

# Sierra Leone - Agriculture Household Tracking Survey - 2010

**Statistics Sierra Leone (SSL)**

Report generated on: July 4, 2024

Visit our data catalog at: <https://microdata.statistics.sl/index.php>

# Identification

**SURVEY ID NUMBER**  
SLE-SSL-AHTS-2010-v1.0

**TITLE**  
Agriculture Household Tracking Survey - 2010

**SUBTITLE**  
First Round

**ABBREVIATION OR ACRONYM**  
AHTS-2010

**TRANSLATED TITLE**  
No translation

**COUNTRY**

Name	Country code
Sierra Leone	SLE

**STUDY TYPE**  
Agricultural Survey [ag/oth]

**SERIES INFORMATION**  
Agriculture Household Tracking Survey 2010, is the first round ever conducted

## ABSTRACT

The Government of Sierra Leone has made agriculture its top priority. Yet, a lack of information about the status of the sector can inhibit effective policy formulation, planning, implementation and performance evaluation. In view of this, in August 2009, the Government of Sierra Leone requested and supported an independent exercise, the Agricultural Household Tracking Survey (AHTS), to obtain accurate and credible agricultural data that can serve as a baseline for longitudinal analyses of Sierra Leone's progress in agricultural development over the next several years.

The AHTS focused on a subset of eight "core crops" comprised of five food crops (rice, cassava, maize, groundnut and sweet potato) and three tree cash crops (cacao, coffee and oil palm). Detailed data on these crops was collected in the eight "crop specific" sections of the AHTS and are provided in this AHTS Report. In addition, some basic data was collected across all crops as well as basic data on household characteristics. In addition, the AHTS collected some data on revenues, access to seeds from the formal sector and other aspects of agriculture that is designed to allow the Government of Sierra Leone to track whether subsistence farmers are becoming more linked to commercial systems over time.

In general, agricultural household surveys, such as the AHTS, are used to provide a representative picture of the status of farming households in a country. The random selection of the sample and its large size allow for a high level of confidence in the final results, even after taking into account issues such as survey measurement error. The AHTS was designed with an exceptionally large sample size so the impact of measurement error on the country level aggregates would be minimal.

The AHTS covered a final sample of 8,840 households, the largest household-level sample for an agricultural survey in Sierra Leone. However, since comparable agricultural data have not been collected before this, the AHTS results do not allow any comparisons over time. The AHTS questionnaire was designed to capture the decisions farmers make, the yields and production levels achieved by the average household, as well as the access to services and technology, food security and other dimensions of agricultural households in Sierra Leone. The survey design followed international standards, with adaptations to local context through extensive field testing. The target sample size was chosen following rigorous power calculations based on SSL data available prior to the AHTS.

This report covers the most salient features of household agriculture in Sierra Leone from the AHTS. The results also highlight areas for policy interventions that could improve productivity, food security and livelihoods of farming households more generally in Sierra Leone. These areas include:-

- i. Improvements in inputs use and planting practices could dramatically improve productivity
  - a. Levels of fertilizer use are low, particularly for the main staples, rice and cassava;
  - b. The adoption of improved seed varieties remains low - for example, only 2% of rice farming households have ever

cultivated one

of the NERICA varieties;

c. Planting practices often involve broadcasting on upland farms and tree crops are often intercropped (not just with other tree crops

for shading purposes);

ii. Households' access to and interaction with markets remains low - for example, 92% of sampled households reported that their

main point of sale for threshed rice was at farm gate (64% for clean rice). AHTS communities reported an average distance of 6.6

miles to the nearest market and 8.8 miles to the nearest permanent market;

iii. There is substantial scope to improve rural infrastructure. This includes both very localized infrastructure such as drying floors and

storage facilities, as well as larger scale infrastructure such as roads. For example, 49% of farmers harvesting cereals stored their

cereals in a room inhabited by the household; only 13% of households used a cement floor for drying. Out of 880 communities

surveyed as part the AHTS community module, 25% reported a walking distance to the nearest motorable road of more than 30

minutes during the dry season.

These communities are the most likely to lack access to markets for agricultural inputs and outputs. 67% of communities were listed as motorable during the dry season; iv. Financial access - much as improved practices are important for farmers, the cost associated with some of these improved practices increases the need for financial services. A lack of these services can create a bottleneck for yield growth and productivity improvements. The AHTS data show that 68% of respondent households who did not borrow money said they had nobody to apply to for a loan and the majority of farmers with existing loans borrowed on the informal market; v. There is need for continued dissemination of better, more sustainable cultivation practices, via continued investments in extension and investments in developing new cultivation techniques and new seed varieties.

#### KIND OF DATA

Sample survey data [ssd]

#### UNIT OF ANALYSIS

The unit of analysis is the Agriculture practices within the household and Communities

## Version

---

#### VERSION DESCRIPTION

Version1.0(February,2010)

#### VERSION DATE

2011-08-15

#### VERSION NOTES

This is the first version no other version has been documented

## Scope

---

#### NOTES

The scope of Agriculture Household Tracking Survey focused on a subset of eight "core crops" comprised of five food crops (rice, cassava, maize, groundnut and sweet potato) and three tree cash crops (cacao, coffee and oil palm). Detailed data on these crops was collected in the eight "crop specific" sections of the AHTS and are provided in this AHTS Report. In addition, some basic data was collected across all crops as well as basic data on household characteristics. In addition, the AHTS collected some data on revenues, access to seeds from the formal sector and other aspects of agriculture that is designed to allow the Government of Sierra Leone to track whether subsistence farmers are becoming more linked to commercial systems over time.

#### TOPICS

Topic	Vocabulary
Ministry of Agriculture Forestry and Food Security	Government of Sierra Leone

## Coverage

### GEOGRAPHIC COVERAGE

The survey coverage is at:

- National level
- District Level

### GEOGRAPHIC UNIT

Locality

### UNIVERSE

All farmers within the Household and the Community as a whole

## Producers and sponsors

### PRIMARY INVESTIGATORS

Name	Affiliation
Statistics Sierra Leone (SSL)	Government of Sierra Leone (GoSL)

### PRODUCERS

Name	Abbreviation	Affiliation	Role
The Food and Agriculture Organisation (FAO)	FAO	UN Agency	Technical assistance
World Food Programme	WFP	UN Agency	Technical assistance

### FUNDING AGENCY/SPONSOR

Name	Abbreviation	Role
Government of Sierra Leone	GoSL	Financial assistance, material and human resources
Food and Agriculture Organization	FAO	Financial assistance, material and human resources
World Food Programme	WFP	Financial assistance, material and human resources

### OTHER IDENTIFICATIONS/ACKNOWLEDGMENTS

Name	Role
Abdul Latif Jameel Poverty Action Lab (J-PAL)/Innovations for Poverty Action (IPA)	Material and human resources

## Sampling

### SAMPLING PROCEDURE

The Agricultural Household Trading Survey follows a two-level sampling methodology, which is the standard for household level surveys.

First, 920 Enumeration Areas (EAs) were sampled for the Agricultural Household Trading Survey out of the 9,671 Enumeration Areas (EAs) from the 2004 census. The sampling was stratified by district to ensure that the results are representative at this level, allowing presentation of district averages. Second, within each sampled EA, a sample of up to 10 agricultural households was drawn using information collected during the Survey Listing Exercise, conducted in October and November 2009. The total target sample size for the AHTS Survey was 9,030 agricultural households. For each EA, 5 additional replacement households were also drawn.

## DEVIATIONS FROM THE SAMPLE DESIGN

No Deviation

## RESPONSE RATE

The final Agricultural Household Trading Survey sample has data on 8,840 households. The target sample size was 9,030 households. Of these, 9,006 households were reached in 917 Enumeration Areas (24 households were not reached and not replaced, over 3 different EAs).

## WEIGHTING

There is a single weight in this dataset, variable v4 Household weight was used on this data

## Data collection

## DATES OF DATA COLLECTION

Start	End	Cycle
2010-05-12	2010-06-22	42 days

## TIME PERIODS

Start date	End date	Cycle
2010-05-12	2011-08-01	1 tear

## DATA COLLECTION MODE

Face-to-face [f2f]

## SUPERVISION

Interviewing was conducted by teams of interviewers. Each interviewing team comprised of four Enumerators, a field editor, a supervisor, and a driver. Each team used a 4 wheel drive vehicle to travel from EAs to EAs.

Team Supervisors - This schedule was designed to all Teams Supervisors to edit questionnaires on a regular basis, in order to identify potential inconsistencies, mistakes and other problems and correct them with enumerators

The Field Monitors - Each Field Monitor was based in a different district although some monitors areas of operation extended across district boundaries

District Coordinators - MAFFS and SSL district-level staff were responsible for jointly coordinating AHTS field activities. Each MAFFS District Agricultural Officer(DAO) and SSL District Statistician was responsible for overseeing the fieldwork in 70-75.

Technical Team - The role of the Technical Team was to design and implement the survey. During fieldwork the team monitored the progress of fieldwork and resolved any issues arising.

## DATA COLLECTION NOTES

The main data collection exercise was designed to include multiple levels of data collection and supervision, namely: Enumeration Team, Field Monitor, District Coordinators and the ATS technical Team.

An intensive training including 5 days field practice of all participants was done, from the 5 days field practice held enumerators took 2 hours twenty minutes on average to interview an household.

Teams were instructed to cover one EA per day for six days every week, with the seventh day reserved for editing questionnaires in order to identify potential inconsistencies, mistakes and other problems and correct them with enumerators, communicating progress and work schedules and submitting edited questionnaires.

- Some form of pre-testing was done in order to finalize the instruction and do final selection of the field team
- The interview was conducted in krio language (broken english language)
- The national survey coordinator educated the community chiefs / headmen about the survey to facilitate the actual field work

## DATA COLLECTORS

Name	Abbreviation	Affiliation
------	--------------	-------------

Statistics Sierra Leone	SSL	Ministry of Finance and Economic Development
-------------------------	-----	--

## Questionnaires

### QUESTIONNAIRES

The Agricultural Household Tracking Survey (AHTS) has two questionnaire which were designed to provide a representative picture of the status of farming household and the community in a country.

A Household Questionnaire was administered in each household, which captured the decision farmers make:-

- The yields and production levels achieved by the average household
- Access to services and technology, food security in the household
- Financial access to the household

In addition to the household questionnaire, a Community Questionnaire was also administered for a particular community

- Insight into farmers household's agricultural and commercial activities prevailing ecological and crop condition and the services they access in their communities.

## Data Processing

### DATA EDITING

Manually editing was done on questionnaire, and computer editing was also done as a way of validating the data as the software provided automatic data checks for acceptable values for the variables and checks between different components of the questionnaires

### METHODOLOGY NOTES

CSPRO was used for data entering

## Data Appraisal

### ESTIMATES OF SAMPLING ERROR

No estimates of sampling error

### DATA APPRAISAL

Technical members comprising MAFFS and SSL team monitored the progress of fieldwork and resolved any issues arising.

## Access policy

### CONTACTS

Name	Affiliation	Email	URL
Statistician General	Statistics Sierra Leone (SSL)	statistics@statistics.sl OR info@statistics.sl	www.statistics.sl
Director Data Processing	Statistics Sierra Leone (SSL)	statistics@statistics.sl OR info@statistics.sl	www.statistics.sl
Information and Dissemination Unit	Statistics Sierra Leone (SSL)	statistics@statistics.sl OR info@statistics.sl	www.statistics.sl

### CONFIDENTIALITY

Statistics Sierra Leone (SSL) requires all users to keep information and data strictly confidential. In this regard, before granting access to datasets, all users have to formally agree to observe the following: 1. Not to reproduce any file(s) or portion(s) of files to which access has been granted without authorization from SSL. 2. Not to willfully identify any individual or household or establishment in the dataset. 3. To hold in strictest confidence, the identity of any individual or household or establishment that may be inadvertently revealed in any documents or discussion, or analysis. Such unintended

identification revealed should be immediately brought to the attention of SSL. 4. Data obtained from SSL are protected by copyright law and therefore not for redistribution or sale. 5. Prospective clients or data users may indicate in an affidavit confidentiality of data they access.

#### ACCESS CONDITIONS

Statistics Sierra Leone (SSL) is required by the 2002 act of parliament to coordinate, collect, compile, analyze and disseminate high quality and objective official statistics to assist informed decision-making, and discussions within the government, business and the media, as well as the wider national and international community. Consequently as a national statistical institution in Sierra Leone, SSL has the obligation to promote data dissemination thereby facilitating national development. Making data available will enable students and the academia to conduct research works, assist investors and our donor community including Non-Governmental Organizations and individuals in taking appropriate decisions. It will also assist the Government of Sierra Leone (GoSL) to formulate appropriate policies and programs for efficient administration and nationwide development. SSL's data dissemination policy framework provides access to data through:

- Unrestricted Datasets
- Restricted Datasets
- Unrestricted Datasets

These categories of datasets are accessible by all without any payment. They are available on-line to all interested users, for planning, research and statistical purposes only.

#### Restricted Datasets

These categories of datasets are accessible online or in the office under certain conditions. Thus, prospective client/data users may access any data based on certain conditions set by either the government or funding agency and the Data Archive authorities at SSL.

The following terms and conditions apply:

Before being granted access to any dataset, all users have to formally agree:

1. To make no copies of any files or portions of files for which access has been granted, except those authorized by SSL.
2. Not to use any technique in an attempt to identify any person, establishment, or sampling unit.
3. To hold in strictest confidence, the identification of any establishment or individual that may be inadvertently revealed in any document or discussion, or analysis. Such inadvertent identification revealed in her/his analysis will be immediately brought to the attention of the SSL.
4. The data and other materials will not be redistributed or sold to other individuals, institutions, or organizations without the written agreement of SSL.
5. The data will be used for statistical and scientific research purposes only.
6. The data will be used solely for reporting of aggregated information, and not for investigation of specific individuals or organizations.
7. No attempt will be made to 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 SSL.
8. No attempt will be made to produce links among datasets provided by the SSL with other datasets that could identify individuals or organizations.
9. Any books, articles, conference papers, thesis, dissertations, reports, or other publications that employ data obtained from the SSL would cite the source of data in accordance with the citation statement provided with the dataset.
10. An electronic copy of all reports and publications based on the requested data will be sent to the SSL.
11. The original collector of the data, the Data Archivists, and the relevant funding agencies bear no responsibility for use of the data or interpretations or inferences based upon such uses.

#### CITATION REQUIREMENTS

"Statistics Sierra Leone, National Population and Housing Census 1985 (NPHC 1985), Version 0.1 of the public use dataset (December 2011), provided by the Statistics Sierra Leone National Data Archive. [www.statistics.sl](http://www.statistics.sl)"

## ACCESS AUTHORITY

Name	Affiliation	Email	URL
Statistics Sierra Leone	SSL	statistics@statistics.sl OR info@statistics.sl	www.statistics.sl

## 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) 2014, Statistics Sierra Leone Agency

## Metadata production

---

## DDI DOCUMENT ID

DDI-SLE-SSL-AHTS-2010-v1.0

## PRODUCERS

Name	Abbreviation	Affiliation	Role
Statistics Sierr Leone	SSL	Government of Sierra Leone	Data Collection

## DATE OF METADATA PRODUCTION

2014-07-11

## DDI DOCUMENT VERSION

Version 1.0



**Data Dictionary**

Data file	Cases	Variables
<b>AHTS2010 - Household Data</b> The file contained data on the status of farming for every selected household in the enumeration area	8803	1111
<b>AHTS 2010 - Community Data</b> The file contained data on the status of farming for every selected community in the enumeration area	903	385