GOVERNMENT OF SIERRA LEONE

REPORT FROM THE LISTING DATA OF THE 2023 ANNUAL AGRICULTURAL SURVEY

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INTRODUCTION

Context of the survey

Agriculture is the bedrock for economic growth, development and poverty eradication in the developing countries. In the words of Gunner Myrdal (1984), “The battle for long-term economic growth will be won or lost in the agricultural sector”. For example, a country that invest in the agricultural sector, will gain massive economic productivity in the long-run, as the investment in agricultural sector will mitigate unemployment, increase standard of living, boost economic growth and increased food self-sufficiency, as compared to a country which doesn’t prioritized investment in agriculture.

Since 2010, the agricultural sector of Sierra Leone has seen a consistent increase in its contribution to the total Gross Domestic Product (GDP), except in 2014 when it fell to 39.8% due to the Ebola Virus Disease (EVD) outbreak. Following that year, the sector's GDP share has risen steadily, reaching 58.9% in 2018 and 61% in 2023. This ongoing trend underscores the significance of agriculture as the primary driver of the Sierra Leonean economy, highlighting its crucial role in providing employment and sustaining livelihoods. In recognition of the critical role the agricultural sector plays in national development, Sierra Leone joined the 50x2030 Initiative in early 2023. This partnership focuses on establishing a sustainable annual agricultural survey program. The program's primary aim is to generate high-quality, timely, and relevant agricultural data that directly addresses the country's needs. This data will be instrumental in achieving national development goals outlined in the Medium-Term National Development Plan 2019-2023 and by extension the current Medium-term National Development Plan 2024-2030, which lay emphasis on the agriculture sector through the Feed Salone Project.

The implementation of the 50x2030 activities in Sierra Leone relies on a variety of statistical undertakings. Two key examples are the Sierra Leone Listing Survey (SLLIST) and the Sierra Leone Annual Agricultural Survey (SLAAS), both conducted in 2023. These surveys play a vital role in monitoring and achieving the goals of the 50x2030 initiative.

The Sierra Leone Listing Survey (SLLIST) is the primary focus of this report. It serves as a foundational element for subsequent surveys, establishing a comprehensive sampling frame that will be utilized in future data collection efforts. By meticulously gathering data on various aspects, SLLIST lays the groundwork for further analysis and ensures the accuracy of subsequent surveys.

Objectives of the Survey

The Listing Survey was designed to:

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

Survey Methodology

The survey employed a stratified random sampling technique to ensure a representative sample of agricultural households across all five regions and fifteen districts of Sierra Leone with the exception of the Western Urban district. The survey focused on collecting data from heads of agricultural households, covering topics such as household demographics, land ownership, agricultural activities, livestock rearing, labor force composition, and participation in off-farm activities.

To ensure timely, reliable and quality output, the focus of the survey execution was to carry out an efficient statistical process, relying on modern technologies such as the use of Computer-Assisted Personal Interviews (CAPI). The main activities undertaken included survey organization; sampling design; tabulation and plan preparation; design of survey questionnaires; training of trainers/supervisors and enumerators; data collection; field supervision and consistency checks; and data processing.

KEY FINDINGS

Dominance of Small-Scale Farming

Sierra Leone has 1,256,456 agricultural households. The majority of agricultural households are small-scale, with most having 1-3 economically active members (92.4%) and limited land holdings (69.9% of agricultural households having under 2 hectares of crop land area). This suggests a family-run agricultural sector.

Existence of Regional Variations

Significant variations exist across regions. Eastern and Southern regions have the most agricultural households, while Western Area has the least. Moreover, livestock rearing is most prevalent in North-Western and Eastern Regions, where 67.5% and 61.9% of holdings respectively rear any livestock. In addition, North-Western region has the highest percentage of households with at least one permanent worker (73%).

Evidence of Gender Disparity

While both genders contribute significantly, a gender gap is evident. Male-headed households dominate the sector (69.2%) and are more involved in permanent agricultural work compared to female-headed households (30.8%).

Crop Production as Mainstay

Crop production is the most widespread activity (96.3%) across all regions and genders, highlighting its importance as the foundation of Sierra Leone's agriculture.

Livestock Rearing Patterns

Chicken rearing is the most common livestock practice (52.8% of agricultural households), followed by sheep (22.9%) and goats (14.1%). Ownership patterns show a concentration of small flocks, with most households having 1 to 4 animals.

Off-Farm Activities

Activities such as hunting, fishing, and aquaculture supplement the subsistence farming practices of a small portion (7.0%) of the agricultural population. The Southern region exhibits the highest dependence on these activities, with a figure of (13.9%).

CHARACTERISTICS OF AGRICULTURAL HOUSEHOLDS

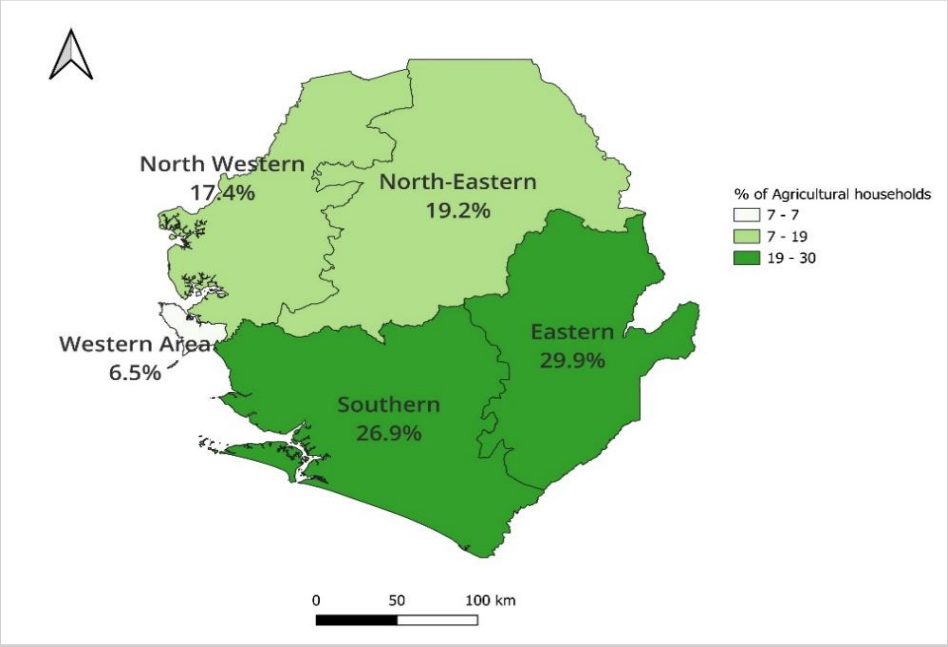
This chapter provides a comprehensive overview of the socio-demographic and economic characteristics of agricultural households in Sierra Leone. Through detailed analysis and visual representations, we examine key aspects such as household composition, regional distribution, and workforce dynamics within agricultural communities.

Socio-Demographic Profile of Agricultural households

More than half of Sierra Leone's agricultural households are in Eastern and Southern regions

Overall, there are 1,256,456 agricultural households in Sierra Leone. The distribution of agricultural households is somewhat uneven across regions, with the Eastern and Southern regions having a larger share. The Eastern Region has the highest number of agricultural households (29.9%), followed by Southern Region (26.9%), making a total of 56.8% for these two regions. The third region with the highest number of agricultural households is the North-Western Region (17.4%). On another note, the Western Area has the lowest percentage (6.5%). It is also worthy to note that, Western Urban is not included in this survey.

Figure 1.1: Percentage distribution of agricultural households by region.



Source: Stats SL /MAFS, Sierra Leone Listing Survey 2023

At district level, the top 3 localities with the highest number of agricultural households are: Kenema district (146,516), followed by Bo district (136,608) and Kono district (122,172). Falaba district is the one with the lowest number of agricultural households (33,970).

Table 1.1: Number and percentage of agricultural households.

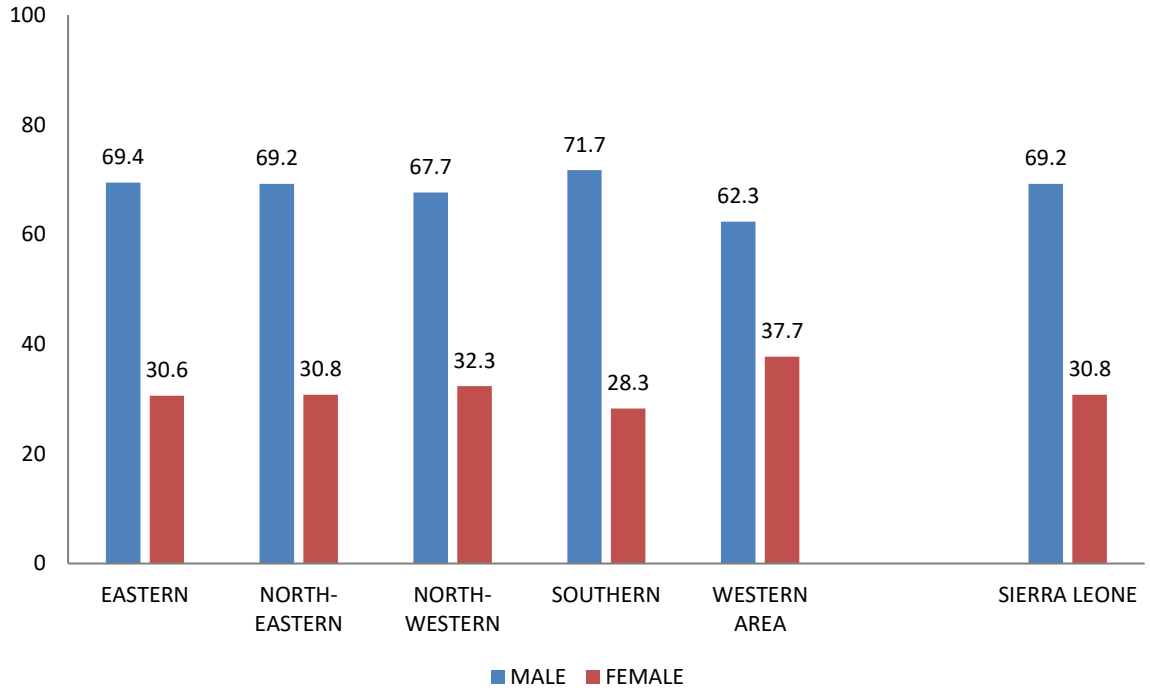
REGION/ DISTRICT	NUMBER OF AGRICULTURAL HOUSEHOLDS	PERCENTAGE
EASTERN	**375,897**	**29.9**
KAILAHUN	107,209	8.5
KENEMA	146,516	11.7
KONO	122,172	9.7
NORTH-EASTERN	**241,283**	**19.2**
BOMBALI	70,013	5.6
FALABA	33,970	2.7
KOINADUGU	35,231	2.8
TONKOLILI	102,068	8.1
NORTH-WESTERN	**218,840**	**17.4**
KAMBIA	68,574	5.5
KARENE	50,917	4.1
PORTLOKO	99,349	7.9
SOUTHERN	**338,345**	**26.9**
BO	136,608	10.9
BONTHE	51,072	4.1
MOYAMBA	73,650	5.9
PUJEHUN	77,014	6.1
WESTERN AREA	**82,091**	**6.5**
WESTERN RURAL	82,091	6.5
SIERRA LEONE	**1,256,456**	**100.0**

Source: Stats SL /MAFS, Sierra Leone Listing Survey 2023

Male-headed holdings almost twice as numerous as female-headed holdings

There are nearly twice as many male-headed agricultural households (69.2%) as female-headed households (30.8%) in Sierra Leone. The chart below suggests that male-headed agricultural households are more prevalent across all regions of Sierra Leone. However, it's important to consider that the Southern Region has a considerably higher proportion of agricultural male households and lower proportion compared to other regions. This might be due to various factors, such as historical land ownership patterns, population distribution, or agricultural suitability of the land in the region.

Figure 1.2: Percentage distribution of agricultural households by head of household and by region

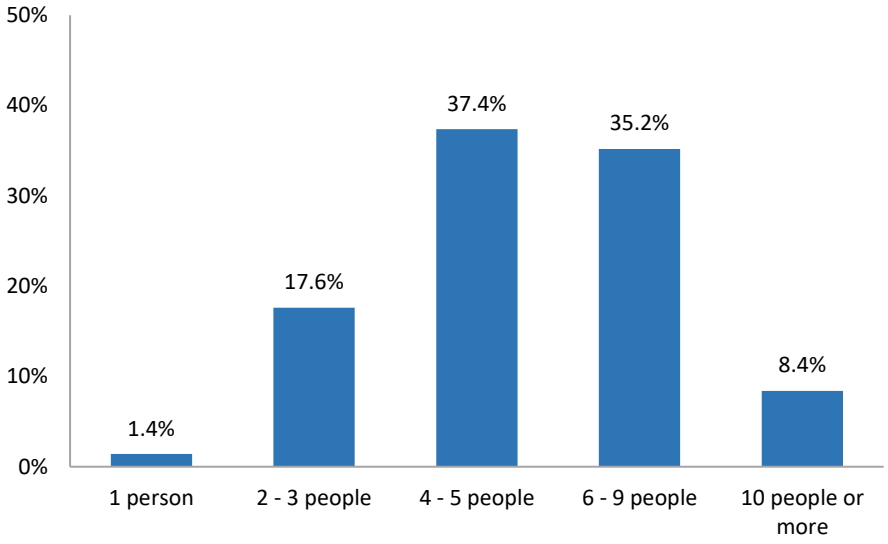


Source: Stats SL /MAFS, Sierra Leone Listing Survey 2023

Low proportion of single-person agricultural households

The results of the survey revealed that households with only one person were the smallest (1.4%). The highest number of agricultural households were of size 4-5 persons (37.4%), followed by households of size 6-9 persons (35.2%) and households of size 2-3 persons at 17.6%.

Figure 1.3: Percentage distribution of agricultural households by size



Source: Stats SL /MAFS, Sierra Leone Listing Survey 2023

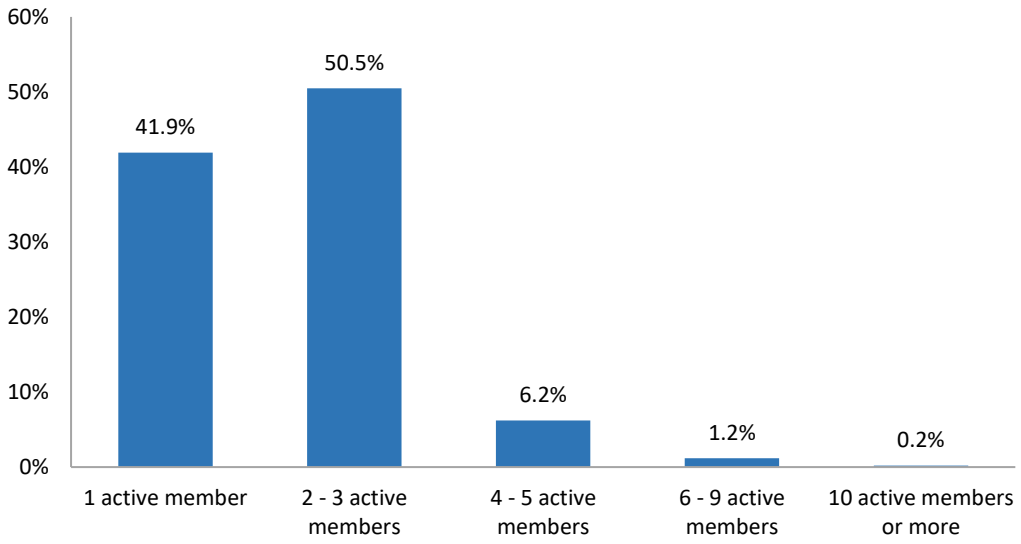
Economic Profile of Agricultural households

Predominance of small-scale family-run farms

The majority (92.4%) of agricultural households have 1-3 economically active members[1]. This suggests a prevalence of small-scale family-run farms. Only a small portion (7.6%) of households have 4 or more economically active members, indicating a limited presence of large-scale agricultural operations. Households with 2-3 economically active members (50.5%) are the most common. In addition, from holdings with at least 2 active members, the number of households steadily decreases as the number of economically active members increases.

[1] See Glossary for the definition of the concept "economically active".

Figure 1.4: Percentage distribution of agricultural households by number of economically active members



Source: Stats SL /MAFS, Sierra Leone Listing Survey 2023

Like the disparity in male (69.2%) and female (30.8%) headed agricultural households, the percentage of permanent workers employed exhibits a marked difference between the sex of agricultural household heads. In all categories, more permanent workers are being employed in male-headed households than in ones headed by females. In those households hiring only one permanent worker, the gap is lower between female-headed households and male-headed households but largest in six-plus permanent workers. This highlights the fact that women have limited resources to hire more workers than men. Also, in terms of cropland area, women-headed households own smaller farms and a relatively small cropland area, thus requiring a smaller number of permanent workers.

Table 1.2: Number/Percentage of agricultural households by number of permanent workers and sex of head of household

PERMANENT WORKERS	MALE		FEMALE		TOTAL	PERCENTAGE
	NUMBER	PERCENTAGE	NUMBER	PERCENTAGE		
NONE	17,699	61.8	10,930	38.2	28,629	100.0
1	160,487	56.6	122,986	43.4	283,473	100.0
2	398,389	73.7	141,990	26.3	540,379	100.0
3	142,000	71.2	57,569	28.8	199,569	100.0
4	72,697	73.6	26,079	26.4	98,776	100.0
5	37,712	72.2	14,552	27.8	52,264	100.0
6+	40,965	76.8	12,400	23.2	53,365	100.0
TOTAL	**869,950**	**69.2**	**386,505**	**30.8**	**1,256,456**	**100.0**

Source: Stats SL /MAFS, Sierra Leone Listing Survey 2023

AGRICULTURAL PRACTICES

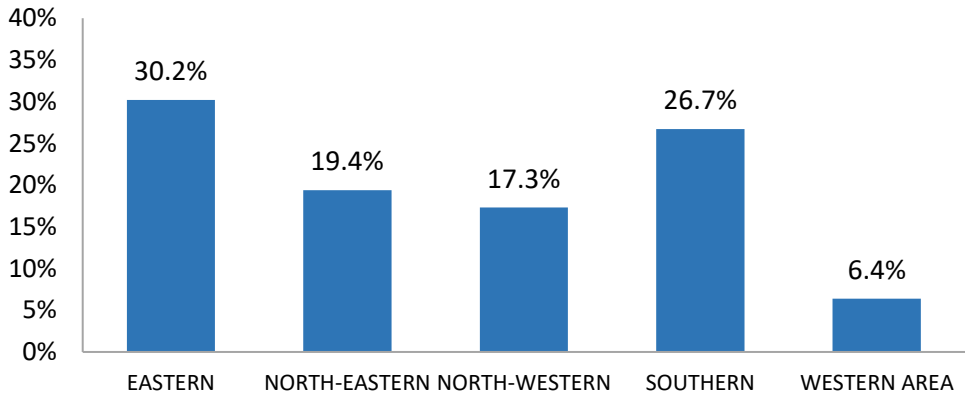
This chapter analyzes the various agricultural practices adopted by households in Sierra Leone. The section is structured into three distinct sub-sections: Crop Production, Livestock, and Other Agricultural Activities, offering comprehensive insights into the agricultural dynamics of the nation. Within the Crop Production sub-section, the dominance of crop cultivation among agricultural households is examined. In the Livestock sub-section, the variety and quantity of livestock maintained by households across Sierra Leone are analyzed. The Other Agricultural Activities sub-section delves into supplementary agricultural pursuits such as on-farm fishing and hunting.

Crop Production

Eastern and Southern regions in the top 2 of regions for crop production

Crop production is practiced by 96.3% (that is 1,209,727) of all agricultural households in Sierra Leone. Among these households, the Eastern region has the highest share (30.2%) of agricultural households involved in crop production. The Southern region follows with 26.7% of agricultural households engaged in crop production. The Western Area has the lowest proportion (6.4%) of households involved in crop production; this reflects the low proportion of agricultural households in this region.

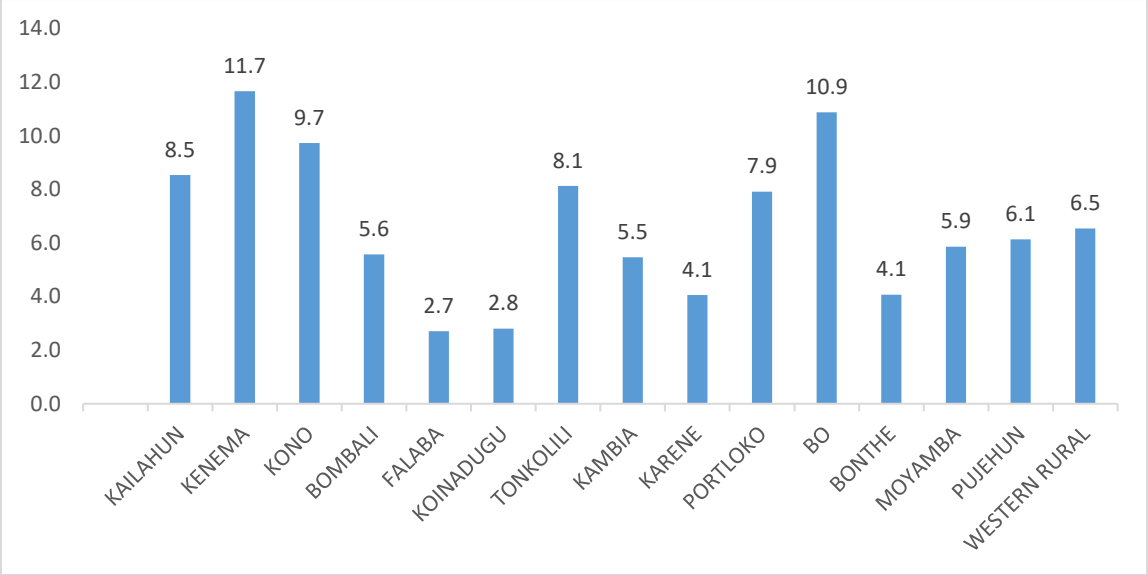
Figure 2.1: Percentage distribution of agricultural households producing crop by region



Source: Stats SL /MAFS, Sierra Leone Listing Survey 2023

Of the total agricultural households in Sierra Leone, Kenema district has households with the highest crop land area (11.7%), followed by Bo district with 10.9%. Generally, the districts from the Eastern region- (Kailahun, Kenema, Kono) have number of households with large crop land area, accounting for 29.9% of total crop area. This can largely be attributed to the existence of large tree crop plantations (cocoa, coffee and oil palm) alongside other temporary crops. Households with the lowest percentage of crop land area were recorded in the Falaba (2.7%) and Koinadugu (2.8%) districts (both form the North-Eastern region). This is not surprising, as these districts have large stretches of mountainous terrains that are not too suitable for crop production. Also, households in these districts are highly engaged in livestock production with a high concentration of cattle ranches. As revealed by the data, Falaba district has the highest number of agricultural households with cattle (13.2%) and sheep (38.2%), when compared with agricultural households from other districts.

Figure 2.2: Percentage of crop land area by district

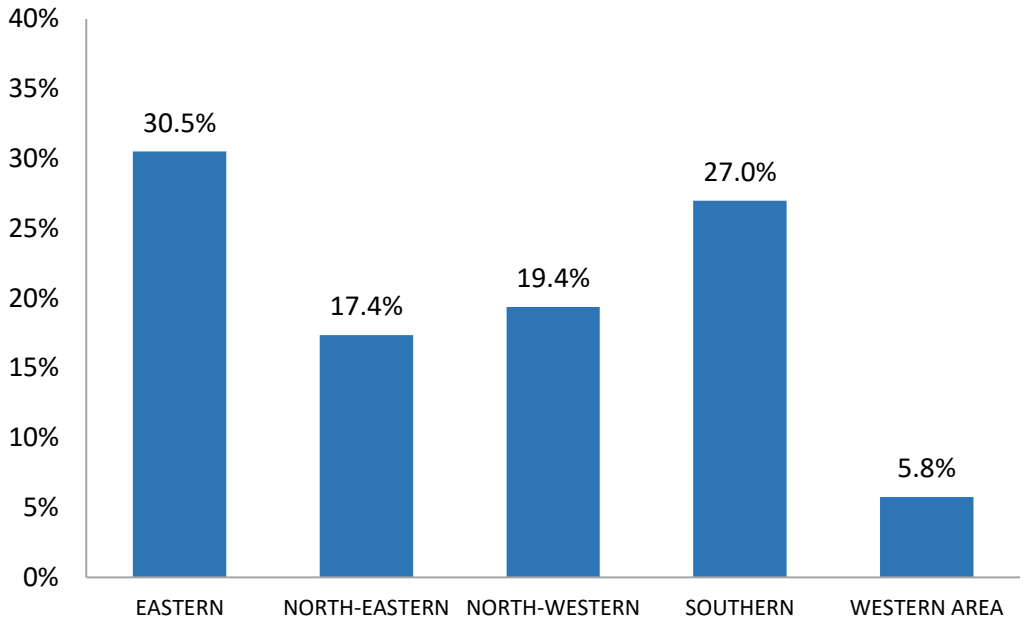


Source: Stats SL /MAFS, Sierra Leone Listing Survey 2023

Livestock rearing

Livestock rearing is practiced by 67.5% (that is 762,495) of all agricultural households in Sierra Leone. The Eastern region has the highest concentration of livestock households, accounting for 30.5% of all holdings engaged in livestock activities. Following this trend, the Southern region comes next with 27.0% of these households, while the Western Area ranks lowest with 5.8%.

Figure 2.3: Percentage distribution of agricultural households rearing livestock by region



Source: Stats SL /MAFS, Sierra Leone Listing Survey 2023

Poultry breeding, the most common livestock activity

Chicken is the most prevalent livestock in Sierra Leone, with a total of 661,946 households rearing chicken. Sheep and goats also appear to be popular livestock choices, with 286,967 and 177,189 households rearing them respectively. Cattle and ducks are less common.

The Eastern region has the highest number of households raising chicken (203,396), while the Western Area has the lowest (40,293). The North-Western region has the most sheep-raising households (75,008), whereas Western Area has the fewest (8,754). Western Area has the highest number of pig-raising households (3,123), while North-Eastern region has the lowest (520).

Table 2.1: Number of agricultural households by type of livestock at regional level

REGION	CATTLE	SHEEP	GOAT	CHICKEN	PIG	DUCK
EASTERN	2,029	72,913	34,711	203,396	2,695	28,047
NORTH-EASTERN	8,658	66,219	38,600	108,718	520	7,607
NORTH-WESTERN	6,904	75,008	65,909	126,574	743	15,310
SOUTHERN	432	64,073	29,137	182,966	2,168	16,379
WESTERN AREA	837	8,754	8,831	40,293	3,123	4,440
SIERRA LEONE	**18,859**	**286,967**	**177,189**	**661,946**	**9,248**	**71,783**

Source: Stats SL /MAFS, Sierra Leone Listing Survey 2023

From table 2.1, it can be seen that, the share of households per various livestock produced varies between the various regions. In the case of cattle, the largest number of households were recorded in the North-Eastern region (8,658), followed by the North-West (6,904). While in the case of sheep, the North-Western region accounted for the highest number of households (75,008). In the cattle of Cattle, the northern regions account 85.5% of households for total number of cattle reared in Sierra Leone. For all livestock types, the Western Area registered the least number of households, except for pigs where it recorded the highest number (3,123), compared to other regions. People in the Western Rural Region tend to concentrate more on piggery than other livestock because of the high demand of pork in the peri-urban areas of Freetown, and the relatively smaller size of land required to run piggeries.

Table 2.2: Number of agricultural households by number of livestock reared by livestock type

	CATTLE	GOAT	SHEEP	PIG
1 to 4 heads	12,087	136,630	257,565	4,342
5 to 9 heads	4,035	31,533	23,797	2,990
10 to 19 heads	1,610	7,840	4,647	1,216
20 heads or more	1,127	1,185	959	699
Total	**18,859**	**177,188**	**286,968**	**9,247**

Source: Stats SL /MAFS, Sierra Leone Listing Survey 2023

The number of agricultural households by chickens at the regional level in Sierra Leone shows that, Eastern Region has the most agricultural households with chickens (203,179) while there are still significant number of households with no chicken (594,510). Western Area has the least number of agricultural households with chickens (40,293).

Table 2.3: Number of Households by Number of Chickens at Regional Level

	NONE	1 TO 9 CHICKENS	10 TO 49 CHICKENS	50 CHICKENS OR MORE	TOTAL
EASTERN	172,502	158,714	44,427	255	375,897
NORTH-EASTERN	132,565	72,818	35,229	671	241,283
NORTH-WESTERN	92,266	80,585	44,323	1,666	218,840
SOUTHERN	155,379	124,149	57,396	1,421	338,345
WESTERN AREA	41,798	24,885	14,692	716	82,091
SIERRA LEONE	594,510	461,150	196,066	4730	1,256,456

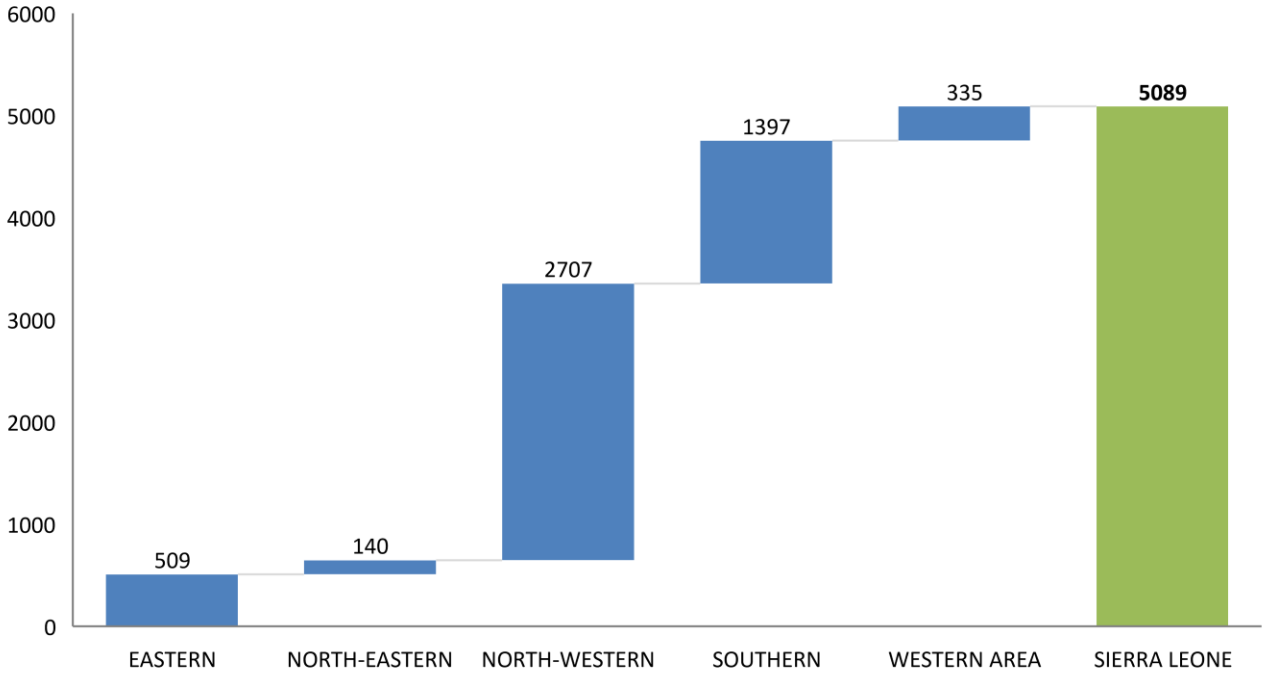
Source: Stats SL /MAFS, Sierra Leone Listing Survey 2023

Other agricultural activities practiced.

Popularity of on farm fishing activities in the North-Western region

Nationally, a total of 5,089 agricultural households reported engaging in on-farm fishing activities. This represents a mere 0.4% of all agricultural households in Sierra Leone. A significant disparity exists between regions regarding the number of households practicing on-farm fishing. The North-Western region leads with 2,707 households, constituting 1.2% of its agricultural households. This is considerably higher compared to other regions. Eastern and North-Eastern regions have the lowest figures, with 509 and 140 households respectively, representing only 0.1% of their agricultural households each.

Figure 2.4: Number of agricultural households practicing on farm fishing activities by region



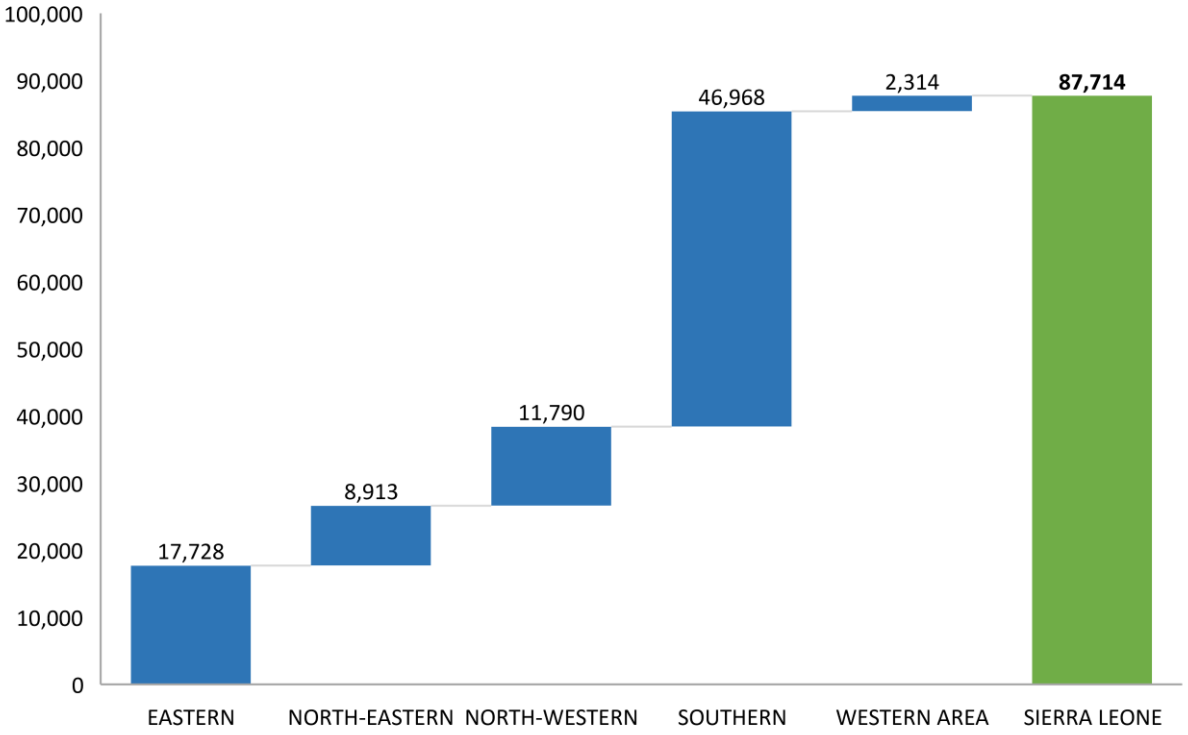
Source: Stats SL /MAFS, Sierra Leone Listing Survey 2023

Hunting fishing most practiced in the Southern region

The chart below reveals a significant regional variation in the fish hunting practices, with some regions exhibiting a higher dependence on these activities compared to others. Nationally, 7.0% (87,714 households) of agricultural households reported engaging in hunting and fishing activities. This suggests that while these activities are not the primary source of livelihood for the majority, they do, however, contribute to the subsistence strategies of a portion of the agricultural population.

A substantial disparity exists between regions regarding the prevalence of hunting and fishing practices. Southern region stands out with the highest number (46,968) of agricultural households participating in these activities. Conversely, Western Area exhibits the lowest participation number (2,314 holdings). This is likely as a result of access to rivers/sea, which may vary across regions.

Figure 2.5: Number of agricultural households practicing hunting fishing activities by region



Source: Stats SL /MAFS, Sierra Leone Listing Survey 2023

CONCLUSION

The 2023 annual agricultural survey listing provides a detailed snapshot of Sierra Leone's agricultural sector, revealing a landscape dominated by small-scale, family-run farms and a workforce primarily composed of 1-3 economically active members. This structure suggests a strong reliance on family labor for agricultural production.

While crop production reigns dominance across all regions and genders, with a participation rate of 96.3%, the survey unveils significant regional variations. The Eastern and Southern regions emerge as agricultural powerhouses, housing the highest concentration of agricultural households. Conversely, the Western Area, with its more urban character, exhibits a lower agricultural presence. Interestingly, the North-Western region stands out for its high percentage of households employing at least one permanent worker, potentially indicating a more labor-intensive form of agriculture in that area.

The survey further unveils a persistent gender gap within the sector. Despite both male and female-headed households playing a crucial role, male dominance is evident. This is reflected in the higher proportion of male-headed households engaged in permanent agricultural work compared to their female counterparts. This disparity necessitates further investigation into the underlying social norms, land ownership patterns, and access to resources that might be contributing to this gap.

RECOMMENDATIONS

- Government and development partners should develop targeted programs to enhance the productivity and income generation potential of small-scale farms. This could include providing access to improved seeds, fertilizers, and extension services tailored to their needs.
- Promote Gender Equity by implementing initiatives to address the gender gap in agricultural work. This could involve encouraging female by providing training and resources specifically for female farmers, and promoting the adoption of labor-saving technologies to reduce workload.
- Encourage diversification into various crops and livestock species to improve household income and dietary diversity. Additionally, explore opportunities for value addition through processing and marketing initiatives.

- Develop targeted strategies that address the specific needs and potential of each region. This might involve promoting livestock rearing in suitable regions, fostering on-farm fishing activities in areas with water resources, or supporting larger-scale operations in areas with available land.

- Strengthen data collection efforts to capture a more comprehensive picture of the agricultural sector, including information on informal activities, land tenure security, and the role of technology adoption. Regularly analyze data to inform policy decisions and track progress towards development goals.

GLOSSARY

Agriculture Household: Refers to a household where one or more persons are holder(s). In peasant farming there will normally be a one-to-one correspondence between the farming household and the holding.

Aquaculture: Means the practice of breeding and raising aquatic organisms in a controlled aquatic environment.

Agricultural Holding: Refers to an economic unit of agricultural production under single management. It consists of all livestock kept and all land used for agricultural production without regard to title.

Agricultural Production: Refers to growing and harvesting of different types of crops. It also includes keeping of livestock and poultry.

Crop Production: Crop production is the process of growing plants for food, fiber, fuel, or other uses. It involves a range of activities, including land preparation, planting, cultivating, harvesting, and storing crops.

Economically Active: Economically active refers to people of working age (usually 15-60 years old) who are either employed or unemployed. In agriculture, this refers to people who are involved in agricultural production or related activities, regardless of their employment status. This can include both paid workers and unpaid family laborers.

Permanent Agricultural Workers: These are workers who are employed in agriculture on a full-time or long-term basis. They typically receive a regular salary or wage and benefits such as health insurance and paid leave.

Non-Permanent Agricultural Workers: These are workers who are employed in agriculture on a temporary or seasonal basis. They may be hired for specific tasks, such as harvesting a particular crop, or they may work for a set period during the growing season.