

Liberia - Liberia Agriculture Census 2024 - Non Household Listing

Liberia Institute of Statistics and Geo-Information Services (LISGIS)

Report generated on: November 12, 2025

Visit our data catalog at: <https://microdata.fao.org/index.php>

Identification

SURVEY ID NUMBER

LBR_2024_LAC_NHL_v01_M_v_01_A_ESS

TITLE

Liberia Agriculture Census 2024 - Non Household Listing

ABBREVIATION OR ACRONYM

LAC 2024 (NON HH)

COUNTRY

Name	Country code
Liberia	LBR

STUDY TYPE

Agricultural Census [ag/census]

SERIES INFORMATION

The LAC-2024 is an integrated census/survey modality program conducted in line with the World Programme for the Census of Agriculture (WCA) 2020 recommendations. The census also aligned with the objective of the 50x2030 Initiative to Close the Agricultural Data Gap. The LAC-2024 is expected to be followed by a series of annual modular agricultural surveys, including the 2024 Income, Labor, and Productivity (ILP) and the 2025 Production Methods and Environment (PME) surveys. As part of the census operations, information on non-household holdings was collected through cooperatives registered with the Cooperative Development Agency, concessions regulated by the National Bureau of Concessions (NBC), large-scale private farms, communal farms, and Farmer Based Organizations (FBOs).

The LAC-2024 also includes the Liberia Agriculture Census 2024 - Community Operations (<https://microdata.fao.org/index.php/catalog/2710>) and the Liberia Agriculture Census 2024 - Household Listing (<https://microdata.fao.org/index.php/catalog/2711>).

ABSTRACT

The Government of Liberia and its Development Partners recognized agriculture as a pivotal sector in fostering economic growth, reducing poverty, and achieving food security. Since the end of the second civil war, the Government, in collaboration with development partners, has made substantial investments to develop and expand the agricultural sector. Over the years, policymakers and data users in the agricultural sector have experienced significant challenges in obtaining the requisite data to monitor and evaluate these interventions and make informed decisions on new interventions. To address these challenges, the Liberia Institute of Statistics and Geo-Information Services (LISGIS) and the Ministry of Agriculture (MoA) conducted several ad hoc agricultural surveys. While valuable, these surveys have often been limited in scope and unable to provide the comprehensive data needed for effective policymaking and planning. To support the sector more robustly, the government decided to undertake a comprehensive agricultural census.

The Liberia Agriculture Census 2024, the second agricultural census in Liberia since 1971 and the first to be conducted digitally, aimed to collect reliable structural data on various aspects of the agricultural sector.

The main objectives of the LAC-2024 were to:

- Reduce the existing data gap in Liberia's agricultural sector;
- Provide comprehensive data on the agriculture sector for policy formulation and evaluation of existing programs;
- Enable LISGIS to establish an agriculture master sampling frame for the conduct of future agricultural surveys and research;
- Identify the structural changes in the agriculture sector over time;
- Provide information on crop, livestock, poultry, and aquaculture activities;
- Determine the size, composition, practices, and related characteristics of Liberia's agricultural holdings;
- Generate disaggregated statistics on agriculture;
- Provide statistics for advocacy in Liberia's agricultural sector;
- Identify agricultural practices and constraints at the community level.

To achieve these objectives, the LAC-2024 was designed to collect structural data for household and non-household holdings, and at the community level. This data provided a wealth of information used to understand the state of agriculture in Liberia. This documentation presents detailed information on the methodology used to collect data at the non-household level and provides useful metadata on the anonymized dataset for non-household holdings.

KIND OF DATA

Census/enumeration data [cen]

UNIT OF ANALYSIS

Agricultural holdings

Scope

NOTES

The scope of the non-household holdings data includes:

- Type of agricultural activities practiced by non-household holdings;
- Characteristics of non-household holders and holdings;
- Hired labor practice;
- Agricultural parcels and plots characteristics;
- Types of crops and methods of crop cultivation;
- Inputs, tools and equipment use;
- Type and number of livestock and poultry.

KEYWORDS

Keyword	Vocabulary	URI
Agriculture	CESSDA (Council of European Social Science Data Archives)	Link
Household Demographics	CESSDA (Council of European Social Science Data Archives)	Link
Land Ownership	CESSDA (Council of European Social Science Data Archives)	Link
Crop Production	CESSDA (Council of European Social Science Data Archives)	Link
Livestock Ownership	CESSDA (Council of European Social Science Data Archives)	Link
Farm Equipment	CESSDA (Council of European Social Science Data Archives)	Link
Agriculture Inputs	CESSDA (Council of European Social Science Data Archives)	Link
Extension Services	CESSDA (Council of European Social Science Data Archives)	Link
Holding	CESSDA (Council of European Social Science Data Archives)	Link
Land Use	CESSDA (Council of European Social Science Data Archives)	Link
Subsistence Farming	CESSDA (Council of European Social Science Data Archives)	Link
Land Tenure	CESSDA (Council of European Social Science Data Archives)	Link
Rural Households	CESSDA (Council of European Social Science Data Archives)	Link

Coverage

GEOGRAPHIC COVERAGE

National coverage

UNIVERSE

All non-household agricultural holdings in Liberia, to include agricultural cooperatives, concessions, communal farms, private farms, farmer-based organizations and other institutional farms engaged in agricultural activities during the 2024 farming season.

Producers and sponsors

PRIMARY INVESTIGATORS

Name	Affiliation
Liberia Institute of Statistics and Geo-Information Services (LISGIS)	Government of Liberia

PRODUCERS

Name	Abbreviation	Affiliation	Role
Ministry of Agriculture	MoA	Government of Liberia	Collaborator
Food and Agriculture Organization of the United Nations	FAO	United Nations	Technical assistance

FUNDING AGENCY/SPONSOR

Name	Abbreviation	Role
Government of Liberia	GOL	Financial Contribution
World Bank	WB	Financial Contribution

OTHER IDENTIFICATIONS/ACKNOWLEDGMENTS

Name	Affiliation	Role
50x2030 Initiative	Global partnership program led by the World Bank, the Food and Agriculture Organization of the United Nations (FAO), and the International Fund for Agricultural Development (IFAD).	Provided technical and financial support for the design, implementation, and analysis of the survey.

Sampling

SAMPLING PROCEDURE

A full census of all non-household holdings in Liberia was envisioned. The LAC-2024 technical team used fifteen (15) days to develop a complete list of all non-household holdings in Liberia. This list was used by 30 county inspectors for the non-household holdings enumeration during the census.

WEIGHTING

No weights.

Data collection

DATES OF DATA COLLECTION

Start	End
2024-01-22	2024-03-22

DATA COLLECTION MODE

Computer Assisted Personal Interview [capi]

SUPERVISION

The LAC-2024 data collection at the non-household level was conducted by 30 county inspectors. The work of these data collectors (or county inspectors) was coordinated by 11 regional and 22 national monitors, who routinely visited teams, provided data quality checks, flagged and corrected potential errors and provided in-field training where necessary. A total of 30 data quality assurance officers (one in each county) were deployed to assist county inspectors with technical issues arising from the CAPI Applications. At LISGIS central office, there were 5 monitors, called HQ monitors, who monitored the LAC-2024 dashboard daily and reported all identified errors and inconsistencies in data captured to regional and national monitors for appropriate actions.

DATA COLLECTION NOTES

The conduct of the 2024 Liberia Agriculture Census (LAC-2024) non-household component encountered several challenges and data limitations that must be recognized when using the microdata. These challenges reflect both the complexity of enumerating a diverse set of agricultural establishments outside of household structures and the logistical constraints

inherent in implementing a nationwide census.

First, the construction of the non-household census frame posed difficulties. While the frame was based on administrative records from multiple agencies, including the Cooperative Development Agency (CDA), Ministry of Agriculture (MOA), National Bureau of Concessions (NBC), and Ministry of Internal Affairs (MIA), there were discrepancies between administrative lists and actual field conditions. Some holdings recorded in registers were found to be dormant, defunct, or had shifted into other forms of activity. Conversely, some holdings that were active in the field were missing from the official lists. Although a verification exercise was conducted to improve coverage, the potential for undercoverage or misclassification cannot be entirely ruled out.

Second, accessibility issues affected data collection. Many non-household holdings are difficult to access due to lack of physical addresses of holders and administrative bureaucracies. This sometimes led to delays in reaching holdings, shortened interview times, or reliance on proxies for information. In a few cases, enumerators encountered difficulties arranging interviews with key managers, particularly within concession companies or larger private farms, where authorization procedures were required. This affected the ability to obtain detailed responses on sensitive topics such as land size, land use, use of tools and equipment, and type of labor utilized. In fact, three of the agricultural concessions recognized by the NBC were not covered by the census despite several attempts by enumerators and census staff.

Third, while the census relied heavily on digital data collection tools (CAPI), connectivity constraints in rural areas occasionally delayed real-time data transfer and monitoring. Enumerators sometimes faced technical issues with tablets, particularly with battery life in areas lacking electricity. Although supervisors provided backup and troubleshooting support, these challenges highlight the need for stronger technological infrastructure to support fully digital operations.

Fourth, some respondents expressed reluctance to provide complete information, particularly on land size, land ownership arrangements, or labor practices. For example, questions on land size and labor hiring occasionally received partial or vague responses, reflecting both the sensitivity of the information and gaps in record-keeping among some institutions. Similarly, while the census intended to capture detailed data on equipment use and mechanization, many respondents could not provide exact numbers, leading to reliance on estimates.

Another challenge relates to the definition and thresholds applied for non-household holdings. For example, non-household livestock and poultry holdings were defined using specific size criteria (such as 25 heads of cattle or 500 chickens). Thus, smaller institutional farms were excluded despite contributing to agricultural production in significant ways at the local level. This limitation means that the census provides a picture of medium-to-large non-household holdings but may underrepresent smaller-scale institutional holdings.

Data were collected using Computer Assisted Personal Interview (CAPI) system. The CSpro application was used to develop the CAPI system. A total of 800 tablets was used for the household level interviews. In addition, some tablets were set aside for replacement of missing, damaged or malfunctioning tablets.

During the data collection, team supervisors routinely synchronized their enumerators tablets for transmission of collected data to the LISGIS central server. At the end of the data collection, all tablets used for collecting the household-level data were synchronized by the team supervisors in the field and later by data quality assurance officers at LISGIS central office. The synchronized data were downloaded in SPSS and Stata format, checked for completeness (by comparing mapping and enumeration data) and inconsistencies, and then prepared for editing, tabulation and analysis.

The census technical team developed a tabulation plan prior to the start of the survey, which helped to guide the data editing, tabulation and analysis processes.

DATA COLLECTORS

Name	Abbreviation	Affiliation
Liberia Institute of Statistics and Geo Information Services	LISGIS	Government of Liberia
Ministry of Agriculture	MOA	Government of Liberia

Questionnaires

QUESTIONNAIRES

The LAC-2024 employed three questionnaires: the household questionnaire, the community questionnaire and the non-household questionnaire. These three questionnaires were based on the 50x2030 Initiative's standard model questionnaires. The Liberia Agriculture Census Technical Working Group (LAC-TWG), comprising technical staff from LISGIS, Ministry of Agriculture (MOA), National Fishery and Aquaculture Authority (NaFAA), Cooperative Development Agency (CDA), and the Ministry of Internal Affairs (MIA) worked with technicians from the 50x2030 Initiative to adapt the questionnaires to Liberia's

context and realities. Suggestions and inputs were solicited from various stakeholders representing government ministries, commissions and agencies (MACs), non-governmental and international organizations, as well as academic institutions involved in agricultural issues. All questionnaires were finalized in English. Some questions in the questionnaires were translated into simple Liberian English, for the purpose of easy administration.

The non-household questionnaire was administered to the non-household holding head member or any member with extensive knowledge of the holding and its agricultural activities. The primary respondent (i.e., the non-household member who provided most of the information for the questionnaire or a given module) may vary across modules.

Data Processing

DATA EDITING

Data was edited using CSpro programs, version 7.7.3. The appropriate edit rules were established by programmers and subject matter specialists at LISGIS and MOA.

In few cases, manual editing techniques were applied to recode responses generated from "other specify" text responses. The SPSS software was used for this purpose.

STATISTICAL DISCLOSURE CONTROL (SDC)

The datasets were anonymized using Statistical Disclosure Control methods to protect respondents' confidentiality while maintaining data utility. The process began with classifying variables into categories: variables to delete, quasi-identifiers, direct identifiers, and linked variables. All direct identifiers and unnecessary variables were removed. Quasi-identifiers and linked variables were analyzed to formulate disclosure scenarios, and disclosure risk was measured using k-anonymity and probabilistic risk techniques. The primary anonymization methods applied included recoding, shuffling, and local suppression. Finally, information loss was assessed to ensure that anonymization methods did not compromise the dataset's utility. The anonymization process was conducted using the R software.

Access policy

CONTACTS

Name	Affiliation	Email	URL
Matthew Wantoe, Director for ICT Division	Liberia Institute of Statistics and Geo-Information Services	matthew.wantoe@lisgis.gov.lr	Link
Liberia Institute of Statistics and Geo-Information Services		lisgis.admin@lisgis.gov.lr	Link

CONFIDENTIALITY

Confidentiality of respondents is guaranteed by the National Statistics and Geo-Information Act of Liberia, enacted 2004 and the United Nations Fundamental Principles on Official Statistics, specifically principle six. 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 LISGIS. 2. Not to use any technique in an attempt to learn the identity of any person, household, non-household or community 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 depositor.

ACCESS CONDITIONS

The dataset has been anonymized and is available as a Public Use Dataset. It is accessible to all for statistical and research purposes only, under the following terms and conditions:

1. The data and other materials will not be redistributed or sold to other individuals, institutions, or organizations without the written agreement of LISGIS.
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 LISGIS.
4. No attempt will be made to produce links among datasets provided by LISGIS, or among data from LISGIS and other datasets that could identify individuals or organizations.
5. Any books, articles, conference papers, theses, dissertations, reports, or other publications that employ data obtained from LISGIS will cite the source of data in accordance with the Citation Requirement provided with each dataset.

6. An electronic copy of all reports and publications based on the requested data will be sent to LISGIS.

The original collectors of the data, LISGIS, MOA, and the relevant funding agencies bear no responsibility for use of the data or for interpretations or inferences based upon such uses.

CITATION REQUIREMENTS

Liberia Institute of Statistics and Geo-Information Services. Liberia Agriculture Census 2022/2023 (LAC-2024) , Ref. LBR-LAC-2024_v01. Dataset downloaded from <https://lisgis.gov.lr/>

ACCESS AUTHORITY

Name	Affiliation	Email	URL
Liberia Institute of Statistics and Geo-Information Services	Government of Liberia	lisgis.admin@lisgis.gov.lr	Link

Disclaimer and copyrights

DISCLAIMER

The user of the data acknowledges that the authorized distributor of the data (i.e., LISGIS), MOA and the relevant funding agency bear no responsibility for use of the data or for interpretations or inferences based upon such uses.

COPYRIGHT

© LISGIS. All Rights Reserved

Metadata production

DDI DOCUMENT ID

DDI_LBR_2024_LAC_NHL_v01_M_v_01_A_ESS_FAO

PRODUCERS

Name	Affiliation	Role
Liberia Institute of Statistics and Geo-Information Services	Government of the Republic of Liberia	Documentation of the study
Ministry of Agriculture	Government of the Republic of Liberia	Documentation of the study
Food and Agriculture Organization of the United Nations	United Nations	Documentation of the study and Metadata adapted for FAM

Data Dictionary

Data file	Cases	Variables
CROP_ano File contains anonymized data for crops	1775	9
HOLDING_ano This file is about the characteristics of holdings	694	147
PARCEL_ano This file is about parcels	982	11
PLOT_ano This file is about plots	1788	8