

Sierra Leone - Sierra Leone Agriculture Household Listing Survey 2023

Statistics Sierra Leone, Ministry of Agriculture and Food Security

Report generated on: December 14, 2024

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

Identification

SURVEY ID NUMBER

SLE-StatsSL-LIST-2023-v01

TITLE

Sierra Leone Agriculture Household Listing Survey 2023

ABBREVIATION OR ACRONYM

SLLIST 2023

COUNTRY

| Name | Country code |
|--------------|--------------|
| Sierra Leone | SLE |

STUDY TYPE

Agriculture Integrated Survey[hh/nhh/agris]

ABSTRACT

In recognition of the critical role the agricultural sector plays in national development, Sierra Leone joined the 50x2030 Initiative in early 2023. This partnership focuses on establishing a sustainable annual agricultural survey program. The program's primary aim is to generate high-quality, timely, and relevant agricultural data that directly addresses the country's needs. The implementation of the 50x2030 activities in Sierra Leone relies on a variety of statistical undertakings, one of which is the Sierra Leone Listing Survey (SLLIST) conducted in 2023. This survey plays a vital role in monitoring and achieving the goals of the 50x2030 initiative. It serves as a foundational element for subsequent surveys, establishing a comprehensive sampling frame that will be utilized in future data collection efforts. By meticulously gathering data on various aspects, SLLIST lays the groundwork for further analysis and ensures the accuracy of subsequent surveys.

The other specific objectives for the design of the Listing Survey were to:

- Accurately enumerate and document all dwelling units/structures and households within the selected enumeration areas (EAs) in preparation for agricultural holdings/households' selection
- Record detailed description of every structure and identify the heads of agricultural holdings/households
- Collect information in each of the 520 selected EAs, ensuring effective supervision and monitoring of the agricultural holdings/households to be selected for data collection.

KIND OF DATA

Sample survey data [ssd]

UNIT OF ANALYSIS

Households

Version

VERSION DESCRIPTION

v2.1: Edited, anonymized dataset distributed as scientific use file

Data have been edited and anonymized before the release. The type of release considered was Scientific Use File (SUF).

Scope

NOTES

This survey focused on collecting data from agricultural households, covering topics such as household demographics, land ownership, agricultural activities, livestock rearing, labor force composition, and participation in off-farm activities.

TOPICS

| Topic | Vocabulary | URI |
|-------------------------|-----------------|----------------------|
| Agricultural workers | ELSST Thesaurus | Link |
| Agricultural production | ELSST Thesaurus | Link |

KEYWORDS

| Keyword | Vocabulary | URI |
|------------|-----------------|----------------------|
| Crops | ELSST Thesaurus | Link |
| Livestock | ELSST Thesaurus | Link |
| Households | ELSST Thesaurus | Link |

Coverage

GEOGRAPHIC COVERAGE

National coverage, with the exception of the Western Urban district

UNIVERSE

All agricultural households in both urban and rural settings were considered for this study.

Producers and sponsors

PRIMARY INVESTIGATORS

| Name | Affiliation |
|---|----------------------------|
| Statistics Sierra Leone | Government of Sierra Leone |
| Ministry of Agriculture and Food Security | Government of Sierra Leone |

PRODUCERS

| Name | Abbreviation | Affiliation | Role |
|-----------------------------------|--------------|----------------|----------------------|
| Food and Agriculture Organization | FAO | United Nations | Technical assistance |

FUNDING AGENCY/SPONSOR

| Name | Abbreviation | Role |
|------------|--------------|--|
| World Bank | WB | Financial assistance through the HISWA Project |

Sampling

SAMPLING PROCEDURE

The survey employed a stratified random sampling technique to ensure a representative sample of agricultural households across all five regions and fifteen districts of Sierra Leone with the exception of the Western Urban district. From 514 Enumeration Areas, a total of 42990 agricultural households were interviewed.

RESPONSE RATE

The response rate was 99.9%.

WEIGHTING

Sample weights were calculated for the data file. It was computed as the inverse of the probability of selection of agricultural household, the latter being the product of the probability of selection of the EA in which the household is located and the probability of selection of the EA.

The weight variable is called "SampleWeight".

Data collection

DATES OF DATA COLLECTION

| Start | End |
|------------|------------|
| 2023-08-28 | 2023-09-18 |

DATA COLLECTION MODE

Computer Assisted Personal Interview [capi]

Questionnaires

QUESTIONNAIRES

The questionnaire was administered in each household, preferably to the head of household. It includes questions on household demographic characteristics and agricultural activities practiced.

The questionnaire is provided as external resource.

Data Processing

DATA EDITING

The listing questionnaire was implemented on CSPRO as CAPI tool. During data collection, some validation controls were integrated into the app to minimize mistakes when typing households' answers. After data collection, a processing program designed under SPSS software permitted to clean both cases and variables. Duplicated cases were deleted and then the sampling weights adjusted to take the two non-covered EAs into account. Missing, illegal, unlike and incoherent values were detected and then locally imputed objectively in respecting filters. Finally, the necessary tabulation variables were created and then tables were produced according to the tabulation plan designed earlier.

METHODOLOGY NOTES

The dataset was anonymized using Statistical disclosure methods. To start the process, variables were classified into main categories as variables to delete, quasi identifiers, direct identifiers, linked variables. All direct identifiers and unnecessary variables were removed. Then, quasi-identifiers (and linked variables) were considered to formulate disclosure scenarios. Disclosure risk was measured using k-anonymity and probabilistic risk.

Quasi identifiers have been anonymized using top coding (which was especially applied to categorical variables), shuffling (which was applied to enumeration area codes) and local suppression which was applied to both the quasi identifiers and the linked variables. In addition, information loss was mainly measured based on number of missing values introduced during anonymization and dependency coefficient between categorical variables.

The software used was R.

Data Appraisal

ESTIMATES OF SAMPLING ERROR

To appreciate the data quality, some tables were supported by sampling errors estimates. Especially, coefficients of variations and standard errors were estimated for a set of indicators in open data publishing purposes.

Access policy

ACCESS CONDITIONS

Licensed datasets, accessible under conditions

Metadata production

DDI DOCUMENT ID

DDI-SLE-StatsS-LIST-2023-v01

PRODUCERS

| Name | Abbreviation | Affiliation | Role |
|---|--------------|----------------------------|----------------------------|
| Statistics Sierra Leone | Stats SL | Government of Sierra Leone | Documentation of the study |
| Ministry of Agriculture and Food Security | MAFS | Government of Sierra Leone | Documentation of the study |
| Food and Agriculture Organisation | FAO | United Nations | Documentation of the study |

DATE OF METADATA PRODUCTION

2024-11-11

DDI DOCUMENT VERSION

Version 1.1 (November 2024)

Data Dictionary

| Data file | Cases | Variables |
|--|-------|-----------|
| SLLIST2023_anonymized_microdata The file contains data related to the listing of agricultural households. It also contains the weighting variable. | 42990 | 31 |