distribution of Ag HHs, by number of plots and sub-region*

Sub-region	Number of plots per parcel			
	1 or 2 plots	3 to 5 plots	6 or more plots	Total
South Buganda	84.1	14.9	1.0	100.00
North Buganda	71.5	25.7	2.8	100.00
West Nile	68.4	26.9	4.7	100.00
Lango	59.7	37.6	2.6	100.00
Acholi	69.6	26.3	4.1	100.00
Kigezi	78.9	19.5	1.7	100.00
Bunyoro	63.7	29.6	6.7	100.00
Tooro	67.0	30.0	3.0	100.00
Busoga	74.3	24.4	1.3	100.00
Teso	42.4	37.0	20.6	100.00
Bukedi	74.1	25.4	0.5	100.00
Elgon	91.5	8.2	0.3	100.00
Karamoja	96.8	3.3	0.0	100.00
Ankole	80.6	17.7	1.7	100.00
Uganda	**72.5**	**24.1**	**3.3**	**100.00**

Note: **Calculated from the post-planting and post-harvest data of second season*

Table 3-8: Total area by use and ZARDI *

ZARDI	Holding size		Agricultural area		Planted area	
	Average	Total	Average	Total	Average	Total
Abi	1.46	745,427	1.14	565,762	0.71	351,171
Buginyanya	0.71	1,055,390	0.62	912,071	0.60	887,757
Bulindi	1.46	670,780	1.26	582,671	1.12	515,699
Kachwekano	0.53	159,921	0.42	125,741	0.38	114,044
Mukono	1.23	1,665,566	1.04	1,403,049	0.84	1,139,068
Ngetta	2.52	1,921,483	1.98	1,486,013	1.14	852,270
Nabuin	0.59	50,675	0.90	7,604	0.90	7,604
Serere	1.86	692,084	1.24	460,654	1.05	388,777
Mbarara	1.11	933,425	0.98	821,196	0.60	500,997
Rwebitaba	0.81	488,269	0.74	445,020	0.72	433,705
Uganda	**1.24**	**8,383,019**	**1.02**	**6,809,781**	**0.78**	**5,191,093**

Note: * *Calculated from the post-planting and post-harvest data of second season.*

Table 3-9: Percentage distribution of Agricultural Households by size of the holding and ZARDI*

ZARDI	Size classes				Total
	<0.5 ha	0.5-1 ha	1-2 ha	Over 2 ha	
Abi	35.1	32.2	18.2	14.5	100.0
Buginyanya	53.0	27.0	15.4	4.6	100.0
Bulindi	28.5	26.4	25.8	19.3	100.0
Kachwekano	68.9	21.7	7.5	1.9	100.0
Mukono	38.8	24.7	22.5	14.0	100.0
Ngetta	11.1	21.8	29.8	37.3	100.0
Nabuin	93.0	1.9	3.2	1.9	100.0
Serere	11.6	29.6	42.0	16.8	100.0
Mbarara	50.9	25.9	14.3	8.9	100.0
Rwebitaba	38.4	35.3	20.5	5.8	100.0
Uganda	**40.3**	**26.1**	**20.4**	**13.2**	**100.0**

Note: **Calculated from the post-planting and post-harvest data of second season*

Table 3-10: Percentage distribution of Agricultural Households by size of the holding and sub-region*

Sub-region	Size classes				
	<0.5 ha	0.5-1 ha	1-2 ha	Over 2 ha	Total
South Buganda	52.3	25.1	14.5	8.1	100.0
North Buganda	30.5	23.7	27.8	18.0	100.0
West Nile	35.1	32.2	18.2	14.5	100.0
Lango	16.9	33.9	34.4	14.8	100.0
Acholi	4.5	7.9	24.6	63.1	100.0
Kigezi	68.9	21.7	7.5	1.9	100.0
Bunyoro	28.5	26.4	25.8	19.3	100.0
Tooro	38.4	35.3	20.5	5.8	100.0
Busoga	45.5	27.5	19.2	7.8	100.0
Teso	11.6	29.6	42.0	16.8	100.0
Bukedi	56.7	26.2	14.1	3.0	100.0
Elgon	56.8	27.3	12.7	3.1	100.0
Karamoja	93.0	1.9	3.2	1.9	100.0
Ankole	51.2	26.8	13.5	8.5	100.0
Uganda	**40.3**	**26.1**	**20.4**	**13.2**	**100.0**

Note: ***** *Calculated from the post-planting and post-harvest data of first season*

Annex 4.

Table 4-1: Percentage distribution of crop plots by sex of the plot manager and ZARDI

	First season			Second season		
ZARDI	**Number of plots**	**% plots managed by males**	**% plots managed by females**	**Number of plots**	**% plots managed by males**	**% plots managed by females**
Abi	1,340,825	64.7	35.3	2,137,858	63.9	36.1
Buginyanya	3,919,476	50.8	49.2	4,167,120	52.5	47.5
Bulindi	1,283,411	67.8	32.2	1,669,776	69.6	30.4
Kachwekano	908,280	38.6	61.4	1,199,883	37.8	62.2
Mukono	3,251,134	56.2	43.8	3,841,844	57.3	42.7
Ngetta	2,556,749	60.8	39.2	2,848,456	63.6	36.4
Nabuin	306,820	33.3	66.7	13,720	74.1	25.9
Serere	1,185,955	77.0	23.0	1,450,240	77.6	22.4
Mbarara	2,017,231	41.4	58.6	2,499,581	43.5	56.5
Rwebitaba	1,573,912	56.9	43.1	2,017,163	58.5	41.5
Uganda	**18,343,793**	**55.7**	**44.3**	**21,845,640**	**57.6**	**42.4**

Table 4-2: Percentage distribution of crop plots by sex of the plot manager and sub-region

	First season			Second season		
Sub-region	**number of plots**	**% plots managed by males**	**% plots managed by females**	**number of plots**	**% plots managed by males**	**% plots managed by females**
South Buganda	1,545,357	53.4	46.6	1,768,514	57.6	42.4
North Buganda	2,184,781	57.4	42.6	2,635,135	57.8	42.2
West Nile	1,340,825	64.7	35.3	2,137,858	63.9	36.1
Lango	1,387,572	59.6	40.4	1,545,205	64.3	35.7
Acholi	1,169,177	62.2	37.8	1,303,251	62.8	37.2
Kigezi	908,280	38.6	61.4	1,199,883	37.8	62.2
Bunyoro	1,283,411	67.8	32.2	1,669,776	69.6	30.4
Tooro	1,573,912	56.9	43.1	2,017,163	58.5	41.5
Busoga	1,900,040	43.7	56.3	2,058,410	46.5	53.5
Teso	1,188,015	77.1	22.9	1,453,674	77.7	22.3
Bukedi	1,013,086	46.9	53.1	1,115,105	47.3	52.7
Elgon	1,006,350	68.2	31.8	993,604	71.0	29.0
Karamoja	305,768	33.4	66.6	13,720	74.1	25.9
Ankole	1,538,227	38.0	62.0	1,937,776	38.5	61.5
Uganda	**18,344,802**	**55.7**	**44.3**	**21,849,074**	**57.6**	**42.4**

Table 4- 3: Percentage and average plot area by cropping system and ZARDI

	First season					Second season				
ZARDI	**number of plots**	**% pure**	**% mixed**	**area pure**	**area mixed**	**number of plots**	**% pure**	**% mixed**	**area pure**	**area mixed**
Abi	1,340,825	69.0	31.0	0.4	0.4	2,137,858	78.5	21.5	0.4	0.4
Buginyanya	3,919,476	56.0	44.0	0.6	0.5	4,167,120	58.9	41.1	0.5	0.5
Bulindi	1,283,411	66.6	33.4	0.8	0.6	1,669,776	61.3	38.7	0.9	0.6
Kachwekano	908,280	74.5	25.5	0.3	0.4	1,199,883	69.6	30.4	0.2	0.3
Mukono	3,251,134	51.7	48.3	0.8	0.8	3,841,844	48.4	51.6	0.7	0.8
Ngetta	2,556,749	76.9	23.1	0.8	0.8	2,848,456	80.9	19.1	0.7	0.8
Nabuin	306,820	80.7	19.3	1.1	1.5	13,720	68.0	32.0	1.2	1.8
Serere	1,185,955	78.4	21.6	0.6	0.6	1,450,240	73.1	26.9	0.7	0.6
Mbarara	2,017,231	57.1	42.9	0.5	0.6	2,499,581	49.6	50.4	0.4	0.6
Rwebitaba	1,573,912	57.5	42.5	0.6	0.6	2,017,163	57.0	43.0	0.5	0.6
Uganda	**18,343,793**	**62.9**	**37.1**	**0.6**	**0.6**	**21,845,640**	**62.3**	**37.7**	**0.6**	**0.6**

Table 4-4: Percentage and average plot area by cropping system and by ZARDI

	First season					Second season				
Sub-region	**number of plots**	**% pure**	**% mixed**	**area pure**	**area mixed**	**number of plots**	**% pure**	**% mixed**	**area pure**	**area mixed**
South Buganda	1,545,357	54.9	45.1	0.7	0.8	1,768,514	48.5	51.5	0.7	0.7
North Buganda	2,184,781	50.3	49.7	0.8	0.8	2,635,135	47.5	52.5	0.7	0.8
West Nile	1,340,825	69.0	31.0	0.4	0.4	2,137,858	78.5	21.5	0.4	0.4
Lango	1,387,572	90.0	10.0	0.8	0.8	1,545,205	85.1	14.9	0.7	0.7
Acholi	1,169,177	61.4	38.6	0.7	0.9	1,303,251	75.9	24.1	0.7	0.9
Kigezi	908,280	74.5	25.5	0.3	0.4	1,199,883	69.6	30.4	0.2	0.3
Bunyoro	1,283,411	66.6	33.4	0.8	0.6	1,669,776	61.3	38.7	0.9	0.6
Tooro	1,573,912	57.5	42.5	0.6	0.6	2,017,163	57.0	43.0	0.5	0.6
Busoga	1,900,040	63.8	36.2	0.6	0.5	2,058,410	59.8	40.2	0.6	0.6
Teso	1,188,015	78.4	21.6	0.6	0.6	1,453,674	73.2	26.8	0.7	0.6
Bukedi	1,013,086	65.9	34.1	0.5	0.6	1,115,105	67.6	32.4	0.5	0.5
Elgon	1,006,350	31.4	68.6	0.6	0.5	993,604	47.3	52.7	0.5	0.5
Karamoja	305,768	80.8	19.2	1.1	1.5	13,720	68.0	32.0	1.2	1.8
Ankole	1,538,227	57.7	42.3	0.4	0.5	1,937,776	51.2	48.8	0.3	0.5
Uganda	**18,344,802**	**62.9**	**37.1**	**0.6**	**0.6**	**21,849,074**	**62.3**	**37.7**	**0.6**	**0.6**

Table 4-5: Comparison of percentage of cropped plots under different cropping systems across survey years, seasons and by ZARDI

Table 4-6: Total plot areas in acres by cropping system and Zonal Agricultural Research and Development Institutes

ZARDI	Pure				Mixed			
	Season 1		Season 2		Season 1		Season 2	
	2019	2020	2019	2020	2019	2020	2019	2020
Abi	57.5	69.0	85.0	78.5	42.5	31.0	15.1	21.5
Buginyanya	51.0	56.0	65.0	58.9	49.0	44.0	35.0	41.1
Bulindi	54.4	66.6	65.1	61.3	45.6	33.4	34.9	38.7
Kachwekano	82.2	74.5	76.1	69.6	17.8	25.5	23.9	30.4
Mukono	52.0	51.7	52.4	48.4	48.0	48.3	47.6	51.6
Ngetta	68.0	76.9	86.3	80.9	32.0	23.1	13.7	19.1
Nabuin	63.6	80.7	86.1	68.0	36.4	19.3	13.9	32.0
Serere	51.6	78.4	81.5	73.1	48.4	21.6	18.5	26.9
Mbarara	49.7	57.1	46.0	49.6	50.3	42.9	54.0	50.4
Rwebitaba	56.2	57.5	55.3	57.0	43.8	42.5	44.7	43.0
Uganda	**56.4**	**62.9**	**64.9**	**62.3**	**43.6**	**37.1**	**35.1**	**37.7**

	First season		Second season		Total	
ZARDI	pure	mixed	pure	mixed	First season	Second season
Abi	390,086	174,249	684,193	183,567	564,335	867,760
Buginyanya	1,283,532	938,452	1,289,895	903,798	2,221,984	2,193,693
Bulindi	679,460	250,447	873,101	401,218	929,906	1,274,319
Kachwekano	191,686	91,996	176,259	105,550	283,682	281,809
Mukono	1,275,696	1,250,789	1,286,572	1,528,122	2,526,485	2,814,694

Ngetta	1,515,624	496,728	1,653,538	452,464	2,012,353	2,106,002
Nabuin	260,103	86,258	11,006	7,785	346,361	18,791
Serere	526,615	157,273	709,216	251,472	683,888	960,688
Mbarara	578,186	540,812	508,526	729,463	1,118,997	1,237,989
Rwebitaba	504,311	429,347	542,259	529,447	933,657	1,071,706
Uganda	**7,205,298**	**4,416,351**	**7,734,564**	**5,092,886**	**11,621,649**	**12,827,450**

Table 4-7: Total plot areas in acres by cropping system and sub-region

	First season		Second season		Total	
Sub-region	**pure**	**mixed**	**pure**	**mixed**	**First season**	**Second season**
South Buganda	630,989	553,400	580,483	661,949	1,184,389	1,242,432
North Buganda	843,094	883,519	868,729	1,107,476	1,726,614	1,976,205
West Nile	390,156	174,281	684,229	183,573	564,437	867,803
Lango	1,037,060	108,793	931,266	165,851	1,145,852	1,097,117
Acholi	478,907	388,050	722,381	286,641	866,958	1,009,022
Kigezi	191,711	92,012	176,270	105,554	283,723	281,824
Bunyoro	679,615	250,499	873,143	401,228	930,113	1,274,371
Tooro	504,414	429,439	542,312	529,483	933,853	1,071,795
Busoga	749,937	360,541	731,410	481,560	1,110,478	1,212,970
Teso	529,717	157,307	713,730	252,183	687,023	965,913
Bukedi	346,019	213,386	344,621	176,987	559,405	521,608
Elgon	187,844	364,715	214,006	245,329	552,559	459,335
Karamoja	259,704	85,364	11,006	7,785	345,068	18,791
Ankole	380,200	355,083	346,036	488,260	735,282	834,296
Uganda	**7,205,298**	**4,416,351**	**7,734,564**	**5,092,886**	**11,621,649**	**12,827,450**

Table 4-8: Median quantity of seeds applied per acre (kg/acre) by type of crop and Zonal Agricultural Research and Development Institutes (ZARDI)

	First season								Second season							
ZARDI	Maize	Rice	Sorghum	Millet	Soya beans	Beans	Groundnuts	Simsim	Maize	Rice	Sorghum	Millet	Soya beans	Beans	Groundnuts	Simsim
Abi	9.7	33.3	18.9	<	<	40.0	28.3	8.8	10.5	26.1	19.2	4.0	25.3	40.4	30.1	5.3
Buginyanya	12.9	24.0	6.1	8.1	16.7	32.4	28.3	5.1	13.9	27.4	7.3	6.5	19.0	32.8	32.1	7.1
Bulindi	13.1	<	<	1.0	20.0	33.3	33.3	4.5	13.3	57.5	10.9	4.0	25.3	37.0	36.6	<
Kachwekano	16.7	80.0	13.5	<	<	40.0	30.0	-	22.0	100.0	26.2	22.2	<	55.0	39.0	-
Mukono	13.3	50.0	<	<	<	32.4	28.3	<	14.8	56.8	<	8.3	29.4	40.0	35.0	<
Ngetta	9.2	17.8	10.2	8.6	25.0	20.0	22.5	4.0	9.2	23.8	10.3	23.8	25.3	30.6	27.8	4.8
Nabuin	10.0	<	7.7	10.0	<	30.0	20.0	3.8	<	-	<	<	-	-	<	-
Serere	9.4	16.2	7.5	2.0	19.5	31.0	22.2	5.4	10.0	16.2	6.1	3.7	20.0	32.4	28.3	5.1
Mbarara	16.7	-	10.8	<	<	36.5	27.7	-	20.8	-	15.2	17.9	<	49.4	40.0	-
Rwebitaba	14.3	<	15.3	<	<	32.4	27.0	2.8	16.9	34.2	16.9	13.5	18.4	41.7	29.5	<
Uganda	**12.0**	**21.0**	**9.7**	**6.7**	**20.3**	**32.4**	**28.3**	**4.6**	**13.9**	**28.5**	**9.0**	**13.9**	**25.3**	**40.4**	**32.1**	**5.1**
NARO	**10.0**	**30.0**	**6.0**	**4.0**	**25.0**	**32.0**	**28.0**	**5.0**	**10.0**	**30.0**	**6.0**	**4.0**	**25.0**	**32.0**	**28.0**	**5.0**

Notes*: -No sampled units under this category <Insufficient number of sampled units under this category*

Table 4-9: Median quantity of seeds applied per acre (kg/acre) by type of crop and sub-region

	First season								Second season							
ZARDI	Maize	Rice	Sorghum	Millet	Soya beans	Beans	Groundnuts	Simsim	Maize	Rice	Sorghum	Millet	Soya beans	Beans	Groundnuts	Simsim
South Buganda	11.7	100.0	3.3	20.0	12.0	33.3	33.3		15.2		-	10.1	8.2	43.5	45.5	
North Buganda	20.0	40.0	4.0	6.3	50.0	41.7	28.3	4.0	26.4	56.8	9.0	8.3	35.8	52.6	33.3	9.7
West Nile	10.1	33.3	20.4	19.0	33.3	40.8	30.0	10.0	13.3	26.1	17.7	4.0	25.3	40.0	39.4	6.7
Lango	10.0	16.2	14.0	7.6	25.3	16.0	23.1	4.5	10.9	33.5	18.0	36.5	25.7	32.4	27.2	5.1
Acholi	10.1	18.8	13.6	10.0	27.0	25.8	26.3	5.0	10.1	19.6	-	5.7	25.3	32.4	32.3	5.1
Kigezi	18.8	125.0	18.0	16.0	16.7	42.5	32.0		31.3	136.4	23.3	25.0	57.4	89.7	43.8	
Bunyoro	17.1	60.0	18.0	1.0	16.7	40.0	33.3	5.0	21.9	57.5	6.9	4.0	25.3	44.0	38.5	7.8
Tooro	16.0	16.2	10.8	20.0	12.5	38.8	27.0	3.2	22.2	34.5	16.9	12.7	18.4	54.7	33.3	6.7
Busoga	16.7	24.0	3.4	8.9	20.0	28.6	30.0	5.0	16.7	27.4	6.1	6.5	22.5	27.8	32.8	6.0
Teso	10.1	16.2	7.6	2.0	19.5	32.4	28.3	6.0	11.4	16.2	7.3	4.0	20.0	32.4	28.3	5.1
Bukedi	16.0	21.0	6.1	10.0	16.7	30.0	28.3	5.1	19.0	27.4	7.2	14.3	18.7	32.4	30.6	7.1
Elgon	20.0	32.0	-	8.0	20.0	66.7	28.3	10.0	13.3	45.5	5.7	8.3	25.5	57.0	34.7	5.1
Karamoja	10.0	30.0	8.0	10.0	26.7	30.0	20.0	3.3	10.7	<	6.1	3.3	<	<	12.5	
Ankole	22.0	<	14.4	12.0	19.2	40.0	28.3		29.6	<	19.3	20.0	41.7	70.1	43.1	
Uganda	**15.0**	**22.1**	**10.7**	**7.7**	**22.5**	**35.7**	**28.3**	**5.0**	**18.9**	**33.7**	**7.5**	**13.9**	**25.3**	**50.0**	**34.2**	5.5
NARO	**10.0**	**30.0**	**6.0**	**4.0**	**25.0**	**32.0**	**28.0**	**5.0**	**10.0**	**30.0**	**6.0**	**4.0**	**25.0**	**32.0**	**28.0**	**5.0**

Notes: -No sampled units under this category <Insufficient number of sampled units under this category

Table 5-1: Percentage distribution of Agricultural Households that received extension (advisory) services by sub-region

Sub-region	Ag HHs	Percent
South Buganda	809,442	12.3
North Buganda	811,345	16.9
West Nile	488,210	14.4
Lango	452,744	8.4
Acholi	316,540	22.5
Kigezi	299,018	24.4
Bunyoro	455,717	15.4
Tooro	604,154	17.3
Busoga	698,411	20.0
Teso	369,542	4.1
Bukedi	385,598	9.4
Elgon	386,704	11.9
Karamoja	197,790	9.4
Ankole	609,267	10.9
Uganda	**6,884,483**	**14.3**

Note: *Denominator – all Ag HHs that responded*

Table 5-2: Percentage distribution of Agricultural Households that received extension (advisory) services by ZARDI

ZARDI	Ag HHs	Percent
Abi	488,210	14.4
Buginyanya	1,470,713	15.1
Bulindi	455,717	15.4
Kachwekano	299,018	24.4
Mukono	1,365,531	15.4
Ngetta	769,285	14.2
Nabuin	197,790	9.4
Serere	369,542	4.1
Mbarara	865,736	10.9
Rwebitaba	604,154	17.3
Uganda	**6,885,695**	**14.3**

Table 5-2a: Percentage distribution of Agricultural Households that received extension (advisory) services in selected years by ZARDI

	Survey Year		
ZARDI	**2018**	**2019**	**2020**
Abi	12.8	4.2	14.4
Buginyanya	13.5	5.8	15.1
Bulindi	9.2	6.5	15.4
Kachwekano	17.0	5.4	24.4
Mukono	12.7	4.5	15.4
Ngetta	13.6	8.7	14.2
Nabuin	7.0	0.4	9.4
Serere	4.5	1.4	4.1
Mbarara	13.3	3.3	10.9
Rwebitaba	13.0	4.5	17.3
Uganda	**11.7**	**5.0**	**14.3**

Table 5-3: Percentage distribution of Agricultural Households that received extension (advisory) services, by topic of advice and sub region

Sub-region	Crop production	PH loss mgt	Farm mgt	Selection of crop varieties	Input use	Farm mechanization	Animal health mgt	Plant protection	Environmental conservation	Marketing	Diary mgt	Value addition/ processing	Did not receive any training	Other
South Buganda	25.4	1.9	9.9	10.3	39.3	0.0	28.6	0.0	0.0	1.1	0.0	0.0	0.0	0.0
North Buganda	57.1	1.5	1.1	5.9	9.9	1.0	12.0	13.9	1.4	0.9	0.0	0.0	0.0	0.0
West Nile	84.2	0.0	4.9	1.0	0.0	0.0	7.6	2.3	0.0	0.0	0.0	0.0	0.0	0.0
Lango	46.0	0.0	2.3	30.3	14.1	2.4	4.8	0.0	2.9	0.0	0.0	0.0	0.0	0.0
Acholi	47.3	0.4	1.3	14.4	2.1	0.4	17.4	1.1	3.7	3.0	0.0	0.7	2.0	20.0
Kigezi	53.8	0.0	0.4	2.3	22.4	0.0	31.2	0.7	0.7	0.5	0.0	0.0	0.0	1.0
Bunyoro	61.2	4.4	14.7	6.7	6.5	2.7	9.7	1.9	1.5	3.3	1.6	0.0	0.0	0.0
Tooro	65.9	3.1	5.6	9.1	21.2	1.8	7.7	1.9	0.0	2.5	0.0	0.0	0.0	1.1
Busoga	67.1	1.3	4.6	5.0	3.5	0.0	32.8	8.1	0.0	4.6	0.0	2.0	0.0	1.3
Teso	28.9	0.0	0.0	0.0	0.0	0.0	63.3	0.0	0.0	7.2	0.0	15.0	0.0	0.0
Bukedi	57.1	2.3	9.7	26.3	0.0	0.0	0.0	2.1	5.0	0.0	0.0	0.0	0.0	0.0
Elgon	62.8	0.0	6.2	0.0	0.0	0.0	28.2	3.0	1.8	3.1	0.0	0.0	0.0	0.0
Karamoja	76.5	0.0	6.3	9.7	0.0	0.0	4.3	0.0	3.2	0.0	0.0	0.0	0.0	0.0
Ankole	31.7	2.9	0.0	5.2	14.3	0.0	37.0	13.7	0.0	0.0	0.0	0.0	0.0	0.0
Uganda	**55.6**	**1.5**	**4.8**	**7.9**	**11.9**	**0.6**	**19.9**	**4.9**	**1.1**	**1.9**	**0.1**	**0.6**	**0.1**	**1.8**

Note: *Denominator is Ag HHs that received advisory services. Mgt – management*

Table 5-4: Percentage distribution of Agricultural Households that received extension (advisory) services by topic of advice and ZARDI

ZARDI	Ag HHs	Crop production	PH loss mgt	farm mgt	selection of crop varieties	Input use	Farm mechanizat	Animal health mgt	Plant protection	Environmental conservation	Marketing	Diary mgt	Value addition processi
Abi	70,492	84.2	0.0	4.9	1.0	0.0	0.0	7.6	2.3	0.0	0.0	0.0	0.0
Buginyanya	221,705	64.6	1.2	5.8	7.4	2.2	0.0	26.5	6.1	1.2	3.6	0.0	1.2
Bulindi	70,300	61.2	4.4	14.7	6.7	6.5	2.7	9.7	1.9	1.5	3.3	1.6	0.0
Kachwekano	72,854	53.8	0.0	0.4	2.3	22.4	0.0	31.2	0.7	0.7	0.5	0.0	0.0
Mukono	209,950	46.4	2.4	4.0	6.7	21.4	0.7	16.5	9.1	0.9	1.1	0.0	0.0
Ngetta	109,370	46.8	0.3	1.7	19.9	6.3	1.1	13.0	0.7	3.5	2.0	0.0	0.5
Nabuin	18,609	76.5	0.0	6.3	9.7	0.0	0.0	4.3	0.0	3.2	0.0	0.0	0.0
Serere	15,313	28.9	0.0	0.0	0.0	0.0	0.0	63.3	0.0	0.0	7.2	0.0	15.0
Mbarara	94,377	29.0	2.0	3.1	8.2	18.3	0.0	37.0	9.7	0.0	0.0	0.0	0.0
Rwebitaba	104,279	65.9	3.1	5.6	9.1	21.2	1.8	7.7	1.9	0.0	2.5	0.0	0.0
Uganda	**987,250**	**55.5**	**1.6**	**4.8**	**7.9**	**11.8**	**0.6**	**19.8**	**4.8**	**1.1**	**1.9**	**0.1**	**0.6**

Notes: *Denominator is Ag HHs that received advisory services. Mgmt – management*

Table 5-5: Percentage distribution of Agricultural Households that received extension (advisory) services by type of service provider and sub-region

Sub-region	Ag HHs	Input suppliers	NGOs	Cooperatives/ farmer associations	Large-scale farmers	Government extension officers	Model farmers	Commercial officers	Others
South Buganda	99,199	43.3	7.2	13.0	11.2	34.6	7.5	1.1	0.0
North Buganda	137,202	7.5	18.7	3.4	6.7	65.4	2.7	0.0	2.6
West Nile	70,492	1.7	42.1	3.2	0.0	53.8	0.0	1.8	0.0
Lango	37,992	49.2	26.3	2.3	0.0	22.4	4.3	2.3	0.0
Acholi	71,378	18.7	52.1	10.6	0.0	16.4	2.9	12.5	1.1
Kigezi	72,854	33.0	15.0	21.5	8.8	28.0	3.6	5.6	0.7
Bunyoro	70,300	8.3	32.6	20.7	4.7	43.4	2.7	0.0	4.6
Tooro	104,279	16.4	25.5	21.4	4.1	50.7	6.3	9.1	0.0
Busoga	139,354	22.1	37.1	8.6	10.3	45.8	10.3	4.3	6.5
Teso	15,313	51.3	30.5	21.0	0.0	4.4	0.0	7.2	0.0
Bukedi	36,282	0.0	34.7	7.2	0.0	58.1	2.4	0.0	0.0
Elgon	46,070	12.5	3.4	5.9	0.0	77.6	3.8	1.7	0.0
Karamoja	18,609	2.0	84.8	0.0	1.9	11.4	3.2	0.0	0.0
Ankole	66,714	37.2	15.5	13.5	2.9	36.1	4.4	0.0	0.0
Uganda	**986,038**	**20.6**	**27.1**	**11.2**	**5.2**	**44.0**	**4.7**	**3.4**	**1.7**

Table 5-6: Percentage distribution of Agricultural Households that received extension (advisory) services by type of service provider and ZARDI

	Ag HHs	Input suppliers	NGOs	Cooperatives/ farmer associations	Large-scale farmers	Government extension officers	Model farmers	Commercial officers	Others
Abi	70,492	1.7	42.1	3.2	0.0	53.8	0.0	1.8	0.0
Buginyanya	221,705	16.5	29.7	7.8	6.4	54.4	7.6	3.0	4.1
Bulindi	70,300	8.3	32.6	20.7	4.7	43.4	2.7	0.0	4.6
Kachwekano	72,854	33.0	15.0	21.5	8.8	28.0	3.6	5.6	0.7
Mukono	209,950	20.7	15.0	7.7	9.0	52.5	3.6	0.5	1.7
Ngetta	109,370	29.3	43.1	7.8	0.0	18.5	3.4	9.0	0.7
Nabuin	18,609	2.0	84.8	0.0	1.9	11.4	3.2	0.0	0.0
Serere	15,313	51.3	30.5	21.0	0.0	4.4	0.0	7.2	0.0
Mbarara	94,377	36.7	12.4	11.1	3.5	41.6	6.9	0.0	0.0
Rwebitaba	104,279	16.4	25.5	21.4	4.1	50.7	6.3	9.1	0.0
Uganda	**987,250**	**20.6**	**27.0**	**11.2**	**5.1**	**44.0**	**4.7**	**3.4**	**1.7**

Table 5-7 Percentage of Agricultural Households that paid for the extension (advisory) services

Sub-region	Ag HHS	Percent	Mean (amount paid UGX)
South Buganda	99,199	1.9	56,824
North Buganda	137,202	2.0	23,571
West Nile	70,492	2.0	9,475
Lango	37,992	2.0	
Acholi	71,378	1.9	76,675
Kigezi	72,854	2.0	5,507
Bunyoro	70,300	1.9	15,861
Tooro	104,279	2.0	5,539
Busoga	139,354	1.9	45,271
Teso	15,313	1.8	17,663
Bukedi	36,282	2.0	10,000
Elgon	46,070	1.9	31,109
Karamoja	18,609	2.0	2
Ankole	66,714	1.8	47,632
Uganda	**986,038**	**1.9**	**42,882**

Table 5-8 Percentage of Agricultural Households that paid for the extension (advisory) services

ZARDI	Ag HHS	Percent
Abi	70,492	2.0
Buginyanya	221,705	1.9
Bulindi	70,300	1.9
Kachwekano	72,854	2.0
Mukono	209,950	1.9
Ngetta	109,370	1.9
Nabuin	18,609	2.0
Serere	15,313	1.8
Mbarara	94,377	1.8
Rwebitaba	104,279	2.0
Uganda	**987,250**	**1.9**

Table 5-9: Percent distribution of Agricultural Households that received extension (advisory) services by level of satisfaction

ZARDI	Ag HHs	Good	Fair	Bad
Abi	70,492	94.5	4.1	1.3
Buginyanya	221,705	95.8	6.2	0.7
Bulindi	70,300	94.7	6.9	0.0
Kachwekano	72,854	96.6	6.4	0.9
Mukono	209,950	94.0	6.0	0.9
Ngetta	109,370	91.0	10.9	0.0
Nabuin	18,609	84.1	15.9	0.0
Serere	15,313	94.7	5.3	0.0
Mbarara	94,377	86.3	16.1	0.0
Rwebitaba	104,279	99.0	5.2	2.5
Uganda	**987,250**	**94.0**	**7.6**	**0.8**

Table 5-10: Percentage distribution of responses to quality of advisory services by level of satisfaction and source

Extension service source	Ag HHs	Good	Fair	Bad
Input suppliers	203,131	88.9	11.1	0.0
NGOs	266,788	93.8	5.9	0.3
Cooperative/farmers associations	110,422	90.2	7.5	2.3
Large-scale farmers	50,834	84.8	15.2	0.0
Local Government extension officers	434,838	94.0	5.0	1.0
Model farmers	46,379	98.6	1.4	0.0
Commercial officers	33,558	93.9	6.1	0.0
Others	17,108	96.9	3.1	0.0

Table 5-11: Percentage distribution of Agricultural Households that received advisory services by method to acquire the advice

Sub-region	Ag HHs receiving service upon explicit request		Average number of visits			
	Ag HHs	Percent	Ag HHs	Mean (on demand)	Ag HHs	Mean (without demand)
South Buganda	99,199	52.6	52,133	1.3	47,066	0.6
North Buganda	137,202	35.2	48,268	2.2	88,935	1.2
West Nile	70,492	10.2	7,217	2.7	63,275	2.3
Lango	37,992	15.1	5,731	1.8	32,262	1.8
Acholi	71,378	28.8	20,565	1.1	50,813	2.4
Kigezi	72,854	41.3	30,068	3.0	42,786	1.9
Bunyoro	70,300	8.0	5,627	2.1	64,674	0.9
Tooro	104,279	19.0	19,768	1.4	84,511	2.1
Busoga	139,354	49.2	68,626	1.7	70,728	2.3
Teso	15,313	64.1	9,818	1.8	5,495	1.3
Bukedi	36,282	5.1	1,848	1.6	34,434	0.8
Elgon	46,070	17.6	8,107	2.2	37,963	2.0
Karamoja	18,609	15.8	2,947	1.7	15,662	2.3
Ankole	66,714	38.7	25,801	2.1	40,913	2.1
Uganda	**986,038**	**31.1**	**306,520**	**1.9**	**679,518**	**1.7**

Table 5-12 Percentage distribution of Ag HHs that received advisory services by method to acquire the advice

	Ag HHs receiving service upon explicit request		Average number of visits			
ZARDI	**Ag HHs**	**Percent**	**Ag HHs**	**Upon explicit request)**	**Ag HHs**	**Without explicit request**
Abi	70,492	10.2	7,217	2.7	63,275	2.3
Buginyanya	221,705	35.4	78,580	1.8	143,126	1.9
Bulindi	70,300	8.0	5,627	2.1	64,674	0.9
Kachwekano	72,854	41.3	30,068	3.0	42,786	1.9
Mukono	209,950	42.1	88,415	1.8	121,534	1.1
Ngetta	109,370	24.0	26,296	1.3	83,075	2.2
Nabuin	18,609	15.8	2,947	1.7	15,662	2.3
Serere	15,313	64.1	9,818	1.8	5,495	1.3
Mbarara	94,377	40.0	37,786	1.9	56,591	1.6
Rwebitaba	104,279	19.0	19,768	1.4	84,511	2.1
Uganda	**987,250**	**31.0**	**306,520**	**1.9**	**680,730**	**1.7**

Table 5-13: Percentage distribution of adult Household members that received advisory services by sex and sub-region

Sub-region	Ag HHs	Male	Female	Both genders
South Buganda	99,199	50	38	12
North Buganda	137,202	55	33	12
West Nile	70,492	44	35	21
Lango	37,992	54	18	29
Acholi	71,378	50	33	17
Kigezi	72,854	49	33	18
Bunyoro	70,300	64	22	13
Tooro	104,279	38	39	23
Busoga	139,354	47	35	18
Teso	15,313	54	30	16
Bukedi	36,282	40	54	6
Elgon	46,070	52	25	24
Karamoja	18,609	23	59	18
Ankole	66,714	37	52	13
Uganda	**986,038**	**48**	**35**	**17**

Table 5-14: Percentage distribution of adult household members that received advisory services by sex and ZARDI

ZARDI	Ag HHs	Male	Female	Both gender
Abi	70,492	44	35	21
Buginyanya	221,705	47	36	17
Bulindi	70,300	64	22	13
Kachwekano	72,854	49	33	18
Mukono	208,738	56	32	12
Ngetta	109,370	51	28	21
Nabuin	18,609	23	59	18
Serere	15,313	54	30	16
Mbarara	94,377	35	54	13
Rwebitaba	104,279	38	39	23
Uganda	**986,038**	**48**	**35**	**17**

Annex 5.

Table 6-1: Maize area, production and yields by sub-region

Sub-region	First season					Second season					Total				
	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)
South Buganda	125,557	115,469	191,530	1.7	1.5	102,767	83,934	194,276	2.3	1.9	228,324	199,402	385,806	1.9	1.7
North Buganda	215,227	192,546	417,710	2.2	1.9	223,404	160,692	431,736	2.7	1.9	438,631	353,237	849,446	2.4	1.9
West Nile	39,240	33,132	41,948	1.3	1.1	13,264	6,748	17,794	2.6	1.3	52,504	39,881	59,743	1.5	1.1
Lango	69,185	67,265	103,058	1.5	1.5	137,032	66,295	195,502	2.9	1.4	206,217	133,560	298,560	2.2	1.4
Acholi	47,942	41,733	67,894	1.6	1.4	10,697	6,349	12,647	2.0	1.2	58,639	48,082	80,541	1.7	1.4
Kigezi	5,229	4,389	7,369	1.7	1.4	9,893	3,582	16,406	4.6	1.7	15,121	7,971	23,774	3.0	1.6
Bunyoro	175,979	170,452	399,311	2.3	2.3	157,769	93,772	286,465	3.1	1.8	333,749	264,224	685,776	2.6	2.1
Tooro	64,066	53,605	161,020	3.0	2.5	85,373	45,902	196,466	4.3	2.3	149,440	99,507	357,487	3.6	2.4
Busoga	124,579	117,553	178,943	1.5	1.4	104,779	73,939	127,450	1.7	1.2	229,357	191,492	306,394	1.6	1.3
Teso	43,329	38,173	52,369	1.4	1.2	50,806	20,599	31,726	1.5	0.6	94,134	58,772	84,095	1.4	0.9
Bukedi	46,005	44,579	68,965	1.5	1.5	38,307	19,856	51,511	2.6	1.3	84,313	64,436	120,476	1.9	1.4
Elgon	77,029	61,935	160,513	2.6	2.1	13,875	4,763	16,305	3.4	1.2	90,904	66,698	176,818	2.7	1.9
Karamoja	28,988	18,613	22,663	1.2	0.8	5,237	699	5,061	7.2	1.0	34,226	19,312	27,724	1.4	0.8
Ankole	8,774	8,025	18,387	2.3	2.1	11,986	7,469	35,452	4.7	3.0	20,760	15,494	53,839	3.5	2.6
Uganda	**1,071,129**	**967,469**	**1,891,681**	**2.0**	**1.8**	**965,188**	**594,598**	**1,618,798**	**2.7**	**1.7**	**2,036,318**	**1,562,067**	**3,510,479**	**2.2**	**1.7**

Notes: **The total area harvested is the total area planted, calculated on those observations whose production is available (not missing) and higher than zero. ***Ratiobetween production (MT) and area harvested (Ha).*

Table 6-1a: Coefficients of variation (CVs) for maize area and production by sub-region

Sub-region	First season			Second season			Total		
	CV area planted	CV area harvested	CV production	CV area planted	CV area harvested	CV production	CV area planted	CV area harvested	CV production
South Buganda	*22.2*	*23.0*	*18.3*	*19.1*	*22.7*	*21.7*	*16.5*	*17.6*	*16.4*
North Buganda	*14.4*	*14.6*	*15.1*	*13.0*	*14.2*	*15.4*	*13.3*	*14.0*	*14.7*
West Nile	*13.4*	*14.6*	*15.9*	*17.8*	*22.1*	*19.4*	*11.6*	*13.4*	*13.9*
Lango	*15.1*	*14.9*	*15.1*	*11.7*	*14.0*	*14.8*	*12.0*	*13.1*	*13.8*
Acholi	*16.6*	*17.5*	*20.0*	*18.4*	*19.4*	*21.5*	*13.3*	*15.4*	*17.0*
Kigezi	*25.8*	*28.0*	*32.1*	*23.0*	*18.7*	*25.9*	*20.8*	*21.9*	*23.2*
Bunyoro	*15.3*	*15.3*	*15.5*	*14.9*	*18.2*	*17.1*	*14.8*	*15.2*	*15.2*
Tooro	*26.1*	*23.9*	*25.7*	*21.2*	*29.6*	*23.0*	*22.7*	*25.2*	*23.5*
Busoga	*11.4*	*12.3*	*11.3*	*11.2*	*12.9*	*13.1*	*10.6*	*11.7*	*10.8*
Teso	*16.3*	*12.5*	*17.7*	*13.9*	*14.3*	*18.6*	*13.4*	*11.4*	*16.7*
Bukedi	*9.9*	*9.8*	*11.4*	*10.5*	*12.6*	*12.6*	*9.1*	*9.0*	*10.6*
Elgon	*17.7*	*17.6*	*21.8*	*28.2*	*22.7*	*31.4*	*16.3*	*16.8*	*20.8*
Karamoja	*18.9*	*24.1*	*27.3*	*93.5*	*63.3*	*95.8*	*22.7*	*24.4*	*32.2*
Ankole	*19.0*	*20.5*	*20.1*	*13.2*	*15.8*	*16.5*	*14.6*	*17.3*	*16.7*
Uganda	***5.5***	***5.6***	***6***	***5.3***	***6.6***	***6.7***	***5.0***	***5.4***	***5.9***

Table 6-2: Maize area, production and yields by ZARDI

ZARDI	First season 2020					Second season 2020					Total 2020				
	Area Planted (Ha)	Area Harvested * (Ha)	Production (MT)	Yield** (MT/Ha)	Yield*** (MT/Ha)	Area Planted (Ha)	Area Harvested * (Ha)	Production (MT)	Yield** (MT/Ha)	Yield*** (MT/Ha)	Area Planted (Ha)	Area Harvested * (Ha)	Production (MT)	Yield** (MT/Ha)	Yield*** (MT/Ha)
Abi	39,240	33,132	41,948	1.3	1.1	13,264	6,748	17,794	2.6	1.3	52,504	39,881	59,743	1.5	1.1
Buginyanya	247,613	224,080	408,422	1.8	1.6	156,960	98,558	195,266	2.0	1.2	404,573	322,626	603,688	1.9	1.5
Bulindi	175,979	170,787	399,311	2.3	2.3	157,769	93,772	286,465	3.1	1.8	333,749	264,224	685,776	2.6	2.1
Kachwekano	5,229	4,492	7,369	1.6	1.4	9,893	3,582	16,406	4.6	1.7	15,121	7,971	23,774	3.0	1.6
Mukono	313,936	283,448	566,976	2.0	1.8	298,871	222,184	572,777	2.6	1.9	612,807	505,633	1,139,753	2.3	1.9
Ngetta	117,127	108,997	170,952	1.6	1.5	147,729	72,644	208,149	2.9	1.4	264,856	181,641	379,101	2.1	1.4
Nabuin	28,988	18,613	22,663	1.2	0.8	5,237	699	5,061	7.2	1.0	34,226	19,312	27,724	1.4	0.8
Serere	43,329	38,173	52,369	1.4	1.2	50,806	20,599	31,726	1.5	0.6	94,134	58,772	84,095	1.4	0.9
Mbarara	35,622	32,737	60,651	1.9	1.7	39,286	29,910	88,688	3.0	2.3	74,907	62,501	149,339	2.4	2.0
Rwebitaba	64,066	53,605	161,020	3.0	2.5	85,373	45,902	196,466	4.3	2.3	149,440	99,507	357,487	3.6	2.4
Uganda	**1,071,129**	**968,064**	**1,891,681**	**2.0**	**1.8**	**965,188**	**594,598**	**1,618,798**	**2.7**	**1.7**	**2,036,318**	**1,562,067**	**3,510,479**	**2.2**	**1.7**

Notes: **The total area harvested is the total area planted, calculated on those observations whose production is available (not missing) and higher than zero. **Ratio between production (MT) and area harvested (Ha).*

Table 6-2a: Coefficients of variation (CVs) for maize area and production by ZARDI

ZARDI	First season			Second season			Total		
	CV area planted	CV area harvested	CV production	CV area planted	CV area harvested	CV production	CV area planted	CV area harvested	CV production
Abi	*13.4*	*14.6*	*15.9*	*17.8*	*22.1*	*19.4*	*17.8*	*22.1*	*19.4*
Buginyanya	*8.2*	*8.3*	*10.1*	*8.3*	*10.0*	*9.5*	*8.3*	*10.0*	*9.5*
Bulindi	*15.3*	*15.3*	*15.5*	*14.9*	*18.2*	*17.1*	*14.9*	*18.2*	*17.1*
Kachwekano	*25.8*	*28.0*	*32.1*	*23.0*	*18.7*	*25.9*	*23.0*	*18.7*	*25.9*
Mukono	*13.5*	*13.8*	*12.9*	*11.7*	*13.2*	*13.7*	*11.7*	*13.2*	*13.7*
Ngetta	*11.2*	*11.4*	*12.1*	*11.0*	*12.8*	*13.9*	*11.0*	*12.8*	*13.9*
Nabuin	*18.9*	*24.1*	*27.3*	*93.5*	*63.3*	*95.8*	*93.5*	*63.3*	*95.8*
Serere	*16.3*	*12.5*	*17.7*	*13.9*	*14.3*	*18.6*	*13.9*	*14.3*	*18.6*
Mbarara	*22.0*	*23.0*	*20.2*	*24.4*	*29.4*	*21.6*	*24.4*	*29.4*	*21.6*
Rwebitaba	*26.1*	*23.9*	*25.7*	*21.2*	*29.6*	*23.0*	*21.2*	*29.6*	*23.0*
Uganda	***5.5***	***5.6***	***6.0***	***5.3***	***6.6***	***6.7***	***5.0***	***5.4***	***5.9***

Table 6-3: Millet area, production and yield by sub-region

Sub-region	First season					Second season					Total				
	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)
South Buganda	669	669	293	0.4	0.4	616	377	272	0.7	0.4	1,285	1,045	565	0.5	0.4
North Buganda	928	928	458	0.5	0.5	610	417	320	0.8	0.5	1,539	1,345	778	0.6	0.5
West Nile	1,235	848	184	0.2	0.1	1,999	1,357	947	0.7	0.5	3,234	2,205	1,131	0.5	0.3
Lango	17,721	17,721	5,752	0.3	0.3	5,409	3,266	1,173	0.4	0.2	23,130	20,986	6,925	0.3	0.3
Acholi	44,338	38,493	10,016	0.3	0.2	10,846	4,685	1,773	0.4	0.2	55,184	43,179	11,789	0.3	0.2
Kigezi	1,188	1,047	794	0.8	0.7	10,105	5,543	5,322	1.0	0.5	11,293	6,590	6,115	0.9	0.5
Bunyoro	739	739	203	0.3	0.3	1,244	900	379	0.4	0.3	1,983	1,639	583	0.4	0.3
Tooro	865	619	287	0.5	0.3	7,929	3,244	3,388	1.0	0.4	8,794	3,862	3,675	1.0	0.4
Busoga	5,803	5,779	3,798	0.7	0.7	2,006	2,006	475	0.2	0.2	7,809	7,785	4,274	0.5	0.5
Teso	16,812	15,884	3,600	0.2	0.2	12,665	5,618	1,998	0.4	0.2	29,478	21,502	5,598	0.3	0.2
Bukedi	14,471	13,922	5,947	0.4	0.4	4,212	455	928	2.0	0.2	18,682	14,377	6,876	0.5	0.4
Elgon	1,320	1,072	735	0.7	0.6	83	0	16		0.2	1,403	1,072	751	0.7	0.5
Karamoja	3,241	2,047	546	0.3	0.2	436	34	12	0.3	0.0	3,677	2,081	558	0.3	0.2
Ankole	449	201	257	1.3	0.6	32,134	21,740	15,638	0.7	0.5	32,583	21,941	15,895	0.7	0.5
Uganda	**109,778**	**99,969**	**32,871**	**0.3**	**0.3**	**90,294**	**49,641**	**32,640**	**0.7**	**0.4**	**200,072**	**149,610**	**65,511**	**0.4**	**0.3**

Notes: **The total area harvested is the total area planted, calculated on those observations whose production is available (not missing) and higher than zero, between production (MT) and area harvested (Ha). (CV– Caution). Coefficient of variation is higher than 40 percent -No sample unit under this category.*

Table 6- 3a: Coefficients of variation (CVs) for millet area and production by sub-region

Sub-region	First Season			Second Season			Total		
	CV area plant-ed	CV area Harve-sted	CV produ-ction	CV area plant-ed	CV area Harve-sted	CV production	CV area planted	CV area harvested	CV production
South Buganda	*68.9*	*68.9*	*66.4*	*54.0*	*63.4*	*58.4*	*47.3*	*54.3*	*44.0*
North Buganda	*51.1*	*51.1*	*58.4*	*51.9*	*61.0*	*71.2*	*44.3*	*47.3*	*50.9*
West Nile	*44.7*	*48.8*	*53.3*	*39.0*	*36.8*	*40.5*	*36.2*	*30.7*	*34.8*
Lango	*26.3*	*26.3*	*24.9*	*35.1*	*49.1*	*44.9*	*22.0*	*23.9*	*24.3*
Acholi	*18.9*	*19.2*	*20.2*	*39.3*	*44.6*	*42.4*	*17.7*	*19.2*	*19.3*
Kigezi	*35.9*	*34.7*	*44.2*	*25.4*	*20.4*	*26.5*	*23.4*	*19.5*	*23.9*
Bunyoro	*58.5*	*58.5*	*63.0*	*35.1*	*43.9*	*42.0*	*37.6*	*44.5*	*38.0*
Tooro	*45.3*	*47.4*	*40.9*	*31.7*	*26.0*	*33.6*	*30.0*	*26.5*	*32.0*
Busoga	*90.6*	*91.0*	*96.2*	*46.4*	*46.4*	*59.1*	*70.6*	*70.8*	*86.0*
Teso	*17.2*	*16.7*	*18.4*	*22.9*	*27.0*	*24.2*	*16.4*	*16.0*	*16.7*
Bukedi	*19.3*	*19.6*	*25.6*	*66.3*	*74.7*	*60.6*	*22.7*	*20.2*	*25.9*
Elgon	*47.4*	*45.3*	*45.5*	*100.0*		*100.0*	*45.6*	*45.3*	*44.5*
Karamoja	*45.0*	*60.6*	*50.2*	*75.1*	*100.0*	*72.4*	*47.5*	*61.1*	*50.1*
Ankole	*41.4*	*60.1*	*58.0*	*11.9*	*13.7*	*12.1*	*11.8*	*13.5*	*11.8*
Uganda	***10.8***	***11.0***	***14.5***	***9.1***	***9.4***	***9.0***	***7.6***	***8.4***	***9.0***

Table 6- 4: Millet area, production and yields by ZARDI

ZARDI	First season					Second season					Total				
	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)
Abi	1,235	848	184	0.2	0.1	1,999	1,357	947	0.7	0.5	3,234	2,205	1,131	0.5	0.3
Buginyanya	21,594	20,773	10,481	0.5	0.5	6,300	2,461	1,419	0.6	0.2	27,894	23,234	11,900	0.5	0.4
Bulindi	739	739	203	0.3	0.3	1,244	900	379	0.4	0.3	1,983	1,639	583	0.4	0.3
Kachwekano	1,188	1,047	794	0.8	0.7	10,105	5,543	5,322	1.0	0.5	11,293	6,590	6,115	0.9	0.5
Mukono	1,509	1,509	587	0.4	0.4	1,058	625	506	0.8	0.5	2,567	2,134	1,093	0.5	0.4
Ngetta	62,058	56,214	15,768	0.3	0.3	16,255	7,951	2,946	0.4	0.2	78,313	64,165	18,714	0.3	0.2
Nabuin	3,241	2,047	546	0.3	0.2	436	34	12	0.3	0.0	3,677	2,081	558	0.3	0.2
Serere	16,812	15,884	3,600	0.2	0.2	12,665	5,618	1,998	0.4	0.2	29,478	21,502	5,598	0.3	0.2
Mbarara	536	288	422	1.5	0.8	32,303	21,909	15,723	0.7	0.5	32,839	22,197	16,145	0.7	0.5
Rwebitaba	865	619	287	0.5	0.3	7,929	3,244	3,388	1.0	0.4	8,794	3,862	3,675	1.0	0.4
Uganda	**109,778**	**99,969**	**32,871**	**0.3**	**0.3**	**90,294**	**49,641**	**32,640**	**0.7**	**0.4**	**200,072**	**149,610**	**65,511**	**0.4**	**0.3**

Notes: **The total area harvested is the total area planted, calculated on those observations whose production is available (not missing) and higher than zero. **Ratio between production (MT) and area harvested (ha) ***Ratio between production (MT) and area planted (ha)*

Table 6-4a: Coefficients of variation (CVs) for millet area and production by ZARDI

ZARDI	First season			Second season			Total		
	CV area plant-ed	CV area harve-sted	CV product-ion	CV area plant-ed	CV area harve-sted	CV production	CV area planted	CV area harvested	CV production
Abi	*44.7*	*48.8*	*53.3*	*39.0*	*36.8*	*40.5*	*36.2*	*30.7*	*34.8*
Buginyanya	*27.7*	*28.6*	*37.9*	*46.8*	*40.3*	*44.3*	*25.0*	*26.9*	*34.4*
Bulindi	*58.5*	*58.5*	*63.0*	*35.1*	*43.9*	*42.0*	*37.6*	*44.5*	*38.0*
Kachwekano	*35.9*	*34.7*	*44.2*	*25.4*	*20.4*	*26.5*	*23.4*	*19.5*	*23.9*
Mukono	*43.5*	*43.5*	*49.2*	*42.2*	*52.6*	*53.6*	*35.3*	*39.6*	*40.1*
Ngetta	*15.5*	*15.5*	*15.8*	*28.7*	*33.1*	*31.2*	*14.1*	*15.1*	*15.1*
Nabuin	*45.0*	*60.6*	*50.2*	*75.1*	*100.0*	*72.4*	*47.5*	*61.1*	*50.1*
Serere	*17.2*	*16.7*	*18.4*	*22.9*	*27.0*	*24.2*	*16.4*	*16.0*	*16.7*
Mbarara	*38.3*	*51.7*	*52.7*	*11.9*	*13.6*	*12.0*	*11.7*	*13.4*	*11.7*
Rwebitaba	*45.3*	*47.4*	*40.9*	*31.7*	*26.0*	*33.6*	*30.0*	*26.5*	*32.0*
Uganda	***10.8***	***11.0***	***14.5***	***9.1***	***9.4***	***9.0***	***7.6***	***8.4***	***9.0***

Table 6-5: Sorghum area, production and yields by sub-region

Sub-region	First season					Second season					Total				
	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area Planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)
South Buganda	270	270	145	0.5	0.5	469	155	556	3.6	1.2	739	425	701	1.6	0.9
North Buganda	118	118	12	0.1	0.1	891	138	535	3.9	0.6	1,008	256	546	2.1	0.5
West Nile	6,041	1,439	563	0.4	0.1	18,127	8,867	11,192	1.3	0.6	24,169	10,306	11,755	1.1	0.5
Lango	4,163	3,178	1,716	0.5	0.4	7,060	2,015	4,319	2.1	0.6	11,223	5,193	6,034	1.2	0.5
Acholi	53,701	1,269	906	0.7	0.0	84,985	55,248	58,170	1.1	0.7	138,685	56,517	59,076	1.0	0.4
Kigezi	19,728	17,838	17,773	1.0	0.9	778	507	458	0.9	0.6	20,505	18,345	18,231	1.0	0.9
Bunyoro	1,912	1,227	1,703	1.4	0.9	3,964	2,104	1,877	0.9	0.5	5,876	3,331	3,580	1.1	0.6
Tooro	1,774	1,493	890	0.6	0.5	2,640	541	1,059	2.0	0.4	4,414	2,034	1,949	1.0	0.4
Busoga	629	528	319	0.6	0.5	1,823	1,375	902	0.7	0.5	2,452	1,904	1,221	0.6	0.5
Teso	17,266	15,738	10,134	0.6	0.6	48,938	18,249	20,827	1.1	0.4	66,204	33,986	30,961	0.9	0.5
Bukedi	7,424	6,076	3,594	0.6	0.5	1,923	964	849	0.9	0.4	9,347	7,041	4,443	0.6	0.5
Elgon	296	63	149	2.4	0.5	466	16	53	3.3	0.1	762	79	202	2.6	0.3
Karamoja	81,925	23,314	14,800	0.6	0.2	285	142	352	2.5	1.2	82,210	23,456	15,152	0.6	0.2
Ankole	3,843	3,484	2,302	0.7	0.6	2,459	1,965	3,573	1.8	1.5	6,302	5,449	5,875	1.1	0.9
Uganda	**199,089**	**76,036**	**55,006**	**0.7**	**0.3**	**174,807**	**92,286**	**104,720**	**1.1**	**0.6**	**373,897**	**168,322**	**159,726**	**0.9**	**0.4**

Notes: **The total area harvested is the total area planted, calculated on those observations whose production is available (not missing) and higher than zero. **Ratio between production (MT) and area harvested (Ha). (CV– Caution). Coefficient of variation higher than 40 percent. -No sample unit under this category*

Table 6-5a: Coefficients of variation (CVs) for sorghum area and production and yields by sub-region

Sub-region	First season			Second season			Total		
	CV area planted	CV area harvested	CV production	CV area planted	CV area harvested	CV production	CV area planted	CV area harvested	CV production
South Buganda	*100.0*	*100.0*	*100.0*	*57.1*	*100.0*	*58.1*	*66.2*	*72.6*	*62.8*
North Buganda	*100.0*	*100.0*	*100.0*	*71.4*	*100.0*	*71.4*	*63.8*	*70.2*	*69.9*
West Nile	*22.6*	*47.3*	*36.1*	*23.6*	*29.2*	*25.8*	*22.3*	*30.9*	*25.8*
Lango	*41.0*	*42.2*	*35.3*	*29.1*	*59.3*	*28.6*	*25.9*	*34.2*	*23.6*
Acholi	*16.2*	*47.5*	*32.3*	*16.7*	*20.3*	*20.0*	*16.0*	*20.0*	*19.8*
Kigezi	*17.8*	*17.9*	*20.2*	*30.5*	*31.7*	*31.5*	*16.9*	*17.2*	*19.5*
Bunyoro	*65.4*	*92.4*	*97.8*	*57.6*	*62.3*	*52.2*	*51.4*	*51.8*	*53.0*
Tooro	*56.0*	*65.8*	*64.4*	*60.8*	*73.8*	*60.8*	*58.2*	*67.2*	*61.9*
Busoga	*57.8*	*66.8*	*63.3*	*51.4*	*53.1*	*50.3*	*47.9*	*50.9*	*50.9*
Teso	*25.3*	*25.6*	*22.3*	*12.9*	*15.0*	*14.4*	*12.3*	*14.2*	*13.4*
Bukedi	*22.9*	*22.8*	*28.3*	*35.9*	*53.8*	*37.8*	*21.9*	*23.9*	*28.1*
Elgon	*81.0*	*100.0*	*76.8*	*85.1*	*100.0*	*69.9*	*60.7*	*81.6*	*63.0*
Karamoja	*16.8*	*17.7*	*18.0*	*60.9*	*97.9*	*58.9*	*16.7*	*17.5*	*17.3*
Ankole	*31.5*	*34.1*	*38.1*	*38.4*	*45.4*	*41.1*	*32.5*	*36.4*	*35.7*
Uganda	***8.8***	***9.5***	***10.0***	***9.5***	***13.1***	***12.0***	***7.7***	***8.5***	***8.8***

Table 6- 6: Sorghum area, production and yields by ZARDI

ZARDI	First season					Second season					Total				
	Area planted (ha)	Area harvested* ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)
Abi	6,041	1,439	563	0.4	0.1	18,127	8,867	11,192	1.3	0.6	24,169	10,306	11,755	1.1	0.5
Buginyanya	8,349	6,668	4,062	0.6	0.5	4,212	2,356	1,804	0.8	0.4	12,561	9,023	5,866	0.7	0.5
Bulindi	1,912	1,227	1,703	1.4	0.9	3,964	2,104	1,877	0.9	0.5	5,876	3,331	3,580	1.1	0.6
Kachwekano	19,728	17,838	17,773	1.0	0.9	778	507	458	0.9	0.6	20,505	18,345	18,231	1.0	0.9
Mukono	118	118	12	0.1	0.1	891	138	535	3.9	0.6	1,008	256	546	2.1	0.5
Ngetta	57,864	4,447	2,621	0.6	0.0	92,045	57,263	62,489	1.1	0.7	149,909	61,710	65,110	1.1	0.4
Nabuin	81,925	23,314	14,800	0.6	0.2	285	142	352	2.5	1.2	82,210	23,456	15,152	0.6	0.2
Serere	17,266	15,738	10,134	0.6	0.6	48,938	18,249	20,827	1.1	0.4	66,204	33,986	30,961	0.9	0.5
Mbarara	4,113	3,755	2,447	0.7	0.6	2,928	2,120	4,128	1.9	1.4	7,041	5,874	6,575	1.1	0.9
Rwebitaba	1,774	1,493	890	0.6	0.5	2,640	541	1,059	2.0	0.4	4,414	2,034	1,949	1.0	0.4
Uganda	**199,089**	**76,036**	**55,006**	**0.7**	**0.3**	**174,807**	**92,286**	**104,720**	**1.1**	**0.6**	**373,897**	**168,322**	**159,726**	**0.9**	**0.4**

Notes: **The total area harvested is the total area planted calculated on those observations whose production is available (not missing) and higher than zero. **Ratio between production (MT) and area harvested (ha). ***Ratio between production (MT) and area planted (ha)*

Table 6-6a: Coefficients of variation (CVs) for sorghum area and production by ZARDI

ZARDI	First season			Second season			Total		
	CV area planted	CV area harvested	CV production	CV area planted	CV area harvested	CV production	CV area planted	CV area harvested	CV production
Abi	22.6	47.3	36.1	23.6	29.2	25.8	22.3	30.9	25.8
Buginyanya	21.0	21.4	25.7	29.2	38.0	30.9	19.1	21.6	23.8
Bulindi	65.4	92.4	97.8	57.6	62.3	52.2	51.4	51.8	53.0
Kachwekano	17.8	17.9	20.2	30.5	31.7	31.5	16.9	17.2	19.5
Mukono	100.0	100.0	100.0	71.4	100.0	71.4	63.8	70.2	69.9
Ngetta	15.3	33.0	25.6	15.5	19.7	18.8	14.9	18.6	18.1
Nabuin	16.8	17.7	18.0	60.9	97.9	58.9	16.7	17.5	17.3
Serere	25.3	25.6	22.3	12.9	15.0	14.4	12.3	14.2	13.4
Mbarara	30.1	32.4	36.4	33.5	42.7	36.4	29.9	34.2	32.6
Rwebitaba	56.0	65.8	64.4	60.8	73.8	60.8	58.2	67.2	61.9
Uganda	***8.8***	***9.5***	***10.0***	***9.5***	***13.1***	***12.0***	***7.7***	***8.5***	***8.8***

Table 6-7: Rice area, production and yields by sub-region

Sub-region	First season					Second season					Total				
	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield* (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield* *(MT/ha)	Yield*** (MT/ha)
South Buganda	532	266	631	2.4	1.2	-	-	-	-	-	532	266	631	2.4	.2
North Buganda	7,860	6,694	6,714	1.0	0.9	9,043	7,644	5,858	0.8	0.6	16,902	14,338	12,572	0.9	0.7
West Nile	2,308	1,599	2,241	1.4	1.0	5,347	3,982	6,179	1.6	1.2	7,654	5,580	8,420	1.5	1.1
Lango	8,002	5,447	5,587	1.0	0.7	7,687	4,658	7,066	1.5	0.9	15,689	10,105	12,653	1.3	0.8
Acholi	22,967	19,157	35,162	1.8	1.5	15,681	13,377	10,765	0.8	0.7	38,648	32,535	45,928	1.4	1.2
Kigezi	2,891	2,633	3,836	1.5	1.3	4,417	2,722	10,795	4.0	2.4	7,308	5,354	14,631	2.7	2.0
Bunyoro	1,195	997	1,427	1.4	1.2	8,698	7,132	11,572	1.6	1.3	9,893	8,130	12,999	1.6	1.3
Tooro	1,246	879	1,202	1.4	1.0	7,480	5,170	13,604	2.6	1.8	8,725	6,049	14,806	2.4	1.7
Busoga	25,562	24,898	36,843	1.5	1.4	18,493	10,638	22,216	2.1	1.2	44,055	35,535	59,059	1.7	1.3
Teso	8,333	6,574	8,627	1.3	1.0	6,587	5,533	5,926	1.1	0.9	14,921	12,107	14,553	1.2	1.0
Bukedi	22,513	22,299	30,955	1.4	1.4	17,998	14,823	21,164	1.4	1.2	40,512	37,122	52,119	1.4	1.3
Elgon	10,515	9,364	22,510	2.4	2.1	4,224	3,742	3,660	1.0	0.9	14,739	13,106	26,170	2.0	1.8
Karamoja	989	319	494	1.5	0.5	-	-	-	-	-	989	319	494	1.5	0.5
South Buganda	532	266	631	2.4	1.2	-	-	-	-	-	532	266	631	2.4	1.2
Uganda	**114,913**	**101,124**	**156,230**	**1.5**	**1.4**	**105,654**	**79,422**	**118,807**	**1.5**	**1.1**	**220,567**	**180,546**	**275,037**	**1.5**	**1.2**

Notes: **The total area harvested is the total area planted calculated on those observations whose production is available (not missing) and higher than zero. **Ratio between production (MT) and area harvested (ha) ***Ratio between production (MT) and area planted (ha)*

Table 6-7a: Coefficients of variation (CVs) for rice area and production by sub-region

Sub-region	First season			Second season			Total		
	CV area Plant-ed	CV area harve-sted	CV product-ion	CV area Plant-ed	CV area harve-sted	CV product-ion	CV area planted	CV area harvested	CV production
South Buganda	*100.0*	*100.0*	*100.0*				*100.0*	*100.0*	*100.0*
North Buganda	*41.4*	*40.3*	*39.7*	*39.1*	*43.3*	*39.1*	*36.0*	*37.6*	*35.3*
West Nile	*39.5*	*49.0*	*53.2*	*21.1*	*24.6*	*24.2*	*22.6*	*27.3*	*29.8*
Lango	*44.1*	*48.1*	*40.7*	*33.6*	*38.5*	*39.1*	*33.0*	*36.6*	*29.8*
Acholi	*40.6*	*44.4*	*60.6*	*48.3*	*49.6*	*40.9*	*42.6*	*45.2*	*53.2*
Kigezi	*76.0*	*77.1*	*72.1*	*77.6*	*67.9*	*80.3*	*76.8*	*72.1*	*77.7*
Bunyoro	*52.9*	*50.6*	*56.5*	*37.2*	*37.8*	*39.7*	*33.6*	*33.9*	*35.7*
Tooro	*51.6*	*54.0*	*56.4*	*69.3*	*57.4*	*64.6*	*63.7*	*54.8*	*62.8*
Busoga	*30.1*	*30.9*	*34.7*	*25.5*	*36.5*	*32.0*	*26.3*	*29.4*	*29.6*
Teso	*27.1*	*31.0*	*35.4*	*29.2*	*29.3*	*31.6*	*23.5*	*24.0*	*28.0*
Bukedi	*16.6*	*16.7*	*17.6*	*16.9*	*17.7*	*18.5*	*16.0*	*16.1*	*16.9*
Elgon	*48.4*	*53.2*	*59.7*	*59.5*	*66.6*	*55.6*	*44.2*	*45.7*	*53.6*
Karamoja	*69.7*	*100.0*	*100.0*				*69.7*	*100.0*	*100.0*
Uganda	***12.9***	***13.8***	***19***	***12.9***	***13.8***	***18.8***	***11.5***	***12.2***	***14.0***

Table 6-8: Rice area, production and yields by ZARDI

ZARDI	First season					Second season					Total				
	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)
Abi	2,308	1,599	2,241	1.4	1.0	5,347	3,982	6,179	1.6	1.2	7,654	5,580	8,420	1.5	1.1
Buginyanya	58,590	56,560	90,308	1.6	1.5	40,715	29,203	47,040	1.6	1.2	99,306	85,762	137,348	1.6	1.4
Bulindi	1,195	997	1,427	1.4	1.2	8,698	7,132	11,572	1.6	1.3	9,893	8,130	12,999	1.6	1.3
Kachwekano	2,891	2,633	3,836	1.5	1.3	4,417	2,722	10,795	4.0	2.4	7,308	5,354	14,631	2.7	2.0
Mukono	8,392	6,960	7,345	1.1	0.9	9,043	7,644	5,858	0.8	0.6	17,435	14,604	13,204	0.9	0.8
Ngetta	30,969	24,604	40,750	1.7	1.3	23,368	18,035	17,831	1.0	0.8	54,337	42,640	58,581	1.4	1.1
Nabuin	989	319	494	1.5	0.5	-	-	-	-	-	989	319	494	1.5	0.5
Serere	8,333	6,574	8,627	1.3	1.0	6,587	5,533	5,926	1.1	0.9	14,921	12,107	14,553	1.2	1.0
Mbarara	-	-	-	-	-	-	-	-	-	-	-	-	-		
Rwebitaba	1,246	879	1,202	1.4	1.0	7,480	5,170	13,604	2.6	1.8	8,725	6,049	14,806	2.4	1.7
Uganda	**114,913**	**101,124**	**156,230**	**1.5**	**1.4**	**105,654**	**79,422**	**118,807**	**1.5**	**1.1**	**220,567**	**180,546**	**275,037**	**1.5**	**1.2**

Notes: **The total area harvested is the total area planted calculated on those observations whose production is available (not missing) and higher than zero. **Ration between production (MT) and area harvested (Ha). (CV– Caution). Coefficient of variation higher than 40 percent -No sample unit under this category*

Table 6-8a: Coefficients of variation (CVs) for rice area and production by ZARDI

ZARDI	First season			Second season			Total		
	CV area Plant-ed	CV area harve-sted	CV Product-ion	CV area Plant-ed	CV area harve-sted	CV production	CV area planted	CV area harvested	CV production
Abi	*39.5*	*49.0*	*53.2*	*21.1*	*24.6*	*24.2*	*22.6*	*27.3*	*29.8*
Buginyanya	*17.0*	*17.5*	*21.4*	*15.1*	*18.2*	*17.8*	*14.9*	*15.7*	*17.6*
Bulindi	*52.9*	*50.6*	*56.5*	*37.2*	*37.8*	*39.7*	*33.6*	*33.9*	*35.7*
Kachwekano	*76.0*	*77.1*	*72.1*	*77.6*	*67.9*	*80.3*	*76.8*	*72.1*	*77.7*
Mukono	*39.3*	*39.0*	*37.3*	*39.1*	*43.3*	*39.1*	*35.0*	*37.0*	*33.9*
Ngetta	*32.2*	*36.2*	*52.6*	*34.2*	*38.1*	*29.2*	*31.8*	*35.6*	*42.2*
Nabuin	*69.7*	*100.0*	*100.0*	-	-	-	*69.7*	*100.0*	*100.0*
Serere	*27.1*	*31.0*	*35.4*	*29.2*	*29.3*	*31.6*	*23.5*	*24.0*	*28.0*
Mbarara	-	-	-	-	-	-	-	-	-
Rwebitaba	*51.6*	*54.0*	*56.4*	*69.3*	*57.4*	*64.6*	*63.7*	*54.8*	*62.8*
Uganda	***12.9***	***13.8***	***18.8***	***12.9***	***13.8***	***18.8***	***11.5***	***12.2***	***14.0***

Table 6-9: Beans area, production and yields by sub-region

Sub-region	First season					Second season					Total				
	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)
South Buganda	56,168	48,078	30,226	0.6	0.5	64,380	41,943	47,487	1.1	0.7	120,548	90,021	77,713	0.9	0.6
North Buganda	91,912	82,720	53,214	0.6	0.6	108,983	67,941	66,742	1.0	0.6	200,896	150,662	119,95	0.8	0.6
West Nile	7,324	5,795	3,043	0.5	0.4	17,232	11,335	8,569	0.8	0.5	24,556	17,130	11,612	0.7	0.5
Lango	68,830	64,085	29,085	0.5	0.4	31,065	13,653	13,626	1.0	0.4	99,895	77,739	42,711	0.5	0.4
Acholi	22,328	16,429	14,081	0.9	0.6	14,288	10,137	8,912	0.9	0.6	36,616	26,566	22,993	0.9	0.6
Kigezi	23,889	20,630	14,074	0.7	0.6	30,450	17,656	21,734	1.2	0.7	54,338	38,287	35,807	0.9	0.7
Bunyoro	67,786	64,452	53,243	0.8	0.8	79,169	48,055	57,691	1.2	0.7	146,955	112,507	110,93	1.0	0.8
Tooro	71,360	61,307	35,032	0.6	0.5	83,434	39,153	46,340	1.2	0.6	154,794	100,460	81,372	0.8	0.5
Busoga	24,839	21,397	13,697	0.6	0.6	21,746	9,664	7,750	0.8	0.4	46,585	31,061	21,446	0.7	0.5
Teso	9,603	9,356	4,479	0.5	0.5	7,839	3,606	2,625	0.7	0.3	17,442	12,961	7,104	0.5	0.4
Bukedi	7,899	7,495	3,879	0.5	0.5	6,009	3,145	2,219	0.7	0.4	13,908	10,640	6,098	0.6	0.4
Elgon	44,367	40,796	27,334	0.7	0.6	45,489	26,247	17,161	0.7	0.4	89,855	67,043	44,495	0.7	0.5
Karamoja	8,775	7,857	4,261	0.5	0.5						8,775	7,857	4,261	0.5	0.5
Ankole	54,452	48,292	34,321	0.7	0.6	64,475	36,344	48,743	1.3	0.8	118,927	84,636	83,065	1.0	0.7
Uganda	**559,531**	**498,689**	**319,969**	**0.6**	**0.6**	**574,559**	**328,880**	**349,598**	**1.1**	**0.6**	**1,134,090**	**827,569**	**669,567**	**0.8**	**0.6**

Notes: **The total area harvested is the total area planted calculated on those observations whose production is available (not missing) and higher than zero. **Ration between production (MT) and area harvested (Ha). (CV– Caution). Coefficient of variation higher than 40 percent -No sample unit under this category*

Table 6-9a: Coefficients of variation for beans area and production by sub-region

Sub-region	First Season			Second Season			Total		
	CV area Plant-ed	CV area harvested	CV production	CV area planted	CV area harvested	CV production	CV area planted	CV area harvested	CV production
South Buganda	12.6	13.3	13.1	10.4	11.8	12.3	10.0	9.9	11.2
North Buganda	12.7	14.0	13.7	10.4	12.6	12.4	11.1	12.8	12.2
West Nile	24.6	27.3	28.8	16.4	18.6	19.3	16.3	18.5	19.5
Lango	10.5	11.1	12.2	18.8	18.5	19.0	10.6	9.7	11.4
Acholi	21.8	19.3	24.4	30.9	35.2	34.6	18.0	18.1	22.4
Kigezi	9.9	11.7	14.8	11.4	12.6	16.7	9.5	10.8	15.0
Bunyoro	10.9	11.4	12.0	12.7	14.2	14.2	11.3	11.8	11.8
Tooro	8.3	9.3	11.0	11.4	13.9	12.9	8.7	9.9	10.2
Busoga	16.6	17.4	28.8	21.7	26.0	24.9	18.1	18.1	25.6
Teso	27.7	27.9	28.9	28.2	29.1	29.6	25.9	23.4	24.7
Bukedi	22.4	23.5	26.7	21.3	25.9	24.9	19.0	22.0	24.1
Elgon	9.3	9.4	12.2	14.8	17.4	14.6	10.5	10.5	11.6
Karamoja	38.8	43.7	40.8				38.8	43.7	40.8
Ankole	8.5	8.2	9.6	8.0	11.6	8.7	7.7	9.1	8.3
Uganda	**3.7**	**4.0**	**4.4**	**4.0**	**4.8**	**4.7**	**4**	**3.8**	**4.0**

Table 6-10: Beans area, production and yields by ZARDI

ZARDI	First Season					Second Season					Total				
	Area planted (Ha)	Area harvested * (Ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (Ha)	Area harvested * (Ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (Ha)	Area harvested * (Ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)
Abi	7,324	5,795	3,043	0.5	0.4	17,232	11,335	8,569	0.8	0.5	24,556	17,130	11,612	0.7	0.5
Buginyanya	77,105	69,688	44,910	0.6	0.6	73,243	39,056	27,130	0.7	0.4	150,348	108,744	72,039	0.7	0.5
Bulindi	67,786	64,452	53,243	0.8	0.8	79,169	48,055	57,691	1.2	0.7	146,955	112,507	110,934	1.0	0.8
Kachwekano	23,889	20,630	14,074	0.7	0.6	30,450	17,656	21,734	1.2	0.7	54,338	38,287	35,807	0.9	0.7
Mukono	126,087	113,298	71,387	0.6	0.6	147,805	93,444	97,374	1.0	0.7	273,893	206,741	168,761	0.8	0.6
Ngetta	91,158	80,514	43,166	0.5	0.5	45,353	23,791	22,538	0.9	0.5	136,511	104,305	65,704	0.6	0.5
Nabuin	8,775	7,857	4,261	0.5	0.5						8,775	7,857	4,261	0.5	0.5
Serere	9,603	9,356	4,479	0.5	0.5	7,839	3,606	2,625	0.7	0.3	17,442	12,961	7,104	0.5	0.4
Mbarara	76,445	65,792	46,374	0.7	0.6	90,033	52,785	65,598	1.2	0.7	166,478	118,577	111,972	0.9	0.7
Rwebitaba	71,360	61,307	35,032	0.6	0.5	83,434	39,153	46,340	1.2	0.6	154,794	100,460	81,372	0.8	0.5
Uganda	559,531	498,689	319,969	0.6	0.6	574,559	328,880	349,598	1.1	0.6	1,134,090	827,569	669,567	0.8	0.6

Notes: **The total area harvested is the total area planted calculated on those observations whose production is available (not missing) and higher than zero. **Ration between production (MT) and area harvested (Ha). (CV– Caution). Coefficient of variation higher than 40 percent -No sample unit under this category*

Table 6-10a: Coefficients of variation (CVs) for beans area and production by ZARDI

ZARDI	First season			Second season			Total		
	CV area Plant-ed	CV area harve-sted	CV product-ion	CV area Plant-ed	CV area harvest-ed	CV production	CV area planted	CV area harvested	CV production
Abi	*24.6*	*27.3*	*28.8*	*16.4*	*18.6*	*19.3*	*16.3*	*18.5*	*19.5*
Buginyanya	*7.9*	*8.1*	*11.7*	*11.3*	*13.5*	*11.9*	*8.6*	*8.5*	*10.6*
Bulindi	*10.9*	*11.4*	*12.0*	*12.7*	*14.2*	*14.2*	*11.3*	*11.8*	*11.8*
Kachwekano	*9.9*	*11.7*	*14.8*	*11.4*	*12.6*	*16.7*	*9.5*	*10.8*	*15.0*
Mukono	*10.4*	*11.4*	*11.2*	*8.9*	*10.4*	*10.6*	*9.2*	*10.3*	*10.0*
Ngetta	*9.6*	*9.7*	*11.5*	*16.1*	*18.4*	*17.8*	*9.2*	*8.6*	*10.8*
Nabuin	*38.8*	*43.7*	*40.8*				*38.8*	*43.7*	*40.8*
Serere	*27.7*	*27.9*	*28.9*	*28.2*	*29.1*	*29.6*	*25.9*	*23.4*	*24.7*
Mbarara	*10.5*	*10.4*	*10.6*	*9.2*	*11.7*	*9.1*	*9.2*	*9.8*	*9.2*
Rwebitaba	*8.3*	*9.3*	*11.0*	*11.4*	*13.9*	*12.9*	*8.7*	*9.9*	*10.2*
Uganda	***3.7***	***4.0***	***4.4***	***4.0***	***4.8***	***4.7***	***3.5***	***3.8***	***4.0***

Table 6-11: Soya beans area, production and yields by sub-region

Sub-region	First season					Second season					Total				
	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)
South Buganda	146	146	87	0.6	0.6	415	-	-			561	146	87	0.6	0.2
North Buganda	1,426	1,111	522	0.5	0.4	1,811	1,031	452	0.4	0.2	3,237	2,142	975	0.5	0.3
West Nile	541	518	451	0.9	0.8	1,790	1,075	650	0.6	0.4	2,332	1,593	1,102	0.7	0.5
Lango	100,757	98,863	68,771	0.7	0.7	23,341	13,223	20,147	1.5	0.9	124,097	112,086	88,919	0.8	0.7
Acholi	20,487	17,182	18,828	1.1	0.9	6,261	4,074	3,512	0.9	0.6	26,748	21,256	22,340	1.1	0.8
Kigezi	135	39	20	0.5	0.1	61	1	33	44.3	0.5	196	40	53	1.3	0.3
Bunyoro	1,358	1,333	914	0.7	0.7	2,416	1,368	963	0.7	0.4	3,774	2,700	1,877	0.7	0.5
Tooro	1,202	1,202	494	0.4	0.4	2,705	2,115	1,230	0.6	0.5	3,906	3,317	1,725	0.5	0.4
Busoga	13,555	11,194	4,851	0.4	0.4	11,240	8,049	4,780	0.6	0.4	24,794	19,243	9,631	0.5	0.4
Teso	5,663	5,513	2,363	0.4	0.4	11,439	2,353	1,330	0.6	0.1	17,101	7,866	3,694	0.5	0.2
Bukedi	3,921	3,921	1,638	0.4	0.4	6,722	2,898	2,401	0.8	0.4	10,643	6,819	4,039	0.6	0.4
Elgon	1,961	1,769	1,046	0.6	0.5	4,391	3,224	1,374	0.4	0.3	6,351	4,993	2,420	0.5	0.4
Karamoja	530	468	267	0.6	0.5						530	468	267	0.6	0.5
Ankole	102	30	10	0.3	0.1	151	-	366		2.4	253	30	376	12.4	1.5
Uganda	**151,783**	**143,289**	**100,262**	**0.7**	**0.7**	**72,742**	**39,410**	**37,240**	**0.9**	**0.5**	**224,524**	**182,699**	**137,502**	**0.8**	**0.6**

Notes: **The total area harvested is the total area planted calculated on those observations whose production is available (not missing) and higher than zero. **Ration between production (MT) and area harvested (ha). (CV– Caution) Coefficient of variation higher than 40 percent -No sample unit under this category*

Table 6-11a: Coefficients of variation (CVs) for soya beans area and production by sub-region

Sub-region	First season			Second season			Total		
	CV area Plant-ed	*CV area harve-sted*	*CV product-ion*	*CV area Plant-ed*	*CV area Harve-sted*	*CV product-ion*	*CV area planted*	*CV area harvested*	*CV production*
South Buganda	100.0	100.0	100.0	100.0			77.9	100.0	100.0
North Buganda	43.3	49.0	48.8	38.1	47.2	33.3	33.8	35.6	32.1
West Nile	62.0	64.8	66.3	44.6	62.7	51.3	36.6	47.2	40.3
Lango	16.3	16.5	17.2	22.7	21.3	24.9	15.5	15.2	16.7
Acholi	20.6	22.6	24.5	29.2	34.8	37.7	18.4	20.4	23.7
Kigezi	83.9	71.4	87.3	53.7	100.0	63.4	71.5	70.0	70.0
Bunyoro	42.9	43.7	42.0	43.0	55.9	45.7	30.2	34.0	29.7
Tooro	36.3	36.3	53.8	39.0	45.4	41.5	34.7	37.6	41.0
Busoga	22.3	25.7	20.3	20.6	25.6	31.1	18.5	21.7	22.1
Teso	32.3	32.9	31.7	33.7	37.5	36.8	27.9	30.1	26.9
Bukedi	28.0	28.0	30.8	33.0	25.0	30.4	25.8	22.6	23.8
Elgon	41.1	42.0	53.3	41.7	40.2	57.9	38.2	36.9	48.9
Karamoja	70.5	69.6	73.1				70.5	69.6	73.1
Ankole	75.7	100.0	100.0	77.7		85.4	54.7	100.0	83.0
Uganda	**11.4**	**12.0**	**13**	**10.9**	**11.2**	**15.0**	**9.5**	**10.1**	**11.7**

Table 6-12: Soya beans area, production and yields by ZARDI

ZARDI	First season					Second season					Total				
	Area planted (Ha)	Area harvested* (Ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (Ha)	Area harvested* (Ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (Ha)	Area harvested* (Ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)
Abi	541	518	451	0.9	0.8	1,79	1,075	650	0.6	0.4	2,332	1,593	1,102	0.7	0.5
Buginyanya	19,436	16,885	7,534	0.4	0.4	22,35	14,170	8,555	0.6	0.4	41,789	31,055	16,089	0.5	0.4
Bulindi	1,358	1,333	914	0.7	0.7	2,41	1,368	963	0.7	0.4	3,774	2,700	1,877	0.7	0.5
Kachwekano	135	39	20	0.5	0.1	6	1	33	44.3	0.5	196	40	53	1.3	0.3
Mukono	1,426	1,111	522	0.5	0.4	2,22	1,031	452	0.4	0.2	3,652	2,142	975	0.5	0.3
Ngetta	121,244	116,045	87,599	0.8	0.7	29,60	17,297	23,660	1.4	0.8	150,845	133,342	111,259	0.8	0.7
Nabuin	530	468	267	0.6	0.5						530	468	267	0.6	0.5
Serere	5,663	5,513	2,363	0.4	0.4	11,43	2,353	1,330	0.6	0.1	17,101	7,866	3,694	0.5	0.2
Mbarara	248	176	97	0.5	0.4	15	-	366		2.4	399	176	463	2.6	1.2
Rwebitaba	1,202	1,202	494	0.4	0.4	2,70	2,115	1,230	0.6	0.5	3,906	3,317	1,725	0.5	0.4
Uganda	151,783	143,289	100,262	0.7	0.7	72,74	39,410	37,240	0.9	0.5	224,524	182,699	137,502	0.8	0.6

Notes: **The total area harvested is the total area planted calculated on those observations whose production is available (not missing) and higher than zero,**Ration between production(MT) and area harvested (Ha). (CV– Caution) Coefficient of variation higher than 40 percent -No sample unit under this category*

Table 6 12a: Coefficients of variation (CVs) for soya beans area and production by ZARDI

ZARDI	First season			Second season			Total		
	CV area plant-ed	*CV area harve-sted*	*CV product-ion*	*CV area planted*	*CV area harvested*	*CV product-ion*	*CV area plant-ed*	*CV area harvested*	*CV production*
Abi	62.0	64.8	66.3	44.6	62.7	51.3	36.6	47.2	40.3
Buginyanya	17.1	18.8	16.4	16.5	17.9	21.5	14.0	15.5	16.3
Bulindi	42.9	43.7	42.0	43.0	55.9	45.7	30.2	34.0	29.7
Kachwekano	83.9	71.4	87.3	53.7	100.0	63.4	71.5	70.0	70.0
Mukono	43.3	49.0	48.8	36.1	47.2	33.3	32.0	35.6	32.1
Ngetta	13.9	14.5	14.5	18.9	18.3	21.9	13.2	13.2	14.2
Nabuin	70.5	69.6	73.1				70.5	69.6	73.1
Serere	32.3	32.9	31.7	33.7	37.5	36.8	27.9	30.1	26.9
Mbarara	66.6	84.5	90.0	77.7		85.4	50.4	84.5	70.1
Rwebitaba	36.3	36.3	53.8	39.0	45.4	41.5	34.7	37.6	41.0
Uganda	**11.4**	**12.0**	**12.7**	**10.9**	**11.2**	**15.0**	**9.5**	**10.1**	**11.7**

Table 6-13: Sweet potatoes area, production and yields by sub-region

Sub-region	First season					Second season					Total				
	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)
South Buganda	15,180	9,898	36,292	3.7	2.4	11,845	5,742	34,831	6.1	2.9	27,025	15,641	71,123	4.5	2.6
North Buganda	47,782	32,169	86,454	2.7	1.8	49,321	14,477	100,627	7.0	2.0	97,103	46,645	187,080	4.0	1.9
West Nile	11,992	9,676	52,374	5.4	4.4	22,256	10,418	113,614	10.9	5.1	34,247	20,094	165,988	8.3	4.8
Lango	13,383	8,736	40,422	4.6	3.0	7,706	3,906	54,867	14.0	7.1	21,089	12,642	95,289	7.5	4.5
Acholi	12,822	3,026	22,275	7.4	1.7	11,382	5,656	83,306	14.7	7.3	24,204	8,682	105,581	12.2	4.4
Kigezi	11,546	8,225	30,276	3.7	2.6	11,698	4,312	31,513	7.3	2.7	23,243	12,538	61,789	4.9	2.7
Bunyoro	7,938	5,204	10,564	2.0	1.3	11,248	3,774	30,801	8.2	2.7	19,187	8,978	41,366	4.6	2.2
Tooro	6,699	5,693	11,567	2.0	1.7	7,321	1,581	27,179	17.2	3.7	14,020	7,274	38,746	5.3	2.8
Busoga	37,898	26,343	89,865	3.4	2.4	46,356	25,856	104,625	4.0	2.3	84,253	52,199	194,490	3.7	2.3
Teso	18,668	7,331	17,536	2.4	0.9	41,469	18,821	93,853	5.0	2.3	60,137	26,152	111,389	4.3	1.9
Bukedi	17,988	8,766	22,990	2.6	1.3	20,749	8,789	55,684	6.3	2.7	38,737	17,555	78,673	4.5	2.0
Elgon	1,593	1,473	4,642	3.2	2.9	6,179	2,882	10,256	3.6	1.7	7,771	4,355	14,898	3.4	1.9
Karamoja	1,471					248					1,719	-	-		
Ankole	6,151	4,034	17,464	4.3	2.8	7,094	3,198	22,661	7.1	3.2	13,245	7,231	40,126	5.5	3.0
Uganda	**211,110**	**130,575**	**442,720**	**3.4**	**2.1**	**254,871**	**109,412**	**763,818**	**7.0**	**3.0**	**465,981**	**239,987**	**1,206,538**	**5.0**	**2.6**

Notes: **The total area harvested is the total area planted calculated on those observations whose production is available (not missing) and higher than zero,**Ration between production (MT) and area harvested (Ha). (CV– Caution) Coefficient of variation higher than 40 percent -No sample unit under this category*

Table 6-13a: Coefficients of variation (CVs) for sweet potatoes area and production by sub-region

Sub-region	First season			Second season			Total		
	CV area Plant-ed	CV area harve-sted	CV product-ion	CV area Plant-ed	CV area harvest-ed	CV product-ion	CV area planted	CV area harvested	CV production
South Buganda	*27.2*	*36.3*	*33.8*	*27.4*	*34.7*	*25.9*	*25.3*	*33.5*	*28.7*
North Buganda	*11.8*	*13.6*	*13.8*	*9.3*	*15.2*	*14.6*	*9.9*	*12.5*	*12.0*
West Nile	*18.4*	*22.1*	*51.0*	*13.0*	*17.8*	*20.7*	*14.1*	*17.8*	*29.7*
Lango	*16.8*	*19.0*	*19.8*	*14.8*	*20.1*	*14.2*	*13.8*	*15.4*	*13.4*
Acholi	*9.3*	*13.5*	*9.5*	*11.6*	*14.6*	*12.2*	*9.3*	*11.5*	*11.0*
Kigezi	*14.9*	*17.0*	*15.1*	*12.3*	*14.0*	*21.3*	*12.7*	*14.0*	*17.0*
Bunyoro	*23.6*	*31.6*	*26.3*	*16.7*	*25.4*	*20.5*	*14.8*	*21.3*	*17.8*
Tooro	*22.7*	*26.9*	*24.5*	*17.2*	*26.0*	*43.0*	*18.4*	*24.8*	*31.3*
Busoga	*11.0*	*11.8*	*12.5*	*16.3*	*22.9*	*18.9*	*13.1*	*14.5*	*13.3*
Teso	*16.2*	*18.3*	*15.7*	*11.3*	*11.7*	*11.6*	*10.7*	*10.9*	*10.0*
Bukedi	*12.4*	*14.4*	*15.2*	*11.6*	*14.1*	*12.3*	*10.7*	*11.1*	*10.1*
Elgon	*31.3*	*33.8*	*31.9*	*20.9*	*22.9*	*19.9*	*20.7*	*22.2*	*20.4*
Karamoja	*61.8*			*100.0*			*57.7*		
Ankole	*15.5*	*17.3*	*18.8*	*15.4*	*24.3*	*16.6*	*14.1*	*17.2*	*15.3*
Uganda	***4.8***	***5.9***	***8.1***	***4.6***	***6.9***	***5.6***	***4.2***	***5.3***	***5.8***

Table 6-14: Sweet potatoes area, production and yields by ZARDI

ZARDI	First season 2020					Second season 2020					Total				
	Area Planted (Ha)	Area Harvested * (Ha)	Production (MT)	Yield** (MT/Ha)	Yield*** (MT/Ha)	Area Planted (Ha)	Area Harvested * (Ha)	Production (MT)	Yield** (MT/Ha)	Yield*** (MT/Ha)	Area Planted (ha)	Area Harvested * (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)
Abi	11,992	9,676	52,374	5.4	4.4	22,256	10,418	113,614	10.9	5.1	34,247	20,094	165,988	8.3	4.8
Buginyanya	57,479	36,582	117,496	3.2	2.0	73,283	37,526	170,565	4.5	2.3	130,762	74,109	288,061	3.9	2.2
Bulindi	7,938	5,204	10,564	2.0	1.3	11,248	3,774	30,801	8.2	2.7	19,187	8,978	41,366	4.6	2.2
Kachwekano	11,546	8,225	30,276	3.7	2.6	11,698	4,312	31,513	7.3	2.7	23,243	12,538	61,789	4.9	2.7
Mukono	61,936	41,997	122,642	2.9	2.0	59,895	19,784	131,240	6.6	2.2	121,831	61,781	253,882	4.1	2.1
Ngetta	26,204	11,762	62,697	5.3	2.4	19,088	9,563	138,173	14.4	7.2	45,293	21,325	200,870	9.4	4.4
Nabuin	1,471	-	-			248	-	-			1,719	-	-		
Serere	18,668	7,331	17,536	2.4	0.9	41,469	18,821	93,853	5.0	2.3	60,137	26,152	111,389	4.3	1.9
Mbarara	7,176	4,103	17,568	4.3	2.4	8,365	3,633	26,878	7.4	3.2	15,541	7,736	44,446	5.7	2.9
Rwebitaba	6,699	5,693	11,567	2.0	1.7	7,321	1,581	27,179	17.2	3.7	14,020	7,274	38,746	5.3	2.8
Uganda	**211,110**	**130,575**	**442,720**	**3.4**	**2.1**	**254,871**	**109,412**	**763,818**	**7.0**	**3.0**	**465,981**	**239,987**	**1,206,538**	**5.0**	**2.6**

Notes*: *The total area harvested is the total area planted calculated on those observations whose production is available (not missing) and higher than zero, **Ration between production (MT) and area harvested (Ha). (CV– Caution) Coefficient of variation higher than 40 percent -No sample unit under this category*

Table 6 - 14a: Coefficients of variation (CVs) for sweet potatoes area and production by ZARDI

ZARDI	First season			Second season			Total		
	CV area plant-ed	CV area harve-sted	CV product-ion	CV area plant-ed	CV area harve-sted	CV production	CV area planted	CV area harvested	CV production
Abi	*18.4*	*22.1*	*51.0*	*13.0*	*17.8*	*20.7*	*14.1*	*17.8*	*29.7*
Buginyanya	*8.2*	*9.3*	*10.1*	*11.0*	*16.2*	*12.3*	*9.1*	*10.6*	*9.4*
Bulindi	*23.6*	*31.6*	*26.3*	*16.7*	*25.4*	*20.5*	*14.8*	*21.3*	*17.8*
Kachwekano	*14.9*	*17.0*	*15.1*	*12.3*	*14.0*	*21.3*	*12.7*	*14.0*	*17.0*
Mukono	*11.3*	*13.5*	*14.0*	*9.4*	*15.1*	*13.2*	*9.8*	*12.7*	*12.0*
Ngetta	*9.7*	*14.5*	*13.2*	*9.1*	*11.9*	*9.2*	*8.2*	*10.3*	*8.6*
Nabuin	*61.8*	*-*	*-*	*100.0*	*-*	*-*	*57.7*	*-*	*-*
Serere	*16.2*	*18.3*	*15.7*	*11.3*	*11.7*	*11.6*	*10.7*	*10.9*	*10.0*
Mbarara	*15.6*	*17.1*	*18.7*	*14.3*	*22.3*	*15.3*	*13.5*	*16.3*	*14.3*
Rwebitaba	*22.7*	*26.9*	*24.5*	*17.2*	*26.0*	*43.0*	*18.4*	*24.8*	*31.3*
Uganda	***4.8***	***5.9***	***8.1***	***4.6***	***6.9***	***5.6***	***4.2***	***5.3***	***5.8***

Table 6-15: Irish potatoes area, production and yields by sub-region

Sub-region	First season					Second season					Total				
	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area Planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)
South Buganda	8,005	5,251	17,477	3.3	2.2	5,762	2,740	18,520	6.8	3.2	13,767	7,991	35,997	4.5	2.6
North Buganda	2,035	2,035	6,408	3.1	3.1	1,597	981	6,357	6.5	4.0	3,632	3,015	12,766	4.2	3.5
West Nile	244	244	346	1.4	1.4	2,247	1,944	6,456	3.3	2.9	2,491	2,188	6,802	3.1	2.7
Lango	-	-	-	-	-	-	-	-	-	-	-	-	-		
Acholi	-	-	-	-	-	-	-	-	-	-	-	-	-		
Kigezi	7,513	6,003	31,931	5.3	4.3	8,434	4,190	32,805	7.8	3.9	15,947	10,193	64,737	6.4	4.1
Bunyoro	2,756	2,731	6,065	2.2	2.2	4,409	3,747	9,912	2.6	2.2	7,165	6,479	15,977	2.5	2.2
Tooro	15,658	11,701	30,452	2.6	1.9	13,703	5,438	27,682	5.1	2.0	29,360	17,139	58,134	3.4	2.0
Busoga	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Teso	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bukedi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Elgon	3,169	3,003	13,584	4.5	4.3	1,318	611	5,901	9.7	4.5	4,487	3,614	19,485	5.4	4.3
Karamoja	-	-	-	-	-	-	-	-	-	-	-	-	-		
Ankole	1,697	1,400	3,649	2.6	2.2	2,028	1,254	6,071	4.8	3.0	3,725	2,654	9,721	3.7	2.6
Uganda	**41,076**	**32,368**	**109,913**	**3.4**	**2.7**	**39,498**	**20,905**	**113,706**	**5.4**	**2.9**	**80,574**	**53,273**	**223,619**	**4.2**	**2.8**

Notes: **The total area harvested is the total area planted, calculated on those observations whose production is available (not missing) and higher than zero. **Ratio between production (MT) and area harvested (ha) ***Ratio between production (MT) and area planted (ha)*

Table 6-15a: Coefficients of variation (CVs) for Irish potatoes area and production by sub-region

Sub-region	First season			Second season			Total		
	CV area Planted	CV area harve-sted	CV product-ion	CV area plant-ed	CV area harvest-ed	CV product-ion	CV area planted	CV area harvested	CV production
South Buganda	*35.2*	*36.9*	*35.6*	*58.1*	*43.7*	*42.9*	*41.7*	*35.1*	*36.9*
North Buganda	*39.7*	*39.7*	*38.8*	*34.6*	*41.0*	*44.7*	*33.8*	*37.1*	*38.1*
West Nile	*100.0*	*100.0*	*100.0*	*90.4*	*89.0*	*91.4*	*91.3*	*90.2*	*91.8*
Lango	-	-	-	-	-	-	-	-	-
Acholi	-	-	-	-	-	-	-	-	-
Kigezi	*27.0*	*28.1*	*34.1*	*30.5*	*28.5*	*29.7*	*24.7*	*27.0*	*30.3*
Bunyoro	*46.1*	*45.8*	*42.3*	*44.4*	*47.6*	*41.1*	*43.3*	*44.7*	*38.4*
Tooro	*31.9*	*36.1*	*47.1*	*32.0*	*28.2*	*27.2*	*30.8*	*30.5*	*32.2*
Busoga	-	-	-	-	-	-	-	-	-
Teso	-	-	-	-	-	-	-	-	-
Bukedi	-	-	-	-	-	-	-	-	-
Elgon	*52.6*	*53.7*	*60.2*	*71.4*	*67.4*	*93.8*	*51.6*	*51.0*	*63.4*
Karamoja	-	-	-	-	-	-	-	-	-
Ankole	*39.3*	*41.8*	*41.3*	*41.4*	*41.6*	*37.3*	*38.3*	*38.6*	*35.5*
Uganda	***15.9***	***16.8***	***19.2***	***17.3***	***16.6***	***15.5***	***15.4***	***14.6***	***15.3***

Table 6- 16: Irish potatoes area, production and yields by ZARDI

ZARDI	First season					Second season					Total				
	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested* (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)
Abi	244	244	346	1.4	1.4	2,247	1,944	6,456	3.3	2.9	2,491	2,188	6,802	3.1	2.7
Buginyanya	3,169	3,003	13,584	4.5	4.3	1,318	611	5,901	9.7	4.5	4,487	3,614	19,485	5.4	4.3
Bulindi	2,756	2,731	6,065	2.2	2.2	4,409	3,747	9,912	2.6	2.2	7,165	6,479	15,977	2.5	2.2
Kachwekano	7,513	6,003	31,931	5.3	4.3	8,434	4,190	32,805	7.8	3.9	15,947	10,193	64,737	6.4	4.1
Mukono	4,180	3,567	11,500	3.2	2.8	2,272	1,467	9,946	6.8	4.4	6,452	5,033	21,446	4.3	3.3
Ngetta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nabuin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Serere	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mbarara	7,556	5,119	16,035	3.1	2.1	7,115	3,508	21,003	6.0	3.0	14,672	8,627	37,038	4.3	2.5
Rwebitaba	15,658	11,701	30,452	2.6	1.9	13,703	5,438	27,682	5.1	2.0	29,360	17,139	58,134	3.4	2.0
Uganda	**41,076**	**32,368**	**109,913**	**3.4**	**2.7**	**39,498**	**20,905**	**113,706**	**5.4**	**2.9**	**80,574**	**53,273**	**223,619**	**4.2**	**2.8**

Notes: **The total area harvested is the total area planted calculated on those observations whose production is available (not missing) and higher than zero. **Ratio between production (MT) and area harvested (ha) ***Ratio between production (MT) and area planted (ha)*

Table 6-16a: Coefficients of variation (CVs) for Irish potatoes area and production by ZARDI

ZARDI	First season			Second season			Total		
	CV area planted	CV area harve-sted	CV production	CV area planted	CV area harve-sted	CV production	CV area planted	CV area harvested	CV production
Abi	100.0	100.0	100.0	90.4	89.0	91.4	91.3	90.2	91.8
Buginyanya	52.6	53.7	60.2	71.4	67.4	93.8	51.6	51.0	63.4
Bulindi	46.1	45.8	42.3	44.4	47.6	41.1	43.3	44.7	38.4
Kachwekano	27.0	28.1	34.1	30.5	28.5	29.7	24.7	27.0	30.3
Mukono	37.2	32.0	35.1	28.5	34.1	36.8	28.8	28.4	29.0
Ngetta	-	-	-	-	-	-	-	-	-
Nabuin	-	-	-	-	-	-	-	-	-
Serere									
Mbarara	35.4	37.5	36.1	48.6	36.8	38.4	39.9	34.1	36.5
Rwebitaba	31.9	36.1	47.1	32.0	28.2	27.2	30.8	30.5	32.2
	15.9	**16.8**	**19.2**	**17.3**	**16.6**	**15.5**	**15.4**	**14.6**	**15.3**

Table 6-17: Simsim area and production by sub-region

Sub-region	First season 2020					Second season 2020					Total 2020				
	Area planted (ha)	Area harvested * (ha)	Production (MT)	Yield* (MT/ha	Yield*** (MT/ha)	Area planted (ha)	Area harvested * (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested * (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)
South Buganda	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
North Buganda	284	284	53	0.2	0.2	288	196	208	1.1	0.7	572	480	261	0.5	0.5
West Nile	2,146	643	306	0.5	0.1	37,209	20,818	8,272	0.4	0.2	39,355	21,460	8,578	0.4	0.2
Lango	24,620	23,087	8,308	0.4	0.3	33,926	21,010	8,545	0.4	0.3	58,546	44,097	16,853	0.4	0.3
Acholi	23,408	8,989	2,162	0.2	0.1	83,807	47,969	17,234	0.4	0.2	107,216	56,959	19,396	0.3	0.2
Kigezi											-	-	-		
Bunyoro	5,296	5,296	2,651	0.5	0.5	1,456	-	376		0.3	6,752	5,296	3,026	0.6	0.4
Tooro	5,664	4,388	1,219	0.3	0.2	2,130	1,951	604	0.3	0.3	7,794	6,339	1,823	0.3	0.2
Busoga	467	467	186	0.4	0.4	1,007	904	271	0.3	0.3	1,474	1,371	457	0.3	0.3
Teso	5,320	4,062	1,527	0.4	0.3	9,049	5,417	3,269	0.6	0.4	14,368	9,479	4,796	0.5	0.3
Bukedi	486	460	153	0.3	0.3	284	234	92	0.4	0.3	770	694	244	0.4	0.3
Elgon	149	149	151	1.0	1.0	46	22	4	0.2	0.1	196	172	156	0.9	0.8
Karamoja	5,540	4,119	1,025	0.2	0.2						5,540	4,119	1,025	0.2	0.2
Ankole											-	-	-		
Uganda	**73,379**	**51,944**	**17,741**	**0.3**	**0.2**	**169,203**	**98,521**	**38,874**	**0.4**	**0.2**	**242,582**	**150,466**	**56,616**	**0.4**	**0.2**

Notes: **The total area harvested is computed on the percentage of the area planted with CROP that was harvested. (CV– Caution). Coefficient of variation is higher than 40 percent -No sample unit under this category than 40 percent -No sample unit under this category*

Table 6-17a: Coefficients of variation (CVs) for simsim area and production by sub-region

Sub-region	First season 2020			Second season 2020			Total 2020		
	Area planted (ha)	Area harvested * (ha)	Production (MT)	Area planted (ha)	Area harvested * (ha)	Production (MT)	Area planted (ha)	Area harvested * (ha)	Production (MT)
South Buganda									
North Buganda	71.0	71.0	70.8	73.8	80.4	89.3	67.0	70.6	80.3
West Nile	41.0	36.6	39.5	20.5	23.9	26.0	20.4	23.8	25.8
Lango	26.2	27.1	28.6	19.3	21.2	22.3	16.3	19.0	19.0
Acholi	23.8	37.9	30.7	14.3	17.1	18.7	13.4	15.6	17.3
Kigezi	-		-	-		-	-	-	-
Bunyoro	98.8	98.8	99.0	87.1		91.0	96.2	98.8	98.0
Tooro	88.2	85.1	83.2	93.7	96.8	85.5	89.7	88.5	83.7
Busoga	72.2	72.2	67.5	68.1	75.8	65.9	57.2	61.5	59.2
Teso	40.9	42.4	42.6	25.6	26.1	38.1	28.2	29.2	31.8
Bukedi	46.1	48.6	60.1	62.0	75.0	65.1	35.4	39.6	43.5
Elgon	100.0	100.0	100.0	69.8	100.0	100.0	89.0	87.6	97.3
Karamoja	47.1	51.9	51.2		-	-	- 47.1	51.9	51.2
Ankole	-	-	-	-		-	-	-	-	--
Uganda	**16.0**	**19.2**	**21.7**	**9.5**	**11.0**	**11.7**	**9.0**	**10.4**	**11.2**

Table 6-18: Simsim area and production by ZARDI

ZARDI	First season 2020					Second season 2020					Total 2020				
	Area planted (ha)	Area harvested * (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested * (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested * (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)
Abi	2,146	643	306	0.5	0.1	37,209	20,818	8,272	0.4	0.2	39,355	21,460	8,578	0.4	0.2
Buginyanya	1,102	1,076	490	0.5	0.4	1,337	1,160	367	0.3	0.3	2,439	2,236	857	0.4	0.4
Bulindi	5,296	5,296	2,651	0.5	0.5	1,456	-	376		0.3	6,752	5,296	3,026	0.6	0.4
Kachwekano											-	-	-		
Mukono	284	284	53	0.2	0.2	288	196	208	1.1	0.7	572	480	261	0.5	0.5
Ngetta	48,029	32,076	10,471	0.3	0.2	117,733	68,979	25,779	0.4	0.2	165,762	101,055	36,250	0.4	0.2
Nabuin	5,540	4,119	1,025	0.2	0.2						5,540	4,119	1,025	0.2	0.2
Serere	5,320	4,062	1,527	0.4	0.3	9,049	5,417	3,269	0.6	0.4	14,368	9,479	4,796	0.5	0.3
Mbarara											-	-	-		
Rwebitaba	5,664	4,388	1,219	0.3	0.2	2,130	1,951	604	0.3	0.3	7,794	6,339	1,823	0.3	0.2
Uganda	**73,379**	**51,944**	**17,741**	**0.3**	**0.2**	**169,203**	**98,521**	**38,874**	**0.4**	**0.2**	**242,582**	**150,466**	**56,616**	**0.4**	**0.2**

Notes: **The total area harvested is computed on the percentage of the area planted with CROP that was harvested. (CV–Caution) Coefficient of variation is higher than 40 percent. -No sample unit under this category than 40 percent -No sample unit under this category*

Table 6-18a: Coefficients of variation (CVs) for simsim area and production by ZARDI

ZARDI	First season 2020			Second season 2020			Total 2020		
	Area planted (ha)	Area harvested * (ha)	Production (MT)	Area planted (ha)	Area harvested * (ha)	Production (MT)	Area planted (ha)	Area harvested * (ha)	Production (MT)
Abi	41.0	36.6	39.5	20.5	23.9	26.0	20.4	23.8	25.8
Buginyanya	39.1	40.1	44.3	53.0	61.0	51.3	37.0	40.2	38.2
Bulindi	98.8	98.8	99.0	87.1		91.0	96.2	98.8	98.0
Kachwekano	-	-	-	-		-	-	-	--
Mukono	71.0	71.0	70.8	73.8	80.4	89.3	67.0	70.6	80.3
Ngetta	17.8	22.2	23.6	11.6	13.5	14.5	10.4	12.1	12.8
Nabuin	47.1	51.9	51.2	25.6	26.1	38.1	47.1	51.9	51.2
Serere	40.9	42.4	42.6	-		-	28.2	29.2	31.8
Mbarara	-	-	-	-	-	-	-	-	-
Rwebitaba	88.2	85.1	83.2	93.7	96.8	85.5	89.7	88.5	83.7
Uganda	**16.0**	**19.2**	**21.7**	**9.5**	**11.0**	**11.7**	**9.0**	**10.4**	**11.2**

Table 6-19: Groundnuts area and production by sub-region

Sub-region	First season 2020					Second season 2020					Total 2020				
	Area planted (ha)	Area harvested * (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested * (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested * (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)
South Buganda	4,608	4,069	2,522	0.6	0.5	6,288	2,065	2,200	`	0.3	10,897	6,134	4,721	0.8	0.4
North Buganda	10,286	9,149	3,841	0.4	0.4	11,870	6,293	3,808	0.6	0.3	22,156	15,442	7,650	0.5	0.3
West Nile	20,347	13,812	5,602	0.4	0.3	24,199	14,919	10,379	0.7	0.4	44,545	28,731	15,981	0.6	0.4
Lango	22,038	21,147	7,619	0.4	0.3	9,852	5,614	3,738	0.7	0.4	31,890	26,761	11,357	0.4	0.4
Acholi	41,312	33,491	19,416	0.6	0.5	21,212	14,727	11,403	0.8	0.5	62,524	48,218	30,819	0.6	0.5
Kigezi	2,955	2,550	1,181	0.5	0.4	2,415	1,369	1,026	0.7	0.4	5,370	3,919	2,208	0.6	0.4
Bunyoro	9,377	8,518	5,665	0.7	0.6	22,918	15,308	11,807	0.8	0.5	32,295	23,826	17,472	0.7	0.5
Tooro	13,285	12,351	5,914	0.5	0.4	13,598	5,548	4,543	0.8	0.3	26,883	17,899	10,457	0.6	0.4
Busoga	43,792	41,665	13,843	0.3	0.3	44,094	32,905	13,368	0.4	0.3	87,886	74,570	27,211	0.4	0.3
Teso	65,049	56,997	21,017	0.4	0.3	7,360	1,865	805	0.4	0.1	72,408	58,862	21,821	0.4	0.3
Bukedi	19,476	18,384	8,770	0.5	0.5	4,614	2,347	1,324	0.6	0.3	24,090	20,731	10,094	0.5	0.4
Elgon	2,173	2,120	1,049	0.5	0.5	2,442	1,342	1,011	0.8	0.4	4,616	3,462	2,060	0.6	0.4
Karamoja	10,975	9,126	5,246	0.6	0.5	312	312	33	0.1	0.1	11,286	9,437	5,278	0.6	0.5
Ankole	13,520	13,224	6,470	0.5	0.5	7,751	4,021	2,237	0.6	0.3	21,270	17,246	8,706	0.5	0.4
Uganda	**279,19**	**246,603**	**108,154**	**0.4**	**0.4**	**178,925**	**108,633**	**67,680**	**0.6**	**0.4**	**458,118**	**355,236**	**175,834**	**0.5**	**0.4**

Notes: **The total area harvested is computed on the percentage of the area planted with CROP that was harvested. (CV–Caution) Coefficient of variation is higher than 40 percent. -No sample unit under this category than 40 percent -No sample unit under this category*

Table 6-19a: Coefficients of variation (CVs) for groundnuts area, production and yields by sub-region

Sub-region	First season 2020			Second season 2020			Total 2020		
	Area planted (ha)	Area harvested * (ha)	Production (MT)	Area planted (ha)	Area harvested * (ha)	Production (MT)	Area planted (ha)	Area harvested * (ha)	Production (MT)
South Buganda	*23.9*	*24.1*	*36.5*	*30.9*	*38.4*	*32.3*	*24.6*	*21.2*	*31.7*
North Buganda	*23.3*	*23.9*	*26.0*	*18.2*	*23.7*	*19.4*	*16.7*	*18.6*	*19.4*
West Nile	*20.4*	*19.0*	*20.1*	*20.5*	*18.5*	*22.6*	*12.4*	*10.7*	*15.7*
Lango	*19.8*	*19.9*	*18.5*	*28.6*	*34.1*	*37.2*	*16.9*	*17.8*	*17.2*
Acholi	*19.6*	*20.7*	*24.8*	*25.1*	*27.0*	*33.1*	*14.1*	*15.4*	*19.3*
Kigezi	*38.5*	*40.6*	*47.6*	*33.1*	*38.7*	*36.3*	*34.3*	*37.5*	*41.1*
Bunyoro	*27.9*	*25.0*	*25.3*	*18.0*	*19.0*	*18.4*	*17.3*	*18.1*	*16.5*
Tooro	*20.3*	*21.0*	*21.6*	*16.8*	*19.5*	*18.3*	*14.8*	*16.9*	*16.8*
Busoga	*66.6*	*70.1*	*59.1*	*69.6*	*78.9*	*68.0*	*67.9*	*73.8*	*63.2*
Teso	*13.6*	*14.0*	*15.8*	*33.8*	*54.3*	*33.7*	*13.6*	*13.8*	*15.4*
Bukedi	*15.4*	*15.6*	*15.6*	*39.9*	*35.3*	*30.6*	*14.9*	*14.4*	*15.0*
Elgon	*39.9*	*40.8*	*36.0*	*44.5*	*49.0*	*51.0*	*31.9*	*32.9*	*33.7*
Karamoja	*37.8*	*41.7*	*45.0*	*100.0*	*100.0*	*100.0*	*38.7*	*42.8*	*45.3*
Ankole	*15.1*	*15.2*	*17.0*	*12.7*	*16.3*	*13.5*	*12.2*	*13.4*	*14.2*
Uganda	***11.8***	***13.0***	***10***	***18.1***	***24.6***	***15.6***	***13.6***	***16.0***	***11.1***

Table 6-20: Groundnuts area and production by ZARDI

ZARDI	First season 2020					Second season 2020					Total 2020				
	Area planted (ha)	Area harvested * (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested * (ha)	Production (MT)	Yield** (MT/ha)	Yield*** (MT/ha)	Area planted (ha)	Area harvested * (ha)	Production (MT)	Yield** (MT/ha)	Yield** (MT/ha
Abi	20,347	13,812	5,602	0.4	0.3	24,199	14,919	10,379	0.7	0.4	44,545	28,731	15,981	0.6	0.4
Buginyanya	65,442	62,169	23,663	0.4	0.4	51,151	36,593	15,702	0.4	0.3	116,593	98,762	39,365	0.4	0.3
Bulindi	9,377	8,518	5,665	0.7	0.6	22,918	15,308	11,807	0.8	0.5	32,295	23,826	17,472	0.7	0.5
Kachwekano	2,955	2,550	1,181	0.5	0.4	2,415	1,369	1,026	0.7	0.4	5,370	3,919	2,208	0.6	0.4
Mukono	14,484	12,808	6,139	0.5	0.4	17,918	8,118	5,858	0.7	0.3	32,402	20,926	11,997	0.6	0.4
Ngetta	63,350	54,638	27,035	0.5	0.4	31,064	20,341	15,141	0.7	0.5	94,414	74,979	42,175	0.6	0.4
Nabuin	10,975	9,126	5,246	0.6	0.5	312	312	33	0.1	0.1	11,286	9,437	5,278	0.6	0.5
Serere	65,049	56,997	21,017	0.4	0.3	7,360	1,865	805	0.4	0.1	72,408	58,862	21,821	0.4	0.3
Mbarara	13,930	13,635	6,694	0.5	0.5	7,990	4,261	2,386	0.6	0.3	21,921	17,896	9,080	0.5	0.4
Rwebitaba	13,285	12,351	5,914	0.5	0.4	13,598	5,548	4,543	0.8	0.3	26,883	17,899	10,457	0.6	0.4
Uganda	**279,193**	**246,603**	**108,154**	**0.4**	**0.4**	**178,925**	**108,633**	**67,680**	**0.6**	**0.4**	**458,118**	**355,236**	**175,834**	**0.5**	**0.4**

Notes: ** a (CV– Caution) Coefficient of variation is higher than 40 percent -No sample unit under this category*

Table 6-20a: Coefficients of variation (CVs) for groundnuts area, production and yields by ZARDI

ZARDI	First season 2020			Second season 2020			Total 2020		
	Area planted (ha)	Area harvested * (ha)	Production (MT)	Area planted (ha)	Area harvested * hHa)	Production (MT)	Area planted (ha)	Area harvested * (ha)	Production (MT)
Abi	*20.4*	*19.0*	*20.1*	*20.5*	*18.5*	*22.6*	*12.4*	*10.7*	*15.7*
Buginyanya	*44.8*	*47.2*	*35.1*	*60.2*	*71.0*	*58.0*	*51.3*	*55.8*	*43.9*
Bulindi	*27.9*	*25.0*	*25.3*	*18.0*	*19.0*	*18.4*	*17.3*	*18.1*	*16.5*
Kachwekano	*38.5*	*40.6*	*47.6*	*33.1*	*38.7*	*36.3*	*34.3*	*37.5*	*41.1*
Mukono	*18.2*	*18.7*	*22.1*	*16.2*	*20.8*	*17.5*	*14.2*	*15.1*	*17.6*
Ngetta	*14.5*	*14.9*	*18.6*	*19.4*	*21.7*	*26.6*	*10.9*	*11.8*	*14.8*
Nabuin	*37.8*	*41.7*	*45.0*	*100.0*	*100.0*	*100.0*	*38.7*	*42.8*	*45.3*
Serere	*13.6*	*14.0*	*15.8*	*33.8*	*54.3*	*33.7*	*13.6*	*13.8*	*15.4*
Mbarara	*14.7*	*14.9*	*16.6*	*12.5*	*15.8*	*13.2*	*11.9*	*13.0*	*13.8*
Rwebitaba	*20.3*	*21.0*	*21.6*	*16.8*	*19.5*	*18.3*	*14.8*	*16.9*	*16.8*
Uganda	***11.8***	***13.0***	***10***	***18.1***	***24.6***	***15.6***	***13.6***	***16.0***	***11.1***

Table 6-21: Banana-food area, production and yields by sub-region

Sub-region	First season 2020			Second season 2020			Total 2020		
	Area planted (ha)	Production (MT)	Yield*** (MT/ha)	Area planted (ha)	Production (MT)	Yield*** (MT/ha)	Area planted (ha)	Production (MT)	Yield*** (MT/ha)
South Buganda	160,564	1,330,485	8.3	134,794	862,405	6.4	134,794	2,192,890	16.3
North Buganda	141,562	787,278	5.6	153,406	847,914	5.5	153,406	1,635,192	10.7
West Nile	7,034	36,024	5.1	9,569	38,853	4.1	9,569	74,877	7.8
Lango	1,436	5,544	3.9	1,798	7,660	4.3	1,798	13,204	7.3
Acholi	1,477	5,721	3.9	1,795	5,316	3.0	1,795	11,037	6.1
Kigezi	23,842	185,957	7.8	19,163	168,692	8.8	19,163	354,649	18.5
Bunyoro	46,476	422,980	9.1	50,833	400,766	7.9	50,833	823,746	16.2
Tooro	93,354	867,531	9.3	92,038	730,019	7.9	92,038	1,597,549	17.4
Busoga	36,146	182,367	5.0	32,178	165,310	5.1	32,178	347,676	10.8
Teso	6,811	16,507	2.4	14,132	14,507	1.0	14,132	31,013	2.2
Bukedi	14,748	48,627	3.3	10,615	38,915	3.7	10,615	87,542	8.2
Elgon	48,373	363,306	7.5	45,221	297,771	6.6	45,221	661,077	14.6
Karamoja	-	-		367	183	0.5	367	183	0.5
Ankole	165,341	1,834,936	11.1	155,924	1,455,503	9.3	155,924	3,290,439	21.1
Uganda	**747,164**	**6,087,262**	**8.1**	**721,834**	**5,033,814**	**7.0**	**721,834**	**11,121,075**	**15.4**

Notes: * *(CV– Caution) Coefficient of variation is higher than 40 percent -No sample unit under this category*

Table 6-21a: Coefficients of variation (CVs) for banana-food area and production by sub-region

Sub-region	First season 2020		Second season 2020		Total 2020	
	Area planted (ha)	Production (MT)	Area planted (ha)	Production (MT)	Area planted (ha)	Production (MT)
South Buganda	9.4	8.9	7.6	8.2	8.2	8.0
North Buganda	8.3	9.6	8.3	9.0	7.9	8.4
West Nile	31.2	38.2	35.3	37.4	32.2	36.5
Lango	27.7	40.5	50.3	36.2	33.2	30.5
Acholi	31.4	28.7	30.5	31.2	30.2	28.1
Kigezi	16.1	18.3	15.0	16.9	15.4	17.5
Bunyoro	14.3	18.3	16.8	17.3	14.3	16.2
Tooro	10.6	11.2	12.7	14.0	11.4	12.0
Busoga	9.5	11.9	9.7	12.7	9.5	11.6
Teso	20.7	26.7	24.3	25.8	21.8	25.9
Bukedi	14.5	21.7	12.4	17.6	13.3	19.3
Elgon	14.1	19.4	13.9	16.6	13.7	17.7
Karamoja			100.0	100.0	100.0	100.0
Ankole	6.7	6.5	7.4	7.7	6.7	6.6
Uganda	**3.6**	**3.9**	**3.6**	**4.1**	**3**	**3.7**

Table 6-22: Banana-food area, production and yields by ZARDI

ZARDI	First season 2020			Second season 2020			Total 2020		
	Area planted (ha)	Production (MT)	Yield*** (MT/ha)	Area planted (ha)	Production (MT)	Yield*** (MT/ha)	Area planted (ha)	Production (MT)	Yield*** (MT/ha)
Abi	7,034	36,024	5.1	9,569	38,853	4.1	9,569	74,877	7.8
Buginyanya	99,267	594,299	6.0	88,015	501,996	5.7	88,015	1,096,296	12.5
Bulindi	46,476	422,980	9.1	50,833	400,766	7.9	50,833	823,746	16.2
Kachwekano	23,842	185,957	7.8	19,163	168,692	8.8	19,163	354,649	18.5
Mukono	237,644	1,607,209	6.8	241,502	1,388,903	5.8	241,502	2,996,113	12.4
Ngetta	2,913	11,265	3.9	3,594	12,976	3.6	3,594	24,241	6.7
Nabuin	-	-		367	183	0.5	367	183	0.5
Serere	6,811	16,507	2.4	14,132	14,507	1.0	14,132	31,013	2.2
Mbarara	229,823	2,345,489	10.2	202,622	1,776,920	8.8	202,622	4,122,409	20.3
Rwebitaba	93,354	867,531	9.3	92,038	730,019	7.9	92,038	1,597,549	17.4
Uganda	**747,164**	**6,087,262**	**8.1**	**721,834**	**5,033,814**	**7.0**	**721,834**	**11,121,075**	**15.4**

Notes: **(CV– Caution) Coefficient of variation is higher than 40 percent -No sample unit under this category.*

Table 6-22a: Coefficients of variation (CVs) for banana-food area and production by ZARDI

ZARDI	First season 2020		Second season 2020		Total 2020	
	Area planted (ha)	Production (MT)	Area planted (ha)	Production (MT)	Area planted (ha)	Production (MT)
Abi	*31.2*	*38.2*	*35.3*	*37.4*	*32.2*	*36.5*
Buginyanya	*8.0*	*12.6*	*8.1*	*10.8*	*7.9*	*11.4*
Bulindi	*14.3*	*18.3*	*16.8*	*17.3*	*14.3*	*16.2*
Kachwekano	*16.1*	*18.3*	*15.0*	*16.9*	*15.4*	*17.5*
Mukono	*7.5*	*8.6*	*7.2*	*7.7*	*7.0*	*7.6*
Ngetta	*21.0*	*24.7*	*29.4*	*24.9*	*22.4*	*21.0*
Nabuin	*20.7*	*26.7*	*100.0*	*100.0*	*100.0*	*100.0*
Serere	-	-	*24.3*	*25.8*	*21.8*	*25.9*
Mbarara	*9.0*	*7.6*	*8.1*	*7.8*	*8.3*	*7.3*
Rwebitaba	*10.6*	*11.2*	*12.7*	*14.0*	*11.4*	*12.0*
Uganda	***3.6***	***3.9***	***3.6***	***4.1***	***3.4***	***3.7***

Table 6-23: Sweet banana area, production and yields by sub-region

Sub-region	First season 2020			Second season 2020			Total 2020		
	Area plant-ed (ha)	Produ-ction (MT)	Yield*** (MT/ha)	Area plant-ed (ha)	Produ-ction (MT)	Yield*** (MT/ha)	Area plant-ed (ha)	Produ-ction (MT)	Yield*** (MT/ha)
South Buganda	2,296	19,606	8.5	2,439	14,153	5.8	2,439	33,759	13.8
North Buganda	18,074	54,505	3.0	15,899	48,435	3.0	15,899	102,940	6.5
West Nile	1,359	3,622	2.7	1,015	3,009	3.0	1,015	6,632	6.5
Lango	2,905	5,733	2.0	1,585	5,891	3.7	1,585	11,623	7.3
Acholi	1,857	5,057	2.7	2,418	5,780	2.4	2,418	10,837	4.5
Kigezi	932	3,272	3.5	1,073	3,650	3.4	1,073	6,922	6.5
Bunyoro	1,679	8,068	4.8	3,351	6,420	1.9	3,351	14,488	4.3
Tooro	1,528	4,155	2.7	4,608	5,766	1.3	4,608	9,921	2.2
Busoga	1,034	3,031	2.9	900	2,097	2.3	900	5,129	5.7
Teso	857	2,096	2.4	1,701	2,767	1.6	1,701	4,863	2.9
Bukedi	1,991	4,749	2.4	771	2,339	3.0	771	7,087	9.2
Elgon	6,217	22,374	3.6	7,776	18,484	2.4	7,776	40,858	5.3
Karamoja	207		-				-	-	
Ankole	1,705	9,649	5.7	1,372	7,984	5.8	1,372	17,633	12.9
Uganda	**42,641**	**145,915**	**3.4**	**44,909**	**126,775**	**2.8**	**44,909**	**272,690**	**6.1**

Notes*: * (CV– Caution) Coefficient of variation is higher than 40 percent -No sample unit under this category*

Table 6-23a: Coefficients of variation (CVs) of sweet banana area, production by sub-region

Sub-region	*First season 2020*		*Second season 2020*		*Total 2020*	
	Area planted (ha)	*Production (MT)*	*Area planted (ha)*	*Production (MT)*	*Area planted (ha)*	*Production (MT)*
South Buganda	*39.8*	*49.6*	*36.0*	*38.7*	*37.2*	*41.3*
North Buganda	*23.8*	*23.2*	*21.7*	*30.5*	*22.3*	*26.1*
West Nile	*27.9*	*38.1*	*31.2*	*31.1*	*27.7*	*31.6*
Lango	*30.6*	*33.9*	*33.9*	*31.9*	*29.1*	*31.3*
Acholi	*26.0*	*45.9*	*22.9*	*24.9*	*21.5*	*29.8*
Kigezi	*39.1*	*40.9*	*35.8*	*38.6*	*36.4*	*38.9*
Bunyoro	*47.1*	*52.7*	*61.7*	*61.5*	*55.1*	*55.9*
Tooro	*39.7*	*27.7*	*35.5*	*33.5*	*32.3*	*29.5*
Busoga	*37.6*	*34.0*	*32.5*	*33.6*	*33.5*	*31.0*
Teso	*29.1*	*41.6*	*21.5*	*32.1*	*20.7*	*31.7*
Bukedi	*22.7*	*27.4*	*22.0*	*25.0*	*21.2*	*24.6*
Elgon	*19.4*	*19.3*	*18.5*	*20.0*	*18.5*	*19.2*
Karamoja	*100.0*				*100.0*	
Ankole	*21.7*	*23.2*	*19.2*	*22.4*	*19.8*	*21.5*
Uganda	***11.4***	***11.7***	***10.6***	***13.5***	***10.4***	***12.2***

Table 6-24: Sweet banana area, production and yields by ZARDI

ZARDI	First season 2020			Second season 2020			Total 2020		
	Area planted (ha)	Production (MT)	Yield*** (MT/ha)	Area planted (ha)	Production (MT)	Yield*** (MT/ha)	Area planted (ha)	Production (MT)	Yield*** (MT/ha)
Abi	1,359	3,622	2.7	1,015	3,009	3.0	1,015	6,632	6.5
Buginyanya	9,242	30,154	3.3	9,448	22,920	2.4	9,448	53,074	5.6
Bulindi	1,679	8,068	4.8	3,351	6,420	1.9	3,351	14,488	4.3
Kachwekano	932	3,272	3.5	1,073	3,650	3.4	1,073	6,922	6.5
Mukono	19,640	69,645	3.5	17,833	57,030	3.2	17,833	126,675	7.1
Ngetta	4,762	10,790	2.3	4,003	11,670	2.9	4,003	22,460	5.6
Nabuin	207	-	-				-	-	
Serere	857	2,096	2.4	1,701	2,767	1.6	1,701	4,863	2.9
Mbarara	2,434	14,114	5.8	1,876	13,542	7.2	1,876	27,656	14.7
Rwebitaba	1,528	4,155	2.7	4,608	5,766	1.3	4,608	9,921	2.2
Uganda	**42,641**	**145,915**	**3.4**	**44,909**	**126,775**	**2.8**	**44,909**	**272,690**	**6.1**

Notes: **(CV– Caution) Coefficient of variation is higher than 40 percent -No sample unit under this category*

Table 6-24a: Coefficients of variation (CVs) of sweet banana area and production by ZARDI

ZARDI	First season 2020		Second season 2020		Total 2020	
	Area planted (ha)	Production (MT)	Area planted (ha)	Production (MT)	Area planted (ha)	Production (MT)
Abi	*27.9*	*38.1*	*31.2*	*31.1*	*27.7*	*31.6*
Buginyanya	*14.6*	*15.3*	*15.7*	*16.6*	*14.7*	*15.4*
Bulindi	*47.1*	*52.7*	*61.7*	*61.5*	*55.1*	*55.9*
Kachwekano	*39.1*	*40.9*	*35.8*	*38.6*	*36.4*	*38.9*
Mukono	*22.3*	*22.6*	*19.9*	*26.8*	*20.6*	*23.5*
Ngetta	*21.3*	*28.0*	*19.3*	*20.3*	*18.2*	*21.7*
Nabuin	*100.0*				*100.0*	
Serere	*29.1*	*41.6*	*21.5*	*32.1*	*20.7*	*31.7*
Mbarara	*24.9*	*25.9*	*22.6*	*33.2*	*23.6*	*27.7*
Rwebitaba	*39.7*	*27.7*	*35.5*	*33.5*	*32.3*	*29.5*
Uganda	***11.4***	***11.7***	***10.6***	***13.5***	***10.4***	***12.2***

Table 6-25: Banana-beer area, production and yields by sub-region

Sub-region	First season 2020			Second season 2020			Total 2020		
	Area planted (ha)	Production (MT)	Yield*** (MT/ha)	Area planted (ha)	Production (MT)	Yield*** (MT/ha)	Area planted (ha)	Production (MT)	Yield*** (MT/ha)
South Buganda	*1,520*	*12,968*	*8.5*	*1,140*	*3,604*	*3.2*	*1,140*	*16,572*	*14.5*
North Buganda	*3,317*	*18,429*	*5.6*	*10,303*	*23,597*	*2.3*	*10,303*	*42,025*	*4.1*
West Nile	*42*	*605*	*14.4*	*91*	*437*	*4.8*	*91*	*1,042*	*11.5*
Lango							-	-	
Acholi	*1,063*	*5,868*	*5.5*	*896*	*5,366*	*6.0*	*896*	*11,234*	*12.5*
Kigezi	*2,597*	*22,031*	*8.5*	*1,276*	*26,871*	*21.1*	*1,276*	*48,902*	*38.3*
Bunyoro	*790*	*5,986*	*7.6*	*456*	*2,767*	*6.1*	*456*	*8,753*	*19.2*
Tooro	*865*	*7,389*	*8.5*	*610*	*11,188*	*18.4*	*610*	*18,577*	*30.5*
Busoga	*1,277*	*5,790*	*4.5*	*1,015*	*2,942*	*2.9*	*1,015*	*8,732*	*8.6*
Teso							-	-	
Bukedi	*665*	*1,275*	*1.9*	*436*	*1,065*	*2.4*	*436*	*2,340*	*5.4*
Elgon	*19*	*93*	*4.9*	*32*	*90*	*2.8*	*32*	*184*	*5.7*
Karamoja							-	-	
Ankole	*2,156*	*23,650*	*11.0*	*1,052*	*21,852*	*20.8*	*1,052*	*45,503*	*43.3*
Uganda	***14,312***	***104,084***	***7.3***	***17,305***	***99,780***	***5.8***	***17,305***	***203,864***	***11.8***

Notes: **(CV– Caution) Coefficient of variation is higher than 40 percent -No sample unit under this category*

Table 6-25a: Coefficients of variation (CVs) of banana-beer area and production by sub-region

Sub-region	First season 2020		Second season 2020		Total 2020	
	Area planted (Ha)	Production (MT)	Area planted (Ha)	Production (MT)	Area planted (Ha)	Production (MT)
South Buganda	94.5	78.9	94.6	73.6	94.5	73.8
North Buganda	43.9	51.8	64.6	63.0	52.6	45.3
West Nile	87.3	83.8	72.4	70.6	70.0	76.5
Lango						
Acholi	45.8	46.9	30.9	43.4	37.2	44.1
Kigezi	33.7	33.2	35.9	42.3	31.9	37.6
Bunyoro	64.8	60.1	57.3	66.3	52.0	51.2
Tooro	43.4	47.7	44.5	44.5	42.7	41.5
Busoga	40.0	39.5	46.2	38.9	41.3	37.2
Teso						
Bukedi	34.1	33.3	33.0	36.1	33.3	33.0
Elgon	81.4	88.4	88.7	100.0	85.8	70.2
Karamoja						
Ankole	25.4	24.9	27.2	22.5	25.3	22.9
Uganda	**17.4**	**17**	**39.3**	**20.5**	**24.9**	**16.1**

Table 6-26: Banana-beer area, production and yields by ZARDI

ZARDI	First season 2020			Second season 2020			Total 2020		
	Area planted (ha)	Production (MT)	Yield*** (MT/ha)	Area planted (ha)	Production (MT)	Yield*** (MT/ha)	Area planted (ha)	Production (MT)	Yield*** (MT/ha)
Abi	42	605	14.4	91	437	4.8	91	1,042	11.5
Buginyanya	1,962	7,158	3.6	1,483	4,098	2.8	1,483	11,257	7.6
Bulindi	790	5,986	7.6	456	2,767	6.1	456	8,753	19.2
Kachwekano	2,597	22,031	8.5	1,276	26,871	21.1	1,276	48,902	38.3
Mukono	4,837	31,397	6.5	11,442	27,200	2.4	11,442	58,597	5.1
Ngetta	1,063	5,868	5.5	896	5,366	6.0	896	11,234	12.5
Nabuin							-	-	
Serere							-	-	
Mbarara	2,156	23,650	11.0	1,052	21,852	20.8	1,052	45,503	43.3
Rwebitaba	865	7,389	8.5	610	11,188	18.4	610	18,577	30.5
Uganda	**14,312**	**104,084**	**7.3**	**17,305**	**99,780**	**5.8**	**17,305**	**203,864**	**11.8**

Notes: *(CV– Caution) Coefficient of variation is higher than 40 percent -No sample unit under this category*

Table 6-26a: Coefficients of variation (CVs) of banana-beer area and production by ZARDI

ZARDI	First season 2020		Second season 2020		Total 2020	
	Area planted (ha)	Production (MT)	Area planted (ha)	Production (MT)	Area planted (ha)	Production (MT)
Abi	*87.3*	*83.8*	*72.4*	*70.6*	*69.96*	*76.48*
Buginyanya	*28.5*	*32.5*	*33.1*	*29.5*	*29.48*	*29.69*
Bulindi	*64.8*	*60.1*	*57.3*	*66.3*	*52.01*	*51.21*
Kachwekano	*33.7*	*33.2*	*35.9*	*42.3*	*31.85*	*37.62*
Mukono	*42.3*	*44.6*	*58.9*	*55.5*	*46.64*	*38.65*
Ngetta	*45.8*	*46.9*	*30.9*	*43.4*	*37.17*	*44.09*
Nabuin						
Serere						
Mbarara	*25.4*	*24.9*	*27.2*	*22.5*	*25.35*	*22.86*
Rwebitaba	*43.4*	*47.7*	*44.5*	*44.5*	*42.73*	*41.49*
Uganda	***17.4***	***17***	***39.3***	***20.5***	***24.9***	***16.1***

Table 6-27: Cassava area and production by sub-region

Sub-region	First season 2020			Second season 2020			Total 2020		
	Area planted (ha)	Production (MT)	Yield*** (MT/ha)	Area planted (ha)	Production (MT)	Yield*** (MT/ha)	Area planted (ha)	Production (MT)	Yield*** (MT/ha)
South Buganda	15,611	43,483	2.8	15,804	26,340	1.7	15,804	69,824	4.4
North Buganda	57,481	90,732	1.6	54,173	113,349	2.1	54,173	204,081	3.8
West Nile	135,366	84,472	0.6	132,995	183,596	1.4	132,995	268,068	2
Lango	128,832	63,745	0.5	100,845	182,824	1.8	100,845	246,569	2.4
Acholi	54,928	56,740	1	64,800	77,332	1.2	64,800	134,072	2.1
Kigezi	2,582	4,632	1.8	1,971	4,496	2.3	1,971	9,128	4.6
Bunyoro	35,217	18,824	0.5	40,107	45,056	1.1	40,107	63,880	1.6
Tooro	26,777	20,230	0.8	27,808	16,992	0.6	27,808	37,221	1.3
Busoga	76,631	71,954	0.9	78,064	124,194	1.6	78,064	196,148	2.5
Teso	79,316	49,300	0.6	129,044	153,391	1.2	129,044	202,692	1.6
Bukedi	84,084	74,424	0.9	73,396	111,811	1.5	73,396	186,236	2.5
Elgon	13,656	6,397	0.5	16,980	20,330	1.2	16,980	26,727	1.6
Karamoja	2,420	-	0	316	1,491	4.7	316	1,491	4.7
Ankole	4,470	15,724	3.5	3,713	10,601	2.9	3,713	26,325	7.1
Uganda	**717,371**	**600,659**	**0.8**	**740,014**	**1,071,803**	**1.4**	**740,014**	**1,672,462**	**2.3**

Notes: *(CV– Caution). Coefficient of variation is higher than 40 percent -No sample unit under this category*

Table 6-27a: Coefficients of variation (CVs) for cassava area, production by sub-region

Sub-region	First season 2020			Second season 2020			Total 2020		
	Area planted (ha)	Area harvested * (ha)	Production (MT)	Area planted (ha)	Area harvested * (ha)	Production (MT)	Area planted (ha)	Area harvested * (ha)	Production (MT)
South Buganda	*18.5*	*18.4*	*30.3*	*20.9*	*28.0*	*19.2*	*17.6*	*19.7*	*20.8*
North Buganda	*17.9*	*18.0*	*25.0*	*14.7*	*18.5*	*14.7*	*15.8*	*17.4*	*16.4*
West Nile	*11.0*	*11.0*	*22.2*	*8.1*	*9.8*	*15.6*	*9.1*	*10.0*	*15.8*
Lango	*7.9*	*7.9*	*23.3*	*6.1*	*10.8*	*10.4*	*6.5*	*7.2*	*10.9*
Acholi	*18.9*	*18.9*	*40.8*	*15.2*	*17.9*	*31.0*	*16.6*	*18.1*	*32.6*
Kigezi	*29.6*	*30.3*	*34.7*	*27.6*	*31.0*	*33.4*	*28.2*	*29.3*	*31.9*
Bunyoro	*20.3*	*20.4*	*24.0*	*16.2*	*21.2*	*18.8*	*15.7*	*17.6*	*16.1*
Tooro	*23.2*	*23.3*	*25.2*	*19.1*	*23.0*	*23.9*	*20.8*	*22.8*	*19.7*
Busoga	*16.2*	*16.2*	*26.7*	*15.9*	*17.8*	*17.6*	*15.5*	*16.1*	*17.2*
Teso	*10.6*	*10.6*	*22.9*	*10.0*	*14.1*	*29.1*	*9.9*	*12.0*	*24.9*
Bukedi	*10.8*	*10.8*	*16.5*	*10.3*	*12.5*	*8.9*	*10.1*	*10.8*	*10.4*
Elgon	*15.6*	*18.9*	*32.1*	*15.9*	*20.4*	*16.9*	*15.0*	*18.9*	*17.5*
Karamoja	*64.7*	*64.7*		*72.9*	*100.0*	*100.0*	*61.2*	*63.0*	*100.0*
Ankole	*15.8*	*17.2*	*28.3*	*13.7*	*22.7*	*18.5*	*12.6*	*15.8*	*19.8*
Uganda	***4.3***	***4.3***	***8.3***	***3.8***	***4.9***	***6.4***	***3.8***	***4.3***	***6.0***

Table 6-28: Cassava area and production by ZARDI

ZARDI	First season 2020			Second season 2020			Total 2020		
	Area planted (ha)	Production (MT)	Yield*** (MT/ha)	Area planted (ha)	Production (MT)	Yield*** (MT/ha)	Area planted (ha)	Production (MT)	Yield*** (MT/ha)
Abi	135,366	84,472	0.6	132,995	183,596	1.4	132,995	268,068	2.0
Buginyanya	174,371	152,776	0.9	168,440	256,335	1.5	168,440	409,111	2.4
Bulindi	35,217	18,824	0.5	40,107	45,056	1.1	40,107	63,880	1.6
Kachwekano	2,582	4,632	1.8	1,971	4,496	2.3	1,971	9,128	4.6
Mukono	68,825	114,981	1.7	68,611	132,123	1.9	68,611	247,103	3.6
Ngetta	183,759	120,485	0.7	165,645	260,156	1.6	165,645	380,641	2.3
Nabuin	2,420	-	0.0	316	1,491	4.7	316	1,491	4.7
Serere	79,316	49,300	0.6	129,044	153,391	1.2	129,044	202,692	1.6
Mbarara	8,737	34,958	4.0	5,079	18,167	3.6	5,079	53,126	10.5
Rwebitaba	26,777	20,230	0.8	27,808	16,992	0.6	27,808	37,221	1.3
Uganda	**717,371**	**600,659**	**0.8**	**740,014**	**1,071,803**	**1.4**	**740,014**	**1,672,462**	**2.3**

Notes*: (CV– Caution) Coefficient of variation is higher than 40 percent -No sample unit under this category*

Table 6-28a: Coefficients of variation for cassava area and production by ZARDI

ZARDI	First season 2020			Second season 2020			Total 2020		
	Area planted (ha)	Area harvested * (ha)	Production (MT)	Area planted (ha)	Area harvested * (ha)	Production (MT)	Area planted (ha)	Area harvested * (ha)	Production (MT)
Abi	*11.0*	*11.0*	*22.2*	*8.1*	*9.8*	*15.6*	*9.1*	*10.0*	*15.8*
Buginyanya	*8.9*	*9.0*	*15.0*	*8.8*	*10.5*	*9.5*	*8.5*	*9.2*	*9.6*
Bulindi	*20.3*	*20.4*	*24.0*	*16.2*	*21.2*	*18.8*	*15.7*	*17.6*	*16.1*
Kachwekano	*29.6*	*30.3*	*34.7*	*27.6*	*31.0*	*33.4*	*28.2*	*29.3*	*31.9*
Mukono	*15.4*	*15.5*	*21.4*	*12.7*	*15.9*	*13.1*	*13.5*	*14.9*	*14.3*
Ngetta	*7.9*	*7.9*	*22.9*	*7.0*	*10.5*	*11.7*	*7.1*	*8.1*	*13.5*
Nabuin	*64.7*	*64.7*		*72.9*	*100.0*	*100.0*	*61.2*	*63.0*	*100.0*
Serere	*10.6*	*10.6*	*22.9*	*10.0*	*14.1*	*29.1*	*9.9*	*12.0*	*24.9*
Mbarara	*24.2*	*25.8*	*31.7*	*12.6*	*18.9*	*20.6*	*17.2*	*20.6*	*23.7*
Rwebitaba	*23.2*	*23.3*	*25.2*	*19.1*	*23.0*	*23.9*	*20.8*	*22.8*	*19.7*
Uganda	***4.3***	***4.3***	***8.3***	***3.8***	***4.9***	***6.4***	***3.8***	***4.3***	***6.0***

Table 6-29: Coffee robusta area and production by sub-region

Sub-region	First season 2020			Second season 2020			Total 2020		
	Area planted (ha)	Production (MT)	Yield*** (MT/ha)	Area planted (ha)	Production (MT)	Yield*** (MT/ha)	Area planted (ha)	Production (MT)	Yield*** (MT/ha)
South Buganda	139,311	60,077	0.4	134,640	35,267	0.3	134,640	95,344	0.7
North Buganda	114,550	27,624	0.2	117,049	36,386	0.3	117,049	64,009	0.5
West Nile	201	5	0.0	201	-	-	201	5	0.0
Lango	209	-	-	209	68	0.3	209	68	0.3
Acholi	6	3	0.5	6	6	1.1	6	9	1.6
Kigezi	10,266	4,596	0.4	10,128	3,052	0.3	10,128	7,649	0.8
Bunyoro	20,634	2,210	0.1	19,011	7,239	0.4	19,011	9,448	0.5
Tooro	10,898	2,802	0.3	11,105	2,643	0.2	11,105	5,445	0.5
Busoga	32,142	7,627	0.2	28,629	7,744	0.3	28,629	15,371	0.5
Teso									
Bukedi	267	20	0.1	267	40	0.2	267	60	0.2
Elgon	139	-	-				-	-	
Karamoja									
Ankole	48,101	23,724	0.5	47,370	11,526	0.2	47,370	35,250	0.7
Uganda	**376,722**	**128,688**	**0.3**	**368,615**	**103,971**	**0.3**	**368,615**	**232,659**	**0.6**

Notes: *(CV– Caution). Coefficient of variation is higher than 40 percent. -No sample unit under this category.*

Table 6-29a: Coefficients of Variation (CVs) for coffee robusta area and production by sub-region

Sub-region	First season 2020		Second season 2020		Total 2020	
	Area planted (ha)	Production (MT)	Area planted (ha)	Production (MT)	Area planted (ha)	Production (MT)
South Buganda	15.3	17.1	65.7	72.5	57.9	51.4
North Buganda	11.5	15.0	-	-	-	-
West Nile	82.2	100.0	51.8	71.7	49.4	50.0
Lango	100.0	-	88.3	-	70.0	-
Acholi	100.0	100.0	100.0	-	100.0	-
Kigezi	26.0	29.0	49.3	57.8	44.8	53.6
Bunyoro	19.9	42.4	33.6	100.0	33.1	36.8
Tooro	21.4	24.3	30.1	27.7	30.5	24.3
Busoga	15.0	24.7	49.6	70.0	48.3	49.2
Teso						
Bukedi	60.0	63.7	73.8	70.2	73.8	65.3
Elgon	100.0	-	22.4	48.3	20.2	26.6
Karamoja						
Ankole	13.7	15.3	51.2	43.3	47.4	73.3
Uganda	**7.1**	**9.3**	**7.2**	**8.0**	**7.2**	**8.1**

Table 6-30: Coffee robusta area and production by ZARDI

ZARDI	First season 2020			Second season 2020			Total 2020		
	Area planted (ha)	Production (MT)	Yield*** (MT/ha)	Area planted (ha)	Production (MT)	Yield*** (MT/ha)	Area planted (ha)	Production (MT)	Yield*** (MT/ha)
Abi	201	5	0.03	201	-	-	201	5	0.0
Buginyanya	32,547	7,647	0.2	28,896	7,784	0.3	28,896	15,431	0.5
Bulindi	20,634	2,210	0.1	19,011	7,239	0.4	19,011	9,448	0.5
Kachwekano	10,266	4,596	0.4	10,128	3,052	0.3	10,128	7,649	0.8
Mukono	205,880	64,862	0.3	202,875	61,030	0.3	202,875	125,893	0.6
Ngetta	214	3	0.0	214	74	0.3	214	77	0.4
Nabuin	-	-	- -	-	-	-	-	-	-
Serere	-	-	- -		--	-	-	-	-
Mbarara	96,082	46,562	0.5	96,184	22,148	0.2	96,184	68,711	0.7
Rwebitaba	10,898	2,802	0.3	11,105	2,643	0.2	11,105	5,445	0.5
Uganda	**376,722**	**128,688**	**0.3**	**368,615**	**103,971**	**0.3**	**368,615**	**232,659**	**0.6**

Notes: *(CV– Caution) Coefficient of variation is higher than 40 percent -No sample unit under this category*

Table 6-30a: Coefficients of variation (CVs) for coffee robusta area and production by ZARDI

ZARDI	First season 2020		Second season 2020		Total 2020	
	Area planted (ha)	Production (MT)	Area planted (ha)	Production (MT)	Area planted (ha)	Production (MT)
Abi	*82.2*	*100.0*	*82.2*		*82.2*	*100.0*
Buginyanya	*14.9*	*24.6*	*15.9*	*22.5*	*15.3*	*20.0*
Bulindi	*19.9*	*42.4*	*18.9*	*24.6*	*18.7*	*26.0*
Kachwekano	*26.0*	*29.0*	*25.9*	*29.5*	*25.9*	*28.3*
Mukono	*11.2*	*13.6*	*11.1*	*12.1*	*11.1*	*12.2*
Ngetta	*97.4*	*100.0*	*97.4*	*92.2*	*97.4*	*89.1*
Nabuin						
Serere						
Mbarara	*18.7*	*20.7*	*18.8*	*19.6*	*18.7*	*19.4*
Rwebitaba	*21.4*	*24.3*	*20.7*	*30.0*	*21.0*	*26.2*
Uganda	***7.1***	***9.3***	***7.2***	***8.0***	***7.2***	***8.1***

Table 6-31: Coffee arabica area and production by sub-region

Sub-region	First season 2020			Second season 2020			Total 2020		
	Area planted (ha)	Production (MT)	Yield*** (MT/ha)	Area planted (ha)	Production (MT)	Yield*** (MT/ha)	Area planted (ha)	Production (MT)	Yield*** (MT/ha)
South Buganda							-	-	
North Buganda	364	146	0.4	422	282	0.7	422	429	1.0
West Nile	2,028	158	0.1	2,129	192	0.1	2,129	351	0.2
Lango	2,906	-	-	781	-	-	781	-	-
Acholi	40	-	-	40	-	-	40	-	-
Kigezi	880	311	0.4	879	404	0.5	879	715	0.8
Bunyoro	4,985	29	0.0	4,992	2,901	0.6	4,992	2,930	0.6
Tooro	46,242	15,780	0.3	45,559	7,759	0.2	45,559	23,539	0.5
Busoga	953	903	0.9	850	532	0.6	850	1,435	1.7
Teso							-	-	
Bukedi	560	103	0.2	560	134	0.2	560	237	0.4
Elgon	31,541	3,589	0.1	26,961	6,084	0.2	26,961	9,674	0.4
Karamoja							-	-	
Ankole	4,503	1,154	0.3	4,760	2,287	0.5	4,760	3,441	0.7
Uganda	**95,003**	**22,175**	**0.2**	**87,932**	**20,576**	**0.2**	**87,932**	**42,750**	**0.5**

Notes: *(CV– Caution) Coefficient of variation is higher than 40 percent -No sample unit under this category*

Table 6-31a: Coefficients of variation (CVs) for coffee arabica area and production by sub-region

Sub-region	First season 2020		Second season 2020		Total 2020	
	Area planted (ha)	Production (MT)	Area planted (Ha)	Production (MT)	Area planted (ha)	Production (MT)
South Buganda						
North Buganda	*65.7*	*72.5*	*57.9*	*51.4*	*61.1*	*50.8*
West Nile	*51.8*	*71.7*	*49.4*	*50.0*	*50.5*	*53.7*
Lango	*88.3*		*70.0*		*82.4*	
Acholi	*100.0*		*100.0*		*100.0*	
Kigezi	*49.3*	*57.8*	*44.8*	*53.6*	*46.9*	*54.8*
Bunyoro	*33.6*	*100.0*	*33.1*	*36.8*	*33.2*	*36.5*
Tooro	*30.1*	*27.7*	*30.5*	*24.3*	*30.3*	*25.3*
Busoga	*49.6*	*70.0*	*48.3*	*49.2*	*46.4*	*53.3*
Teso						
Bukedi	*73.8*	*70.2*	*73.8*	*65.3*	*73.8*	*65.5*
Elgon	*22.4*	*48.3*	*20.2*	*26.6*	*20.7*	*32.1*
Karamoja						
Ankole	*51.2*	*43.3*	*47.4*	*73.3*	*49.0*	*60.4*
Uganda	***17.0***	***22***	***17.3***	***15.6***	***17.0***	***16.8***

Table 6-32: Coffee arabica area and production by Zonal Agricultural Research and Development Institutes

ZARDI	First season 2020			Second season 2020			Total 2020		
	Area planted (ha)	Production (MT)	Yield*** (MT/ha)	Area planted (ha)	Production (MT)	Yield*** (MT/ha)	Area planted (ha)	Production (MT)	Yield*** (MT/ha)
Abi	2,028	158	0.1	2,129	192	0.1	2,129	351	0.2
Buginyanya	33,054	4,596	0.1	28,370	6,750	0.2	28,370	11,346	0.4
Bulindi	4,985	29	0.0	4,992	2,901	0.6	4,992	2,930	0.6
Kachwekano	880	311	0.4	879	404	0.5	879	715	0.8
Mukono	364	146	0.4	422	282	0.7	422	429	1.0
Ngetta	2,947	-	-	822	-	-	822	-	-
Nabuin							-	-	
Serere							-	-	
Mbarara	4,503	1,154	0.3	4,760	2,287	0.5	4,760	3,441	0.7
Rwebitaba	46,242	15,780	0.3	45,559	7,759	0.2	45,559	23,539	0.5
Uganda	**95,003**	**22,175**	**0.2**	**87,932**	**20,576**	**0.2**	**87,932**	**42,750**	**0.5**

Table 6-32a: Coefficients of variation (CVs) for coffee arabica area and production by ZARDI

ZARDI	First season 2020		Second season 2020		Total 2020	
	Area planted (ha)	Production (MT)	Area planted (ha)	Production (MT)	Area planted (ha)	Production (MT)
Abi	*51.8*	*71.7*	*49.4*	*50.0*	*50.5*	*53.7*
Buginyanya	*21.4*	*40.2*	*19.3*	*24.3*	*19.8*	*28.2*
Bulindi	*33.6*	*100.0*	*33.1*	*36.8*	*33.2*	*36.5*
Kachwekano	*49.3*	*57.8*	*44.8*	*53.6*	*46.9*	*54.8*
Mukono	*65.7*	*72.5*	*57.9*	*51.4*	*61.1*	*50.8*
Ngetta	*87.0*	-	*66.7*	-	*80.7*	-
Nabuin	-	-	-	-	-	-
Serere	-	-	-	-	-	-
Mbarara	*51.2*	*43.3*	*47.4*	*73.3*	*49.0*	*60.4*
Rwebitaba	*30.1*	*27.7*	*30.5*	*24.3*	*30.3*	*25.3*
Uganda	***17.0***	***22.0***	***17.3***	***15.6***	***17.0***	***16.8***

Table 6-33: Percentage of households cultivating major crops at national level (years 2019 and 2020)

Crop	2019		2020	
	Season 1	Season 2	Season 1	Season 2
Banana-beer	4.1	3.9	2.3	2.5
Banana-food	46.6	47.3	56.0	59.2
Sweet banana	6.4	5.6	8.4	8.8
Beans	53.6	41.9	45.2	53.4
Cassava	53.1	44.8	43.6	54.7
Coffee arabica	7.1	7.2	6.6	7.0
Coffee robusta	21.9	20.7	24.0	24.8
Groundnuts	28.9	11.1	16.7	16.7
Irish potatoes	7.3	5.0	3.4	4.7
Maize	69.5	48.3	52.1	57.1
Millet	11.4	7.4	6.0	8.7
Rice	4.3	2.7	3.8	4.5
Simsim	5.4	6.3	2.8	7.9
Sorghum	15.3	6.7	10.1	10.1
Soya beans	7.9	6.7	6.2	5.9
Sweet potatoes	36.1	31.6	22.2	35.8

Table 6-34: Area, production and yields in the year 2019 national level

Crop	AAS 2019									
	AAS 2019 first season					AAS 2019 second season				
	Area planted (ha)	Area harvested (ha)	Production (MT)	Yield on area harvested	Yield on area planted	Area planted (ha)	Area harvested (ha)	Production (MT)	Yield on area harvested	Yield on area planted
Maize	1,073,426	964,464	1,463,572	1.5	1.4	813,647	774,989	1,296,007	1.7	1.6
Rice	113,454	68,352	75,608	1.1	0.7	64,212	61,300	90,988	1.5	1.4
Sorghum	244,634	92,363	52,647	0.6	0.2	79,244	73,709	44,661	0.6	0.6
Millet	168,068	144,945	46,597	0.3	0.3	62,248	58,767	26,061	0.4	0.4
Soya beans	128,453	114,781	78,875	0.7	0.6	87,330	83,889	48,004	0.6	0.5
Groundnuts	330,999	262,566	92,105	0.4	0.3	89,330	86,343	41,197	0.5	0.5
Simsim	98,560	51,002	12,416	0.2	0.1	122,992	117,426	31,169	0.3	0.3
Irish potatoes	59,817	53,138	154,848	2.9	2.6	34,779	32,665	105,998	3.2	3.1
Sweet potatoes	255,456	158,472	295,816	1.9	1.2	248,214	218,164	776,194	3.6	3.1
Beans	510,086	442,741	238,230	0.5	0.5	357,123	322,111	199,380	0.6	0.6
Cassava	684,554		927,484	N/R	1.4	658,561		1,733,522	N/R	2.6
Banana-food	577,399		4,177,749	N/R	7.2	589,378		5,260,662	N/R	8.9
Coffee arabica	75,125		21,386	N/R	0.3	82,774		41,634	N/R	0.5
Coffee robusta	337,829		84,161	N/R	0.2	309,942		107,990	N/R	0.3

Note: *N/R, not relevant - Yields of permanent crops and cassava have been calculated each season by dividing the seasonal production by the area planted in the season. Please note that the table has been updated.*

Table 6-35: Area, production and yields in the year 2020 national level

Crop	AAS 2020									
	AAS 2020 first season					AAS 2020 second season				
	Area planted (ha)	Area harvested (ha)	Production (MT)	Yield on area harvested	Yield on area planted	Area planted (ha)	Area harvested (ha)	Production (MT)	Yield on area harvested	Yield on area planted
Maize	1,071,129	967,469	1,891,681	2.0	1.8	965,335	594,654	1,618,797	2.7	1.7
Rice	114,913	101,124	156,230	1.5	1.4	105,663	79,430	118,807	1.5	1.1
Sorghum	199,089	76,036	55,006	0.7	0.3	174,839	92,292	104,720	1.1	0.6
Millet	109,778	99,969	32,871	0.3	0.3	90,297	49,644	32,640	0.7	0.4
Soya beans	151,783	143,289	100,262	0.7	0.7	72,747	39,414	37,240	0.9	0.5
Groundnuts	279,076	247,437	108,158	0.4	0.4	178,942	108,646	67,680	0.6	0.4
Simsim	73,379	51,944	17,741	0.3	0.2	169,219	98,531	38,874	0.4	0.2
Irish potatoes	41,076	32,368	109,913	3.4	2.7	39,501	20,906	113,707	5.4	2.9
Sweet potatoes	211,110	130,575	442,720	3.4	2.1	254,883	109,417	763,819	7.0	3.0
Beans	717,371	713,278	600,659	0.8	0.8	740,054	528,587	1,071,806	2.0	1.4
Cassava	559,531		319,969	N/R	0.6	574,592		349,599	N/R	0.6
Banana-food	747,164		6,087,262	N/R	8.1	721,889		5,033,825	N/R	7.0
Coffee arabica	95,003		22,175	N/R	0.2	87,932		20,576	N/R	0.2
Coffee robusta	376,722		128,688	N/R	0.3	368,615		103,971	N/R	0.3

Note: *N/R, not relevant - Yields of permanent crops and cassava have been calculated each season by dividing the seasonal production by the area planted in the season. Please note that the table has been updated.*

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