Rwanda - Rwanda Seasonal Agriculture Survey 2018

National Institute of Statistics of Rwanda

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Overview

Identification

ID NUMBER
RWA_2018_RSAS_v01_EN_M_v01_A_OCS

Overview

ABSTRACT
The main objective of the Seasonal Agriculture Survey is to provide timely, accurate, reliable and comprehensive agricultural statistics that describe the structure of agriculture in Rwanda in terms of land use, crop production and livestock to monitor current agricultural and food supply conditions and to facilitate evidence based decision making for the development of Agriculture sector. In this regard, the National Institute of Statistics of Rwanda conducted the Seasonal Agriculture Survey (SAS) from November 2017 to October 2018 to gather up-to-date information for monitoring progress on agriculture programs and policies in Rwanda, including the Second Economic Development and Poverty Reduction Strategy (EDPRS II) and Vision 2020. This 2018 RSAS covered three agricultural seasons (A, B and C) and provides data on background characteristics of the agricultural operators, farm characteristics (area, yield and production), agricultural practices, agricultural equipment's, use of crop production by agricultural operators and by large scale farmers.

KIND OF DATA
Sample survey data [ssd]

UNITS OF ANALYSIS
Agricultural holdings

Scope

NOTES
The scope of 2018 Seasonal Agriculture Survey concerned farm characteristics (Area, yield and production; agricultural practices; small agricultural equipments; and use of crop production).

TOPICS

Topic	Vocabulary	URI
Agriculture & Rural Development	FAO	
Food (production, crisis)	FAO	
Land (policy, resource management)	FAO	

Coverage

GEOGRAPHIC COVERAGE
National coverage

UNIVERSE
The RSAS 2018 targeted potential agricultural 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
Ministry of Agriculture and Animal Resources	Government of Rwanda	Technical partner
National Agriculture Export Board	Government of Rwanda	Technical partner
Rwanda Agricultural Board	Government of Rwanda	Technical partner
Rwanda Environmental Management Authority	Government of Rwanda	Technical partner

FUNDING

Name	Abbreviation	Role
Government of Rwanda	GoR	Funder

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	Ministry of Finance and Economic Planning	Metadata producer

DDI DOCUMENT VERSION
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Sampling

Sampling Procedure

In order to provide the basis for conducting probability surveys based on complete coverage of the farm level, and as a better way of collecting agricultural data and finding better precise survey estimates, SAS used a Multiple-Frame Sampling (MFS) methodology by which, area frame was constructed and survey sample was drawn from it. Apart from that, a list frame of large-scale farmers (LSF), with at least 10 hectares of agricultural holdings, was done to complement the area frame just to cover crops mostly grown by large scale farmers and that cannot be easily covered in area frame. For detailed information regarding the sampling procedures, refer to the component of methodology in the report.

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
- inputs (seeds, fertilizers, labour…)
- agricultural practices
- crop production
- use of production.

All the surveys questionnaires used were published in English.

Data Collection

Data Collection Dates

Start	End	Cycle
2017-12-10	2018-01-30	Season A
2018-04-29	2018-07-19	Season B
2018-09-04	2018-09-24	Season C

Data Collection Mode

Face-to-face [f2f]

Data Collection Notes

Data collection consists of 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.

For SAS 2018 the NISR employed around 151 field workers in the form of two-person teams to conduct the fieldwork. The fieldwork consisted of a Phase 1 for segment screening and a Phase 2 for plot data collection. Training was provided to all fieldwork personnel on the data collection methodologies associated with the use of GPS for point-sampling and computer tablet questionnaires used for plot data collection and farmer interviews. 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.

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Data Processing

Data Editing

The CAPI method of data collection allows the enumerators in the field to collect and enter data with their tablets and then synchronize to the server at headquarters where data are received by NISR staff, checked for consistency at NISR and thereafter transmitted to analysts for tabulation using STATA software, and reporting using office Excel and word as well.

Data Appraisal

Other forms of Data Appraisal

All Farm questionnaires were subjected to two/three rounds of data quality checking. The first round was conducted by the enumerator and the second round was conducted by the team leader to check if questionnaires had been well completed by enumerators. And in most cases, questionnaires completed by one enumerator were peer-reviewed by another enumerator before being checked by the Team leader.