Rwanda - Rwanda Seasonal Agriculture Survey 2020

National Institute of Statistics of Rwanda

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Overview

Identification

ID NUMBER
RWA_2020_RSAS_v01_EN_M_v01_A_OCS

Overview

ABSTRACT
The main objective of the Seasonal Agricultural Survey is to provide timely, accurate, reliable and comprehensive agricultural statistics that describe the structure of agriculture in Rwanda mainly in terms of land use, crop area, yield and crop production to monitor current agricultural and food supply conditions and to facilitate evidence-based decision making for the development of the agricultural sector.

The National Institute of Statistics of Rwanda (NISR) has been conducting an annual agricultural survey since November 2012 for the estimation of the national agricultural crop area and production estimates. In 2019/2020 agricultural year, the NISR conducted the second edition of theUpgraded Seasonal Agricultural Survey (USAS) covering the three agricultural seasons. The USAS incorporated an increased sample size to provide more precise estimates. The USAS allows information for monitoring progress on agriculture programs and policies in Rwanda.

KIND OF DATA
Sample survey data [ssd]

UNITS OF ANALYSIS
Agricultural holdings

Scope

NOTES
The scope of the survey concerned farm characteristics (Area, yield, production; use of production, agricultural practices; agriculture inputs and land tenure).

Coverage

GEOGRAPHIC COVERAGE
National coverage

UNIVERSE
The RSAS 2020 targeted potential agriicultural land and large scale farmers.

Producers and Sponsors

PRIMARY INVESTIGATOR(S)

Name	Affiliation
National Institute of Statistics of Rwanda	Ministry of Finance and Economic Planning

OTHER PRODUCER(S)

Name	Affiliation	Role

National Institute of Statistics of Rwanda	Ministry of Finance and Economic Planning	Main producer
Ministry of Agriculture and Animal Resources	Government of Rwanda	Technical partner
Rwanda Agricultural Board	Ministry of Agriculture and Animal Resources	Technical partner
National Agriculture Export Board	Ministry of Agriculture and Animal Resources	Technical partner

FUNDING

Name	Abbreviation	Role
Government of Rwanda	GoR	Funding

Metadata Production

METADATA PRODUCED BY

Name	Abbreviation	Affiliation	Role
Office of Chief Statistician	OCS	Food and Agriculture Organization	Adoption of metadata for FAM
National Institute of Statistics of Rwanda	NISR	Minisrty of Finance and Economic Planning	Metadata producer

DDI DOCUMENT VERSION
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Sampling

Sampling Procedure

Out of 5 defined agricultural strata, only dominant hill crop land stratum, dominant wetland crops stratum, dominant rangeland stratum and mixed stratum were considered as land potential for agriculture. The remaining stratum is the non-agricultural land. Note that clusters covered by tea plantations were not considered in the area sample frame due to reasons stated above. Thus, RSAS is conducted on 4 above mentioned strata to cover other major crops. In 2020 agricultural year, the sample of segments was increased in order to improve agriculture statistics where sample increased from 780 (sample used from 2018 to 2019) to 1200 segments.

At first stage,1200 segments were selected and allocated at district level based on the power allocation approach (Bankier3, 1988). Sampled segments inside each district were distributed among strata with a proportional-to-area criterion.

At second stage, 25 sample points were systematically selected, following a special distance of 60 meters between points. Sample points are reporting units within each segment, where enumerators go to every point, locate and delineate plots in which the sample points fall, and collect records of land use and related information. The recorded information represents the characteristics of the whole segment which are extrapolated to the stratum level and hence the combination of strata within each district provides district area related statistics.

Response Rate

Data collection was done in 780 segments and 222 large scale farmers holdings for Season A, whereas in Season C data was collected in 232 segments, response rate was 100% of the sample.

Weighting

Sampling weights were calculated for each stratum in each district considering the total number of segments in the stratum and the sample size in the specific stratum.

Questionnaires

Overview

There were two types of questionnaires used for this survey namely screening questionnaire and plot questionnaires. A Screening questionnaire was used to collect information that enabled identification of a plot and its land use using the plot questionnaire. For point-sampling, the plot questionnaire is concerned with the collection of data on characteristics of crop identification, crop production and use of production, inputs (seeds, fertilizers and pesticides), agricultural practices and land tenure. All the surveys questionnaires used were published in English and is attached as external documentation.

Data Collection

Data Collection Dates

Start	End	Cycle
2019-09-01	2020-08-31	N/A

Data Collection Mode

Computer Assisted Personal Interview [capi]

Data Collection Notes

Data collection is done in two distinct phases: The first Phase, known as screening activity, consists of visiting all sampled segments and delineating all plots in which the sampled grids points are fallen and thereafter recording the related information using screening questionnaire. The second phase consists of visiting the sub-sampled agricultural plots from screened plots in phase one as well as all Large- Scale Farmers having cultivated plots in the season the survey is being conducted. This phase is conducted in the period of harvesting where farmers are requested to provide information about sowing period and harvesting period, inputs used, agricultural practices done on the plots, the crop production and its use.

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Data Processing

Data Editing

The tablet computer assisted data collection and interview allowed for very fast and efficient uploading and transfer of the enumerated data from the field to NISR headquarters for processing. The tablet software instruments (electronic version of the paper questionnaires) allowed for instantaneous checking of the respondent data and automatically directed the enumerator questioning to reduce non-sampling errors within the data collection.

Other Processing

The dataset has been anonymized for public use.

Data Appraisal

No content available