

# Rwanda - Rwanda Season Agriculture Survey 2021

**National Institute of Statistics of Rwanda**

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## Identification

### SURVEY ID NUMBER

RWA\_2021\_RSAS\_v01\_EN\_M\_v01\_A\_OCS

### TITLE

Rwanda Season Agriculture Survey 2021

### COUNTRY

| Name   | Country code |
|--------|--------------|
| Rwanda | RWA          |

### STUDY TYPE

Agricultural Survey [ag/oth]

### 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 seasonal agricultural surveys since 2012 for the estimation of the national agricultural crop area and production estimates. In the 2020/2021 agricultural year, the NISR conducted Seasonal Agricultural Survey (SAS) covering the three agricultural seasons. The SAS provides information used as a tool to assist in addressing key agricultural issues and information needs that will inform policymakers and other stakeholders and allow more effective identification of priority intervention needs.

### KIND OF DATA

Sample survey data [ssd]

### UNIT OF ANALYSIS

Agricultural holdings

## Scope

### NOTES

The scope of the survey concerned farm characteristics (Land use, Crop land, Crop production, Crop yield, Use of inputs and Agricultural practices).

## Coverage

### GEOGRAPHIC COVERAGE

National Coverage

## Producers and sponsors

### PRIMARY INVESTIGATORS

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

### PRODUCERS

| Name                                       | Affiliation                               | Role                   |
|--|---|------------------------|
| National Institute of Statistics of Rwanda | Ministry of Finance and Economic Planning | Producer of the Survey |

## FUNDING AGENCY/SPONSOR

| Name                 | Abbreviation | Role                 |
|----------------------|--------------|----------------------|
| Government of Rwanda | GoR          | Funder of the Survey |

## 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 2021 agricultural year, the total sample used was 1200 segments.

At first stage, 1200 segments were selected and allocated at district level based on the power allocation approach (Bankier, 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.

## WEIGHTING

Sampling weights were calculated for each sampled plot in the sampled segment for each stratum.

## Data Collection

## DATES OF DATA COLLECTION

| Start      | End        |
|------------|------------|
| 2020-12-02 | 2021-02-04 |
| 2021-05-02 | 2021-06-30 |
| 2021-08-15 | 2021-09-08 |

## DATA COLLECTION MODE

Computer Assisted Personal Interview [capi]

## Questionnaires

## QUESTIONNAIRES

Seasonal Agricultural Survey used two questionnaires:

- 1) Screening Questionnaire: Screening questionnaire is used to collect information on the delineated plot. This information is mainly related to land use, plot area and crop cultivated.
- 2) Plot Questionnaire: Plot questionnaire is used to collect information mainly related to crop production, inputs used (seeds, fertilizers and pesticides), and agricultural practices in the sampled plots.

## Data Processing

## DATA EDITING

CAPi data collection method allows enumerators to collect and enter data using tablets and send those data to the server at headquarter where data are received by NISR staff, checked for consistency and thereafter transmitted to analysts for tabulation and reporting using STATA Excel software.

## Access policy

### CONTACTS

| Name                                       | Affiliation                               | Email                  | URL                  |
|--|---|------------------------|----------------------|
| National Institute of Statistics of Rwanda | Ministry of Finance and Economic Planning | info@statistics.gov.rw | <a href="#">Link</a> |

### CONFIDENTIALITY

Confidentiality of respondents is guaranteed by law No. 45/2013 of 16/06/2013 in its article 17, before being granted access to the dataset, all users have to formally agree: 1. To make no copies of any files or portions of files to which s/he is granted access except those authorized by the data depositor. 2. Not to use any technique in an attempt to learn the identity of any person, establishment, or sampling unit not identified on public use data files. 3. To hold in strictest confidence the identification of any establishment or individual that may be inadvertently revealed in any documents or discussion or analysis. Such inadvertent identification revealed in her/his analysis will be immediately brought to the attention of the data.

### ACCESS CONDITIONS

1. The data and other materials provided by the National Institute of Statistics of Rwanda will not be redistributed or sold to other individuals, institutions, or organizations without the written agreement of the National Institute of Statistics of Rwanda .
2. The data will be used for statistical and scientific research purposes only. They will be used solely for reporting of aggregated information, and not for investigation of specific individuals or organizations.
3. No attempt will be made to re-identify respondents, and no use will be made of the identity of any person or establishment discovered inadvertently. Any such discovery would immediately be reported to the National Institute of Statistics of Rwanda .
4. No attempt will be made to produce links among datasets provided by the National Institute of Statistics of Rwanda.

### CITATION REQUIREMENTS

National Institute of Statistics of Rwanda (NISR). Seasonal Agricultural Survey 2021, December 2021

## Metadata production

### DDI DOCUMENT ID

DDI\_RWA\_2021\_RSAS\_v01\_EN\_M\_v01\_A\_OCS\_FAO

### PRODUCERS

| Name                                       | Abbreviation | Affiliation                               | Role                        |
|--|--------------|---|-----------------------------|
| National Institute of Statistics of Rwanda | NISR         | Ministry of Finance and Economic Planning | Main producer of the survey |
| Office of Chief Statistician               | OCS          | Food and Agriculture Organization         | Metadata adapted for FAM    |

### DDI DOCUMENT VERSION

RWA\_2021\_RSAS\_v01\_EN\_M\_v01\_A\_OCS\_v01

## Data Dictionary

| Data file  | Cases | Variables |
|--|-------|-----------|
| rwa-sas-seasonA_Crop production                          | 41634 | 70        |
| rwa-sas-SeasonA_PartIII_Fertilizers_Pesticides           | 22314 | 43        |
| rwa-sas-SeasonA_PartIV_Agricultural practice             | 17342 | 56        |
| rwa-sas-seasonA_Screening_Agroforestry                   | 30596 | 12        |
| rwa-sas-seasonA_Screening_Antierosion_land consolidation | 33890 | 13        |
| rwa-sas-seasonA-Screening_crops                          | 52873 | 21        |
| rwa-sas-seasonB_Crop production                          | 35869 | 69        |
| rwa-sas-SeasonB_PartIII_Fertilizers_Pesticides           | 20431 | 43        |
| rwa-sas-SeasonB_PartIV_Agricultural practice             | 19333 | 55        |
| rwa-sas-seasonB_Screening_Agroforestry                   | 30122 | 12        |
| rwa-sas-seasonB_Screening_Antierosion_land consolidation | 36257 | 13        |
| rwa-sas-seasonB-Screening_crops                          | 49348 | 21        |
| rwa-sas-seasonC_Crop production                          | 3416  | 67        |
| rwa-sas-SeasonC_PartIII_Fertilizers_Pesticides           | 4838  | 39        |
| rwa-sas-SeasonC_PartIV_Agricultural practice             | 2779  | 49        |
| rwa-sas-seasonC_Screening_Agroforestry                   | 5063  | 12        |
| rwa-sas-seasonC_Screening_Antierosion_land consolidation | 5668  | 13        |
| rwa-sas-seasonC-Screening_crops                          | 10495 | 19        |