Liberia Agriculture Census 2024
COMMUNITY REPORT

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

In Collaboration with

Ministry of Agriculture (MOA)

February, 2025

50x2030

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LIBERIA AGRICULTURE CENSUS 2024

FINAL REPORT

COMMUNITY OPERATIONS

DATA SOURCES AND AVAILABILITY

The Liberia Agriculture Census 2024 (LAC-2024) Final Reports (Household, Non-household and Community) are available online at: https://lisgis.gov.lr/census.php

Additional information from the LAC-2024 can be obtained from the Liberia Open Data Portal via: https://liberia.opendataforafrica.org/data#topic=Agriculture

LISGIS Headquarters, through its dedicated Agriculture Statistics unit, serves as the primary source for any additional information pertaining to the LAC-2024 that may not be found in the Final Reports or on the Open Data Portal.

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RELATED LINKS

The LAC-2024 microdata can be obtained from:

https://microdata.lisgislr.org/index.php/catalog/?page=1&ps=15

CITATION REQUIREMENT AND FORMAT GUIDANCE

Liberia Institute of Statistics and Geo-Information Services (LISGIS), Liberia Agriculture Census 2024 Final Report, February 2025.

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FOREWORD

The Liberia Agriculture Census 2024 (LAC-2024) marks a significant and transformative milestone in the nation's journey towards modernizing its agricultural data collection systems, underscoring Liberia's strong commitment to the vital agricultural sector. This landmark initiative, expertly conducted by the Liberia Institute of Statistics and Geo-Information Services (LISGIS) in close collaboration with the Ministry of Agriculture (MOA), the United Nations Food and Agriculture Organization (FAO), the World Bank (WB), and other crucial partners, represents Liberia's first comprehensive digital agriculture census – a truly historic achievement.

This nationwide initiative gathered structural data on crop and livestock production, household demographics, land use and tenure, access to infrastructure and agricultural resources, and non-household and community-based agricultural activities. Prior to LAC-2024, Liberia's last agriculture census was conducted in 1972, leaving a critical data gap that this updated census now bridges. The findings will equip policymakers, planners, and stakeholders with accurate, up-to-date agricultural statistics to drive evidence-based decision-making, policy formulation, and sustainable development. As agriculture remains a cornerstone of Liberia's economy and food security, LAC-2024 serves as a transformative tool for fostering productivity, investment, and resilience in the sector.

Given that agriculture remains the bedrock of Liberia's economy and a cornerstone of its food security, the findings of LAC-2024 are poised to be a transformative catalyst for driving productivity, attracting crucial investment, and building enhanced resilience throughout the sector. The profound insights gleaned from this census will be instrumental in addressing existing challenges within agriculture, offering an unprecedentedly clear understanding of the sector's current state and effectively guiding future improvements and strategic interventions.

On behalf of the Government of Liberia, I wish to express my appreciation for the financial and technical support provided by the World Bank, FAO and IFAD through the Harmonizing and Improving Statistics in West Africa Project (HISWAP) and the 50x2030 Initiative.

I also wish to express our heartfelt appreciation to the dedicated members of the Census Steering Committee, ably chaired by the Minister of Agriculture, and the highly professional staff of the Liberia Agriculture Census Technical Working Group. This group, comprising experts from LISGIS, MOA, the Cooperative Development Agency (CDA), and the National Fisheries and Aquaculture Authority (NaFAA), demonstrated exceptional expertise and unwavering dedication, which were critical to the successful execution of this ambitious undertaking.

A special and well-deserved note of appreciation is extended to all the National, Regional, and HQ monitors, the diligent County Inspectors, the meticulous Data Quality Assurance Officers, the effective Team Supervisors, and the committed field enumerators. Their tireless efforts, unwavering commitment, and perseverance in the field were the very backbone of this census, without which its successful completion would not have been possible.

Finally, I convey my deepest gratitude to all respondents across Liberia for generously giving their time and providing invaluable contributions. Their participation was essential to the success of the census. I also thank the public, private sector actors, and all other institutions and individuals who provided support throughout the implementation of the LAC-2024.

Hon. Richard Fatorma Ngafuan
Director General
Liberia Institute of Statistics and Geo-Information Services (LISGIS)

PREFACE

The importance of data for evidence-based decision making to inform agriculture development is invaluable. Quality data is needed across all spectrums of agriculture value chains to inform government, commercial parties, and development partners' actions within the agriculture sector. Beyond national government level, county authorities also need reliable data to develop their strategic plans.

The Liberia Agriculture Census 2024 undertaken by the Liberia Institute for Statistics and Geo-information services (LISGIS) in collaboration with the Ministry of Agriculture through funding from the World Bank's HISWA PROJECT and with technical support from the Food and Agriculture Organization of the United Nations (FAO), captured data on agricultural activities, farmland characteristics in communities, resource management, climate change and environment, agriculture labor, community infrastructure and many structural issues of the agriculture sector. The census's capture of communities across the country to support and enrich the master sample frame is important for future research samples and comparability of results.

It is my fervent hope that this **2024 Liberia Agriculture Census Community Report** will provide information about the agricultural sector to all relevant stakeholders including the government, development partners, international and inter-governmental organizations, private-sector actors, policy makers, and planners to support the development of the agriculture sector in Liberia. We encourage all stakeholders, with an aim of improving the agriculture sector either through support of inputs, promotion of agro-processing for industrial value-chain development or for improved farmers' livelihood, to utilize the findings of this community assessment as additional guidance for intervention designs, agricultural planning, implementation, monitoring and reporting about the sector. The findings are also important for setting benchmarks for many of the structural issues affecting the agriculture sector.

Special appreciation goes to our development partners for the financial and technical support provided to these initiatives to close the data gaps in agriculture and rural statistics. Also, I acknowledge and appreciate the leadership and teams from LISGIS, and our team from MOA for their invaluable efforts. I also acknowledge and appreciate the efforts of the field staff and all those who went near and far to ensure that the data were adequately captured. Finally, I appreciate all community participants and stakeholders who accepted and provided insights which culminated into findings from the Liberia Agriculture Census. Let us continue these coordination and collaborations in producing important statistics that are needed for the development of the sector.

J. Alexander Neutah, PhD
Minister, Ministry of Agriculture
Republic of Liberia

EXECUTIVE SUMMARY

The Liberia Agriculture Census 2024 (LAC-2024) Community Report provides a detailed account of agricultural activities, community and farmland characteristics, resource management, and infrastructure across 7,193 sampled communities. The data and insights captured through focus group discussions reveal the diverse socio-economic and environmental dynamics shaping Liberia's agricultural landscape.

Key findings highlight the following:

Agricultural Practices and Livelihoods: Rain-fed temporary crop cultivation is the dominant agricultural practice, adopted by 72% of communities, followed by market gardening (54.4%) and permanent crop cultivation (28.3%). Poultry farming and livestock rearing are notable livelihood activities, with 32.6% of communities involved in poultry farming and 27.3% raising goats.

Community Development and Facilities: A little more than 68% of communities reported no new infrastructural developments in the three years preceding the census. For those experiencing changes, new on-grid electricity (30.9%), roads (22.9%), and schools (22.2%) were the most common. Access to critical infrastructure remains limited, with only 3.3% of communities having direct access to hospitals, and 15.3% to food markets. Electricity is accessible to only 37.5% of communities.

Environmental Concerns: About 58.7% of communities expressed some form of environmental concern. Lack of water (dry spells) and floods were the two main environmental concerns reported by communities, expressed by 27.9% and 19.6%, respectively. Land degradation affects 15.6% of communities, with severe impacts noted in Rivercess County. Desertification is reported by 19.3% of communities, and farmland abandonment was reported in 21.3% of communities. About 10.6% of communities have agricultural land located within officially protected or preserved areas while only 8.9% of communities reported to have forest or wooded land under sustainable management. Over a fifth of communities suffered from environmental contamination.

Extreme Natural Events or Disaster: Nearly one-third of communities had been directly impacted by extreme natural events such as storms, floods, or dry spells over the previous 3 years before the census. The most frequently reported disaster was extreme winds or storms, affecting 72.6% of communities, followed by flood/erosion, which affected 48.3% of communities. A large percentage of communities encountered disasters such as COVID-19 (85.3%), fire disasters (40.4%), and extreme winds or storms (32.0%) only once. However, certain disasters, like dry spells (22.8%) and extreme temperatures (31.4%), had a notable share of communities reporting occurrences ten times or more.

Challenges in Agricultural Activities: Farmers in communities faced numerous challenges, including crop diseases, reported by 53.9% of communities, animal damage (by 46.2% of communities), and high input costs (31.9% of communities). Poor transportation and limited access to credits for agricultural purposes (only 33.4% of communities had access to credit services) exacerbate the challenges.

Access to Markets and Services: Access to market is a constraint for many farmers in communities, as more than 58% of communities reported walking over 30 minutes to reach weekly markets. Less than 10% of communities reported access to agricultural input shops or storage facilities.

Labor and Wage Disparities: Labor hiring practices show gender-based disparities, with men predominantly engaged in physically intensive tasks and receiving higher wages. Women and children are hired for planting and weeding, often at lower wages.

ABBREVIATIONS

ASF	African Swine Fever
BV	Brucella
CAPI	Computer-Assisted Personal Interview
CBPP	Contagious Bovine Pleuropneumonia
COVID	Coronavirus Disease
CSPro	Census and Survey Processing System
EA	Enumeration Area
FGD	Focus Group Discussion
HISWAP	Harmonizing and Improving Statistics in West Africa Project
IBD	Infectious Bursal Disease
IFAD	International Fund for Agricultural Development
LAC	Liberia Agricultural Census
LISGIS	Liberia Institute of Statistics and Geo-Information Services
MOA	Ministry of Agriculture
NaFAA	National Fisheries and Aquaculture Authority
NCD	New Castle disease
PPR	Peste des Petits Ruminants
SDGs	Sustainable Development Goals
UNFAO	United Nations Food and Agriculture Organization
VSLA	Village Saving Loan Association
WB	World Bank

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CHAPTER 1: INTRODUCTION

Background

Liberia's economy is deeply rooted in agriculture, with a significant proportion of the population dependent on farming, forestry, livestock, and fisheries for their livelihoods. Despite this, the sector has long been constrained by limited access to accurate, timely, and disaggregated data to support effective policy formulation, investment decisions, and program design. The last agriculture census was conducted in 1972, and the data collected at that time is not only outdated but was also lost during the years of civil conflict, creating a longstanding void in the nation's agricultural statistical infrastructure.

To bridge this gap, the LAC-2024 was conceptualized and implemented using modern digital tools and international best practices. It represents Liberia's first fully digital agriculture census, employing Computer-Assisted Personal Interviewing (CAPI) technology to improve data quality, timeliness, and overall operational efficiency. The census is aligned with FAO's World Programme for the Census of Agriculture (WCA) guidelines and supported under the Harmonizing and Improving Statistics in West Africa (HISWA) Project and the 50x2030 Initiative, both aimed at strengthening agricultural data systems across the region.

The 2024 Liberia Agriculture Census (LAC-2024) marks a pivotal moment in Liberia's efforts to revitalize and modernize its agricultural statistical system. As the first comprehensive agricultural census in over five decades, LAC-2024 provides critical data to assess the structure, performance, and dynamics of the agriculture sector across the country. The census was implemented by the Liberia Institute of Statistics and Geo-Information Services (LISGIS) in close collaboration with the Ministry of Agriculture (MoA), with technical and financial support from the World Bank, the Food and Agriculture Organization of the United Nations (FAO), and other key development partners.

Rationale

The rationale behind conducting the 2024 Liberia Agriculture Census is grounded in the urgent need to generate reliable and up-to-date agricultural statistics to inform national planning, monitor progress, and support the transformation of the agriculture sector. Agriculture remains central to Liberia's economic development, food security, and poverty reduction efforts. However, the sector has been undermined by a critical lack of baseline data on farm holdings, land use, cropping systems, livestock, fisheries, and forestry.

In the absence of recent census data, policymakers and development actors have relied heavily on fragmented, outdated, or proxy indicators to guide their interventions—resulting in inefficiencies, misaligned policies, and suboptimal resource allocation. The re-establishment of a comprehensive and accurate agricultural statistical base through LAC-2024 is essential for designing evidence-based policies and programs that respond to the realities on the ground.

Moreover, the agriculture census is a cornerstone for tracking national and international commitments, including the Sustainable Development Goals (SDGs), the Comprehensive Africa Agriculture Development Programme (CAADP), and Liberia's national agriculture development strategies. By deploying cutting-edge data collection methods and adhering to globally recognized standards, LAC-2024 ensures that Liberia is better positioned to monitor progress, attract investment, and support inclusive rural development.

In summary, the LAC-2024 serves not only as a statistical operation but also as a strategic intervention aimed at reshaping Liberia's agricultural future. It provides a foundation for transformative planning and programming that can unlock the sector's full potential in driving sustainable development and national resilience.

Scope

The Liberia Agriculture Census 2024 (LAC-2024) comprehensively covered all major agricultural activities across the country, providing vital data on crop and livestock production, land use and tenure, household demographics, access to infrastructure and agricultural resources, and non-household and community-based agricultural activities. This extensive survey serves as a crucial tool for policy formulation, planning, and sustainable development within Liberia's agriculture sector; including:

- Crop production (food and cash crops)
- Livestock rearing (cattle, poultry, goats, pigs, etc.)
- Forestry (timber, non-timber forest products, and conservation practices)
- Aquaculture and fisheries

The census targeted all agricultural establishments, including:

- Households engaged in agricultural activities
- farmer-based organizations
- Commercial agricultural enterprises, such as agricultural concessions, cooperatives, and private farms
- Communal farms and institutional farming initiatives

In addition, the census targeted agricultural communities.

Geographically, the census spanned all 15 counties and 160 statistical districts of Liberia, utilizing a stratified cluster sampling approach based on enumeration areas (EAs) from the 2022 National Population and Housing Census (NPHC). The census methodology ensured representative data collection across urban and rural areas.

Objectives

The primary objective of the Liberia Agriculture Census 2024 was to collect structural and up-to-date statistics on the country's agricultural sector to support policy formulation, program development, and decision-making. Specifically, the census aims to:

1. Provide accurate and reliable data on agricultural activities, including crop production, livestock, poultry, forestry, and aquaculture.
2. Assess the structure and characteristics of agricultural holdings, including land use, farm size, production methods, and technology adoption.
3. Analyze the socioeconomic conditions of agricultural households, including housing ownership, condition of housing units, and access to services.
4. Identify challenges and opportunities in the agricultural sector to inform targeted interventions and development strategies.
5. Develop a Master Sampling Frame for future agricultural surveys, enabling more efficient and cost-effective data collection.

Census Questionnaires

To achieve the above objectives, the LAC-2024 employed three questionnaires; household, non-household and community questionnaires. These questionnaires were used to collect a wealth of information in the agricultural sector. The results of the LAC-2024 are summarized in three separate reports based on these questionnaires. These include Household, Community and Non-household reports.

Objectives of the Report

This report presents the main results of the LAC-2024 Community Survey. Its main objective is to provide deeper understanding on the opportunities and challenges facing farmers in Liberia. The report aims to serve as a comprehensive resource for policymakers, researchers, and development practitioners. By providing a detailed snapshot of Liberia's agricultural landscape, the LAC-2024 Community report offers a robust foundation for designing evidence-based strategies to address systemic challenges, capitalize on opportunities, and drive sustainable development.

The LAC-2024 Community Survey findings reveal a predominantly rain-fed agricultural system characterized by limited diversification and significant infrastructural deficits.
The data highlights the persistent challenges faced by farmers, including crop diseases, limited access to agricultural inputs, and inadequate market infrastructure.

Additionally, the LAC-2024 Community Survey report sheds light on environmental and socio-economic dynamics, such as the effects of land degradation, Dry Spells, and agricultural labor practices. These insights are critical for identifying targeted interventions that can enhance productivity, sustainability, and resilience within Liberia's agricultural sector.

Definition of key terms

Agricultural Community: A locality, town, or village that had at least one agricultural household during the 2022/2023 farming season.

Abandoned Farmland: Land abandonment refers to the cessation of agricultural activities for at least 5 years. It is often referred to as the giving away of land for natural succession, such as grasses, shrubs, and trees on former agricultural lands. Land abandonment is widespread around the world and encompasses different land-uses, such as orchards, croplands, and rangelands. It may result in land degradation.

Daily Markets: These are markets that operate on daily basis.

Dry Spells: A short period of little or no rainfall during a normally wet season.

Land Degradation: Land degradation is a process in which the value of a biophysical or biochemical environment is affected by a combination of natural or human-induced processes acting upon the land. It is viewed as any change or disturbance to the land perceived to be deleterious or undesirable. Natural hazards are excluded.

Land Desertification: Desertification is the process by which natural or human causes reduce the biological productivity of dry lands (arid and semiarid lands). Declines in productivity may be the result of climate change.

Weekly Markets: are markets that operate on specific days of the week. There is the main market and the secondary market. The main markets operate on specific days of the week while the secondary markets operate a day before the main market day.

Methodology

The Liberia Agriculture Census 2024 (LAC-2024) community survey adopted a robust and context-specific methodology to ensure comprehensive and representative data collection at the community level. A community, for the purpose of this survey, is defined as a locality, town, or village. The data collection approach integrated focus group discussions (FGDs) to capture key qualitative and quantitative information from agricultural communities.

Sampling Framework

The sampling framework was designed to align communities with their respective Enumeration Areas (EAs). Each community's selection probability and sample weight were equivalent to those of its linked EA[1]. This alignment ensured consistency and representativeness in the sampling process.

In instances where a community was associated with multiple EAs, adjustments were made to address multiplicity. Specifically, the sampling frame incorporated additional weighting measures to accurately reflect the community's representation across these EAs. This adjustment safeguarded the integrity of the sampling design and minimized bias.

Focus Group Discussions (FGDs)

Data collectors conducted FGDs as the primary data collection method to engage with community members and gather diverse perspectives. Each FGD was required to have a minimum of 10 participants and a maximum of 15 participants. The number of FGD conducted was a function of the type of EAs assigned to the data collectors (Single-EA Community, Multi-EA Community and Multi-Community EAs).

1. **Single-EA Community:**

For a community linked to a single EA, one FGD was conducted involving a cross-section of community dwellers, including community leaders and representatives from various groups and professions.

2. Multi-EA Communities:

In communities with multiple linked EAs but a unified leadership structure, data collectors conducted a single FGD. This approach avoided duplication of effort and ensured a holistic discussion reflecting the community's collective insights.

3. Multi-Community EAs:

In cases where an EA encompassed multiple communities, FGDs were held in the larger communities. Data collectors encouraged participation from residents of smaller neighboring communities to capture diverse inputs and enhance representativeness.

Data Collection and Quality Assurance

FGDs were facilitated using a structured questionnaire (with mostly closed-ended questions) designed to capture key thematic areas, including agricultural practices, resource utilization, and challenges faced by agricultural communities. Data collectors were trained to foster inclusive participation and record

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[1] For details on the EAs selection and weighting procedures, check the LAC-2024 Household Sector Final Report.

responses systematically using a Computer Assisted Personal Interview (CAPI) program. The CSPro application was specifically used for data collection.

To ensure data accuracy, data collectors adhered to standardized procedures established by the LAC technical team and cross-verified information with those provided by households. The methodological adjustments for multi-EA and multi-community contexts further enhanced the reliability of the collected data.

Key findings

There were **7,193** agricultural communities sampled across Liberia's fifteen counties. Most of the communities practiced *rain-fed temporary crops cultivation*. About **72** per cent of communities practiced this activity. *Market gardening* was practiced in more than half of the communities (54.4%).

The majority of communities, **68.8** per cent (4,952) did not experience any new developments within the past three years before the data collection. Among the communities that experienced new developments, the most commonly reported developments include the provision of on-grid electricity (**30.9%**), construction of new roads (**22.9%**), and establishment of new schools (**22.2%**).

Two in four communities reported practice of *poultry* or *livestock rearing*. Poultry activities took place in **32.6** per cent of communities. *Goats* and *Pigs* were the two main types of livestock raised in communities. About **27.3** per cent of communities raised goats while **25.1** per cent of them raised pigs. Only **8.1** per cent of livestock or poultry communities had vaccination campaigns.

There are **57.1** per cent of communities having direct access to primary school, **3.3** per cent have direct access to hospitals and **34.4** per cent of them have access to the same infrastructure (hospitals) when nearby areas are considered. Also, **15.3** per cent of communities have direct access to food market for purchase and sales.

Crop disease and animal damage are the two most challenges faced by farmers in the communities. About **53.9** per cent of communities reported that crop disease is a major challenge for farmers while **46.2** per cent of communities reported animal demage as a major challenge.

The most frequently reported disaster was extreme winds or storms, affecting **72.6** per cent of communities, followed by flood/erosion, which affected **48.3** per cent of communities, while lack of water (Dry Spell) and floods were the two most environmental concerns expressed by communities, **27.9** per cent and **19.6** per cent, respectively.

About **33.4** per cent of communities have access to at least one source of agricultural credit services.

CHAPTER 2: CHARACTERISTICS OF COMMUNITY FOCUS GROUP DISCUSSANTS

The Liberia Agriculture Census 2024 (LAC-2024) community module was designed to capture critical insights from local communities through focus group discussions. The module was administered to selected groups of elders, leaders, professionals and adult dwellers in the community. These groups constituted either farmers, non-farmers or mix; and, they were expected to have vast knowledge about the community and its undertakings.

The LAC-2024 community module engaged 61,600 key informants across 7,193 sampled communities. The module had a special section that gathered comprehensive data on the demographic and socio-economic characteristics of these respondents. The focus of this chapter is to provide an overview of the respondents' profiles, including their sex, age, education level, positions within their communities, and primary livelihood activities. Understanding these characteristics is essential for interpreting the community-level data and identifying the factors influencing agricultural activities and development in Liberia.

Socio-demographic characteristics of respondents

Sex and Age Distribution

> *Males dominated the community focus group discussions.*

Nationally, the distribution of respondents shows that males represented 66.1 per cent of the total 61,600 participants, while females accounted for 33.9 per cent. This indicates a notable gender disparity in the composition of key informants engaged in the community focus group discussion during the Liberia Agriculture Census 2024. The significant male majority may reflect existing gender roles and cultural dynamics that influence participation in decision-making and community discussions. Despite this imbalance, the inclusion of over 20,000 female respondents provides valuable insights into women's perspectives and roles in agricultural and community activities.

Figure 1. Distribution of Respondents by Sex

66.1%

33.9%

The distribution of respondents by age groups shows that middle-aged and older individuals were the predominant participants in the community focus group discussions. The largest proportion of respondents fell within the 45–54 age group (27.4%), followed by the 35–44 age group (25.7%) and the 55–64 age group (18.0%). Individuals aged 65 and over accounted for 13.5 per cent, indicating significant representation from older adults. Meanwhile, younger respondents (aged 15 to 34) were notably fewer, with 12.6 per cent in the 25–34 age group and only 2.9 per cent in the 15–24 age group. This distribution suggests that older and middle-aged individuals play a more prominent role in community discussions, likely due to their perceived authority, experience, and involvement in decision-making processes. The distribution also supports the fact that the community focus group discussants were mostly adults and elderly persons who had vast knowledge of their respective communities.

Figure 2. Distribution of Respondents by Age Group
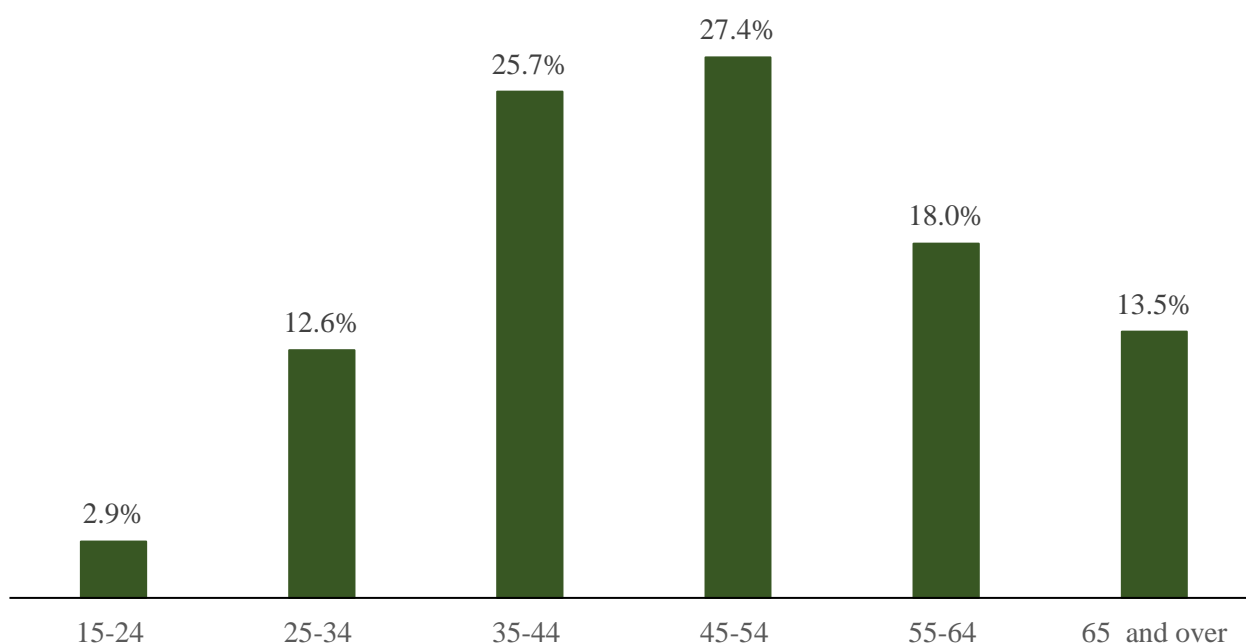
Geographic Representation

Table 1 below illustrates the distribution of respondents across Liberia's 15 counties during the Agriculture Census Community Focus Group Discussions, totaling 61,600 participants. Montserrado County has the largest share, representing 23.5 per cent of the total respondents, followed by Nimba (11.3%), Grand Bassa (10.7%), and Lofa (10.1%). In contrast, counties like Grand Kru (2.2%), Maryland (2.4%), and Gbarpolu (2.5%) have the lowest proportions of participants. The high proportion of respondents in Montserrado and Nimba counties could be possibly linked to the high population densities of these counties and the willingness of their community dwellers to participate in the FGD. Despite the regional disparities, the data shows that respondents were drawn from all of Liberia's 15 counties.

Table 1. Distribution of Respondents by County

County	Number	Per cent
Bomi	2,075	3.4
Bong	5,763	9.4
Grand Bassa	6,612	10.7
Grand Cape Mount	2,338	3.8
Grand Gedeh	2,485	4.0
Grand Kru	1,336	2.2
Lofa	6,230	10.1
Margibi	4,124	6.7
Maryland	1,457	2.4
Montserrado	14,475	23.5
Nimba	6,953	11.3
Rivercess	2,232	3.6
Sinoe	2,353	3.8
River Gee	1,609	2.6
Gbarpolu	1,557	2.5
Liberia	**61,600**	**100.0**

Educational Attainment of Respondents

> *Although the majority of respondents reported some form of formal education attainment, a significant proportion reported no level of education.*

Nationally, 37.9 per cent of respondents reported no formal education, with counties like Grand Bassa (53.7%) and Grand Cape Mount (54.7%) having the highest proportions. Montserrado County, the urban hub, has the lowest share of respondents with no education (20.1%) and the highest with tertiary/post-secondary education (30.3%). While primary education is fairly consistent across most counties, secondary and tertiary education levels show sharp contrasts. For instance, Grand Gedeh and Nimba have relatively higher shares of respondents completing secondary education, whereas counties like Grand Bassa and River Gee exhibit lower tertiary attainment rates (2.3% and 2.8%, respectively).

Table 2. Per cent Distribution of Respondents by Highest Educational Level attained and county

County	None	Primary	Lower Secondary	Upper Secondary	Tertiary/Post-secondary	Total
Bomi	44.5	20.4	11.2	18.6	5.4	100.0
Bong	48.3	19.1	13.0	14.3	5.4	100.0
Grand Bassa	53.7	20.8	12.7	10.4	2.3	100.0
Grand Cape Mount	54.7	16.8	10.3	12.7	5.5	100.0
Grand Gedeh	29.3	19.8	21.1	23.4	6.4	100.0
Grand Kru	43.2	11.8	15.8	23.3	5.9	100.0
Lofa	50.5	15.3	12.6	13.3	8.4	100.0
Margibi	43.9	19.6	10.9	15.6	9.9	100.0
Maryland	35.7	24.1	17.4	19.1	3.7	100.0
Montserrado	20.1	9.1	13.4	27.1	30.3	100.0
Nimba	27.5	17.6	23.0	23.1	8.8	100.0
Rivercess	43.7	25.2	16.1	11.6	3.4	100.0
Sinoe	35.6	25.2	16.5	17.2	5.5	100.0
River Gee	40.9	23.6	17.5	15.2	2.8	100.0
Gbarpolu	46.8	16.6	12.3	18.7	5.5	100.0
Liberia	**37.9**	**16.9**	**14.7**	**18.8**	**11.8**	**100.0**

Community leadership and roles

Positions held by respondents

> *The community focus group discussions were attended by grassroots and leadership figures, with fewer technical professionals' involvement.*

Figure 3 presents the distribution of respondents based on their status in the community. The largest proportion, 40.8 per cent, consists of "ordinary community members", highlighting broad community representation. Village or community heads make up 19.5 per cent of respondents. This suggests that significant inputs were gathered from local leaders. Representatives of women's associations (10.6%) and youth organizations (10.3%) also form notable groups, indicating diverse participation. However, specialized roles such as agricultural extension officers (0.3%), heads of agricultural groups (0.5%), and veterinarians (0.7%) are minimally represented, suggesting limited engagement from technical experts. Government workers (12.5%) and representatives of cultural committees (5.1%) also contributed to the discussions.

Figure 3. Distribution of Respondents by Status in the Community

Community Member	40.8
Village/Community Head	19.5
Government Worker(s)	12.5
Representative of Women Association	10.6
Representative of Youth Organization	10.3
Representative of Cultural Committee	5.1
Spouse to Village/ Community Head	4.5
Representative of School Committee	1.6
Veterinarian	0.7
Head of agricultural group	0.5
Agricultural Extension Officer	0.3
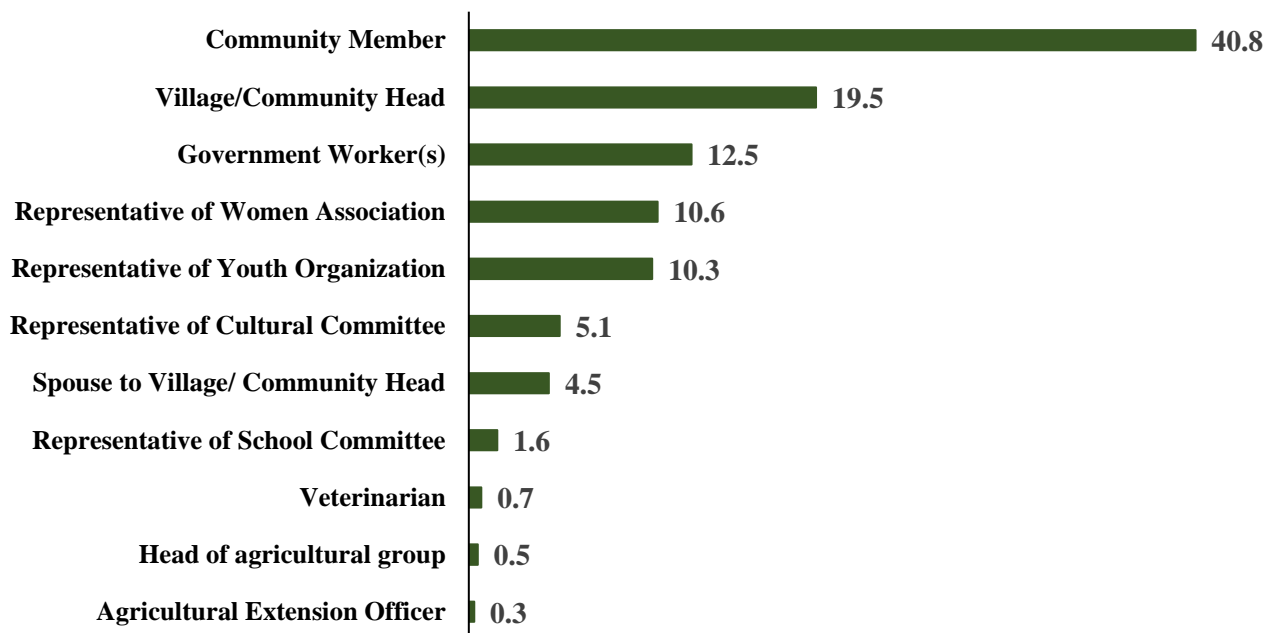
Respondents Involvement in Agricultural Activities

> ***Most of the respondents were engaged in agricultural activities in the community, especially crop cultivation.***

The distribution of respondents based on agricultural activities practiced in the communities reviewed that crop farming is overwhelmingly the most common activity, practiced by 76.5 per cent of respondents. Other agricultural activities, including poultry (7.1%), livestock raising (5.3%), fish capture/fish farming (1.5%), and forestry (1.0%), account for much smaller proportions. About 21.8 per cent of respondents reported not engaging in any agricultural activity. This result shows that the majority of the respondents had first-hand experience on the agricultural activities in the communities and were therefore better position to provide relevant information.

Figure 4. Distribution of Respondents by Agricultural Activities

- Crop farming
- Poultry
- Livestock raising
- Fish capture/fish farming
- Forestry
- None
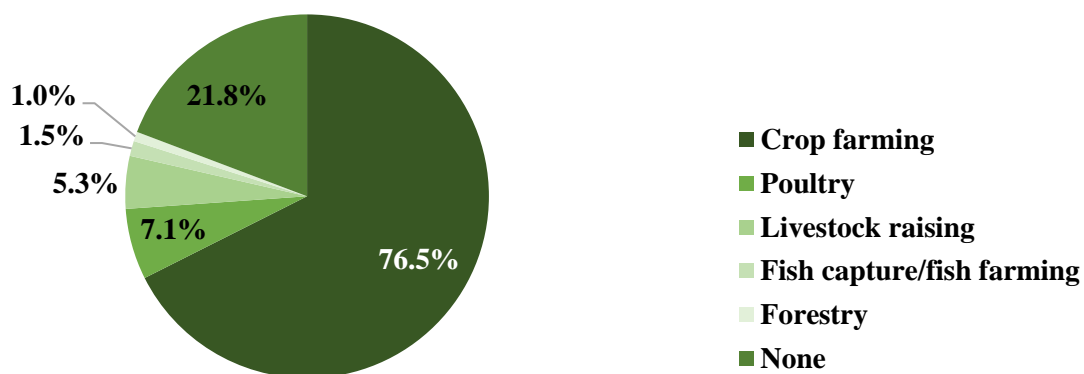
CHAPTER 3: AGRICULTURAL ACTIVITIES AND FACILITIES IN COMMUNITIES

Agriculture is an important part of the local community growth and development. It contributes to their food supply, creates jobs for locals, and serves as a source of livelihood for families. The involvement of any given population in the agrarian sector is not only to raise income and reduce poverty but show their level of efficiency and strength in food security. This chapter presents information on the various agricultural activities practiced in communities across Liberia. In particular, the chapter presents data on production and processing activities in the communities.

Agricultural Production Activities Practiced in the Communities

Crop Cultivation Activities

The LAC-2024 data from the community focus group discussions indicates a predominantly rain-fed agricultural system in communities, with limited infrastructure for irrigation or specialized crop activities. Rain-fed temporary crops are the dominant agricultural activity, practiced by 72 per cent of

> *Rain-fed temporary crop cultivation is widely practiced in communities across Liberia.*

communities across Liberia. Market gardening, practiced by 54.4 per cent of communities, and the cultivation of permanent crops, practiced in 28.3 per cent of communities are also widely practiced in Liberia. These results reflect a focus on both subsistence and commercial farming in Liberia. Activities such as irrigation farming (6.8%), arboriculture (1%), and forage crop cultivation (1.1%) are adopted on a low scale nationwide, highlighting limited diversification in specialized agricultural practices. Forestry-related activities and wild crop foraging for livestock are practiced by 15.2 per cent and 5.3 per cent of communities, respectively.

Figure 5. Distribution of Communities by Crop Cultivation Activities Practiced
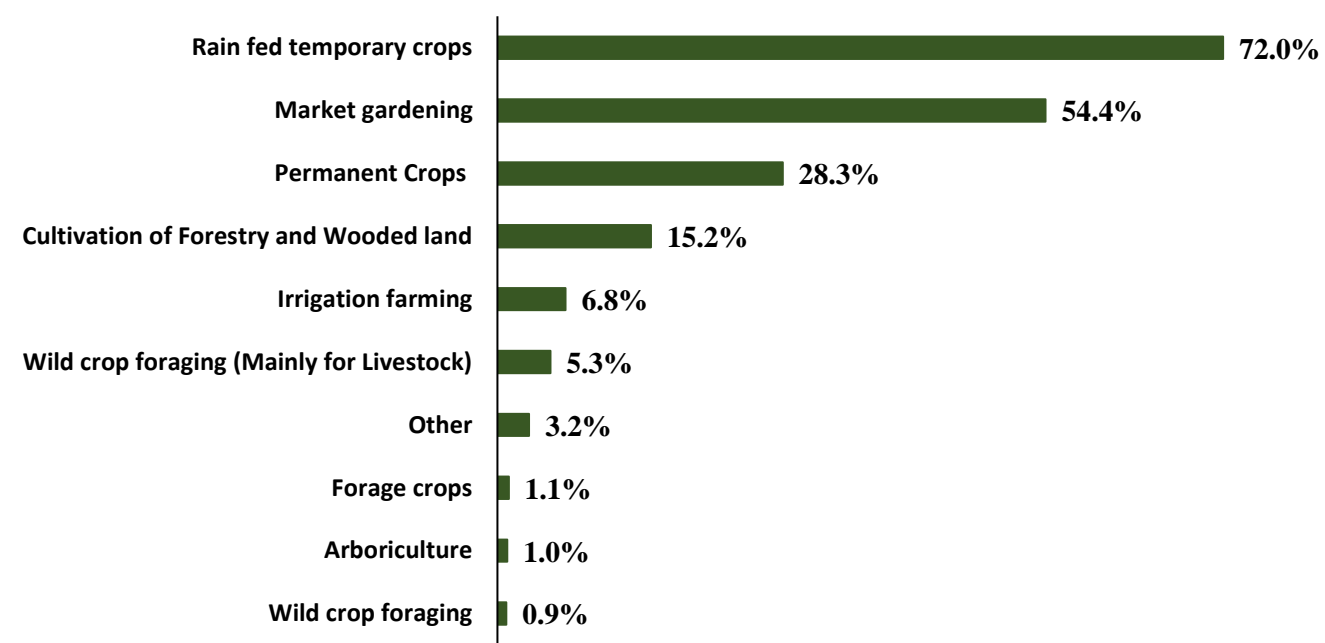
Poultry and Livestock Production Activities

During the community focus group discussions (FGDs), participants were asked about livestock and poultry production activities in their communities over the past 12 months preceding the data collection. Out of 7,193 communities surveyed, 2,346 reported engaging in poultry farming in the year preceding

> *The findings indicate that poultry farming is more prevalent in communities across Liberia than livestock rearing.*

data collection, which accounts for 32.6 per cent of the communities. Poultry farming is followed by goat rearing, which was practiced by 1,966 communities, constituting 27.3 per cent, and pig farming at 25.1 per cent. Sheep rearing was noted in 19.0 per cent of the communities, while cattle rearing was the least common, at 5.8 per cent. Other activities, such as bee-keeping and snail farming, were minimally practiced, representing only 1.1 per cent of the communities. The distribution of communities by the type of poultry or livestock raised shows a clear preference for smaller and more manageable animals.

Table 3. Distribution of Communities by Type of Livestock or Poultry Activities Practiced

Livestock/Poultry	Number	Per cent
Cattle	418	5.8
Goats	1,966	27.3
Sheep	1,365	19.0
Poultry	2,346	32.6
Pigs	1,808	25.1
Others (e.g. bee-keeping, snail, etc.)	82	1.1

Fish Production

In Liberia, various types of fishery activities such as marine industrial fishing, which involves fishing activity by trawler and motor boats (mainly for commercial purposes), artisanal fishing (fishing activity by canoe or boat), aquaculture or fish farming and other types of fisheries are practiced within some communities. The LAC-2024 asked about the practice of these activities within the sampled communities during the 2022/2023 farming season. Overall, relatively fewer communities reported the presence of some forms of fishery activities, with artisanal fishing being the most pronounced (7.5%). The second most practiced fishery activity was aquaculture, practiced by 6.0 per cent of communities. Marine industrial fishing activities within communities were very low, as only 0.9 per cent of communities reported this activity (see **Table 4**).

Table 4. Distribution of Communities by Type of Fishery Activities Practiced

Fishery Activities	Number	Per cent
Artisanal fishing	542	7.5
Aquaculture	433	6.0
Other	298	4.1
Marine industrial fishing	63	0.9

Processing activities in the communities

Information gathered from the LAC-2024community survey reviewed that the majority of communities do not have processing activities.

Production and processing are complementary in terms of agricultural productivity. Agro-processing is an important component of the agriculture value chain, as it helps in value addition.

Figure 6. Presence and Types of Processing Activities within the community

Only 22.7 per cent of communities reported the practice of some forms of Agro-processing activities. This result highlights the significant gap in value addition within the agricultural sector. Among communities engaged in processing activities, crop processing is overwhelmingly dominant, practiced by 94.4 per cent of these communities, likely driven by the need to handle

staple crops such as rice and cassava. Other processing activities, including livestock (8.4%), forest wood (7.7%), fish (6.4%), and poultry (6.0%), are comparatively minor.

Availability of agricultural facilities

Few communities reported availability of various types of agriculture facilities, with rice mills been the dominant.

At the national level, information gathered from the agriculture census reviewed fewer communities in which agricultural facilities are available. The data shows that only 17.3 per cent of communities had rice mills and 4.4 per cent had cassava mills. Palm oil and sugar cane mills are more available in communities across Liberia than cassava mills (see **Table 5**).

By county, the analysis of available agriculture facilities within communities showed substantial disparities among the 15 counties. Lofa County leads in the availability of rice mills in communities, with 83.8 per cent of sampled communities reporting access, emphasizing its strong association with rice production. Nimba also stands out with the highest proportion of communities reporting cassava mills (7.4%), sugarcane mills (38.6%), and palm oil mills (44.9%). Gbarpolu and Bong also have significant proportions of communities reporting rice mills, at 61.2 per cent and 29.2 per cent, respectively. However, counties like Montserrado, Margibi, and Rivercess have very low per centages of communities reporting the presence of any facility type. Notably, some counties specialize in specific facilities, such as Maryland, where 23.4 per cent of communities reported sugarcane mills.

Table 5. Per cent Distribution of Communities by Type of Agricultural Facilities Available

County	Rice Mill	Cassava Mill	Sugar Cane Mill	Palm oil mill
Bomi	4.5	7.4	3.1	3.8
Bong	29.2	3.2	18.9	24.8
Grand Bassa	5.1	5.1	8.9	0.3
Cape Mount	14.3	7.0	1.4	5.4
Grand Gedeh	10.1	6.8	1.5	1.3
Grand Kru	1.0	3.2	7.5	0.0
Lofa	83.8	7.8	15.1	30.7
Margibi	3.2	0.4	2.1	0.0
Maryland	0.6	6.5	23.4	0.0
Montserrado	0.5	0.6	2.2	0.4
Nimba	25.2	7.4	38.6	44.9
Rivercess	0.4	8.3	0.0	0.7
Sinoe	0.8	5.7	0.0	0.8
River Gee	0.6	3.3	1.1	0.0
Gbarpolu	61.2	10.7	12.5	4.9
Liberia	**17.3**	**4.4**	**10.3**	**10.9**

Availability of electricity in communities

The availability of electricity within communities is important for improving agricultural productivity. Electricity is needed to power agricultural processing facilities and other equipment. The use of modern farm technologies mostly requires the availability of stable and reliable electricity. Thus, information on the availability of electricity within agricultural communities in Liberia is vital. The community level data from the agriculture census presents such information, as communities' dwellers were asked about the availability, source and working conditions of electricity in their communities.

> *Overall, the percentage of communities reporting the availability of electricity is low.*

The distribution of communities with electricity in Liberia reveals significant disparities across counties, reflecting uneven access to energy infrastructure. Montserrado County has the highest proportion of communities with electricity (81.5%), far exceeding the national average of 37.5 per cent, likely due to its urbanization and concentration of resources in the capital region. Maryland (44.6%) and Nimba (41.3%) follow, demonstrating relatively higher access in these counties. Conversely, counties such as Gbarpolu (3.6%) and Rivercess (2.1%) have extremely low proportions of communities with electricity, underscoring severe energy deficits in these counties. Agricultural counties like Bong (19. 6%0, Lofa (11.9%) and Grand Bassa (9.6%) also show limited electrification. **Figure 7** shows that 7 in 10 communities having electricity are connected to the national grid. Community solar was reported by 20.6 per cent of communities as the main source of electricity. Only 2.5 per cent of communities reported the availability of community/mini-grid as the main source of electricity.

Figure 7. Percent Distribution of Communities with Electricity by County and Source of Electricity

County	Percent
Rivercess	2.1
Gbarpolu	3.6
Grand Bassa	9.6
Lofa	11.9
River Gee	16.5
Bong	19.6
Grand Kru	25.4
Bomi	30
Margibi	31.1
Grand Gedeh	33.6
Cape Mount	34.9
Liberia	37.5
Sinoe	37.5
Nimba	41.3
Maryland	44.6
Montserrado	81.5

Source	Percent
National grid (LEC)	70.0%
Community Solar	20.6%
Community Generator	8.8%
Other	6.1%
Community-/Mini-grid	2.5%
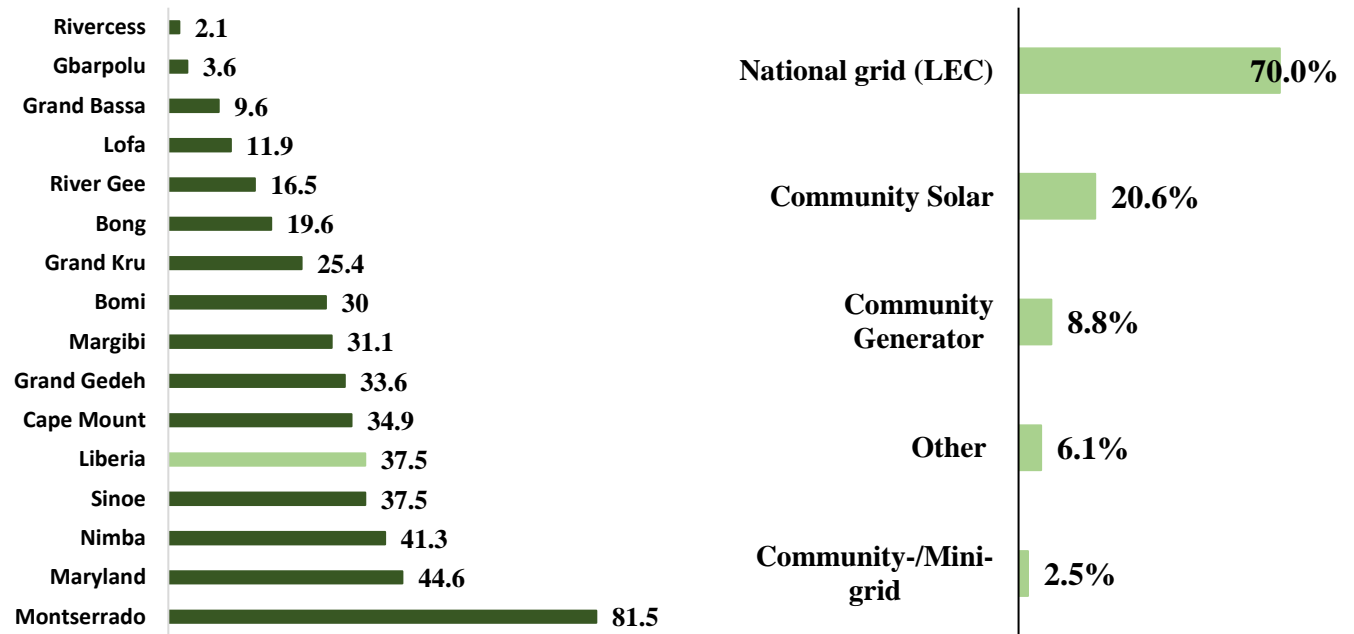
CHAPTER 4. DIFFICULTIES IN CROP PRODUCTION ACTIVITIES AND CHARACTERISTICS OF COMMUNITIES' FARMLANDS

The LAC-2024 community survey collected useful data that can be used to assess direct and indirect challenges confronting agricultural communities and farmers involved in various agricultural activities. Community dwellers were asked to identify the various challenges facing farmers in their communities over the past 3 years preceding the survey. They were also asked about the characteristics of their farmland. The findings from these questions are analyzed in this chapter to provide insights into the direct and indirect challenges facing farmers in Liberia and the characteristics of various farmlands across the country. The focus is placed on crop production activities since it is the predominant agricultural activity practice within communities.

Difficulties related to crop production

Table 6 shows the per centage of communities that indicated various difficulties related to crop production activities. Over half of the communities (53.9%) stated crop diseases as a serious difficulty faced by farmers in crop production, followed by animal damage (46.2%) and production theft (41.1%). It is also important to highlight that other types of difficulties, like high input costs, accessing credit, and selling the products were reported by a noticeable proportion of communities, 31.9 per cent, 30.9 per cent, and 30.0 per cent, respectively. Insecurity/violence and indebtedness were reported by only 4.7 per cent of communities.

Table 6. Difficulties Related to Crop Production faced by Farmers in the Communities

Difficulties	Number of Communities	% of Total Communities
Crop diseases	3,874	53.9
Animal damage	3,326	46.2
Production theft	2,955	41.1
High input costs	2,297	31.9
Lack of and difficulties in getting input	2,234	31.1
Difficulty accessing credit	2,225	30.9
Difficulties in selling the products	2,160	30.0
Poor transportation and/or infrastructure	1,975	27.5
Lack of agricultural Land	1,589	22.1
Soil degradation/decreasing soil fertility	1,399	19.4
Water scarcity	1,342	18.7
Access to agricultural extension and advisory services (AEAS)	1,259	17.5
Low adoption of improved technology	1,055	14.7
Flood	935	13.0
Poor access to land	922	12.8
Poor access to energy	849	11.8
Insufficient manpower	784	10.9
Dry Spell	754	10.5
Insecurity, violence	339	4.7
Indebtedness	339	4.7
Others	78	1.1

Characteristics of communities' farmlands

This section of the Census community report is about the share of total farmland in the community that has been affected by land degradation, desertification or abandonment in the past 3 years before the data collection; and the current situation compared to 3 years ago *vis* increase, decrease or stagnancy.

Farmland Degradation

> ***Many communities in Bong, Rivercess and Lofa reciteded impact of land degradation on their farmlands.***

The impact of land degradation on community farmlands over the past three years preceding the survey was reported by communities across the country, with Bong, Rivercess and Lofa been highly affected. **Table 7** below provides a detailed per centage distribution of communities in Liberia by the share of farmland affected by land degradation across counties. Nationally, 61.6 per cent of communities report no land degradation, while 22.7 per cent experience mild degradation (between 1 to 25% of farmland affected). Moderate (that is 26% to 50% of farmland affected) to severe (that is 76%-100% of farmland affected) degradation affects 15.6 per cent of communities, with the highest levels seen in Rivercess, where 14.4 per cent of communities experience severe degradation. Many communities in Bong (56.2%) and Lofa (47.4%) reported some levels of degradation of their farmlands, mainly moderate degradation. Counties like Grand Bassa (79.4%) and Gbarpolu (80.3%) exhibit high proportions of communities reporting unaffected farmland.

Analysis of the evolution of farmland degradation compared to three years before the data collection shows that about 37 per cent of communities experienced an increase in the total area affected by the phenomenon while 17 per cent experienced a decrease. Communities that reported stagnancy in the total affected area constituted 46 per cent.

Table 7. Percentage Distribution of Communities by Share of Farmland Affected by Land Degradation and County.

County	None (0%)	1-25%	26%-50%	51%-75%	76%-100%	Total
Bomi	65.1	31.9	1.3	1.2	0.5	100.0
Bong	43.8	27.4	16.3	11.8	0.7	100.0
Grand Bassa	79.4	18.1	1.9	0.1	0.4	100.0
Cape Mount	64.9	19.0	14.3	1.8	0.0	100.0
Grand Gedeh	67.1	25.1	6.0	0.6	1.1	100.0
Grand Kru	77.2	18.4	4.4	0.0	0.0	100.0
Lofa	52.6	31.1	10.2	5.2	0.9	100.0
Margibi	58.6	29.1	10.9	0.7	0.7	100.0
Maryland	71.4	17.6	7.3	3.7	0.0	100.0
Montserrado	62.3	18.0	7.3	5.2	7.2	100.0
Nimba	56.6	19.3	14.1	8.8	1.2	100.0
Rivercess	51.4	24.7	9.5	0.0	14.4	100.0
Sinoe	68.2	25.7	3.8	2.3	0.0	100.0
River Gee	66.8	30.1	2.1	1.0	0.0	100.0
Gbarpolu	80.3	13.2	6.5	0.0	0.0	100.0
Liberia	**61.6**	**22.7**	**8.7**	**4.3**	**2.6**	**100.0**

Farmland Desertification

> *While share of farmland affected by desertification remain low at the national level, many communities in Lofa reported the impact of the phenomenon on their farmland.*

About 41.2 per cent of communities in Lofa reported the impact of desertification on their farmland compared to only 19.3 per cent at the national level. A high proportion of communities in Lofa (26.2%) indicated that between one and a quarter of their farmland was affected by desertification. Counties like Grand Bassa (95.2%) and Maryland (90.2%) have the highest per centages of communities reporting unaffected farmland. It is also worth noting that 13.9 per cent of communities in Rivercess reported severe impact of desertification on their farmland (between 76-100% of farmland affected). Among communities affected by the impact of desertification, 35 per cent reported an increase over the last three years while 23 per cent said they experienced a decrease. About 42 per cent reported that the situation remained the same.

Table 8. Percent Distribution of Communities by Share of Farmland Affected by Desertification

County	None (0%)	[1-25%]	[26%-50%]	[51%-75%]	[76%-100%]	Total
Bomi	90.9	7.5	0.4	1.2	0.0	100.0
Bong	70.9	13.1	7.8	7.4	0.8	100.0
Grand Bassa	95.2	3.1	1.7	0.0	0.0	100.0
Cape Mount	81.6	10.0	7.3	1.1	0.0	100.0
Grand Gedeh	87.1	11.0	1.5	0.0	0.4	100.0
Grand Kru	81.1	10.2	7.6	1.1	0.0	100.0
Lofa	58.8	26.2	9.9	4.6	0.4	100.0
Margibi	71.1	21.4	5.4	1.7	0.4	100.0
Maryland	90.2	4.8	2.1	2.9	0.0	100.0
Montserrado	86.3	9.7	2.2	0.7	1.2	100.0
Nimba	79.1	8.1	9.4	2.5	0.9	100.0
Rivercess	77.5	5.3	3.3	0.0	13.9	100.0
Sinoe	90.3	6.1	2.8	0.7	0.0	100.0
River Gee	78.0	20.4	0.6	1.0	0.0	100.0
Gbarpolu	83.6	7.8	4.2	4.4	0.0	100.0
Liberia	**80.7**	**11.5**	**4.7**	**2.1**	**1.0**	**100.0**

Abandoned Farmland

> *Majority of Communities in Liberia had No Experience of Farmland Abandonment, with Notable Regional Disparities.*

The data in **Table 9** provides insights into the extent of farmland abandonment across communities in Liberia. Over 78 per cent of communities in Liberia reported no farmland abandonment. About 12.9 per cent of communities experienced minimal abandonment (that is 1 to 25% of total farmland abandoned). Moderate to high abandonment (between 26% to 50% and 76%-100% of total farmland, respectively) is relatively low, affecting 8.4 per cent of communities. Grand Bassa and Maryland counties reported the highest shares of communities with no

farmland abandonment, as 91.0 per cent and 90.1 per cent of communities reported no experience of farmland abandonment, respectively. On the other hand, Rivercess stands out with 13.9 per cent of its communities experiencing severe abandonment (between 76% to100% of total farmland abandoned), the highest in the country. Lofa and Margibi also show higher proportions of mild to moderate abandonment, with 33.3 per cent and 31.9 per cent of their communities affected, respectively.

Regarding the evolution of farmland abandonment, about 29.3 per cent of communities that experienced the phenomenon complained of an increase in the total area of farmland been abandoned over the past three years preceding the data collection. More than half (52.9%) of communities indicated that the situation has remained the same over the past three years while 17.8 per cent reported a decrease in the situation.

Table 9. Percent Distribution of Communities by Share of Farmland Abandoned

County	None (0%)	[1-25%]	[26%-50%]	[51%-75%]	[76%-100%]	Total
Bomi	94.6	3.7	0.8	0.8	0.0	100.0
Bong	70.9	14.0	8.8	4.3	2.0	100.0
Grand Bassa	91.0	6.9	2.0	0.0	0.1	100.0
Cape Mount	78.5	12.1	6.9	2.5	0.0	100.0
Grand Gedeh	80.8	14.5	3.3	1.0	0.4	100.0
Grand Kru	67.3	17.1	14.4	1.1	0.0	100.0
Lofa	66.6	23.9	5.6	3.8	0.1	100.0
Margibi	66.8	24.3	7.6	0.9	0.4	100.0
Maryland	90.1	8.1	1.8	0.0	0.0	100.0
Montserrado	84.6	6.8	3.9	2.8	1.9	100.0
Nimba	74.3	19.8	4.4	0.7	0.9	100.0
Rivercess	65.3	6.3	10.0	4.4	13.9	100.0
Sinoe	89.5	5.6	1.9	3.0	0.0	100.0
River Gee	72.2	26.2	1.6	0.0	0.0	100.0
Gbarpolu	86.1	5.4	4.4	4.2	0.0	100.0
Liberia	**78.7**	**12.9**	**4.9**	**2.2**	**1.3**	**100.0**

Reasons for Farmland Abandonment

> *The most pronounced reason for land abandonment was the lack of water.*

For those communities that reported abandoning a portion of their farmland, some reasons were given for their action. About 29.4 per cent of the communities said it was due to lack of water that they abandoned their farmland. Production flow problems, such as those related to different steps in the production process, including planting, harvesting and storage, was cited as the second most reason for land abandonment, cited by 19.9% of the communities. Land disputes and increased labor cost were also mentioned by a noticeable proportion of communities (see *Figure 8*). Oil spillage and insufficient basic infrastructure were the least mentioned reasons given by the communities.

Figure 8. Reasons for Farmland Abandonment in Liberia

Reason	Value
lack of water	29.4
production flow problems	19.9
Land disputes	14.4
increased labour cost	12.9
Erosion	10.6
lack of labourers	10.5
Conflicts	9.8
Insecurity	7.8
water salinity	6.8
Increased cost of inputs	3.8
insufficient basic infrastructure	3.4
Oil Spillage	1.1
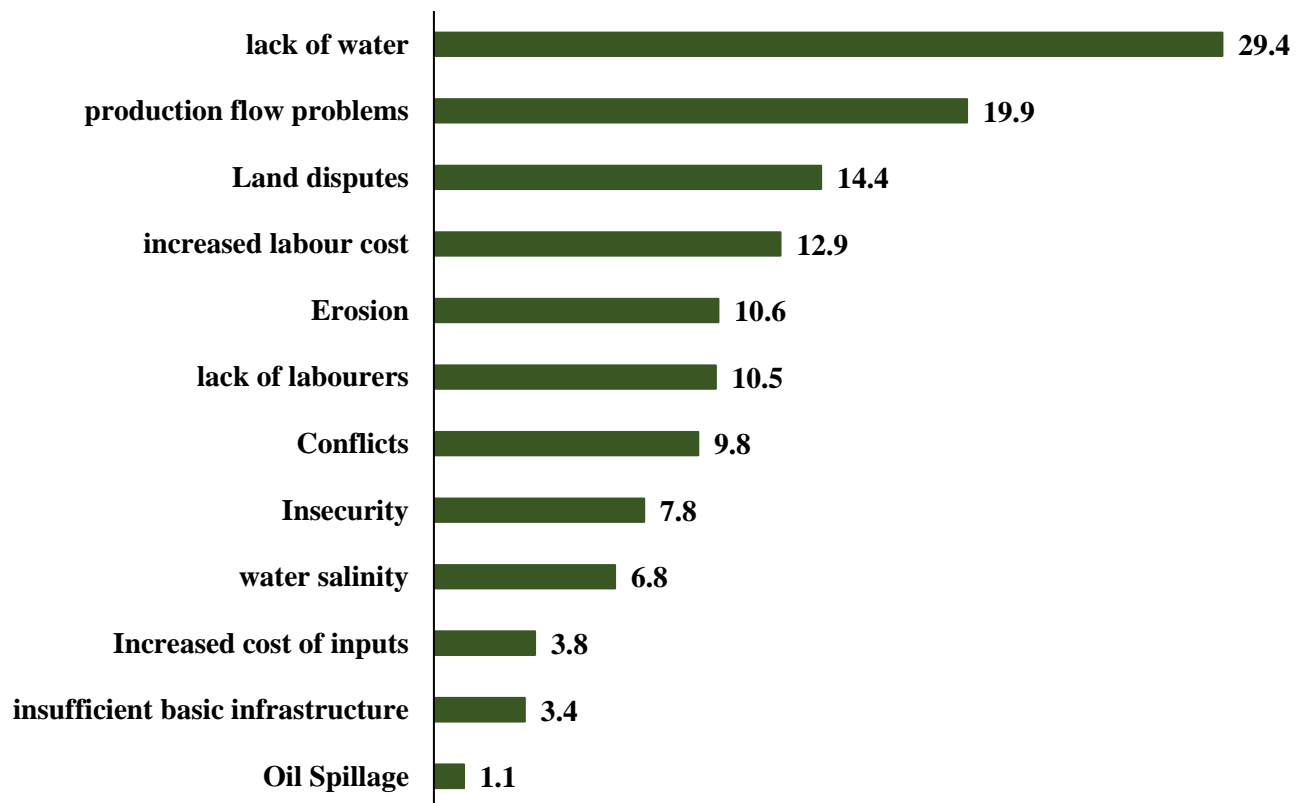
CHAPTER 5. ACCESS TO MARKETS, AGRICULTURAL INPUTS, SERVICES AND CREDITS IN THE COMMUNITIES

Accordingly, access to markets, agricultural inputs, extension services, and financial credit is essential for boosting agricultural productivity, improving rural livelihoods, and driving sustainable economic growth in Liberia. This chapter examines the availability, accessibility, and constraints associated with these resources, highlighting key challenges faced by farmers. It explores market access in terms of location, distance, and logistical barriers, as well as the availability of essential inputs such as seeds, fertilizers, and pesticides, revealing systemic gaps that hinder productivity. The chapter also addresses limited access to agricultural credit, emphasizing the role of Village Savings and Loan Associations (VSLAs) in bridging financial gaps where formal lending institutions are unavailable. Furthermore, it assesses livestock and poultry vaccination campaigns, identifying deficiencies in coverage and disease targeting that threaten agricultural resilience. The findings underscore the urgent need for policy interventions, infrastructure development, and enhanced financial and technical support to strengthen agricultural value chains and ensure long-term sectoral growth in Liberia.

Markets to sell Agricultural Products

Limited access to markets often leads to high costs associated with transportation, intermediaries, and post-harvest losses, reducing farmers' profits and contributing to low productivity. Farmers in Liberia usually take their produce to weekly and daily markets to sell. The locations and time taken to access these markets are important for understanding the level of constraint faced by farmers in selling their produce. The LAC-2024 community survey asked community dwellers about the location of their nearest weekly or daily markets and the time it takes for farmers to access them. This section presents the key findings.

Location and Distance of Weekly Markets to Sell Agriculture Products

> ***Vast Majority of Communities Reported that Farmers Sell their Produce at Weekly Markets Within their Districts.***

According to the data collected, 55.5 per cent of communities indicated that farmers sell their agriculture products in weekly markets within the same district. Only 22.5 per cent of communities reported that the farmers sell their produce in the community where they reside. About 15 per cent of communities mentioned that farmers take their produce to sell in another district while 5 per cent indicated that they went to another county. The per centage of communities that reported farmers taking their produce to another country was just 2 per cent.

Accessibility to weekly markets, measured by walking time to the nearest weekly market is a challenge for many agricultural communities. Over half of the communities (58.0%) experience long travel times

> ***More than Half of the Agricultural Communities have Challenges Accessing Weekly Markets.***

(more than 30 minutes of walk) to access the nearest weekly market. About 22.5 per cent of communities indicated that they do not know the time required to reach the nearest weekly market when walking. Only 7 per cent of communities reported spending less than 15 minutes accessing the nearest weekly markets (see **Figure 9**).

Figure 9. Percent Distribution of Communities by Location of Weekly Markets and Time Spent to Access Them.
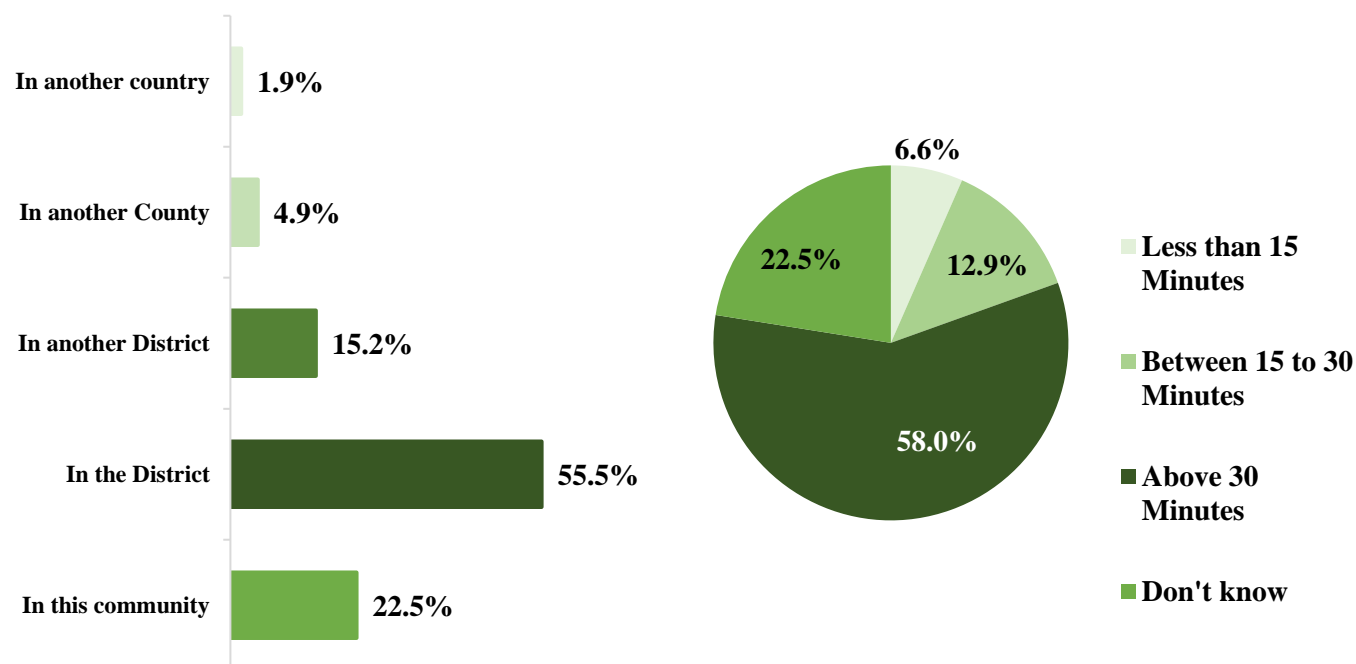
Location and Distance of Daily Markets to Sell Agriculture Products

> *The data highlights that while district-level daily markets are the most accessible for many agricultural communities, a significant proportion faces challenges related to long travel times and limited access to daily markets outside their immediate areas.*

The data shows that most farmers have daily markets to sell their agricultural products within their district, as 49.3 per cent of communities reported that their daily markets were within the district of the community. A little above 33 per cent of communities pointed out that their daily markets were situated in their communities. Fewer communities access daily markets in other districts (12.7%), other counties (3.4%), or countries (1.3%). However, nearly half (47.0%) of communities' travel over 30 minutes to reach these daily markets, highlighting significant accessibility challenges. Only 7.3 per cent of communities have daily markets within 15 minutes, while 33.2 per cent are unsure of travel time.

Figure 10. Percent Distribution of Communities by Location of Daily Markets and Time Spent to Access Them.
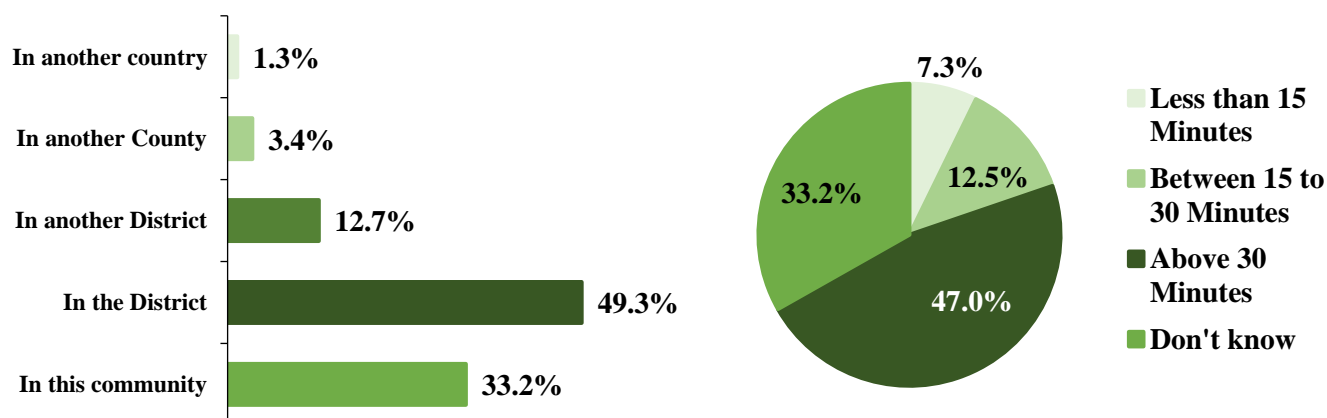
Access to agricultural inputs, services and credits in the communities

This section presents data on the availability of key agricultural inputs and technical support services, the accessibility of credit sources and facilities, and the provision of livestock and poultry vaccination campaigns in communities.

Availability of Agricultural Inputs and Services

The availability of agricultural inputs and technical support services is essential for promoting sustainable agricultural practices, enhancing livelihoods, and fostering economic development. Despite the importance of the availability of inputs and services in agricultural productivity, the LAC-2024 results indicate that the availability of inputs and services in communities is relatively low. Figure **11** shows the per centage of

> *Availability of Agriculture Inputs and Technical Support Services are Relatively low across Communities in Liberia.*

communities reporting the availability of various agricultural inputs and services. The highest per centage of communities reported seed/planting materials shops (4.3%) and fertilizer shops (3.8%). Other critical agricultural services show similarly low availability, with 1.1 per cent and 0.6 per cent of communities reporting the availability of storage for agricultural products and fishing input shops, respectively.

Figure 11. Percentage of Communities with access to various inputs and services
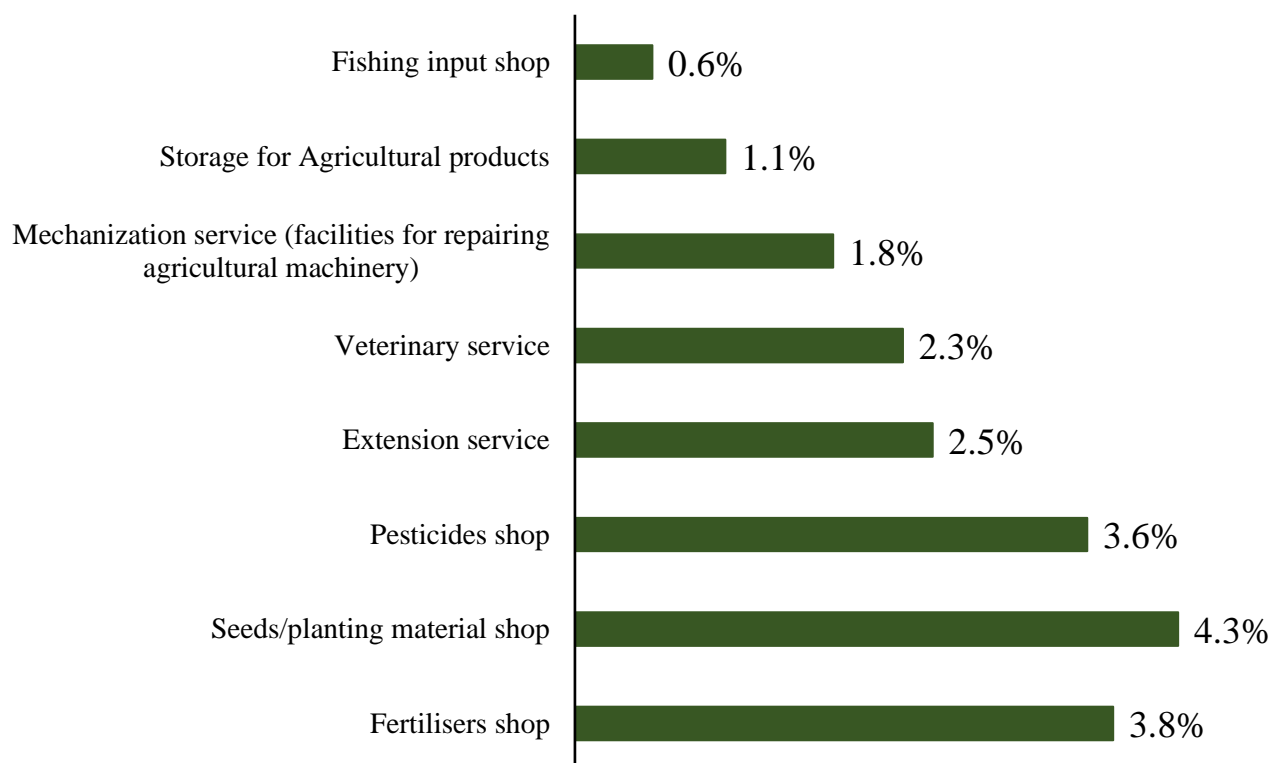
Availability of Sources of Agricultural Credits

Access to credit is vital for agriculture as it enables farmers to invest in the necessary inputs, manage risks, expand operations, and enhance productivity. It helps community dwellers cope with the unforeseen challenges of the agricultural sector, such as unfavorable climate patterns, and market instability. The data shows that 66.6 per cent of communities had no sources of agricultural credit available. However, 19 per cent of communities reported the availability of Village Saving Loan Association (VSLA) and 18.9 per cent had Financial Club. Concerning microcredit and cooperatives, 2.1 per cent of communities reported both categories. Other sources of agricultural credits, such as banks, available in 1.5 per cent of communities and input suppliers, available in 0.2 per cent of communities, were rarely available in the communities.

Figure 12. Percentage of Communities with Access to Various Sources of Credits
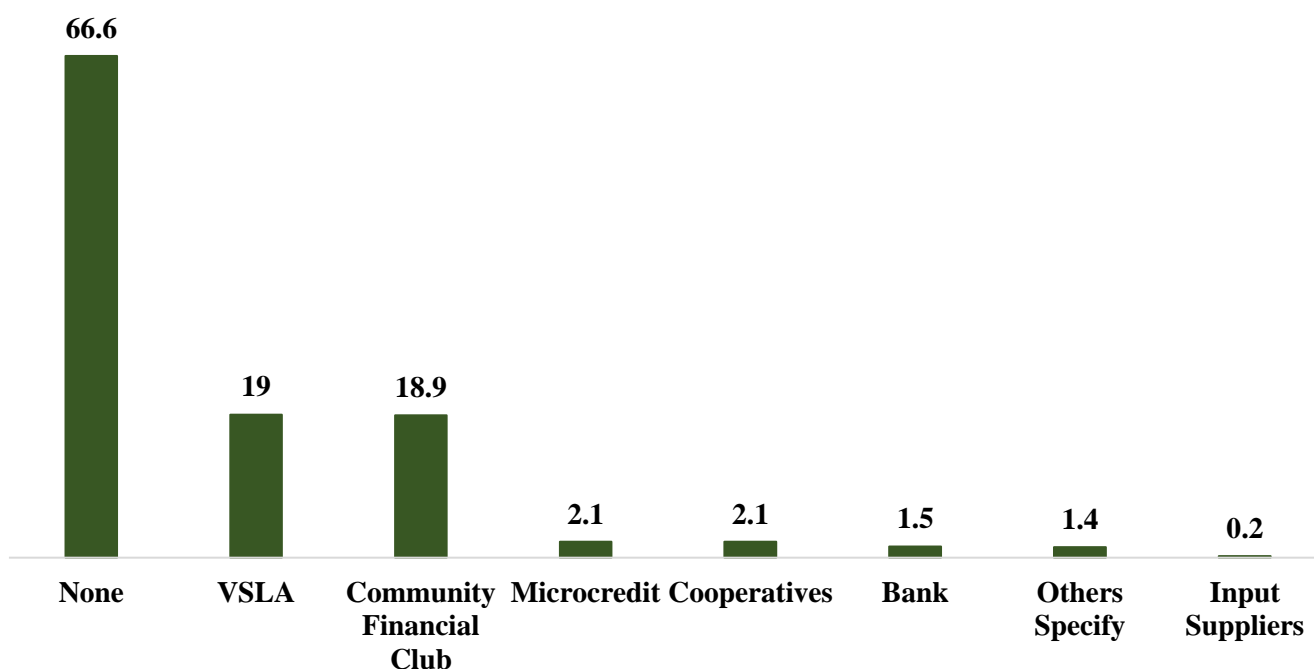
Availability of Livestock or Poultry Vaccination by Veterinary Services

Notably, vaccination is not just a technical or veterinary issue, but also an integral part of broader community well-being and development. Ensuring that these services are accessible to communities involved with Livestock rearing can significantly improve the resilience of both agricultural systems and the communities that depend on them.

The data collected on the number of communities that received livestock or poultry vaccination by veterinary services, highlights a significant gap in vaccination coverage in the communities. About 91.9 per cent of the 3,667 communities practicing livestock or poultry production activities reported not receiving any kind of livestock or poultry vaccination campaigns. Among the 8.1 per cent of livestock or poultry rearing communities that received some kind of vaccination campaigns, nearly 8 in 10 indicated that they received only livestock vaccination campaigns while 5.4 per cent indicated receiving only poultry vaccination campaigns. About 14.4 per cent of them received both livestock and poultry vaccination campaigns by veterinary services.

Figure 13. Percent Distribution of Communities by kinds of vaccination services received from veterinary services
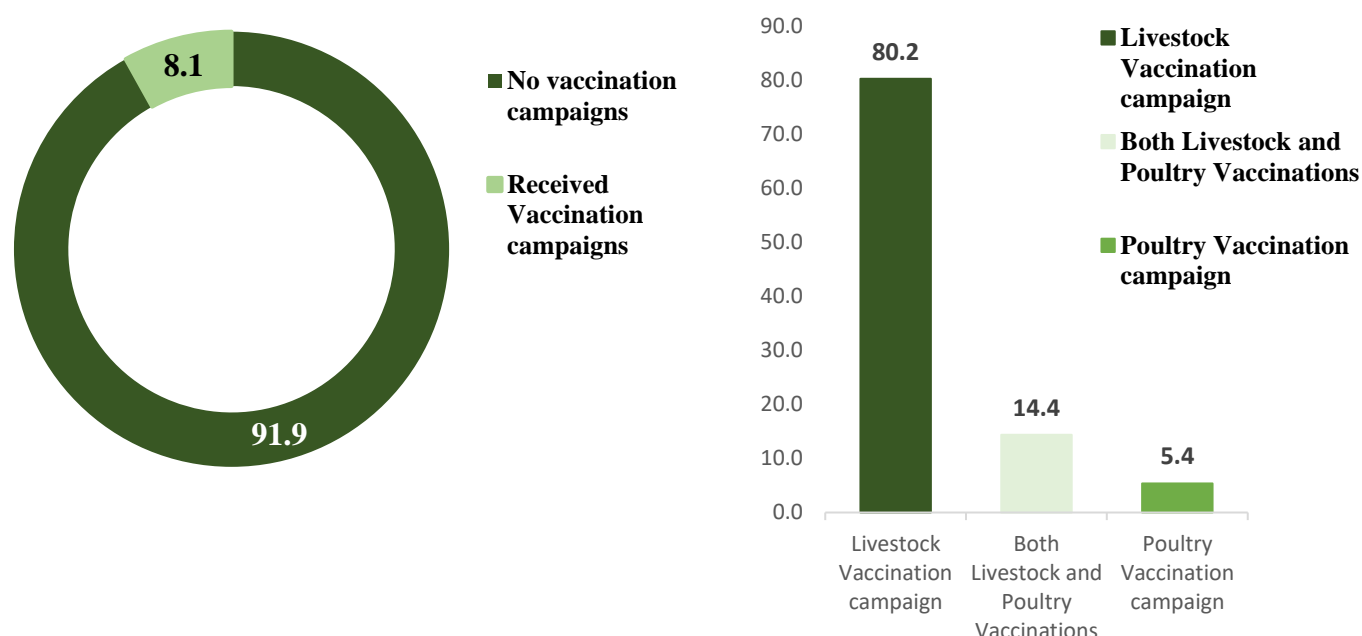
Types of Livestock and Poultry Vaccination campaigns Provided by Veterinary Services or Available in Communities

The data on livestock and poultry vaccination campaigns by type reveals that among the 297 communities receiving vaccination campaigns, PPR (Goat Disease) vaccinations were the most common, covering 45.6 per cent of the communities. This was followed by other vaccinations such as Rabies at 28.3 per cent, and ASF (African Swine Fever) at 24.1 per cent. Vaccinations for diseases like Brucella (13.8%), Fowl Cholera (13.2%), and NCD (Newcastle Disease) (12.8%) were moderately common among communities. However, vaccines for conditions such as Hemorrhagic Septicemia (1.1%), Fowl Pox (4.2%), and Internal/External Parasites (3.5%) were received or available in very few communities.

Table 10. Distribution of Communities that Received Vaccination Campaigns by Types of Vaccinations Received

Type of livestock or poultry Vaccination	Number of communities	Per cent of total communities that received vaccination
ASF (African Swine Fever)	71	24.1
BV(Brucella)Brucella)	41	13.8
CBPP (Contagious Bovine Pleuropneumonia)	15	5.1
Fowl Cholera	39	13.2
Fowl Typhoid	34	11.5
HS (hemorrhagic Septicemia)	3	1.1
Infectious Bursal Disease (IBD)	15	5.0
NCD (New Castle disease)	38	12.8
PPR (Goat Disease)	135	45.6
Fowl pox	12	4.2
Internal/External Parasites	10	3.5
Other	84	28.3

Total number of communities that received some forms of vaccination campaigns: 297 communities.

CHAPTER 6: AGRICULTURAL LABOUR IN THE COMMUNITY

Agricultural labor is fundamental to the success and sustainability of farming systems and rural economies. It plays a critical role in food production, ensuring the availability of essential crops and livestock products to meet local and global demands. Agricultural labor supports livelihoods for millions of people, particularly in rural areas, where farming is often the primary source of income. It contributes to economic development by fostering employment opportunities, reducing poverty, and enhancing food security. Moreover, labor availability and efficiency significantly impact on agricultural productivity and innovation, influencing practices such as planting, harvesting, irrigation, and pest management. A well-supported and skilled agricultural workforce is essential for adapting to challenges like climate change, evolving market demands, and the need for sustainable farming practices.

The agriculture census' community module gathered a wealth of information on agricultural labor practices within the communities. This chapter provides a summary of the findings. In particular, the chapter presents information on men and women hiring of agricultural labor for various types of agricultural activities, the source of hired persons and the amount paid to hire different categories of labor (i.e., Men, Women and Children) from within or outside the communities.

Hiring of laborers to work in fields

> *Slightly more communities reported female hiring of laborers to work in fields compared to their male counterparts.*

A total of 5,103 communities, constituting 70.9 per cent, mentioned that female farmers hired laborers to work in their fields, compared to 5,017 (69.7%) that indicated male farmers hired laborers to work in fields.

Source of hired labor

Table 11 provides insights into the distribution of communities where laborers are hired for agricultural activities, categorized by sex and the source of hired labor. A significant proportion of communities, 43.8 per cent and 45.4 per cent for male and female farmers respectively, rely on labor hired from within the community. Communities where labor is hired exclusively from outside the community are minimal, with only 1.9 per cent for both male and female farmers. Interestingly, 54.3 per cent of communities with male farmers and 52.6 per cent with female farmers hire laborers from both within and outside the community, indicating a broader reach in sourcing labor. This distribution suggests that most communities prioritize local labor, but a substantial number also leverage external sources to meet agricultural labor demands.

Table 11. Distribution of Communities Where Farmers Hire Labourers by Sex and Source of Hired Labour

Source	Male Farmers		Female Farmers	
	Number	Per cent	Number	Per cent
Within community	2,195	43.8	2,319	45.4
Outside community	96	1.9	99	1.9
Both	2,726	54.3	2,685	52.6
Total	**5,017**	**100.0**	**5,103**	**100.0**

Activities for which men hire labor

The figures below present the distribution of communities where male farmers hire men, women, and children for agricultural work, categorized by type of activities. Male farmers in the communities predominantly hire men for clearing fields (in 97.2% of communities), and preparing fields (in 76% of communities), reflecting the emphasis on physical labor tasks. Women are hired across more diverse activities, with the highest proportions of communities employing women for planting (75.2%), weeding (72%), and harvesting (68.7%), showcasing their integral role in the planting and maintenance phases. In contrast, children are hired in a much smaller proportion of communities, with the majority (80.7%) not hiring children under 15 at all (see **Figure 14**). Among the communities that hire children, planting (67.9%) and clearing fields (60.0%) are the most common activities for which children were hired (see **Figure 15**).

Figure 14. Percent Distribution of Men Hiring of Children in Communities

Legend:
- Communities in which Male Hired Children Under 15
- Communities in which Male do not Hired Children Under 15

Pie values: 19.3, 80.7
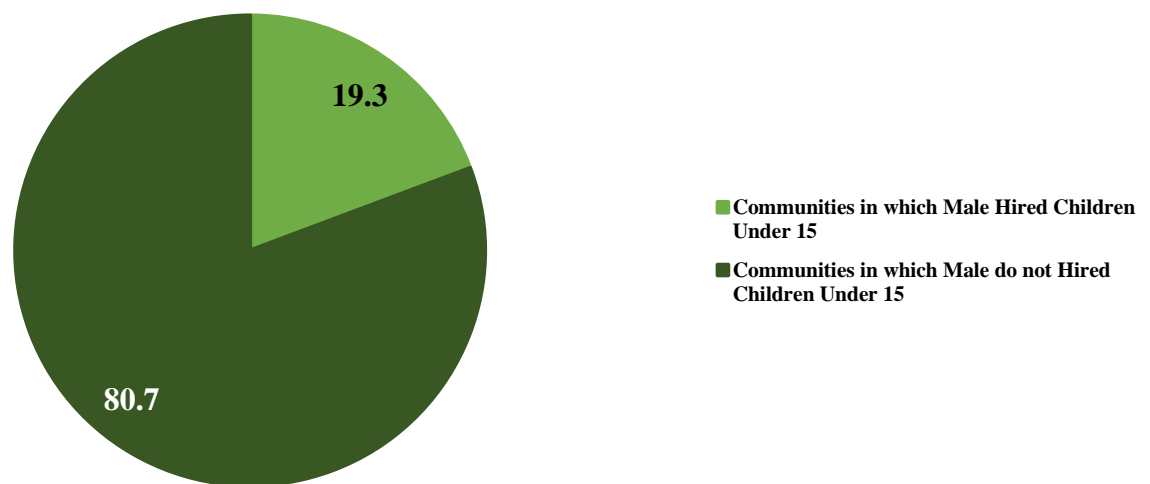
Figure 15. Percent Distribution of Communities Where Male Farmers hire Men, Women, or Children for Agricultural Work, Categorized by Type of Activities

Children
- Planting: 67.9
- Clearing fields: 60.0
- Preparing fields: 53.4
- Harvesting: 43.3
- Weeding: 40.0
- Processing: 11.6
- Other: 5.6
- Applying Fertilizer: 0.5

Women
- Planting: 75.2
- Weeding: 72.0
- Harvesting: 68.7
- Clearing fields: 15.8
- Preparing fields: 13.0
- Do not hire women: 8.7
- Processing: 6.6
- Applying Fertilizer: 1.5
- Other: 0.9

Men
- Clearing fields: 97.2
- Preparing fields: 76.0
- Planting: 37.7
- Harvesting: 33.6
- Weeding: 13.1
- Processing: 8.0
- Applying Fertilizer/ Pesticide/Herbicide: 3.1
- Other: 2.2
- Do not hire men: 1.1

Average daily cost of men-hired labor

Table 12 outlines the average daily wages (in Liberian Dollars) that men paid to workers for various agricultural activities, categorized by gender. Men receive the highest wages across most activities, with other acts of labor such as fencing (577 LRD) and clearing fields (500 LRD) being the highest-paid tasks, reflecting their engagement in labor-intensive roles. Women, while also contributing significantly, are paid lower wages, with their highest average for planting (422 LRD) and clearing fields (414 LRD). Children receive the lowest wages across all activities, with their highest average also in other acts of labor such as fencing (358 LRD) and clearing fields (292 LRD).

Table 12. Average Daily Wages that Men Paid to Workers for Agricultural Activities, Categorized by Gender

Gender	Activities	Mean (in L$)
Men	Clearing fields	500
	Preparing fields	479
	Applying Fertilizer	417
	Weeding	490
	Planting	460
	Harvesting	428
	Processing	415
	Other acts of Labour	577
Women	Clearing fields	414
	Preparing fields	383
	Applying Fertilizer	368
	Weeding	414
	Planting	422
	Harvesting	399
	Processing	343
	Other acts of Labour	310
Children	Clearing fields	292
	Preparing fields	288
	Applying Fertilizer	215
	Weeding	272
	Planting	277
	Harvesting	283
	Processing	264
	Other acts of Labour	358

Activities for which women hire labor

In the majority of communities, women hire men for labor-intensive tasks such as clearing and preparing fields. About 94.4 per cent of communities reported that women hired men to clear fields while 75.2 per cent of them indicated that women hired men to prepare fields. Women hiring other women are mostly for planting (in 73.8% of communities), weeding (in 70.4% of communities), and harvesting (in 67.7% of communities). This finding further supports the assertion that women play a critical role in planting and crop maintenance activities in Liberia's agriculture sector. In contrast, women hiring children for agricultural activities is practiced in fewer communities. In those communities where the practice exists, women hire children primarily for planting (70.2%), clearing fields (51.9%), and weeding (49.0%).

Figure 16. Percent Distribution of Women Hiring of Children in

18.7

81.3

■ Communities in which Female Hired Children Under 15

■ Communities in which Female Do not Hire Children Under 15
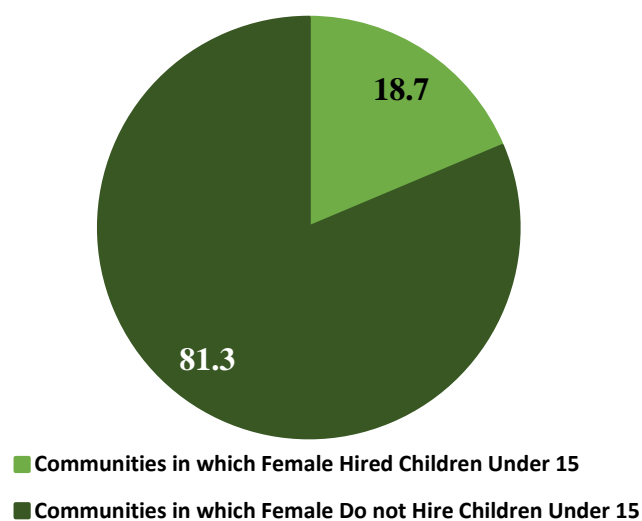
Figure 17. Percent Distribution of Communities Where Female Farmers Hires Men, Women, or Children for Agricultural Work, Categorized by Type of Activities
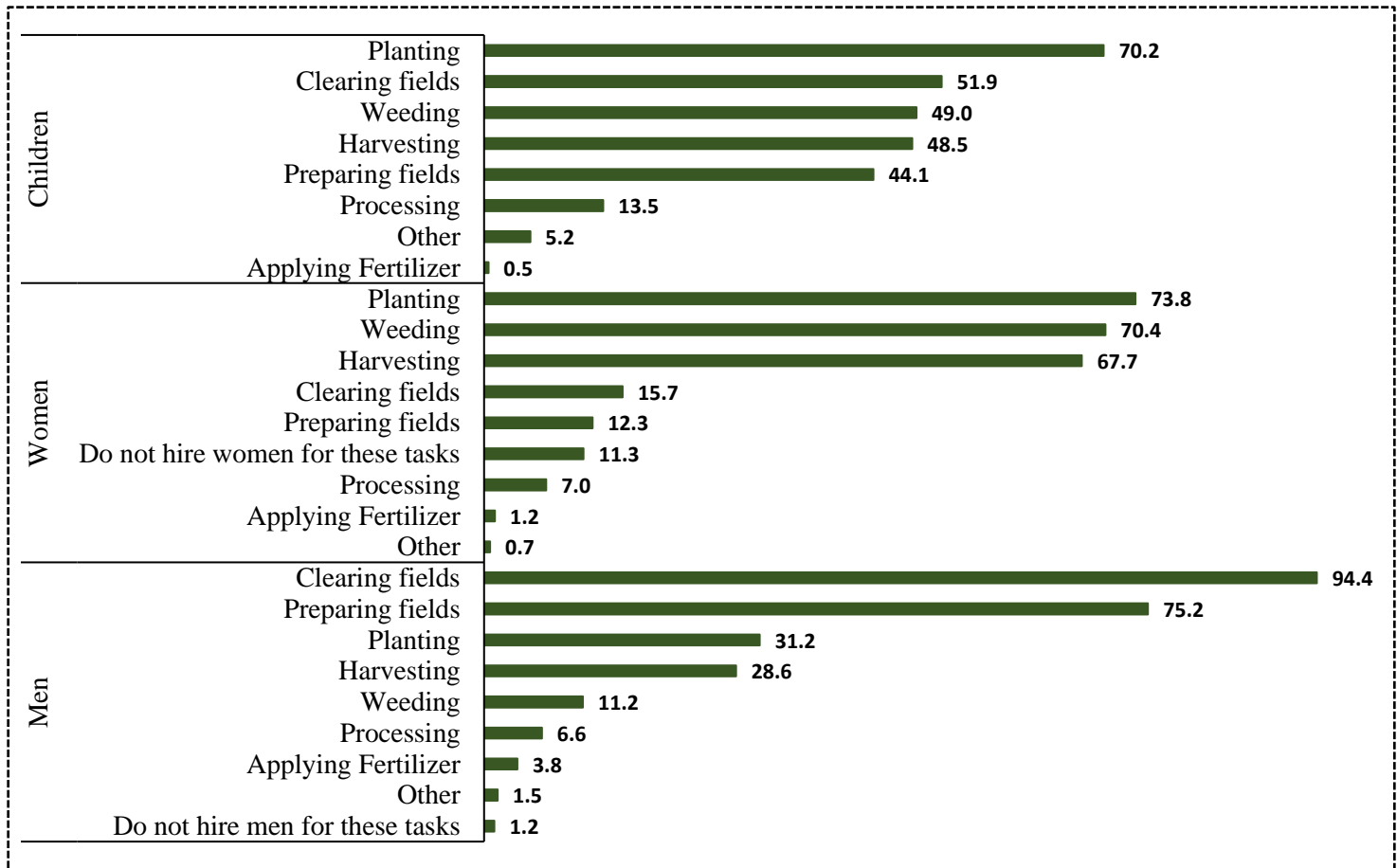
Average daily cost of women-hired labor

The average daily wages (in Liberian Dollars) paid by women to men, women, and children under 15 years for various agricultural tasks are presented in **Table 13**.

Across all activities, women paid men the highest wages, with clearing fields (528 LRD) and preparing fields (544 LRD) commanding the top rates. It is important to note that females paid slightly higher rates for these activities compared to their male counterparts. Women paid other women moderately lower wages for agricultural activities, with clearing fields and planting both averaging around 399–411 LRD. Compared to men's daily payment to women for these same activities, women paid slightly less. Children under 15 are paid the least for all tasks by both sexes. The average daily cost of women hiring children is between 265 LRD (for processing) and 323 LRD (for clearing fields).

Table 13. Average Daily Wages that Women Paid to Workers for Agricultural Activities, Categorized by Gender

Gender	Tasks	Mean (LRD)
Men	Clearing fields	528
	Preparing fields	544
	Applying Fertilizer	425
	Weeding	449
	Planting	438
	Harvesting	418
	Processing	408
	Other activities	471
Women	Clearing fields	399
	Preparing fields	384
	Applying Fertilizer	391
	Weeding	410
	Planting	411
	Harvesting	399
	Processing	356
	Other activities	231
Children Under 15	Clearing fields	323
	Preparing fields	307
	Applying Fertilizer	277
	Weeding	280
	Planting	271
	Harvesting	273
	Processing	265
	Other activities	381

CHAPTER 7: COMMUNITY INFRASTRUCTURE AND TRANSPORTATION

Access to infrastructure and transportation plays a vital role in the development and well-being of communities, enabling access to essential services, economic opportunities, and improved quality of life for its residents. The current chapter provides data on infrastructure and transportation across communities in Liberia. It highlights the availability and accessibility of key infrastructure, such as schools, health facilities, transport networks, and agricultural services. It further examines the modes of transportation mainly used by community dwellers to access various facilities. The findings in this chapter identify the need for targeted investments to address infrastructure gaps and improve connectivity, fostering equitable development across all communities.

Community infrastructures

Table 14 provides information on access to infrastructure across communities, distinguishing between direct availability within the community and indirect access from neighboring areas. Educational infrastructure shows the highest accessibility, with primary schools being directly available in 57.1 per cent of communities and accessible in 78 per cent when including nearby areas. Secondary schools and nurseries are less common but still accessible to 53.5 per cent and 39 per cent of communities, respectively. Health services present a more uneven distribution: only 3.3 per cent of communities have hospitals, though indirect access raises the total to 34.3 per cent. Private clinics are much more accessible (68%), while pharmacies are available or accessible to 33.3 per cent of communities, highlighting significant gaps in rural health infrastructure.

Transport, communication, agricultural facilities, and financial services are markedly underdeveloped. Only 36.8 per cent of communities have access to main roads, while infrastructure such as bus stops (4.7%) and post offices (2.3%) are minimal. Agricultural facilities like storage and greenhouses are scarce, with total accessibility below 3 per cent. Financial services, such as formal banks and microfinance institutions, are accessible in only 13.5 per cent and 8.5 per cent of communities, respectively. Conversely, religious structures, like mosques or churches, are the most accessible among other infrastructures, with 80.8 per cent of communities having direct or indirect access.

Table 14. Distribution of Communities that have access to Infrastructure

Infrastructure	Available in the Community		Not Available in the Community but Community have Access		Total Community with Access	
	Number	Per cent	Number	Per cent	Number	Per cent
SCHOOL						
Nursery	2,082	28.9	727	10.1	2,809	39.0
Primary (public or private)	4,109	57.1	1,502	20.9	5,611	78.0
Secondary (public or private)	1,571	21.8	2,277	31.6	3,848	53.5
HEALTH						
Hospital	235	3.3	2,231	31.0	2,466	34.3
Private clinic	1,818	25.3	3,075	42.8	4,893	68.0
Pharmacy	1,250	17.4	1,145	15.9	2,395	33.3
TRANSPORT/COMMUNICATIONS						
Cell phone distributor	345	4.8	775	10.8	1,120	15.6
Post office	15	0.2	149	2.1	164	2.3
Bus/Minibus stop	117	1.6	218	3.0	335	4.7
Main access road	1,700	23.6	949	13.2	2,649	36.8
Internet café	219	3.1	403	5.6	623	8.7
AGRICULTURE						
Storage	82	1.1	108	1.5	190	2.6
Processing	582	8.1	195	2.7	777	10.8
Garage	364	5.1	578	8.0	942	13.1
Greenhouses	52	0.7	6	0.1	58	0.8
Landing site	37	0.5	49	0.7	86	1.2
OTHER INFRASTRUCTURE						
Bank (formal sector)	66	0.9	902	12.5	969	13.5
Microfinance institution	148	2.1	466	6.5	614	8.5
Police station	509	7.1	2,444	34.0	2,953	41.1
Food Market for purchase	1,102	15.3	2,002	27.8	3,104	43.2
Mosque or Church	4,932	68.6	882	12.3	5,814	80.8
Fire station	29	0.4	215	3.0	245	3.4

Community transportation

The community module of the LAC-2024 collected information on the primary modes of transportation used by community dwellers to access various types of infrastructure. Walking is the most frequent means of transport for most community dwellers, particularly for accessing schools, health facilities, and religious institutions, with rates as high as 95.2 per cent for mosques or churches and 91.9 per cent for agricultural processing sites. Cars and motorcycles are the second-most commonly used modes, especially for accessing banks (58.3%) and garages (35.5%). The popular use of cars and motorcycles to access banks and garages could be linked to the long distances between these facilities and the communities. Public transportation options, such as buses or minibuses, are rarely utilized, reflecting their limited availability in most areas. Infrastructure like fire stations,

storage facilities, and landing sites see a mix of walking and vehicle use, with some dependence on less common means like boats or ferries (see **Appendix A1**).

CHAPTER 8: KEY EVENTS IN THE COMMUNITIES

The survey asked community dwellers to describe important events in their community in the last three years before the data collection, including any events during the survey year. The purpose was to identify events that have changed the well-being of people in the community over the past three years. Residents were asked about events such as the construction of new schools or medical facilities, the creation of new employment opportunities, or the construction of a new road or other development projects. In addition, the survey gathered information on the year of experience of these latest events, and the proportion of community dwellers who benefited from them. This section presents three sub-sections that provide information on communities' knowledge of new events, the year of their occurrences, and the proportion of community dwellers that benefited from them.

Communities' knowledge of new events that made people better off

Community dwellers were asked to describe important events that had taken place in their community three years before the LAC-2024, including any events that occurred during the census year. The objective was to capture events that changed the well-being of people in the community for better. Examples of events that may have made people better off are new schools or medical facilities, new employment opportunities, or the construction of a new road or other development projects.

The data reveals that out of 7,193 communities surveyed, 31.2 per cent (2,242 communities) reported experiencing at least one new community event, while the majority, 68.8 per cent (4,952 communities), did not experience any new developments. The relatively low per centage of communities benefiting from new events underscores the need for targeted interventions to ensure a more equitable distribution of resources and development projects across communities.

Table 15. Distribution of Communities by Experience of New Community Events

Community Experience	Frequency	Per cent
Experienced New Community Event	2,242	31.2
Did Not Experience Any New Event	4,952	68.8
Total	**7,193**	**100.0**

Among the communities that experienced new events, the most commonly reported developments include the provision of on-grid electricity (30.9%), construction of new roads (22.9%), and establishment of new schools (22.2%). However, other critical areas such as new health facilities (6.5%), new employment opportunities (10.9%), and market facilities (4.4%) were less frequently experienced by communities, suggesting gaps in addressing broader socio-economic needs. Furthermore, a high per centage (26.1%) of communities reported Other Good Events, mainly the provision of cash from NGOs to households for the establishment of small businesses and the construction of new homes as well as the construction of new town halls.

Table 16. Communities that Experienced New Community Events

Community Events	Number	Per cent
New Employment Opportunity	244	10.9
New Health Facility	147	6.5
New Road	512	22.9
New School	499	22.2
Improved Transportation Services	62	2.8
New On-Grid Electricity	692	30.9
New Off-Grid Electricity	130	5.8
New Irrigation Facility	22	1.0
New Market Facility	99	4.4
New Processing Facility	136	6.1
New Storage Facility	42	1.9
Other Good Event (Including Cash from NGOs and construction of Town Halls)	586	26.1

Year of occurrences of new community events

The analysis of the distribution of communities that experienced various new events over time, revealed that the majority of these developments occurred in 2023 across almost all categories. For instance, 49.6 per cent of communities that experienced new employment opportunities reported that the event occurred in 2023, while 60.5 per cent of those who experienced new health facilities and 55.4 per cent of those who saw new roads indicated that the events occurred in 2023 as well. Similarly, 53.5 per cent of communities gained access to new on-grid electricity, and an overwhelming 89 per cent who experienced new off-grid electricity installations reported that the events occurred in 2023. Communities that experienced new schools also mentioned the same year (46.4%). The data suggests that community-level progress was most prominent in 2023, with earlier years showing gradual increases (see **Appendix A2**).

Proportion of community dwellers that benefited from new community events.

Table 17 illustrates the per centage distribution of communities that experienced various new events by the share of residents benefiting from them. The results highlight variations in the degree of inclusiveness across event types. Events such as new on-grid electricity, new roads, and other good events (including cash from NGOs and construction of new Town Halls) had the most significant impact, with the majority of communities reporting benefits for over 50 per cent of their residents (47.2%, 42.9%, and 52.7% of communities, respectively). In contrast, events like new employment opportunities and new health facilities predominantly benefited smaller shares of residents, with 64.1 per cent and 48.5 per cent of communities indicating benefits for only 10 per cent or fewer of their residents. New irrigation facilities showed a unique distribution, with most communities experiencing benefits for either 41–50 per cent (48.3%) or above 50 per cent (42.6%) of their residents.

Table 17. Per cent Distribution of Communities that experienced New Events by Share of Residents that Benefited from them

New Events	Share of residents that benefited						Total
	< =10%	**11%-20%**	**21%-30%**	**31%-40%**	**41%-50%**	**>50%**	
New Employment Opportunity	64.1	13.7	7.1	2.9	4.9	7.4	100.0
New Health Facility	48.5	4.3	1.5	2.6	4.4	38.7	100.0
New Road	26.5	9.3	7.2	4.0	10.0	42.9	100.0
New School	31.1	8.3	17.9	8.0	9.4	25.3	100.0
Improved Transportation Services	20.4	10.2	9.1	4.6	25.7	29.9	100.0
New On-Grid Electricity	14.6	7.9	7.3	7.4	15.6	47.2	100.0
New Off-Grid Electricity	24.9	16.5	11.2	5.5	3.1	38.8	100.0
New Irrigation Facility	4.6	0.0	4.6	0.0	48.3	42.6	100.0
New Market Facility	22.9	7.5	7.2	24.0	10.0	28.5	100.0
New Processing Facility	19.4	7.5	13.4	9.1	15.4	35.3	100.0
Other Good Event	24.9	7.5	3.2	2.4	9.3	52.7	100.0

CHAPTER 9: ENVIRONMENT

Issues related to the environment have a profound impact on community livelihoods, natural resources, and sustainable development. This chapter examines key aspects of various environmental challenges and practices, as captured in the LAC-2024 community module. It highlights the extent to which communities utilize officially protected areas for agriculture, manage forest and wooded lands sustainably, and experience environmental contamination. In addition, the chapter explores the prevalence and nature of environmental concerns, such as Dry Spell, floods, and pollution, expressed by communities. It also assesses the institutional capacity for environmental protection, focusing on the presence of organizations dedicated to addressing these issues. The findings provide valuable insights into the environmental issues in communities, highlighting areas for intervention.

Use of officially protected or preserved areas as agricultural land

Figure 18 highlights the distribution of communities based on whether they are utilizing officially protected or preserved areas for agricultural activities. Out of the total 7,193 communities, 10.6 per cent (765 communities) are engaged in agricultural activities within officially protected or preserved areas, while a significant majority of 89.4 per cent (6,428 communities) are not. This indicates that most agricultural activities occur outside protected or preserved areas, reflecting a general adherence to land-use policies. However, the presence of agricultural activities in protected areas raises concerns about potential environmental degradation and the need for strengthened enforcement of conservation regulations to safeguard these areas.

Figure 18. Percent Distribution of Communities by Whether or Not They are Using Officially Protected or Preserved Areas as Agricultural Land

■ Some Agricultural Area located in Officially Protected or Preserved Area
■ No Agricultural Area Located in Officially Protected or Preserved Area
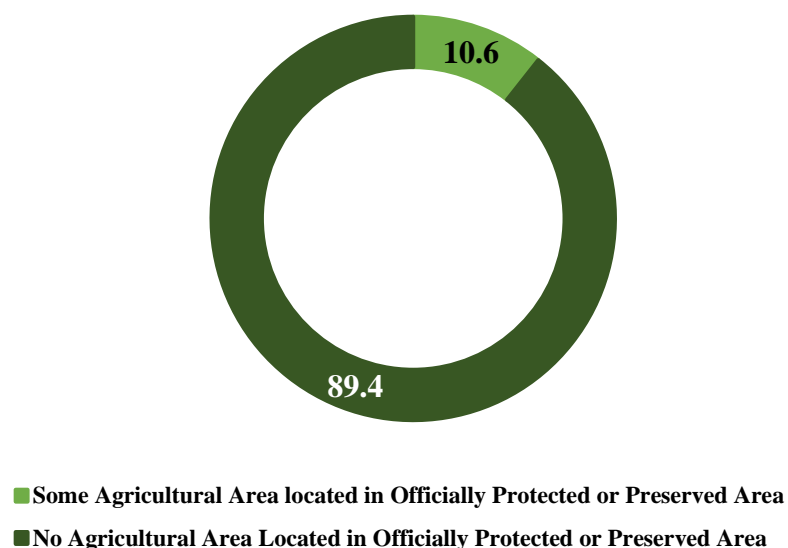
Community forest or wooded land under sustainable forest management

Information on sustainable management of forest or wooded land were gathered during the agriculture census. Of the total 7,193 communities, only 8.9 per cent (637 communities) reported to have forest or wooded land under sustainable management, while a substantial majority of 91.1 per cent (6,556 communities) do not practice sustainable forest management. This distribution underscores a critical gap in the implementation and adoption of sustainable forestry practices, which are essential for preserving biodiversity, mitigating climate change, and ensuring long-term environmental stability.

Environmental contamination

Over a fifth of communities suffered from environmental contamination. The data shows that 20.8 per cent (1,495 communities) reported having sites that suffer from environmental contamination, while the majority, 79.2 per cent (5,699 communities), did not report such issues. This indicates that while environmental contamination affects a notable portion of communities, most remain unaffected. However, the presence of contamination in over a fifth of communities highlights a significant environmental challenge that require some intervention.

Table 18. Distribution of Communities by Whether or Not they have any Sites that Suffer from Environmental Contamination

Category	Frequency	Per cent
Suffer from Environmental Contamination	1,495	20.8
Did Not Suffer from Environmental Contamination	5,699	79.2
Total	**7,193**	**100.0**

Main environmental concern in the communities

Environmental concerns are an important aspect of community well-being, as they directly impact livelihoods, health, and sustainability. Understanding the distribution and prevalence of such concerns helps to inform targeted interventions and policy-making. The data presented in **Figure 19** provides a summary of how communities perceive and experience environmental challenges.

Environmental issues are a significant concern for the majority of communities. The findings of the LAC-2024 community survey shows that more than half, 58.7 per cent (or 4,222 communities) expressed some form of environmental concerns.

The analysis of the specific environmental concerns reported by the 4,222 communities that expressed environmental concerns shows that lack of water (Dry Spell) affects most communities (27.9% of communities). Floods follow lack of water (or Dry Spell) as the second most reported environmental concern, affecting 19.6 per cent of the communities. Other noticeable concerns include water pollution (expressed by 14.7% of communities), air pollution (expressed by 14.2% of communities), and extreme temperatures (expressed by 7.3% of communities). Soil pollution was the least reported concern, accounting for only 4.3 per cent of communities. The prevalence of Dry Spell and floods as concerns among communities underscores the impact of climate variability, while pollution concerns point to human activities contributing to environmental

Figure 19. Prevalence of Environmental Concerns Among Communities
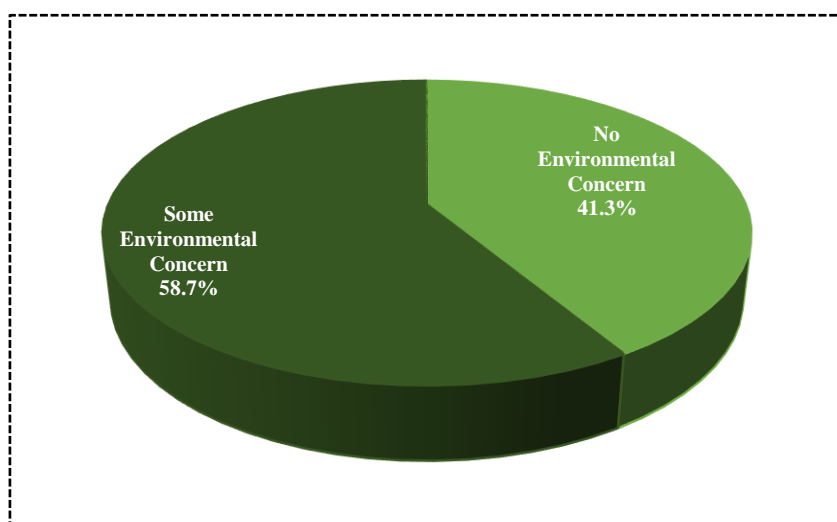
degradation. Addressing these concerns requires a multifaceted approach, combining mitigation of climate change impacts, improved water management, and pollution control measures.

Table 19. Distribution of Communities by Main Environmental Concerns

Environmental Concerns	Number	Per cent
Lack of water (Dry Spell)	1,179	27.9
Floods	826	19.6
Air pollution	599	14.2
Soil pollution	183	4.3
Water pollution	619	14.7
Extreme temperature (cold or heat)	308	7.3
Other	508	12.0
Total	**4,222**	**100.0**

Prevalence of organizations for environmental protection among communities

Community knowledge of environmental protection programs (often provided by local organizations) is an important step in addressing environmental issues. The presence of organizations dedicated to environmental protection plays a crucial role in addressing and mitigating the environmental challenges faced by communities. As highlighted in the findings above, a significant portion of communities reported various environmental concerns, including Dry Spell, floods, and pollution. Understanding the prevalence of such organizations provides insights into the institutional support available to tackle these issues and the gaps that need to be addressed to strengthen environmental management at the community level.

In this section, an analysis of the prevalence of organizations for environmental protection among communities, categorized by whether or not they reported environmental concerns is provided. Across all communities, only 8.5 per cent (613 communities) have an organization focused on environmental protection, with a higher prevalence among communities that reported some environmental concerns (11.7% of communities) compared to those without concerns (3.9% of communities). In contrast, the vast majority of communities, 91.5 per cent (6,580 communities), lack such organizations, highlighting a significant gap in institutional capacity for addressing environmental issues (see **Table 20**)

These findings emphasize the limited organizational presence for environmental protection, even in communities facing environmental challenges. This gap underscores the need for strengthening environmental governance and promoting the establishment or support of such organizations. Their presence is critical for addressing the specific environmental concerns identified earlier, such as Dry Spell, floods, and pollution, by facilitating community-driven solutions and implementing effective mitigation strategies.

Table 20. Distribution of Communities by Perception of Environmental Issues and Existence of Organization for Environmental Protection

	No Environmental Concern		Some Environmental Concern		Total	
	Number	Percent	Number	Percent	Number	Percent
Presence of Organization for Environmental Protection	117	3.9	496	11.7	613	8.5
No Organization for Environmental Protection	2,854	96.1	3,726	88.3	6,580	91.5

Total	**2,972**	**100.0**	**4,222**	**100.0**	**7,193**	**100.0**

CHAPTER 10: NATURAL EXTREME EVENTS OR DISASTERS

Natural extreme events or disasters significantly impact communities as they pose a threat to their livelihoods, infrastructure, and overall well-being. Climate change often intensifies these events, making certain areas increasingly vulnerable to their effects. This chapter explores the prevalence, types, and frequency of natural extreme disasters experienced by communities as captured in the LAC-2024. The findings provide critical insights into the scale and nature of these disasters, helping to identify areas requiring targeted interventions. Specifically, the chapter examines the proportion of communities affected, the most common disasters reported, and the recurrence of these events. In addition, the findings highlight the need for robust disaster risk management and climate adaptation strategies to mitigate the adverse effects of extreme events or disasters.

Communities experienced of extreme events or disasters

Understanding the extent to which communities have been affected by extreme events or disasters provides valuable insights for planning and implementing effective disaster risk reduction and resilience strategies. The LAC-2024 gathered information on whether communities experienced natural extreme disasters in the past three years preceding the data collection. The data presented in this section sheds light on the prevalence of natural extreme disasters among communities over the past three years before the agriculture census.

Findings from the survey show that nearly one-third of communities had been directly impacted by extreme natural events such as floods, Dry Spells, or storms over the previous 3 years before the agriculture census. A total of 2,233 communities (or 31.0% of communities) reported suffering from some kind of natural extreme events or disasters, while 69.0 per cent (4,960 communities) did not. The prevalence of such disasters underscores the growing vulnerability of communities to climate-related hazards and the importance of disaster risk reduction strategies.

Types of disasters that affected communities

Information on the specific types of natural extreme events or disasters that affected the 2,233 communities during the past 3 years before the agriculture census was also collected. The most frequently reported disaster was extreme winds or storms, affecting 72.6 per cent of these communities, followed by flood/erosion at 48.3 per cent. Fire disasters were also prevalent, impacting 41.3 per cent of affected communities, while dry spell was reported by 31.4 per cent. Other significant events include extreme temperatures (27.2%), COVID-19 (26.4%), and pest or disease outbreaks (23.3%).

Table 21. Share of Communities that suffered from Various Kinds of Events or Disasters

Disaster	Number	Per cent
Dry Spell	701	31.4
Flood/Erosion	1078	48.3
Extreme Winds/Storms	1620	72.6
Extreme temperatures (cold or heat)	606	27.2
Fire Disaster	923	41.3
COVID-19	590	26.4
Pest and Disease outbreak (e.g., army worm)	520	23.3
Other Events or Disasters	92	4.1

Frequency of disasters that affected communities

Table 22 displays the distribution of communities based on how often disasters of various types occurred. For most disasters, a significant proportion of communities experienced them only once, such as COVID-19 (85.3%), fire disasters (40.4%), and extreme winds or storms (32.0%). However, certain disasters, like dry spell (22.8%) and extreme temperatures (31.4%), had a notable share of communities reporting occurrences ten times or more. This result likely indicates persistent and recurring impacts of dry spell and extreme temperatures. Floods and erosion stand out, with 44.8 per cent of affected communities experiencing them ten times or more, highlighting their chronic nature in certain areas. Disasters like pest and disease outbreaks show relatively consistent distribution across varying frequencies, with 33.0 per cent of communities reporting occurrence of one time and 11.2 per cent of them reporting ten times or more occurrences.

Table 22. Distribution of Communities by Kinds of Disaster Experienced and Frequency of Occurrences

Frequency of Disaster	Dry Spell	Flood/Erosion	Extreme Winds/Storms	Extreme Temperatures (cold or heat)	Fire Disaster	COVID-19	Pest and Disease outbreak
One time	32.7	14.8	32.0	31.8	40.4	85.3	33.0
Two times	19.8	11.1	27.7	14.2	21.5	3.3	24.6
Three times	11.3	12.3	16.8	12.0	14.2	5.5	20.1
Four times	4.5	1.4	4.7	5.4	6.3	0.8	6.9
Five times	3.3	1.7	6.7	3.4	2.0	2.4	1.8
Six times	0.7	0.5	0.8	0.9	6.7	0.0	1.8
Seven times	3.4	6.3	0.5	0.2	1.5	0.0	0.4
Eight times	0.6	5.6	1.8	0.6	0.1	0.0	0.0
Nine times	1.0	1.5	0.1	0.2	0.1	0.0	0.2
Ten times and above	22.8	44.8	8.9	31.4	7.3	2.8	11.2
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

CONCLUSION AND RECOMMENDATIONS

Conclusion

The LAC-2024 Community Survey presents a comprehensive snapshot of the agricultural landscape in Liberia, revealing both the opportunities for growth and the pressing challenges that must be addressed. The findings confirm that agriculture in Liberia remains predominantly rain-fed and vulnerable to climatic variability, while also hindered by infrastructural, economic, and institutional constraints.

Despite these obstacles, the survey underscores the sector's untapped potential to drive socio-economic transformation—provided that key structural reforms and targeted investments are implemented. Notably, gaps in irrigation infrastructure, market access, storage facilities, and agro-processing remain major barriers to productivity and value addition. Furthermore, the report brings attention to cross-cutting issues such as gender disparities, insufficient extension services, limited access to credit and inputs, and growing environmental threats like land degradation and dry spells.

Overall, the LAC-2024 results provide a critical evidence base to inform agricultural policy, planning, and investment decisions. With coordinated action and sustained commitment, the challenges highlighted in this report can be transformed into opportunities for inclusive and sustainable agricultural development.

Recommendations

Based on the findings of the LAC-2024 Community Survey, the following key recommendations are proposed to improve the performance and resilience of Liberia's agricultural sector:

1. **Expand Irrigation Infrastructure**
   Promote the development of large-scale and community-based irrigation systems through public-private partnerships (PPPs), with a focus on efficient and equitable water resource management.
2. **Enhance Market Access and Storage**
   Construct and rehabilitate rural markets, roads, and affordable storage solutions (such as silos and cold rooms) to minimize post-harvest losses and improve farmers' linkages to local and regional markets.
3. **Support Agro-Processing and Value Addition**
   Facilitate the growth of agro-processing enterprises by offering tax incentives, grants, and affordable financing options. This will boost employment, enhance value chains, and stimulate rural economies.
4. **Address Labour and Gender Disparities**
   Implement policies and programs to promote fair wages and decent working conditions in agriculture, with a specific focus on reducing gender-based inequalities in pay and participation.
5. **Improve Agricultural Extension Services**
   Strengthen extension delivery systems by investing in training, staffing, and resources to ensure timely and adequate support for farmers across all regions.
6. **Increase Access to Credit and Inputs**
   Expand financial inclusion and input subsidy programs tailored to smallholder farmers, enabling them to invest in improved seeds, fertilizers, and technologies.

7. **Promote Sustainable Land Use and Environmental Management**
   Introduce and scale up sustainable land management practices, afforestation, and disaster risk reduction strategies to combat land degradation and mitigate climate-related shocks.
8. **Strengthen Institutional Coordination and Capacity**
   Foster stronger collaboration among government institutions, development partners, and private stakeholders to ensure the effective implementation, monitoring, and evaluation of agricultural interventions.

By acting on these recommendations, Liberia can build a more inclusive, climate-resilient, and economically viable agricultural sector. The LAC-2024 findings should be utilized as a strategic tool to inform continuous policy dialogue, program design, and sectoral investment for years to come.

APPENDIX

Appendix A1. Distribution of Communities by Mode of Transportation and Infrastructure

Infrastructure	Walking	Tricycle	Bicycle	Car/Motorcycle	Bus/Mini-bus	Taxi	Boat/Canoe	Ferry	Don't know	Other specify	Total
SCHOOL											
Nursery	34.8%	0.0%	0.3%	3.0%	0.0%	0.0%	0.0%	0.0%	-	61.9%	100.0%
Primary (Public or Private)	72.4%	0.1%	0.1%	4.7%	0.0%	0.0%	0.0%	0.0%	22.0%	0.6%	100.0%
Secondary (Public or Private)	41.0%	0.0%	0.9%	10.3%	0.1%	0.0%	0.2%	0.0%	46.5%	1.0%	100.0%
HEALTH											
Hospital	47.8%	0.7%	2.5%	47.2%	0.2%	0.0%	0.4%	0.0%	-	1.2%	100.0%
Clinic	72.2%	0.9%	1.8%	22.7%	0.0%	0.0%	0.2%	0.0%	-	2.3%	100.0%
Pharmacy	77.6%	0.1%	0.4%	20.7%	0.0%	0.0%	0.1%	0.0%		1.1%	100.0%
Cell Phone Distributor	51.4%	0.0%	2.9%	40.1%	0.0%	0.2%	0.2%	0.0%	-	5.2%	100.0%
Post Office	26.6%	0.0%	4.5%	42.3%	0.0%	0.0%	0.0%	0.0%	-	26.5%	100.0%
Main access road	85.0%	0.0%	1.6%	12.6%	0.0%	0.0%	0.4%	0.0%	-	0.4%	100.0%
Internet Cafe	56.8%	1.2%	1.5%	39.9%	0.0%	0.0%	0.0%	0.0%	-	0.7%	100.0%
AGRICULTURE											
Storage	66.1%	0.5%	8.3%	22.3%	0.0%	0.0%	0.0%	2.2%	-	0.5%	100.0%
Processing	91.9%	0.0%	0.3%	6.9%	0.3%	0.0%	0.0%	0.0%	-	0.6%	100.0%
Garage	57.4%	0.3%	1.9%	35.5%	0.0%	0.0%	0.0%	0.0%		4.9%	100.0%
Greenhouses	91.3%	0.0%	2.3%	4.1%	0.0%	0.0%	0.0%	0.0%	-	2.2%	100.0%
Landing site	62.9%	0.0%	0.0%	32.9%	0.0%	0.0%	1.8%	0.0%		2.3%	100.0%
OTHER PLACES											
Bank (formal sector)	32.3%	0.4%	7.6%	58.3%	0.0%	0.9%	0.0%	0.0%	-	0.5%	100.0%
Microfinance institution	54.1%	0.5%	0.8%	36.4%	0.0%	0.0%	0.0%	0.0%	-	8.3%	100.0%
Police station	49.1%	0.3%	3.9%	45.6%	0.0%	0.0%	0.2%	0.0%	-	0.9%	100.0%
Food Market for purchase	71.0%	1.1%	2.2%	24.2%	0.0%	0.0%	0.6%	0.0%	-	0.9%	100.0%
Mosque or Church	95.2%	0.1%	0.2%	2.7%	0.0%	0.0%	0.1%	0.0%		1.7%	100.0%
Fire station	34.0%	0.0%	3.1%	42.4%	0.0%	0.5%	0.0%	0.0%		20.1%	100.0%

Appendix A2. Distribution of Communities that Experienced New Community Events by Year of Occurrences

Community Events	Year	Number	Per cent
New Employment Opportunity	2020	15	6.1
	2021	32	13.0
	2022	76	31.3
	2023	121	49.6
	Total	244	100.0
New Health Facility	2020	6	3.8
	2021	17	11.6
	2022	35	24.1
	2023	89	60.5
	Total	147	100.0
New Road	2020	9	1.7
	2021	87	17.0
	2022	133	25.9
	2023	284	55.4
	Total	512	100.0
New School	2020	18	3.6
	2021	80	16.1
	2022	169	34.0
	2023	231	46.4
	Total	499	100.0
Improved Transportation Services	2020	1	2.0
	2021	7	11.3
	2022	18	28.9
	2023	36	57.8
	Total	62	100.0
New On-Grid Electricity	2020	48	6.9
	2021	74	10.7
	2022	200	28.9
	2023	370	53.5
	Total	692	100.0
New Off-Grid Electricity	2021	3	2.5
	2022	11	8.5
	2023	116	89.0
	Total	130	100.0
New Irrigation Facility	2022	12	52.8
	2023	10	47.2
	Total	22	100.0
New Market Facility	2020	4	3.9
	2021	6	5.7
	2022	47	47.2
	2023	43	43.2
	Total	99	100.0

Community Events	Year	Number	Per cent
New Processing Facility	2020	4	2.9
	2021	16	11.7
	2022	67	49.1
	2023	49	36.2
	Total	136	100.0
New Storage Facility	2021	3	8.0
	2022	1	2.4
	2023	38	89.6
	Total	42	100.0
Other Good Event (including cash from NGOs and Construction of town halls)	2020	11	1.9
	2021	114	19.5
	2022	189	32.2
	2023	272	46.4
	Total	586	100.0

SN	Institutions
1	Ministry of Agriculture
2	Liberia Institute of Statistics and Geo-Information Services (LISGIS)
3	Ministry of Finance and Development Planning
4	Ministry of Gender, Children & Social Protection
5	Ministry of Internal Affairs
6	National Fisheries and Aquaculture Authority
7	Cooperative Development Agency
8	Liberia Agriculture Commodity Regulatory Authority
9	Forestry Development Authority
10	Central Agriculture Research Institute
11	Environmental Protection Agency
12	National Food Assistance Agency
13	National Bureau of Concession
14	National Disaster Management Agency
15	Liberia Land Authority
16	Action Against Hunger
17	Scale Up Nutrition Secretariat
18	University of Liberia Agriculture College
19	Farmers Union Network of Liberia

APPENDIX C: List of LAC-2024 Coordinating Committee Members

SN	Institutions
1	Minister for Planning and Development, MOA
2	Liberia Institute of Statistics and Geo-Information Service (LISGIS)
3	National Fishery and Aquaculture Authority
4	Forestry Development Authority
5	Central Agriculture Research Institute
6	Cooperative Development Agency
7	Liberia Agriculture Commodity Regulatory Authority
8	National Food Assistance Agency
9	Farmers Union Network of Liberia

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