



**UGANDA BUREAU OF STATISTICS**



THE REPUBLIC OF UGANDA

# **THE ANNUAL AGRICULTURE SURVEY 2018**

## **STATISTICAL RELEASE**

**MAY 2020**



## FOREWORD

The 2018 Annual Agricultural Survey (AAS 2018) is 6<sup>th</sup> survey of this kind after two surveys that were conducted after the 1963/65 Agriculture Census by the Ministry of Agriculture, followed by another two conducted after the 1990/91 National Census of Agriculture and Livestock, again conducted by the Ministry of Agriculture and then one conducted in 2017 by UBOS in close collaboration with MAAIF.

The overall objective of the AAS is to provide high quality and timely current agricultural data on priority core macro and micro development indicators pertaining the performance of agriculture sector as well as indicators on crop, livestock and environment interaction for better agricultural policy making in inter-censal periods.

Unlike the previous Annual Agricultural Surveys, the AAS 2018 adopted the Agricultural Integrated Survey (AGRIS) methodology which recommends a Core module (Crop & Livestock production) and periodical rotating modules on thematic topics, such as the holding economy, labour input, production methods and environment, and machinery/equipment/assets. This survey was conducted by Uganda Bureau of Statistics (UBOS) in close collaboration with the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) and Food and Agriculture Organization of the UN (FAO).

UBOS and MAAIF are extremely grateful to FAO and other development partners for the funding and the technical cooperation during the exercise. Similar gratitude is also extended to the national staff from UBOS, MAAIF and the Local Governments not forgetting all the respondents for their great cooperation.

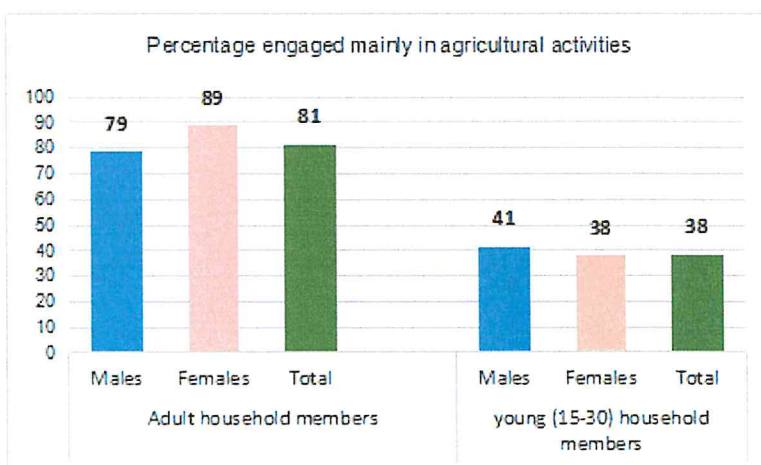
  
Chris N. Mukiza (*PhD.*)  
**EXECUTIVE DIRECTOR**

## The Annual Agriculture Survey (AAS) 2018 – Statistical Release

*The agricultural sector is the largest employer in Uganda and it remains essential to secure the livelihood of the Ugandan population.*

The findings of the Annual Agricultural Survey 2018 confirm that the agricultural sector ranks first in terms of labour force in the Uganda economy. Approximately 7.4 million households operate agricultural land and/or rear livestock. Within these agricultural households, 81.2 percent of the adult members report to be mainly engaged in agricultural activities.

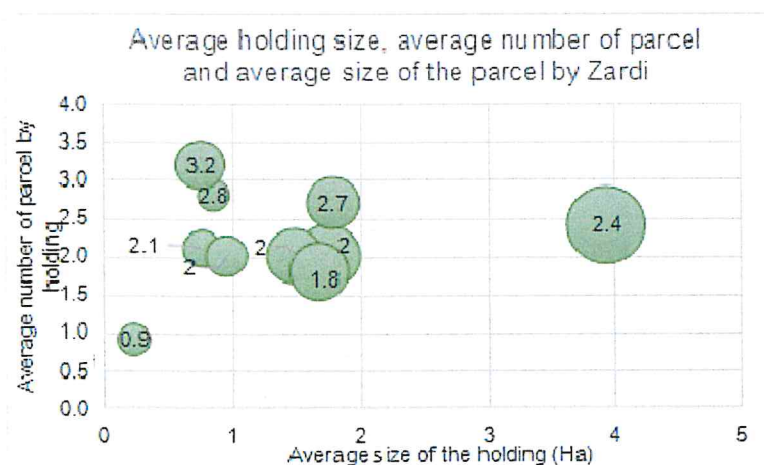
The percentage of the household members engaged mainly in agriculture further increases to 90 percent when focusing solely on the female agricultural population. Agriculture represents an important employer for the youth although to a lesser extent, with about 38 percent of the agricultural household members in the 15 to 30 years age class reporting 'agriculture' as first occupation.



Around 80 percent of the agricultural households engage in crop and livestock production both for own consumption and to generate income, while 9 percent of the households declare to engage in those activities only for own consumption. As such, agriculture remains backbone in securing subsistence and income to a large portion of the population.

*A skewed land distribution characterizes the agricultural landscape with a predominance of households operating on less than one hectare*

Information obtained in the AAS 2018 indicates that the average holding size has increased



over the last decade to reach an average area per household of 1.35 Ha compared to 1.1 Ha in 2008/9<sup>1</sup>. Yet, disparities in the land distribution is observed with 66.2 percent of households operating less than 1 Ha of agricultural land and only 13 percent of households farming more than 2 Ha of agricultural land.

During the survey, agricultural households listed all parcels

<sup>1</sup> Source: Uganda Census of Agriculture 2008/9.



used partially or completely for agricultural activities. Results indicate that, at national level, agricultural households utilized on average two parcels per season with an average size of 0.78 Ha per parcel. A mere 13 percent of agricultural households use 5 parcels or more.

Some variations in the physical characteristics of the holdings is observed between ZARDIs. The adjacent bubble chart captures three dimensions: the average holding size, the average number of parcels by holding and the average parcel size (size of the bubble).

Nabuin is characterized by small size holdings, which tend to operate just one parcel of an average size of 0.3 Ha. At the opposite end, in the ZARDI of Ngetta, the average size of the holdings is 3.9 Ha and the holdings tend to operate an average of 2.4 parcels of mean size 1.8 Ha. In all other ZARDIs, we observe very similar holding structures in terms of the average holding size and the average number of parcels. Yet, the average parcel size varies across the ZARDIs. For instance, in the Abi ZARDI, the average parcel size is 0.3 Ha while in Bulindi the average parcel size is 1.2 Ha.

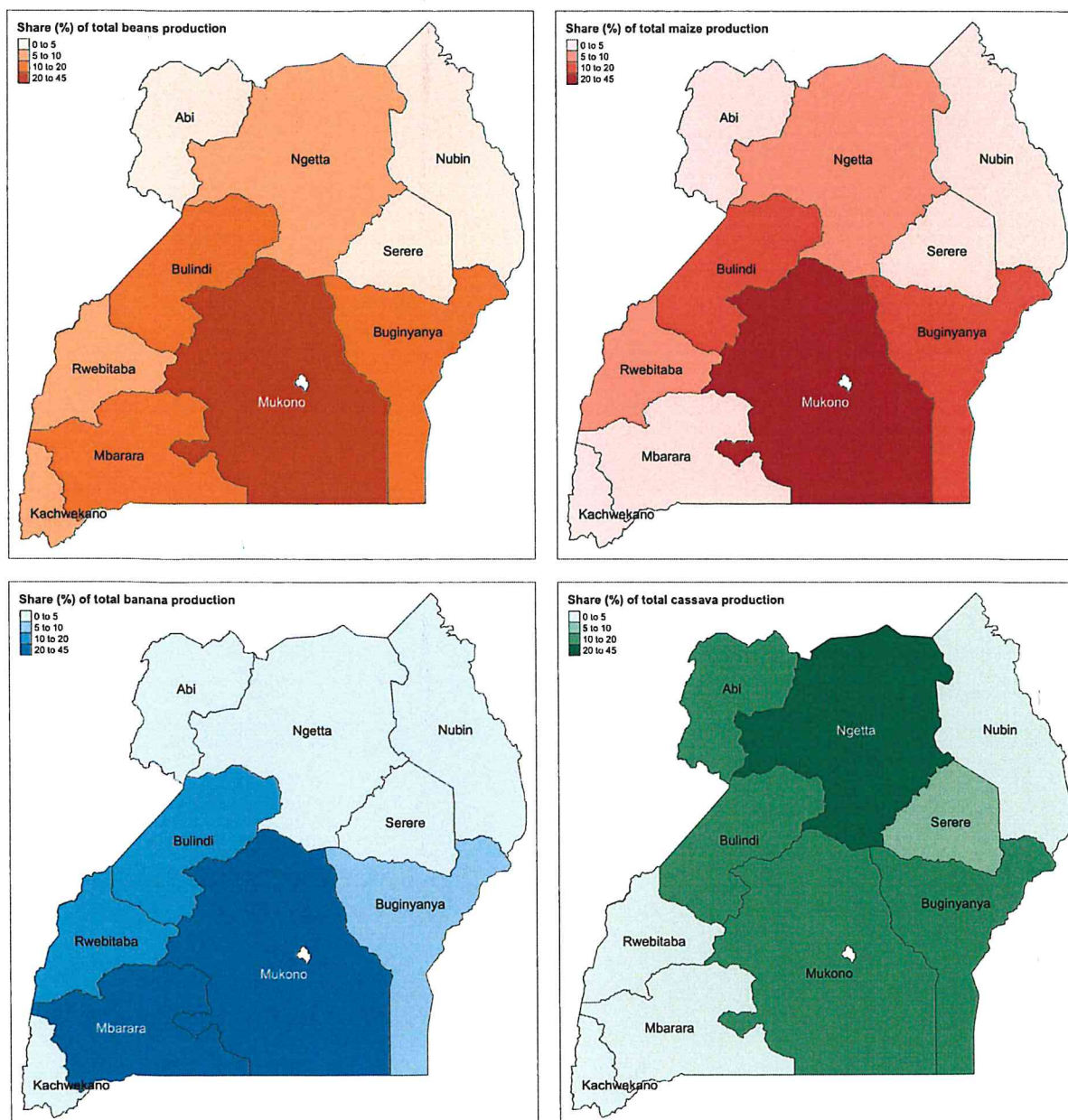
***The survey unfolds the presence of a gap between men and women in terms of tenure rights over agricultural land. Yet, women work on the land more than men.***

The survey reveals that 39.6 percent of the adults (18+) living in agricultural households are owners or right holders over the agricultural land they cultivate. Such percentage gets as high as 48.7 percent among the men, while it goes down to 31.1 percent among the women (SDG 5.a.1). Yet, women cultivate crops more frequently than men and for longer hours.

***Despite a relatively wide variety of agricultural production, maize, banana-food, cassava and beans are the primary food crops grown in Uganda.***

- **Maize** is one of the crops identified as a priority crop in Uganda. In the agricultural year 2018, it was grown by 55 percent of the agricultural households on a land area of about 2.5 million Ha (cumulated both 1st and 2nd seasons). The production of maize in 2018 was 3.4 million tonnes with a yield of 1.7 MT/Ha in second season.
- **Banana Food**, commonly known as “Matooke” is a major crop grown mainly in the Western, Central and parts of Eastern Uganda. Banana food is grown by 47 percent of the agricultural households on a land area of about 579,000 Ha. The annual total production of banana food in 2018, was 6.5 million tonnes with a yield of 12.3 MT/Ha.
- **Cassava** is one of most the important staple food crops in the country. It is useful in manufacturing industry. Cassava is grown mainly in the Central, Northern and North-Western parts of Uganda. The crop is grown by about 29 percent of the agricultural households. In 2018, about 4.4 million tonnes were produced from a land area of about 941,000 Ha. The annual yield of cassava was 8.7 MT/Ha.
- **Beans** are pulses rich in protein; they are desired by farmers as cover crops because of their nitrogen fixing ability. They are cultivated by 54 percent of the agricultural households; they are common in most parts of Uganda and mainly grown by smallholder farmers. In 2018, the total area planted with beans was about 1.2M Ha and the annual total production of beans was 728,000 tonnes with a yield of 0.6 MT/Ha in second season.

### Share of total production across the ZARDIs: beans, maize, banana and cassava



Despite not being one top crop in terms of area cultivated or production, **coffee** deserves attention because it is a cash crop and it has been identified a strategic crop for Uganda. Two types of coffee are grown in the country - i.e., Arabica and Robusta. Arabica coffee is grown by 17 percent of the agricultural households, majorly in the areas of Elgon, Tooro, Kigezi, and West Nile, while Robusta coffee is grown by 8 percent of the agricultural households and it is not concentrated in specific areas of the country. The AAS 2018 findings reveal that the total production of coffee was about 308,000 MT from a land area of 428,000 Ha. Arabica coffee contributed about 24 percent to total coffee production. Arabica and Robusta have approximately the same yield (1.0 MT/Ha for Arabica and 0.9 MT/Ha for Robusta).



*The Ugandan soil fertility has reduced and hence it needs enhancements. However, agricultural households applying fertilisers are a minority*

According to the Uganda National Fertiliser Policy, the loss of soil nutrients in Uganda remains one of the highest of the African continent. Therefore, the Government of Uganda has put in place interventions that enhance access to and use of fertilisers.

Despite the governmental efforts that advocate for an increased use of fertilisers, the AAS 2018 results indicate that only 24 percent of agricultural households used fertilisers. Most of the farmers (40%) do not apply fertilisers because they are too expensive while 25 percent believe that the soil is fertile enough.

The majority of households applying fertilisers used organic fertilisers while 32 percent used inorganic fertilizers. Mbarara (64.8%) had the highest percentage of Ag HHs using fertilisers followed by Kachwekano (39.6%), while Nabuin (3.0%) had the lowest percentage of Ag HHs using fertilisers.

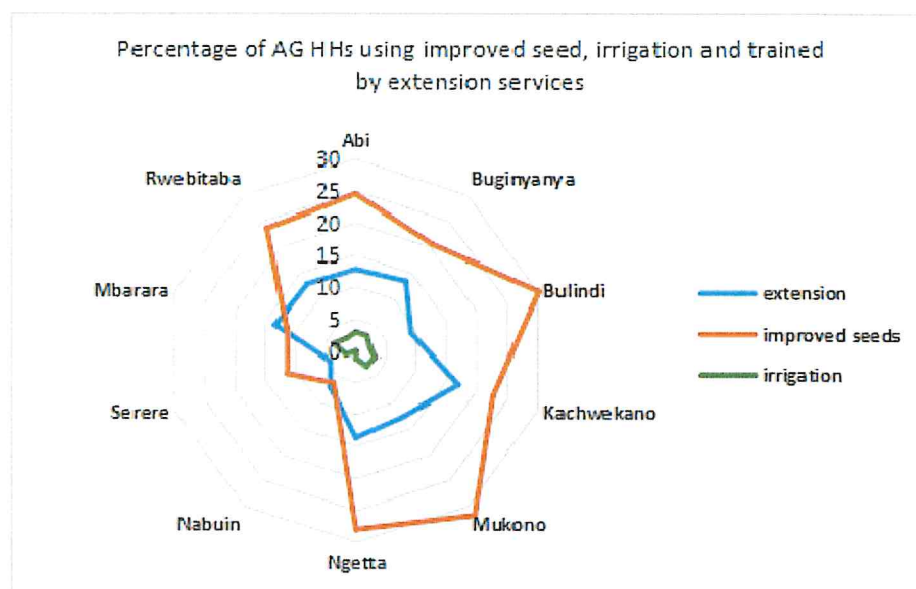
*Use of disease control products has not increased in the past decade*

As part of the strategy to increase agricultural production and improve food security, between 2015 and 2020, the Agricultural Sector Strategic Plan (ASSP) focused on pests, vectors and disease control, especially for the priority and strategic commodities and along the entire value chain. The AAS 2018 results indicate that about 21 percent of agricultural households used agro-chemicals, with Bulindi (34%) having the highest percentage and Ngetta (6%) having the lowest percentage.

The current adoption of agro-chemicals is consistent with the results obtained during the Uganda Census of Agriculture (UCA) 2008/9 when the percentage of agricultural household applying agro-chemicals was as high as 17 percent.

*Further effort is needed to modernise the agricultural sector*

The survey results presents a highly rain fed crop production, mainly based on traditional seeds and characterized by a low penetration of extension services. At national level, 2 percent of the agricultural households use irrigation, 23 percent use improved seeds, 12 percent received advisory services in the 12 months prior to the survey. The chart below shows breakdown by ZARDI.



***There is need to increase investments in the livestock sector to match the increasing demand for Livestock and livestock products***

There was an increase in the population of cattle, goats, sheep, pigs and rabbits from 11.4 million, 12.5 million, 3.4 million, 3.18 million, and 373,000 respectively in UCA 2008 to 12.1 million, 15.6 million, 4.4 million, 4.5 million and 628,000 respectively in 2018. On the other hand, the population of chicken was 37.4 million in 2008 while in 2018 it was recorded at 35.4 million.

***Finally, about a half of the Ag HHs reported experiencing food shortage and there is significant variation in the proportion of Households experiencing shocks in Agricultural production across ZARDIs***

During the 2018 agricultural year about 47 percent of Ag HHs experienced a food shortage compared to 57 percent reported in UCA 2008/09. Ag HHs continue to experience shocks i.e. sudden losses in food and livestock production may be due to extreme weather conditions, such as drought, hailstorms; insecurity; geopolitical crises etc. that are a great threat to food security. Overall, 74 percent of Ag HHs reported a shock. Among these, 82 percent reported a drought, 40 percent faced pests and diseases while floods affected 17 percent of Ag HHs. At the ZARDI level, Serere (96%), Ngetta (94%), and Nabuin (92%) ZARDIs had the highest percentage of Ag HHs that reported shocks in 2018 while Rwebitaba (54%) and Kachwekano (52%) had the least percentage of Ag HHs that experienced shocks.



## *Technical background*

The AAS is a nation-wide survey that able to generate estimates at the national, sub-regional and Zonal Agricultural Research and Development Institute (ZARDI) jurisdiction levels (excluding Kampala).

The AAS collects data from a sample of about 7,000 agricultural households through Computer Assisted Personal Interviews. It focuses on land tenure, crop areas, crop production, agricultural practices, inputs, variable and fixed costs, services, food security, livestock rearing and livestock production.

The AAS has been established in 2017 to address the growing demand for agricultural statistics. The AAS 2018 is therefore the second round conducted in the framework of this Survey Programme.

For the future rounds, the Annual Agricultural Survey Programme aims to expand its sample to the non-household sector farms – i.e., hospitals, schools, prison, corporations and cooperatives that are not linked to households and produce crops and/or rear livestock.

Finally, UBOS is working towards the integration of the Annual Agricultural Survey and the National Panel Survey (UNPS) into an AAS/UNPS Integrated Survey Programme. In the context of the Integrated Survey Programme, the AAS and the UNPS will share a sub-sample of agricultural households, will use the same agricultural questionnaire and will harmonize methodologies concerning agricultural statistics. The establishment of the AAS/UNPS Integrated Survey Programme is supported by the Food and Agriculture Organization of the United Nations (FAO) and the World Bank under the umbrella of the 50x2030 Initiative to Close the Agricultural Data Gap.

## *Institutional information*

The Uganda Bureau of Statistics (UBOS) is the principal agency responsible for collecting, processing, analysing and disseminating data. The UBOS Act of 1998 mandated UBOS to coordinate and supervise the National Statistical System (NSS) and to provide quality and demand-driven statistics that support policies, decision-making, research and development initiatives.

In its role of principal agency collecting data, UBOS undertakes major surveys and censuses on important themes such as demography, service delivery, socio-economy, economy, agriculture, etc.

### **Why agricultural statistics?**

Agriculture has a strategic importance for poverty reduction, especially in low-income economies like Uganda and most especially in rural areas where the majority of the population is employed in the agricultural sector.

The agricultural sector has been the backbone of the Uganda's economy for many years. The sector accounts for the largest share of employment (36%)<sup>2</sup> and close to 80<sup>3</sup> percent of all households in Uganda are involved in agriculture (UBOS, 2015). It is a source of food, raw materials for industries and foreign exchange given the many agricultural exports. The Agricultural Sector Strategic Plan (ASSP), the National Development Plan (NDP) II, and now the NDP III identify agriculture as one of the priority sectors for investment. This happens

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<sup>2</sup> The Uganda National Household Survey (UNHS) 2016/17

<sup>3</sup> National Population and Housing Census 2014



because the agricultural sector has a great multiplier effect on the overall country economy, including the manufacturing and service sectors.

At the continental and at global level, the *Malabo Declaration on Accelerated Agricultural Growth and Transformation* and the *United Nations Sustainable Development Goals* (SDGs) on Zero Hunger (SDG 2), Gender Equality (SDG 5), Clean Water and Sanitation (SDG 6), and Responsible Consumption and Production (SDG 12) highlight the importance of agriculture.

With these initiatives in place, the demand for agricultural statistics has tremendously increased because policy makers have improved their awareness of the importance of data for policies, planning and monitoring in the agricultural sector.

In 2018, the survey was funded by the Government of Uganda and the Food and Agriculture Organization of the United Nations (FAO) through its AGRISurvey Programme.

### ***Contact information***

For more information, or to require about concepts, methods or data quality, contact UBOS Directorate of Agriculture and Environmental Statistics at: [Patrick.okello@ubos.org](mailto:Patrick.okello@ubos.org) or [flavia.oumo@ubos.org](mailto:flavia.oumo@ubos.org)