

# Uganda - Annual Agricultural Survey, 2018 (Second Season).

**Uganda Bureau of Statistics (UBOS)**

Report generated on: August 28, 2024

Visit our data catalog at: <https://microdata.fao.org/index.php>

## Identification

### SURVEY ID NUMBER

UGA\_2018\_AAS\_v01\_EN\_M\_v01\_A\_OCS

### TITLE

Annual Agricultural Survey, 2018 (Second Season).

### COUNTRY

Name	Country code
Uganda	UGA

### STUDY TYPE

Agriculture Integrated Survey[AGRISurvey]

### SERIES INFORMATION

The Uganda Annual Agricultural Survey (AAS) is an agricultural survey designed with the overall objective of providing high quality data and agricultural statistics on priority core macro and micro development indicators.

More specifically, the AAS aims to provide timely data and information:

- 1) On crop and livestock production, agricultural land area, prices of agricultural outputs and inputs, market information, farm income, food security, gender and the environment;
- 2) For assessing the adoption of appropriate agricultural production practices in different agro-ecological zones in Uganda, and;
- 3) On the adoption and use of livestock production technologies.

The AAS is a farm-based modular survey implemented annually by the Uganda Bureau of Statistics (UBOS) - Directorate of Agriculture and Environmental Statistics since 2017, in close collaboration with the Ministry of Agriculture, Animal Industry and Fishery (MAAIF). Since the second season of 2018, the AAS questionnaire has been revised and enriched thanks to the technical assistance of the Food and Agriculture Organization of the United Nations (FAO). More specifically, the AAS has been revised in order to accommodate specific features of the AGRIS methodology, developed by the Global Strategy to Improve Agricultural and Rural Statistics (GSARS) and implemented by the FAO through the AGRISurvey programme. The AAS with the newly developed questionnaire was first rolled out during the second agricultural season of 2018, with data collection organized in two visits: the post-planting and the post-harvesting.

### ABSTRACT

The AAS is an integrated modular survey aiming to provide high quality and timely data on the performance of the Ugandan agricultural sector, as well as core indicators on crop and livestock for better agricultural policy making.

Data collection for the AAS is implemented in two waves, corresponding to the first (January-June) and second (July-December) seasons of the Ugandan agricultural year. For each season, households in the survey's sample are interviewed twice, during the Post-Planting (PP) period and the post-harvesting (PH) period. This results in a total of four visits during the agricultural year. For what concerns the AAS 2018, due to a change in the methodology and questionnaire in between seasons, data collected during the first and second season are not perfectly comparable and have been treated separately. Hence, this DDI only refers to microdata collected during the second season of 2018.

Among information collected with the AAS there is data on:

- The use of agricultural land along with the health and quality of soils in Uganda;
- The quantity and value of agricultural production;
- The access to extension services, market information and agricultural facility;
- Food security of agricultural households;
- Livestock keeping and animal products production;
- The socio-demographic characteristics of agricultural household members.

The collected data is used to produce a set of tables and indicators for tracking and evaluating the impacts of government and development programs on agriculture, and to compute SDG and CAADP indicators related to food and agriculture. For the main findings from the AAS 2018, see the Executive Summary of the AAS 2018 Report.

### KIND OF DATA

Sample survey data [ssd]

## UNIT OF ANALYSIS

Households

## Version

## VERSION NOTES

Due to a change in the survey questionnaire in between the first and second seasons of 2018, data collected during the two seasons are not perfectly comparable and have been treated separately. This DDI only refers to microdata collected during the second season of 2018. Microdata from the first season of the 2018 survey round will not be released

## Scope

## NOTES

The AAS 2018 collects data for the timespan of an agricultural year. The Ugandan Agricultural year is divided in two seasons, and, for each season, households are interviewed twice: during the post-planting and the post-harvesting periods.

The description of scope for the survey, during the post-planting period includes:

- 1) Household member socio-demographic characteristics;
- 2) Agricultural enterprises undertaken by the household in the current agricultural season;
- 3) Land use (Parcel and plots used by the agricultural households) i.e. Access to land, land use rights, decision making, land area, seed/seedlings utilization, etc.

The main objective of this questionnaire is to estimate land areas for crops planted. This is done combining objective measurement (i.e., GPS) on plots and parcels and then collecting the share of land area covered by each crop on each plot (based on farmer's assessment). In addition, the questionnaire collects information on land tenure and use of agricultural inputs. This questionnaire contains a roster of household members, a roster of parcels, a roster of plots for each parcel and a list of crops by plot.

The description of scope for the survey, during the post-harvesting period includes:

- 1) Household member socio-demographic characteristics (only for new household members)
- 2) Crop production and disposals
- 3) Use of agricultural inputs for crop production
- 4) Cost of labour used for crop production
- 5) Labour input used on the agricultural household
- 6) Animal raised on the holding
- 7) Inputs used for livestock production
- 8) Livestock production and dispositions
- 9) Access to agricultural information
- 10) Access to means of transportation
- 11) Access to storage facilities
- 12) Access to agricultural credit
- 13) Fixed costs of the agricultural household
- 14) Shocks and food security of the agricultural household
- 15) Access to extension services
- 16) Land disputes

The main objective of this questionnaire is to collect data on crops harvested by agricultural households, based on farm declarations. In addition, the questionnaire collects information concerning the disposition of crops, labour input and use of inputs such as seed/seedlings. Furthermore, it aims to collect livestock capital, animal production and inputs over a 12-month reference period, thus covering the entire agricultural year.

The post-harvesting questionnaire also collects information concerning household and holding characteristics, such as the access to market and agricultural information, household food security, shocks and their impact on food security etc.

## TOPICS

Topic	Vocabulary
Agricultural Production	World Bank

Economy	World Bank
Labour	World Bank

## KEYWORDS

Keyword
Agricultural production
Crop Yield
Livestock
AGRISurvey
Agricultural practices
Agricultural households

## Coverage

## GEOGRAPHIC COVERAGE

Regional Coverage

## UNIVERSE

Agricultural households (i.e. agricultural holdings in the household sector)

## Producers and sponsors

## PRIMARY INVESTIGATORS

Name	Affiliation
Uganda Bureau of Statistics (UBOS)	Government of Uganda

## PRODUCERS

Name	Affiliation	Role
Food and Agriculture Organization	United Nations	Provided technical assistance and trainings to UBOS

## FUNDING AGENCY/SPONSOR

Name	Abbreviation	Role
United States Agency for International Development	USAID	Main donor for the AGRISurvey program in Uganda

## Sampling

## SAMPLING PROCEDURE

The sampling frame used for the AAS 2018 was constituted by a complete list of census enumeration areas (EAs) covering the entire national territory of Uganda, for a total of 80183 EAs. An EA represents the smallest ground area portion, mapped with definite boundaries. EAs should not be intended as administrative area categories, but only as ground area portions defined to facilitate the selection of the sample and ease data collection activities. As of 2014, Uganda is divided into 112 administrative districts. In each district, the following hierarchical administrative division is in place: 1) County, 2) Sub county, 3) Parish, 4) Village, 5) Local council area. The frame file contains the administrative affiliation for each EA and number of households at the time of the census. Each EA has also a designated residence type: urban or rural.

The sampling design adopted is a two-stage sampling design. In order to increase the efficiency of the sampling design for the AAS, the sampling frame is divided into 10 Zonal Agricultural Research and Development Institutes (ZARDIs). At the first

stage of selection, a sample of EAs (Primary Sampling Units) was drawn. At the second stage, a sample of agricultural households in the selected EAs was drawn (Secondary Sampling Units). The determination of the required number of EAs is based on the approach of Probabilities Proportional to Size (PPS), using the systematic sampling algorithm. The measure of size to be used in selecting the sample is the number of agricultural households resulting from the 2014 Population and Households Census (PHC). The employed sampling procedure led to the production of representative estimates at the region, sub region, and zardi level. Hence, the zardi is the maximum level of geographical disaggregation for which representative estimates can be computed.

#### RESPONSE RATE

The response rate was about the 86% during the post-planting visit, and the 83% during the post-harvesting visit.

#### WEIGHTING

Sampling weights are included in each microdata files.

## Data Collection

#### DATES OF DATA COLLECTION

Start	End	Cycle
2018-10-15	2018-12-20	Post-Planting
2019-02-18	2019-06-06	Post-Harvesting

#### DATA COLLECTION MODE

Computer Assisted Personal Interview [capi]

#### DATA COLLECTION NOTES

For the data collection, the national territory has been divided in 10 Zonal Agricultural Research Development Institute (ZARDIs) which are aligned to 10 Agro-ecological zones in Uganda. Each agro-ecological zone include districts with similar climate, land use and cropping patterns. The following are the 10 Zardis considered for the AAS:

- 1) Abi: districts included are Arua, Nebbi, Moyo, Adjumani, Koboko, Yumbe, Maracha-Terego and Zombo;
- 2) Buginyanya: districts included are Sironko, Mbale, Iganga, Jinja, Tororo, Mayuge, Namutumba, Namayingo, Luuka, Kamuli, Kaliro, Buyende, Bugiri, Pallisa, Kibuku, Butaleja, Busia, Budaka, Manafwa, Kween, Kapchorwa, Bulambuli, Bukwo and Bududa;
- 3) Bulindi: districts included are Hoima, Masindi, Kiryandongo, Kibaale, and Buliisa;
- 4) Kachwekano: districts included are Kabale, Rukungiri, Kanungu and Kisoro;
- 5) Mukono: districts included are Mukono, Mpigi, Kayunga, Kalangala, Kampala, Luwero, Masaka, Nakasongola, Mubende, Wakiso, Nakaseke, Buikwe, Buvuma, Mityana, Kiboga, Kyankwanzi, Gombe, Kalungu, Bukomansimbi, Butambala and Lwengo;
- 6) Ngetta: districts included are Lira, Apac, Dokolo, Lamwo, Nwoya, Agago, Albetong, Amolatar, Kole, Otuke, Oyam, Pader, Kitgum, Amuru and Gulu;
- 7) Nabuin: districts included are Moroto, Nakapiripirit, Kotido, Napak, Amudat, Kaabong and Abim;
- 8) Serere: districts included are Serere, Kumi, Bukedea, Amuria, Ngora, Katakwi, Soroti and Kaberamaido;
- 9) Mbarara: districts included are Mbarara, Ntungamo, Bushenyi, Kiruhura, Lyantonde, Sheema, Rubirizi, Mitoma, Isingiro, Ibanda, Buhweju, Sembabule, and Rakai;
- 10) Rwebitaba: districts included are Bundubugyo, Kabarole, Kamwenge, Kasese, Kyegegwa, Kyenjojo and Ntoroko.

Being an urban area, Kampala has been excluded from the survey. Also Ntoroko district was not included in the sample.

## Questionnaires

#### QUESTIONNAIRES

The AAS 2018 was conducted using two main questionnaires i.e. the Post-Planting, and Post-harvesting questionnaires. For each season, agricultural households are interviewed twice: during the post-planting and the post-harvesting visit.

The questionnaire used during the post-planting season is called "Form 4 - Crop Area Module" and is organized as follows:

- Section 4.1: Cover Page;

- Section 4.2: Household Roster;
- Section 4.3: Enterprise Identification;
- Section 4.4: Parcel Roster;
- Section 4.5: Plot Roster;
- Section 4.6: Crop Roster.

The questionnaire used for the post-harvesting visit is called "Form 52- Crop Production, Household and Holding Characteristics Module" and is organized as follows:

- Section 5.1: Cover Page;
- Section 5.2: Household Roster;
- Section 5.3: Production and Dispositions of Crops;
- Section 5.4: Agricultural Inputs;
- Section 5.5: Production Activities and their Costs;
- Section 5.6: Labour Input on the Holding;
- Section 5.7.1: Cattle and Pack Animals;
- Section 5.7.2: Small Ruminants;
- Section 5.7.3: Poultry;
- Section 5.8.1: Cattle and Pack Animals: Input Costs;
- Section 5.8.2: Small Ruminants: Input Costs;
- Section 5.8.3: Poultry: Input Costs;
- Section 5.9.1: Cattle Meat;
- Section 5.9.2: Small Ruminants Meat;
- Section 5.9.3: Poultry Meat;
- Section 5.9.4: Cattle Milk;
- Section 5.9.5: Small Ruminants Milk;
- Section 5.9.6: Eggs Production;
- Section 5.9.7: Other Animal Products;
- Section 5.10: Sources of Agricultural Information;
- Section 5.11: Access to facilities;
- Section 5.12: Transport Means;
- Section 5.13: Storage Facilities;
- Section 5.14: Access to Credit;
- Section 5.15: Fixed Costs;
- Section 5.16: Shocks and Food Security;
- Section 5.17: Extension Services;
- Section 5.18: Land Disputes.

## Data Processing

### DATA EDITING

All data cleaning and editing operations were performed using the statistical software Stata.

## Data Appraisal

### ESTIMATES OF SAMPLING ERROR

The accuracy of a survey results depends on both sampling and non-sampling errors. The AAS 2018 had a large enough and representative sample hence limiting errors due to sampling. On the other hand, the non-sampling errors usually resulting from errors occurring during data collection, were controlled thorough training of the data collectors, field supervision by the headquarter team, and a well-developed CAPI program. The standard errors and Coefficients of Variations (CVs) for selected indicators at national, ZARDI & sub-regional levels are presented in an Appendix of the final Survey Report.

## Access policy

### CONTACTS

Name	Email	URL
Uganda Bureau of Statistics	ubos@ubos.org	<a href="#">Link</a>

**CONFIDENTIALITY**

The AAS 2018 Second Season microdata has been adequately anonymized before dissemination. Confidentiality of respondents is guaranteed by Article 19 of the Uganda Bureau of Statistics Act , 1998. Before being granted access to the microdata files, all users have to formally agree and sign the UBOS microdata terms of use and conditions for scientific use files.

**ACCESS CONDITIONS**

The AAS 2018 Second Season microdata are disseminated as Scientific Use File (SUF) to accredited users.

**CITATION REQUIREMENTS**

Uganda Bureau of Statistics. Annual Agricultura Survey (AAS) 2018-Second Season, Version 1.2 of the scientific use file, provided by the Uganda National Data Archive. [www.ubos.org](http://www.ubos.org)

## Disclaimer and copyrights

---

**DISCLAIMER**

The user of the data acknowledges that the original collector of the data, the authorized distributor of the data, and the relevant funding agency bear no responsibility for use of the data or for interpretations or inferences based upon such uses.

**COPYRIGHT**

(c) 2020, Uganda Bureau of Statistics

## Metadata production

---

**DDI DOCUMENT ID**

DDI\_UGA\_2018\_AAS\_v01\_EN\_M\_v01\_A\_OCS\_FAO

**PRODUCERS**

Name	Abbreviation	Affiliation	Role
Uganda Bureau of Statistics	UBOS		
Food and Agriculture Organization	FAO	United Nations	Technical assistance on microdata documentation
Office of Chief Statistician	OCS	Food and Agriculture Organization	Metadata adapted for FAM

**DDI DOCUMENT VERSION**

UGA\_2018\_AAS\_v01\_EN\_M\_v01\_A\_OCS\_v01

## Data Dictionary

Data file	Cases	Variables
<b>PP_PH_Household_level_file</b> This file contains variables collected at the household level with various sections of the Post-Planting (Form 4) and Post-Harvesting (Form 5_2) Questionnaires of the AAS 2018. It also contains the sampling weight coefficients.	6098	168
<b>PH_5.2_Household_Members</b> This file contains information collected at the household members level. Microdata were collected through Section 5.2 of FORM 52 (Post-Harvesting questionnaire). The file also contains the sampling weight coefficients.	36367	16
<b>PH_5.3_Disposition_State1</b> This file contains information on the disposition/utilization of crop production harvested under the main harvesting condition. Microdata in this file was collected with Section 5.3 of Form 52 (Post-Harvesting questionnaire). The file also contains the sampling weight coefficients.	34520	12
<b>PH_5.3_Disposition_State2</b> This file contains information on the disposition/utilization of crop production harvested under the second main harvesting condition. Microdata in this file was collected with Section 5.3 of Form 52 (Post-Harvesting questionnaire). The file also contains the sampling weight coefficients.	4308	12
<b>PH_5.4_Ag_Practices_Chemicals</b> This file contains information on pesticides used for crop production, applied at plot level. Microdata in this file was collected with Section 5.4 of Form 52 (Post-Harvesting questionnaire). The file also contains the sampling weight coefficients.	2135	18
<b>PH_5.4_Ag_Practices_InorgFert</b> This file contains information on inorganic fertilizers used for crop production, applied at plot level. Microdata in this file was collected with Section 5.4 of Form 52 (Post-Harvesting questionnaire). The file also contains the sampling weight coefficients.	800	19
<b>PH_5.4_Ag_Practices_OrgFert</b> This file contains information on organic fertilizers used for crop production, applied at plot level. Microdata in this file was collected with Section 5.4 of Form 52 (Post-Harvesting questionnaire). The file also contains the sampling weight coefficients.	2058	13
<b>PH_5.5_Prod_Activities</b> This file contains information on agricultural households production activities and their costs. Microdata in this file was collected with Section 5.5 of Form 52 (Post-Harvesting questionnaire). The file also contains the sampling weight coefficients.	6167	8
<b>PH_5.7_Animals_raised</b> This file contains information on animal raised by agricultural holdings. Microdata in this file was collected with Sections 5.7.1, 5.7.2, 5.7.3 of Form 52 (Post-Harvesting questionnaire). The file also contains the sampling weight coefficients.	12508	37
<b>PH_5.8_Animal_Input</b> This file contains information on quantity and cost of inputs used for livestock. Microdata in this file was collected with Sections 5.8.1, 5.8.2, 5.8.3 of Form 52 (Post-Harvesting questionnaire). The file also contains the sampling weight coefficients.	8400	59
<b>PH_5.9.6_Eggs</b> This file contains information on eggs production. Microdata in this file was collected with Sections 5.9.6 of Form 52 (Post-Harvesting questionnaire). The file also contains the sampling weight coefficients.	3240	9
<b>PH_5.9.7_Products_other</b> This file contains information on other animal products production. Microdata in this file was collected with Sections 5.9.7 of Form 52 (Post-Harvesting questionnaire). The file also contains the sampling weight coefficients.	1326	19
<b>PH_5.9_Meat</b> This file contains information on meat production. Microdata in this file was collected with Sections 5.9.1, 5.9.2, 5.9.3 of Form 52 (Post-Harvesting questionnaire). The file also contains the sampling weight coefficients.	1366	16



<b>PH_5.9_Milk</b> This file contains information on milk production. Microdata in this file was collected with Sections 5.9.4, 5.9.5 of Form 52 (Post-Harvesting questionnaire). The file also contains the sampling weight coefficients.	4224	23
<b>PH_5.10_Agric_Information</b> This file contains information on sources of agricultural information used by agricultural households. Microdata in this file was collected with Section 5.10 of Form 52 (Post-Harvesting questionnaire). The file also contains the sampling weight coefficients.	21938	8
<b>PH_5.11_Facility</b> This file contains information on the access to services and facilities relevant to agriculture. Microdata in this file was collected with Section 5.11 of Form 52 (Post-Harvesting questionnaire). The file also contains the sampling weight coefficients.	20713	7
<b>PH_5.12_Transportation_Means</b> This file contains information on means of transportation used by the agricultural household. Microdata in this file was collected with Section 5.12 of Form 52 (Post-Harvesting questionnaire). The file also contains the sampling weight coefficients.	9654	7
<b>PH_5.14_Credit_Access</b> This file contains information on sources and amount of loans received by agricultural households. Microdata in this file was collected with Section 5.14 of Form 52 (Post-Harvesting questionnaire). The file also contains the sampling weight coefficients.	636	14
<b>PH_5.15_Fixed_Costs</b> This file contains information on cost of agricultural production by source. Microdata in this file was collected with Section 5.15 of Form 52 (Post-Harvesting questionnaire). The file also contains the sampling weight coefficients.	2055	7
<b>PH_5.16_Shocks_&amp; FoodSecurity</b> This file contains information on shocks experienced by agricultural households. Microdata in this file was collected with Section 5.16 of Form 52 (Post-Harvesting questionnaire). The file also contains the sampling weight coefficients.	6734	8
<b>PH_5.17_Extension_Services</b> This file contains information on extension services received by agricultural households. Microdata in this file was collected with Section 5.17 of Form 52 (Post-Harvesting questionnaire). The file also contains the sampling weight coefficients.	967	47
<b>PP_4.3_Household_Enterprises</b> This file contains information on agricultural enterprises (crop and livestock production) undertaken by agricultural households. Microdata have been collected through section 4.3 of Form 4 (Post-Planting questionnaire). The file also contains the sampling weight coefficients.	10447	8
<b>PP_PH_Crop_Roster</b> This files contains microdata at the crop level collected with Form 4 (Post-Planting questionnaire) and Form 52 (Post-Harvesting questionnaire). It also contains the sampling weight coefficients.	38087	52
<b>PP_PH_Parcel_Roster</b> This files contains microdata at the parcel level collected with Form 4 (Post-Planting questionnaire) and Form 52 (Post-Harvesting questionnaire). It also contains the sampling weight coefficients.	13977	43
<b>PP_PH_Plot_Roster</b> This files contains microdata at the plot level collected with Form 4 (Post-Planting questionnaire) and Form 52 (Post-Harvesting questionnaire). It also contains the sampling weight coefficients.	31858	43