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In partnership with the  
Government of Sierra Leone

Main Report

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## STATE OF FOOD SECURITY IN SIERRA LEONE 2020

# Comprehensive Food Security and Vulnerability Analysis

Data collected November–December 2020

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# Preface

The *State of Food Security in Sierra Leone 2020* showcases findings from the Comprehensive Food Security and Vulnerability Analysis (CFSVA). The CFSVA provides a trend analysis on food insecurity and is conducted every five years. This is the third CFSVA conducted in Sierra Leone. Despite the ongoing global COVID-19 pandemic, the CFSVA was undertaken as planned in November and December 2020, underscoring the commitment of food security partners.

The *State of Food Security in Sierra Leone 2020* is a culmination of the collaborative efforts of the Ministry of Agriculture and Forestry, Statistics Sierra Leone and the World Food Programme. The analysis contributes to the Government and development partners' understanding of the food and nutrition security situation of the population at the district and chiefdom level. It provides insight based on more than 34,000 household surveys and 17,046 mid upper arm circumference measurements of children under the age of five years. The analysis considers multisectoral data and indicators contributing to the food and nutrition security status of households across Sierra Leone.

The economic impacts of COVID-19 compounded an already stagnant economic situation, representing the latest in a series of shocks that has compromised the resilience of already vulnerable households. With some 77 percent of the rural population relying on farming as their primary livelihood, low production rates seriously exacerbated food insecurity and wellbeing.

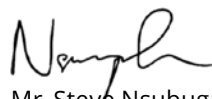
The restrictions on movement and trade coincided with the annual planting season, lowering food production and thus increasing imports of food commodities. Lack of access to food led farming households to frequently eat the seeds that were intended for the planting season, thus further impacting farming activities in the mid-term.

The 2020 CFSVA was possible through the cooperation and technical inputs of multiple partners and organizations in Sierra Leone. Generous support from Irish Aid, Food and Agriculture Organization, World Bank, International Fund for Agricultural Development, Japan International Cooperation Agency and UNICEF made it possible to deliver this important assessment on the state of food security in Sierra Leone.

We are grateful to all of the enumerators, supervisors and district and regional coordinators for their hard work and commitment to making this assessment a success. Special thanks is also extended to the 34,000 households who participated in the CFSVA for giving their time and information.



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# Acronyms

ABCs	Agricultural Business Centres
CARI	Consolidated Approach for Reporting Indicators of Food Security
CFSVA	Comprehensive Food Security and Vulnerability Analysis
COVID	Coronavirus Disease
CSI	Coping Strategy Index
FAO	Food and Agriculture Organization
FBOs	Farmer Based Organizations
FCS	Food Consumption Score
FEWSNET	Famine Early Warning Systems Network
FSMS	Food Security Monitoring System
GAM	Global Acute Malnutrition
GDP	Gross Domestic Product
IFAD	International Fund for Agricultural Development
LCSI	Livelihood Coping Strategy Index
M&E	Monitoring and Evaluation
MAF	Ministry of Agriculture and Forestry
MND	Micronutrient Deficiency Diseases
MoF	Ministry of Finance
MoHS	Ministry of Health and Sanitation
MUAC	Mid Upper Arm Circumference
NSADP	National Sustainable Agriculture Development Plan
ODK	Open Data Kit
rCSI	reduced Coping Strategy Index
SLDHS	Sierra Leone Demographic and Health Survey
SMART	Standardized Monitoring and Assessment of Relief and Transitions
StatsSL	Statistics Sierra Leone
UNICEF	United Nations Children's Fund
US\$	United States Dollar
VAM	Vulnerability Analysis and Mapping
WASH	Water Sanitation and Hygiene

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## CFSVA 2020

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# Executive summary

## **This is the third Comprehensive Food Security and Vulnerability Analysis in Sierra Leone evidencing trend analysis that spans over ten years.**

The 2020 food security and vulnerability analysis was conducted eight months after the first COVID-19 case was confirmed in Sierra Leone. The pandemic has had a devastating impact on the global economy, put enormous pressure on national health systems and paralyzed the world population in strict lockdowns. Sierra Leone has not been spared and the Government, in its efforts to contain the pandemic, imposed a partial inter-district lockdown in March 2020 and later a national lockdown was announced, which set measures that included border closure, school closures and restrictions on movements. These lockdown measures stifled economic growth, increased prices of basic commodities, including staple food prices and led to loss of income for majority of Sierra Leoneans. While this food security analysis is not a COVID-19 impact study, it does provide insights into the fragility of livelihoods and trend analysis in comparison with previous food security analyses of 2015 and 2010 that were also implemented in challenging contexts: the deadly outbreak of Ebola in 2014/15 and the first analysis was conducted against the backdrop of the global economic crisis in 2008/09.

Food security had briefly improved in 2018 since the end of the Ebola outbreak in 2014/15, based on the analysis of the Food Security Monitoring System (FSMS), which is conducted by the WFP and Ministry of Agriculture and Forestry and has the same methodology as the Comprehensive Food Security and Vulnerability Analysis. The monitoring system data from September 2018 showed an overall national food insecurity rate of 44 percent. However, in 2019 the monitoring system<sup>1</sup> showed again a higher prevalence of food insecurity at 53 percent. This indicates that any improvement seen in 2018 was not because of any structural progresses in addressing the underlying causes of food insecurity in Sierra Leone but a temporary progress that was caused by short lived favourable conditions.

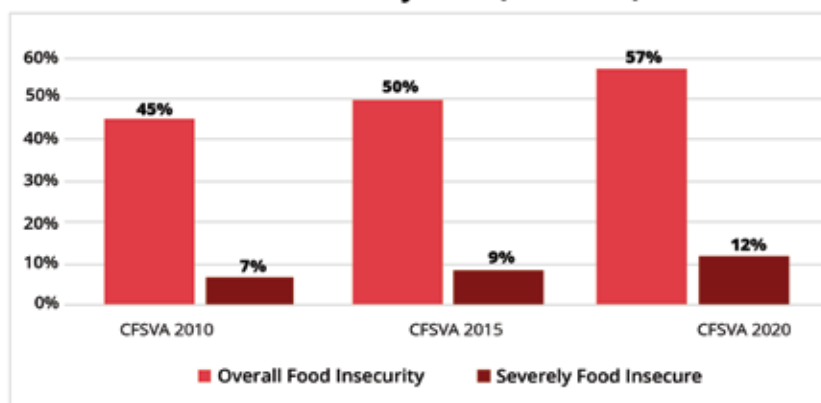
Food insecurity and vulnerability to shocks have worsened significantly over the past ten years for most Sierra Leoneans, reaching a staggering 57 percent of the population. The COVID-19 pandemic and its economic fallout has further exacerbated living conditions and access to basic amenities in 2020. The latest Comprehensive Food Security and Vulnerability Analysis in Sierra Leone gives an overview and a trend analysis of the food and nutrition security situation today compared with previous analyses of 2010 and 2015.

<sup>1</sup> August 2019 Food Security Monitoring System Findings. See link: <https://docs.wfp.org/api/documents/WFP-0000109936/download/>

## What is the state of food insecurity in Sierra Leone?

- Today over 4.7 million people are food insecure of which 963,217 are severely food insecure and 3,790,029 are moderately food insecure. More than half a million people have been added to the count of food insecure people over the last five years.
- Not only are more people food insecure but also the severity of food insecurity is deepening. The number of people facing severe hunger tripled between 2010 and 2020.
- Over 3.3 million people are food insecure in rural areas compared to 1.4 million people in urban areas.
- Severe acute malnutrition (measured by mid upper arm circumference) increased from 0.6 percent in 2017 to 3.7 percent in 2020 and is strongly correlated to high mortality risk. Global acute malnutrition rate of 6.7 percent is also higher compared to the 2.6 percent rate in 2017.
- Food insecurity and malnutrition in Sierra Leone are mainly caused by limited access to nutritionally diverse foods: 85 percent of children between ages 24–59 months do not consume a diet that meets minimum dietary diversity. Rice prices have doubled and cassava prices have quadrupled since 2015.

Food insecurity trend (2010–2020)



## Where do most food insecure people live in Sierra Leone?

With such a high national prevalence, food insecurity is spread across Sierra Leone. However, more food insecure people live in rural communities. The districts with the highest number of food insecure people are in Kenema (527,571), Kailahun (411,693), Bo (397,850), Pujehun (392,245) and Tonkolili (389,040). The districts with significantly less food insecure populations are Western Area Slum (54,735), Koinadugu (123,640), Western Area Rural (139,279) and Western Area Urban (210,336).

Households with a poor food consumption score have a slightly higher prevalence of malnourished children, specifically severely malnourished children. The situation is serious in Moyamba district where 10 percent of children under the age of five years are malnourished. Falaba (8.8 percent) and Port Loko (7.7 percent) districts also have high levels of acute malnutrition.



## Why are people food insecure in Sierra Leone?

While COVID-19 has had a serious impact on livelihoods and food security, it can only be partly attributed to the deterioration of food security over the past decade. Outdated agricultural methods, insufficient and expensive agricultural inputs contribute to low yields, whilst unacceptably high harvest and post-harvest losses, uneconomical access to markets and high food prices all contribute to food insecurity in Sierra Leone. Unaffordability of healthy foods also leads to malnutrition, forcing households to adopt unsustainable and negative coping strategies.

Labour intensive food production is a main livelihood for most rural households (77 percent). Almost all farmers (97.5 percent) use hand tools to cultivate the land, making agriculture a labour-intensive, uneconomical and subsistent livelihood activity. Only 7 percent of farmers applied chemical fertilisers, which is inadequate given the poor soil fertility. Improved seeds are only used by 17 percent of farmers (compared to 10 percent in 2015) and thus, the majority are unable to achieve a better crop yield. Farmers rely on environmentally degrading slash and burn land preparation methods and adoption of modern farming machinery is exceptionally slow: usage of 4-wheel tractors only increased from 0.2 percent in 2015 to 0.3 percent in 2020 and hand tractors were used by only 1.2 percent of farmers.

In urban localities, the most common source of income is petty trading and this group was hardest hit when the lockdown was imposed: 97 percent of traders reported being affected by the restrictions.

Most Sierra Leoneans depend on the market for food and spend, on average, 63 percent of total expenditures on food. The majority are thus vulnerable to price increases as their income margins are small. Rice is the main staple, with the average price increasing by 38 percent compared to 2019, and more than doubled (135 percent) compared to 2015 prices. Cassava, a close substitute to rice, was also affected by a 36 percent price increase since 2019, and quadrupled in price (437 percent) compared to 2015. When staple prices increase, the most common coping strategy is to reduce consumption of other food groups, particularly those rich in protein and vegetables.

## Who are the most food insecure people in Sierra Leone?

The highest percentage of food insecure people in Sierra Leone are those involved in agriculture based livelihoods, such as production and sale of food and cash crops, fishing and unskilled wage labour (agriculture) with over 60 percent being food insecure. These livelihood activities are mainly performed by households in rural areas.

Close to one in four fishing families are severely food insecure, followed by households relying on fruits and vegetable sales. The latter is a livelihood primarily done by women. Households engaged in salaried work and trading are least food insecure at 43 percent and are mainly found in urban areas.

Factors that heavily influence food and nutrition security are income, education, nutritional quality of foods consumed and hygiene. The higher the education level of the head of households, the better their food security status. For example, a household headed by a person without formal education is more food insecure than one whose head has vocational training (61 percent compared to 46 percent). Women in Sierra Leone have less education than men and often drop out before completing primary school.

The prevalence of severely food insecure households is however only slightly higher at 13 percent among female headed households compared with 11 percent among male headed households.



## What can be done to improve the food security situation?

- Train farmers in improved agricultural practices.
- Provide farmers with much needed improved seeds and fertilisers to increase their production and make agriculture economically viable as a livelihood for youths.
- Improve food access by strengthening markets and road networks.
- Improve accessibility and affordability of diverse and nutritious foods.
- Provide affordable solar energy that supports modernization.
- Continue to promote community health and hygiene.
- Provide cold chain facilities to reduce post-harvest losses of vegetables and fish, and to increase the income potentials of these livelihoods.
- Expand school feeding to the most vulnerable and deprived communities.
- Invest in literacy training of adult women.
- Establish vocational institutions for youth and offer affordable loans.





# CHAPTER 1

## INTRODUCTION

**The 2020 Comprehensive Food Security and Vulnerability Analysis (CFSVA) was conducted eight months after the first case of COVID-19 was confirmed in Sierra Leone.** The pandemic has had a devastating impact on the global economy, put enormous pressure on national health systems and paralyzed the world's population. Sierra Leone was not spared and border closures, school closures and restrictions on movements were imposed, which led to price increases in goods and services and loss of income for many. While the CFSVA is not a COVID-19 impact study, it does provide insights into the fragility of livelihoods in the country. The trend analysis provided in the 2020 CFSVA in the context of COVID-19 pandemic is comparable with previous CFSVA's that were implemented in Sierra Leone: the first was conducted in 2010 against the backdrop of the global economic crisis of 2008/09 and the second was conducted in 2015 during the deadly outbreak of Ebola in 2014/15. The field work for this CFSVA started on 12 November 2020 and was completed on 31 December 2020.

## Sierra Leone overview

Sierra Leone is situated within one of the world's most abundant marine ecosystems. It hosts the deepest natural harbour in Africa, has fertile agricultural land and receives second highest rainfall in Africa. Yet, Sierra Leone performs poorly on most global development measures: 151/157 on the Human Capital Index, 150/160 on the Gender Inequality Index, 163/190 on the Doing Business Index, 156/160 on the Logistics Performance Index, 187/209 on the

Government Effectiveness Index, 196/207 on internet access and 179/195 on vulnerability to biological threats in the Global Health Security Index.<sup>2</sup> Poverty remains disproportionately rural (78.5 percent) and the largest reduction in poverty over the past decade occurred in urban areas outside of Freetown. The major determinants of poverty are a large household size, low education of the head of household, high rates of employment in agriculture and non-wage employment. Furthermore, poverty rates for households with access to electricity are between 13.5 and 20 percentage points lower than those without electricity access. Extreme poverty in rural areas increased by 4.3 percentage points between 2012 and 2018.<sup>3</sup> Electricity access is 16 percent (the fourth lowest globally) and is only 1 percent outside Freetown. Rapid advances in the digital world amplify the infrastructure gaps.<sup>4</sup>

Sierra Leone is ranked among the top countries most vulnerable to the negative impacts of climate change. The country has already experienced extreme vulnerability to climate change as witnessed by the recent natural disasters, such as floods and mudslides. Deforestation further heightens risk of mudslides and other shocks. The irregularity in rainfall and weather patterns have impacted food production, thus threatening the livelihoods of much of the population that relies on agriculture and fishing for sustenance. Shifting rainfall patterns have caused disruption in planting seasons and resulted in diminished agricultural production and poverty, particularly in farmers. Sierra Leone is susceptible to the impact of rainfall variability and the frequency and

<sup>2</sup> World Bank 2020.

<sup>3</sup> Sierra Leone Poverty Assessment 2019.

<sup>4</sup> World Bank 2020.

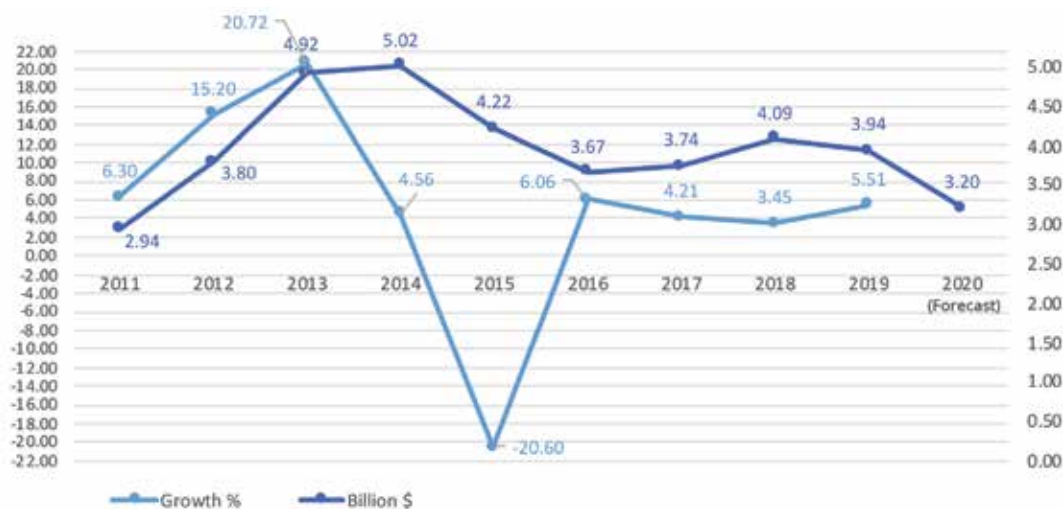


intensity of extreme weather events, including heat waves and heavy precipitation events. Heavy rainfall following dry spells often causes extensive flooding throughout the country. The Global Adaptation Index on vulnerability to climate change ranks Sierra Leone 158/182. With 13 percent of its area and more than 35 percent of the population at risk, the country has a relatively high mortality risk from multiple hazards. Youth (defined as people aged 15–35 years) comprise of 39.4 percent of the 7,092,113 population in Sierra Leone, according to the 2015 Census. The country's population is expected to double in size by 2036 based on the projected population growth rate of 3.2 percent per annum (population growth rate between 2004 and 2015). Rural to urban migration is expected to continue and the urban population increased from 35 percent to nearly 40 percent between 2001 and 2015, but the country lacks a strong formal employment sector to support this young population that seek economic opportunities.<sup>5</sup>

## Economy

Sierra Leone has an advantageous geography and abundant mineral, agricultural and blue resources, yet the country's per capita Gross Domestic Product (GDP) of USD 527.53 (2019) is almost the same as it was after independence. The country has the largest iron ore and rutile deposits globally. The mining sector accounts for two thirds of exports and makes up for 20 percent of GDP and 20 percent of fiscal revenues. The country's most significant growth boom was driven by iron ore exports (20.7 percent in 2013) before the global ore price collapsed in 2015/2016. Recent macroeconomic and financial developments have been impacted by the COVID-19 pandemic. Real GDP was estimated to contract by 2.7 percent in 2020 after growing by 5.4 percent in 2019. The decline was attributable to weak external demand for major exports, particularly diamonds, and declines in the mining, transport, trade and tourism sectors. Inflation was estimated to increase to 17 percent in

**Figure 1: GDP growth (% of GDP at current prices) and per capita GDP (USD) 2011–2020**



Source: World Bank. National Account Data, Tradingeconomics.com

<sup>5</sup> The World Bank: World Development Indicators (<http://databank.worldbank.org/data/source/world-development-indicators>). GoSL, Sierra Leone's National Development Plan: 2019–2023 (NDP), p. 27.

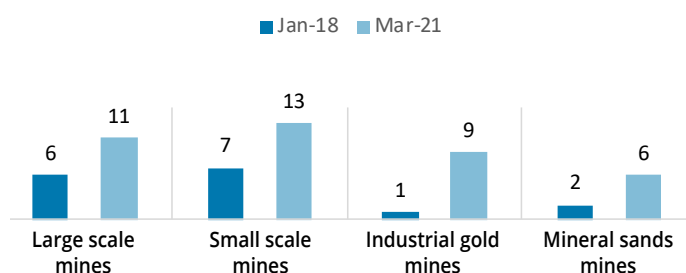
2020 from 14.8 percent in 2019, due to supply chain disruptions and transportation restrictions during the pandemic. The decline in exports caused the current account deficit to increase to 15.6 percent of GDP from 13.5 percent in 2019. At the end of September 2020, foreign exchange reserves were \$565 million (4.2 months of import cover), compared with \$506 million (3.5 months of import cover) in 2019. The stock of public debt increased to 77 percent of GDP as of 30 November 2020 from 70 percent in 2019. Sierra Leone's debt is classified as being at high risk of debt distress, largely due to heightened solvency and liquidity risks arising from the COVID-19 pandemic.<sup>6</sup>

Agriculture, including agribusiness, is a key sector of the Sierra Leone economy, contributing more than half of GDP and accounting for the largest share of labour markets. The sector is dominated by smallholder production of staple crops, which together accounts for three-quarters of the volume of agricultural production. However, low productivity and several failures in market, policy and institutional coordination diminishes the country's agriculture competitiveness. According to the Ministry of Agriculture and Forestry (MAF) only 15 percent of arable land is cultivated. Sierra Leone is a largely import-dependent country, importing US\$ 200–300 million worth of rice annually.<sup>7</sup>

## Mineral export and revenue

According to data from Statistics Sierra Leone (StatsSL), the mineral exports for 2019 were worth US\$ 430 million, accounting for 62 percent of total

**Figure 2: Number of mines in Sierra Leone between January 2018 and March 2021**



export. In 2020, mineral export was circa US\$ 313 million, and accounted for 48 percent of total exports.

Total revenue to the Government of Sierra Leone from mining was US\$ 56 Million (2018), US\$ 61 million (2019) and US\$ 44 Million (2020), the reduction mainly due to the COVID-19 pandemic. Figure 2 shows the expansion in mining sector in the past couple of years.<sup>8</sup>

## Policies

The Government recognizes the importance of supporting the agriculture sector to ensure food security and access to nutrition, promote household financial stability and countrywide economic growth. As a signatory to the Comprehensive Africa Agriculture Development Programme, the Government of Sierra Leone developed its National Sustainable Agriculture Development Plan (NSADP 2010–2030), which remains the country's primary policy document on agriculture.<sup>9</sup>

**The NSADP has six thematic areas:**

1. Sustainable land and water management system;
2. Rural infrastructure and trade-related capacities for improved market access;

<sup>6</sup> Africa Development Bank.

<sup>7</sup> Statistics Sierra Leone.

<sup>8</sup> National Mining Agency.

<sup>9</sup> Government of Sierra Leone. National Sustainable Agriculture Development Plan (2010–2030).



3. Improved food production to reduce hunger including during emergencies and disasters that require agricultural support;
4. Agricultural technology development, dissemination and adoption;
5. Sustainable use of forestry, fisheries and livestock resources; and
6. Cross-cutting issues, such as policy formulation and review, agricultural statistics, monitoring and evaluation, women in agriculture, youth in agriculture and farmers' health.

The Ministry of Agriculture and Forestry (MAF), in collaboration with the Ministry of Finance and the Bank of Sierra Leone, has set the foundation for a bold policy shift, which will come into effect in 2021. The shift aims to revitalize private sector engagement in the agriculture sector. The thrust of the policy change is on providing agricultural financing to fund value chains of priority commodities. Ultimately, the shift will give equal prominence to all the priority crops. In 2021, the Government hopes to provide incentives to boost the rice value chain in the country, owing to the fact that rice is the national staple and that hundreds of millions of dollars are spent every year to import it.

The Government's overarching policy document is the 2019–2023 Mid-Term National Development Plan: Education for Development. This document provides an overview of the macroeconomic context, including opportunities and inhibitors to growth. Eight policy clusters encompass the Government's strategic priorities: (i) Human Capital Development; (ii) Population, Youth Employment and Migration; (iii) Diversification of the Economy; (iv) Governance and Accountability for Results; (v) Infrastructure and Economic Competitiveness; (vi) Women,

Children, Adolescents and Persons with Disabilities; (vii) Addressing Vulnerabilities and Building Resilience; and (viii) Means of Implementation. Agriculture, as a means to promote food security, end hunger and malnutrition, and support economic growth, is a cross-cutting priority under these clusters. The following strategies are planned: encouraging private investment, promoting improved technologies, increasing production of food and cash crops, and improving livestock production.

The 2019–2025 medium-term National Agricultural Transformation Plan (NAT), which includes the 2019–2023 short-term National Agricultural Transformation Plan (NATP), details how to achieve the agricultural objectives of the Mid-Term National Development Plan. It has four priorities: (i) rice self-sufficiency; (ii) livestock development; (iii) crop diversification; and (iv) sustainable forest management and biodiversity conservation. There are three enabling policies: (i) improving policy coherence, joint and strategic planning, coordination, research, and resource mobilization; (ii) making youth and women catalysts for agribusiness development, and (iii) investing in transformative technology such as mechanization, irrigation, water management and remote sensing.

Sierra Leone National Food and Nutrition Security Policy 2012–2016 by Ministry of Health and Sanitation (MoHS) provided an overview of Sierra Leone's current state of food security and nutrition, objectives and goals for improving these metrics, strategies to achieve the improvements and an overview of institutional arrangements among key players. While the policy has not been updated, there is a strategic plan in place from 2019 to 2025.

## Objectives and methodology

The Sierra Leone 2020 CFSVA aims to do the following:

- Assess changes in levels of food insecurity between the two previous CFSVAs undertaken in 2010 and 2015;
- Update the profiles of food insecure and vulnerable people and their livelihoods;
- Assess the impact of COVID-19 on people's livelihoods;
- Identify the underlying causes and risk factors which result in food insecurity, and the potential impact on the most vulnerable; and
- Identify the medium- to long-term response options to address food insecurity.

The 2020 CFSVA offers an understanding of the food security and vulnerability situation at the chiefdom level. This understanding helps in planning development activities that effectively target the most vulnerable and thus optimizes the allocation of scarce resources.

The following modules are included in the CFSVA: demographics, agriculture, education, nutrition, livelihoods, health, water sanitation and hygiene (wash), expenditure, coping strategies and impact of COVID-19. In addition, modules from FAO and the World Bank that were previously included in the assessment are not presented in this report as those modules will be part of other publications.

## Sampling

The Sierra Leone Census 2015 data was used for sampling purposes. A two-stage stratified cluster sampling technique was applied. The stratification is based on the urban, rural and livelihood

zones (LZ). Enumeration Areas (EAs) provided by StatsSL were used as a national sampling frame for the selection of communities.

Each chiefdom is considered as a unit of analysis or cluster for the CFSVA. The first stage stratification is the random selection of EAs within each chiefdom. During the second stage, households are randomly selected for interview within each selected EA. The EAs are distributed on the basis of a probability proportional to size technique among rural, urban and LZs. This allowed for equal representation.

The following formula was used for the calculation of sample size at district level:

$$n = z^2 \times \frac{p(1-p)}{d^2} \times$$

- N = Required minimum sample size
- Z = Z-score corresponding to the degree of confidence
- P = Estimated prevalence of the outcome being measured (food insecurity)
- K = Design effect (required for two-stage cluster sampling)
- d = Minimum desired precision or maximum tolerance error

In calculating the sample size a 95 percent degree of confidence was used ( $Z = 1.96$ ), the 2015 CFSVA result was used for prevalence ( $P = 49.8$  percent), a design effect of 1.5 was applied, the level of precision was 10 percent, which is common practice, and 10 percent was added for refusal or absence.

Based on the above parameters, a minimum sample size per chiefdom or urban ward was calculated at 160 households. The number of districts in Sierra Leone is 16, including Western Area Rural and Western Area Urban. The urban slums in Western Area Urban are an additional stratum, thus resulted in the total number of districts or strata

being 17. Karene and Falaba are new districts and thus there are no comparisons with 2015.

In Sierra Leone, there are 195 chiefdoms in total. However, if including the 13 wards which make up Western Area (rural, urban and slums), the total number of chiefdoms is 208. Per formula, 160 households per chiefdom were randomly selected keeping in accordance with the rural, urban and LZs parameters. Using the same approach, 16 EAs per chiefdom with 10 households per EA were selected. This resulted in a total sample size of 33,760 households nationwide. After cleaning the data, 1,432 questionnaires were removed to ensure the integrity of information collected from the overall sample as a result of errors or anomalies identified in the dataset.

The Mid Upper Arm Circumference (MUAC) measurement of children between 6 and 59 months of age was done on all children in the sampled households and 17,046 children were measured. The MUAC results are only statistically representative at district level due to the sample size.

## Coverage

The CFSVA covered all 16 districts and also included the slum areas of Western Urban (Freetown) as a separate “district/stratum” to provide specific information on the food security and nutrition status of slum dwellers. The data was collected at the chiefdom level, where all 195 chiefdoms and 13 urban wards were given equal representation. A total of 33,760 households across the country were interviewed.

**Table 1: 2020 CFSVA coverage**

CFSVA completion status			
	Target	Completed	Completion rate
Districts/Strata	16+1	16+1	100%
Chiefdoms	195+13=208	195+13=208	100%
Households	33,760	32,631	96.7%

Both rural and urban areas within each district and chiefdom were selected to be interviewed to produce representative results. The rural coverage was 84 percent, while urban coverage was 16 percent. A significant proportion of the urban areas surveyed in low populated cities are characterised by semi-urban settlements with mixed styles of living, thus influencing some of the results.

**Table 2: 2020 CFSVA coverage by area**

District	Rural	Urban
Bo	90%	10%
Bombali	88%	12%
Bonthe	90%	10%
Falaba	99%	1%
Kailahun	91%	9%
Kambia	83%	17%
Karene	93%	7%
Kenema	92%	8%
Koinadugu	83%	17%
Kono	91%	9%
Moyamba	87%	13%
Port Loko	74%	26%
Pujehun	85%	15%
Tonkolili	93%	7%
Western Area Rural	100%	0%
Western Area Slum	0%	100%
Western Area Urban	0%	100%
<b>Total</b>	<b>84%</b>	<b>16%</b>



## Instruments for primary data collection

In addition to second data reviews, the CFSVA used quantitative tools to collect data. Two survey tools were used in the assessment:

1. Household questionnaire (quantitative)
2. Community questionnaire (quantitative)

The questionnaires were designed using the XLS Form. ODK Collect application (Android based) was used for data collection and ONA, a private company, was used for data storage and sharing data securely.

## Staff

The 2020 CFSVA staff comprises of senior staff from MAF's Planning Evaluation Monitoring and Statistics Division who supported the monitoring, supervision and coordination of field staff. The district staff of MAF were responsible for data collection in their respective districts. In addition, staff from StatsSL provided support on sampling, supervision, coordination and data collection. Considering the need for nutrition indicators in the CFSVA, the Nutrition Directorate staff within the MoHS were responsible for training, supervision and data collection of nutrition indicators. Also, experienced enumerators that have been part of the previous CFSVAs and the FSMS participated as monitors, supervisors and field data collectors. The overall field supervision and coordination was done by WFP's Vulnerability Analysis and Mapping (VAM) and Monitoring and Evaluation (M&E) staff. A total of 360 enumerators and 90 supervisors were selected and trained for the 2020 CFSVA.

## Training

Due to the COVID-19 pandemic and the strict health regulations in place, the Technical Committee agreed to conduct a Training of Trainers (ToT) and later decentralized the training at regional level. A ToT was conducted for 16 district monitors and four regional coordinators by WFP VAM in Port Loko, where participants translated the tools in four local languages. After the ToT, four regional trainings were conducted in Port Loko, Makeni, Bo and Kenema simultaneously by the district monitors and coordinators. All trainings at the national and regional level included a full day of field testing. These trainings were closely supervised by WFP VAM team.

## Data processing and analysis

Data analysis was conducted using the Statistical Package for Social Science and Emergency Nutrition Assessment software for the MUAC component.

Food security measurement is guided by the Consolidated Approach for Reporting Indicators of Food Security (CARI), a methodology for analysing and reporting the level of food insecurity within a population. Considering the household's food consumption (measured through the Food Consumption Score), coping capacity (measured through the Coping Strategy Index) and the share of monthly expenses devoted to food, households are classified into one of the four food security categories.

The population figures used in the analysis was based on the Statistics Sierra Leone's 2020 population projection.

In this report, as per CARI guidelines, the food insecure population is comprised of the following categories.

**Table 3: Description of overall WFP food security classifications**

	<b>Food Secure</b>	<b>Marginally food secure</b>	<b>Moderately food insecure</b>	<b>Severely food insecure</b>
<b>Food Security Index</b>	Able to meet essential food and non-food needs without engaging in atypical coping strategies	Has minimally adequate food consumption without engaging in irreversible coping strategies; unable to afford some essential non-food expenditures	Has significant food consumption gaps, OR marginally able to meet minimum food needs only with irreversible coping strategies	Has extreme food consumption gaps, OR has extreme loss of livelihood assets will lead to food consumption gaps, or worse

**Table 4: Categories of food insecure population**

<b>Food Security Index</b>	<b>Description</b>	<b>Food secure/ Food insecure</b>
Food secure	Able to meet essential food and non-food needs without engaging in atypical coping strategies	Food secure
Marginally food secure	Has minimally adequate food consumption without engaging in irreversible coping strategies; unable to afford some essential non-food expenditures	
Moderately food insecure	Has significant food consumption gaps, OR marginally able to meet minimum food needs only with irreversible coping strategies	Food insecure
Severely food insecure	Has extreme food consumption gaps, OR has extreme loss of livelihood assets will lead to food consumption gaps, or worse	

Results are presented within the CARI food security console, which gives a clear snapshot of the prevalence of food security indicators in a systematic and transparent way to establish the population’s overall food security prevalence, the Food Security Index. Table 5 lists the CARI food security indicators that were used in the analysis.

**Table 5: CARI food security indicators**

	<b>Module</b>	<b>CARI food security indicator</b>
1.	Food consumption	Food consumption score
2.	Food basket value	Food expenditure share
3.	Non-food expenditure	
4.	Livelihood coping strategies	Livelihood coping strategies indicator

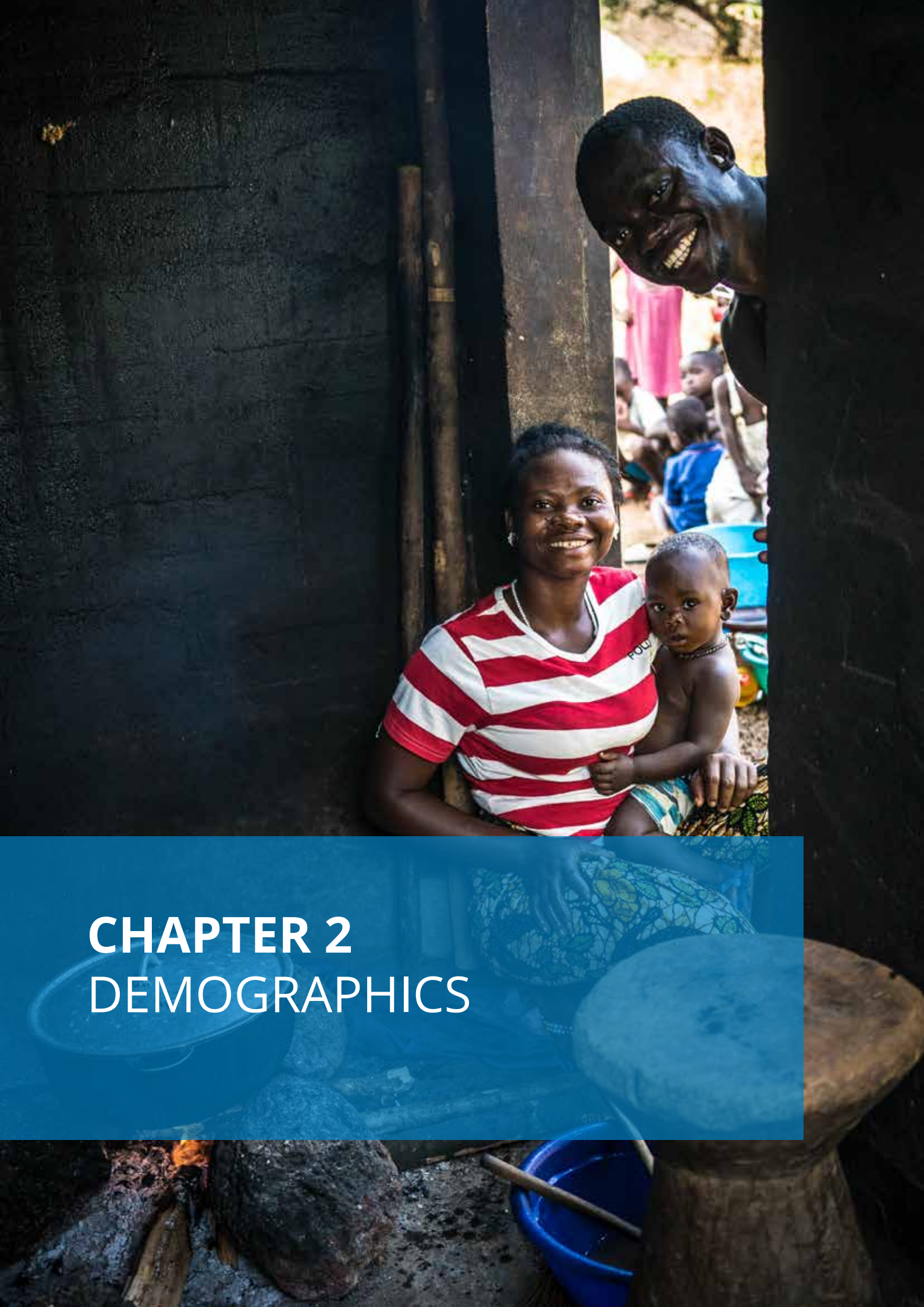


## Management

The CFSVA was supervised by WFP's international VAM consultant. The MAF led the process in close collaboration with WFP. A technical committee comprised of representatives from MAF, MoHS, WFP, FAO, UNICEF, StatsSL and donors provided high level supervision to ensure the effective implementation of the CFSVA. The Technical Committee reviewed and agreed on the questionnaire, methodology and implementation strategy and was also actively involved in the coordination and supervision of the training of enumerators and field activities.

A meeting was held on March 10th, 2021 with the technical committee where preliminary results were presented. This was followed by a validation workshop that took place on 30th March 2021. Experts and partners from different agencies including the Government, UN, NGOs, donors and academia were present and provided suggestions and recommendations during the working group to further enhance the analysis and the finalization of the report.





## CHAPTER 2 DEMOGRAPHICS



## Household size

On average, Sierra Leonean households are composed of 5.3 members. Households are slightly larger in size in urban (5.5) than in rural areas (5.3). The largest families are mostly found in Tonkolili (6.7 members), Karene (6.3 members), Koinadugu (6.2 members) and Kambia (5.9 members). The smallest average family size is found in Bonthe (4.4 members), Kailahun (4.6 members) and Kenema (4.8 members).

**Table 6: Average household size and gender composition**

District name	Male Headed households	Female headed households	Overall
Bo	5.2	4.6	5.1
Bombali	5.6	5.1	5.5
Bonthe	4.6	4.0	4.4
Falaba	5.1	4.1	5.0
Kailahun	4.7	4.3	4.6
Kambia	5.9	5.5	5.9
Karene	6.4	5.8	6.3
Kenema	4.9	4.7	4.8
Koinadugu	6.3	5.7	6.2
Kono	5.8	5.5	5.7
Moyamba	4.9	4.6	4.9
Port Loko	5.4	4.9	5.3
Pujehun	5.0	4.7	4.9
Tonkolili	6.8	6.0	6.7
Western Area Rural	5.2	5.2	5.2
Western Area Urban	5.1	5.4	5.2
Rural	5.4	4.8	5.3
Urban	5.5	5.4	5.5
<b>Overall</b>	<b>5.5</b>	<b>5.0</b>	<b>5.3</b>

## Dependency ratio

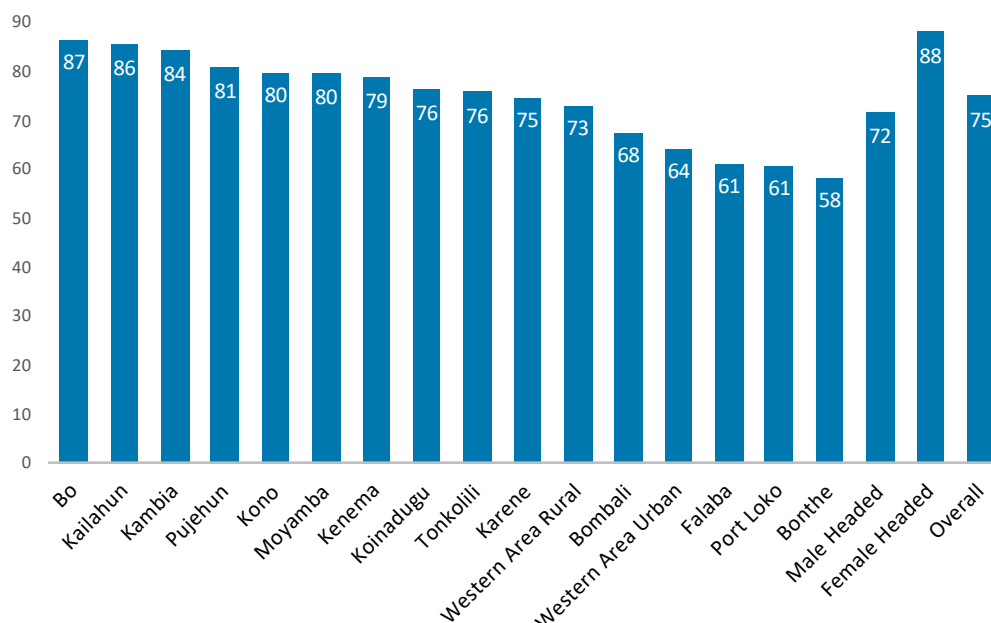
The dependency ratio gives insight into the number of people in a household who are of non-working age compared to the number of people who are of working age. A high ratio means that the working age population—and the overall economy—faces a greater burden in supporting the young (under 15 years of age) and the ageing population (over 65 years of age). Households with a high dependency ratio are significantly more prone to food insecurity.

The average dependency ratio across the country is 75. Female headed households had a higher dependency ratio of 88 compared to their male headed households' counterparts with a ratio of 72. This could be a result of the role played by women as care givers and who double up to provide economic support to the households, thus women had higher dependency ratios.

Households in Bo had the highest dependency ratio and Bonthe had the lowest dependency ratio. There was no significant difference between the polygamous families' dependency ratios and monogamous families' dependence ratios with both reporting 74 and 75 respectively. However, there was a slight difference with child and aged dependency ratios with polygamous families having a slightly higher aged dependency ratio of 9 compared to 7 of monogamous families. This is a result of the larger family size with more elderly members.



**Figure 3: Dependency ratio by district**



### Gender of household head

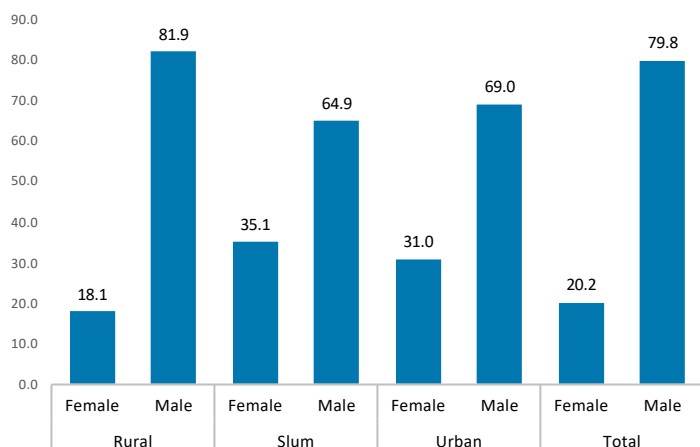
Twenty percent of households are headed by women. This percentage is much higher in urban areas (31 percent) and in urban slums (36 percent).

By district, the highest percentages of female headed households are in Western Area Urban [(Freetown) 45 percent], Western Slums (36 percent), Kailahun (31 percent), Western Area Rural (26 percent) and Pujehun (24

percent). The lowest percentage of female-headed households are found in Falaba (11.5 percent), Tonkolili (12.5 percent) and Koinadugu (14.5 percent).

Polygamy is common in Sierra Leone although more prevalent in rural areas compared to urban localities. On average, 19 percent of the male headed household have more than one wife. The highest percentage of such households are in Falaba (35 percent), Koinadugu (34 percent) and Tonkolili (34 percent).

**Figure 4: Percentage of households by gender and location**



### Age of household head

In Sierra Leone, the average age of the household's head is 46 years. There was no difference in the average age of female headed households and male headed households with both having an average of 46 years. However, in urban areas the household head's average age was slightly lower at 45 years, compared to average age of 46 years in the rural areas.

Tonkolili district had the oldest average age of household head (50 years) compared to Pujehun, which had the youngest average age of 42 years. In most districts female headed households had older average age compared to their male counterparts, apart from in Karene district.

**Table 7: Average age of household head**

District name	Male headed	Female Headed	Overall
Bo	45	47	45
Bombali	47	49	47
Bonthe	43	43	43
Falaba	46	50	46
Kailahun	44	45	44
Kambia	48	49	48
Karene	49	45	49
Kenema	46	45	46
Koinadugu	47	49	47
Kono	46	46	46
Moyamba	46	48	46
Port Loko	48	47	48
Pujehun	42	44	42
Tonkolili	50	50	50
Western Area Rural	44	47	44
Western Area Urban	42	43	43
Rural	46	47	46
Urban	45	44	45
<b>Overall</b>	<b>46</b>	<b>46</b>	<b>46</b>

## Disability

Households are generally susceptible to income loss and consequential food insecurity when household heads have one or more disabilities.

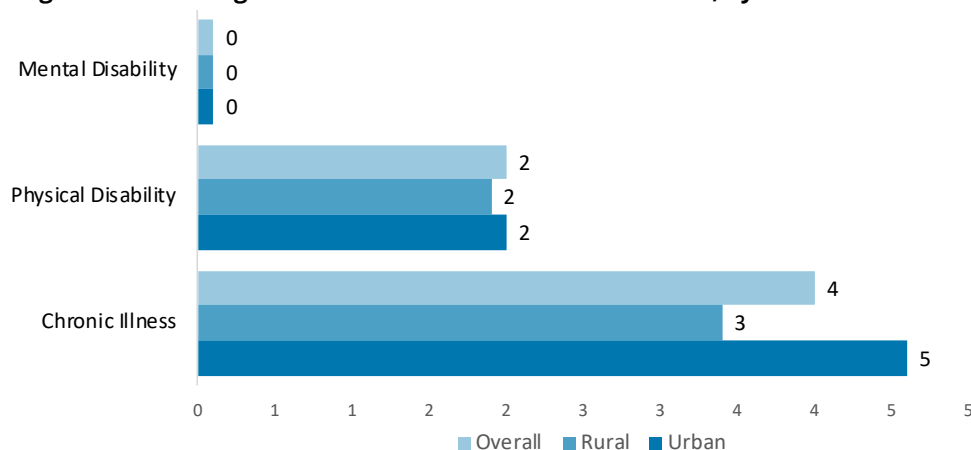
On average, 6 percent of household heads were living with one of the three types of disabilities included in the survey: chronic illness, mental disability, physical disability. The most common form of disability is chronic illness (at 4 percent), which is higher in urban areas (at 5 percent) than in rural areas (at 3 percent). There were no significant differences among male headed and female headed households on disability status as in both instances 2 percent of the household heads were suffering from a chronic illness and 2 percent had a physical disability.

## Housing

### Household ownership

Generally, most of the households interviewed own the house they were currently living in as 76 percent reported ownership. There was a significant difference in the proportion of households renting in urban areas compared

**Figure 5: Percentage of household heads who are disabled, by location**



to the rural areas: 40 percent of the urban dwellers reported paying rent, while in rural areas only 3 percent were living in rented accommodations. The disparity in rented accommodations compared to property ownership arises from the increasing number of people migrating to urban areas in search for improved livelihoods. In rural areas, 82 percent of the households reported owning their homesteads compared to 45 percent of owned properties in the urban areas. Ninety percent of elderly headed households owned their houses compared to the households headed by people in the productive ages (18–64 years) where 74 percent had ownership.

### Roofing material

The majority of households (74 percent) reported using corrugated iron/zinc sheets for roofing and the other most common (20 percent of households) roofing material was thatch (grass/straw). In both rural and urban areas, corrugated iron/zinc sheets were common forms of roofing. However, thatch was still more common in rural areas (22 percent) compared to the urban areas (7 percent). In the rural areas, thatch is mostly used for the kitchen.

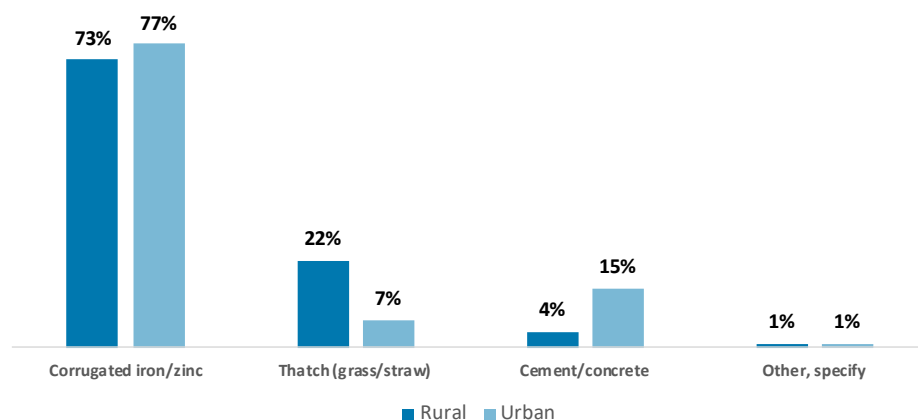
### Major materials used on the external walls

Construction material is usually a determinant of wealth in a household. The more expensive, stronger and modern materials used for construction, the wealthier the households are. In the rural areas, mud bricks were the major construction material used for outer walls (78 percent of the households). In urban areas, the most commonly used material was cement or concrete bricks (44 percent) and mud or mud bricks (38 percent). The higher proportion of mud bricks and corrugated iron (12 percent) used in the urban households could indicate a worsening situation of housing conditions.

### Floor materials

In urban areas, households had better access to modern and stronger building materials compared to their rural counterparts. Cement and concrete were mainly used as floor materials in urban areas (72 percent) compared to rural households where only 22 percent households used cement and concrete as floor materials. In rural areas, mud was still used as the most common material for flooring. In urban areas, the

**Figure 6: Types of housing materials used in rural and urban areas**





22 percent of the houses that had mud floors were reported mainly in slums while other 4 percent of the households used wood as flooring material.

## Livelihoods

Livelihoods are activities that households engage in to earn a living. In Sierra Leone, the predominant livelihood activity is agriculture, where most rural households directly or indirectly rely on agricultural activities to meet their food and non-food needs.

### Type of livelihoods

In rural areas, agriculture-based livelihoods are dominant as 80 percent of households are engaged in production and sale of food crops, and 31 percent are involved in production and sale of cash crops. In urban areas this is much lower where only 29 percent households grow and sell food and 12 percent engage in cash crops. Petty trading and formal trading were major sources of income in urban areas: 50 percent and 35 percent of the households respectively.

Women who are heading households are more active in income generating activities than their male counterparts. Women engage in petty trade and vendor on the streets (43 percent compared to 26 percent of men doing the same livelihood activity). Women also engage in trading, selling, and other commercial activities (21 percent compared to 13 percent of men) and sell gifts (13 percent compared to only 6 percent of men).

Gathering and selling of wild foods is regarded as a coping mechanism and was mainly employed by female headed households (3 percent) compared to male headed households (2 percent).

**Table 8: Types of livelihoods and its practice by location (urban or rural)**

Livelihood Type	Rural	Urban	Overall
Production and sale of food crops	80%	28%	72%
Petty trading-street vendor	26%	50%	30%
Trading, Seller, Commercial activity	11%	35%	15%
Salaries, Wages	5%	23%	8%
Production and sale of cash crops	31%	12%	28%
Unskilled wage labour agriculture	18%	7%	17%
Unskilled wage labour non-agriculture	12%	15%	12%
Skilled wage labour	8%	14%	9%
Wood cutting/coal burning	12%	4%	11%
Palm oil extraction	11%	2%	10%
Livestock rearing and/or selling	9%	4%	9%
Production and sale of vegetables and/or fruits	8%	4%	8%
Gifts	8%	8%	8%
Mining of minerals	6%	2%	6%
Fishing	6%	2%	5%
Handicrafts / Artisan	4%	6%	4%
Others (specify)	3%	2%	3%
Gathering and selling of wild food	2%	1%	2%
Palm wine selling	2%	1%	2%
Remittances/ Migrating labour	2%	1%	2%
Hunting and selling bush meat	1%	0%	1%
Begging	1%	1%	1%
Mining of sand and stone	1%	2%	1%
Extraction of palm wine (poyo)	1%	0%	1%
Aid	1%	2%	1%
Salt extraction	0%	2%	1%
Cart puller/push cart	0%	0%	0.2%

Although very small (3 percent), female headed households were slightly more reliant on external support, such as remittances compared to male headed households (1 percent).

**Table 9: Main livelihood options by sex of household head**

Livelihood	Male	Female
Production and sale of food crops	75%	60%
Petty trading-street vendor	26%	43%
Production and sale of cash crops	28%	28%
Trading, Seller, Commercial activity	13%	21%
Unskilled wage labour agriculture	17%	14%
Gifts	6%	13%
Unskilled wage labour non-agriculture	12%	12%
Wood cutting/coal burning	11%	8%
Production and sale of vegetables and/or fruits	8%	8%
Salaries, Wages	8%	6%
Palm oil extraction	11%	6%
Livestock rearing and/or selling	9%	6%
Skilled wage labour	10%	5%
Fishing	6%	4%
Handicrafts /Artisan	4%	3%
Others (specify)	3%	3%
Mining of minerals	6%	3%
Gathering and selling of wild food	2%	3%
Remittances/ Migrating labour	1%	3%

## Asset score

The asset score measures the number of different assets that a household has. These are productive assets, households' assets and community assets. Depending on the asset, it may protect a household from shocks (floods, mudslides, landslides, economic etc.). Generally, all the households owned some productive, community and household

assets. Male headed households owned different and more assets compared to female headed households as they had a higher score in all categories (see Table 11 below).

Productive assets included agricultural equipment, transport and other income generating assets that are used by households for their livelihoods. The average productive asset score was 8.28 with male headed households having 8.59 assets, which is 20 percent more than the female headed households with a score of 6.89. With the major livelihoods being agriculturally based, male headed households have a higher productivity asset score compared to female headed households.

Male headed households also own more household assets with an average score of 12.49 compared to female headed households of 11.32. Lastly, male headed households had another added advantage in having more access to community assets with an average score of 2.37 compared to the female headed household score of 2.19.

**Table 10: Asset scores of male and female headed households**

Asset Type	Male headed households Asset Ownership Score	Female headed households Asset Ownership Score	Overall Asset Ownership Score
Productive Assets	8.59	6.89	8.28
Household Assets	12.49	11.32	12.26
Community Assets	2.37	2.19	2.34

## Wealth index

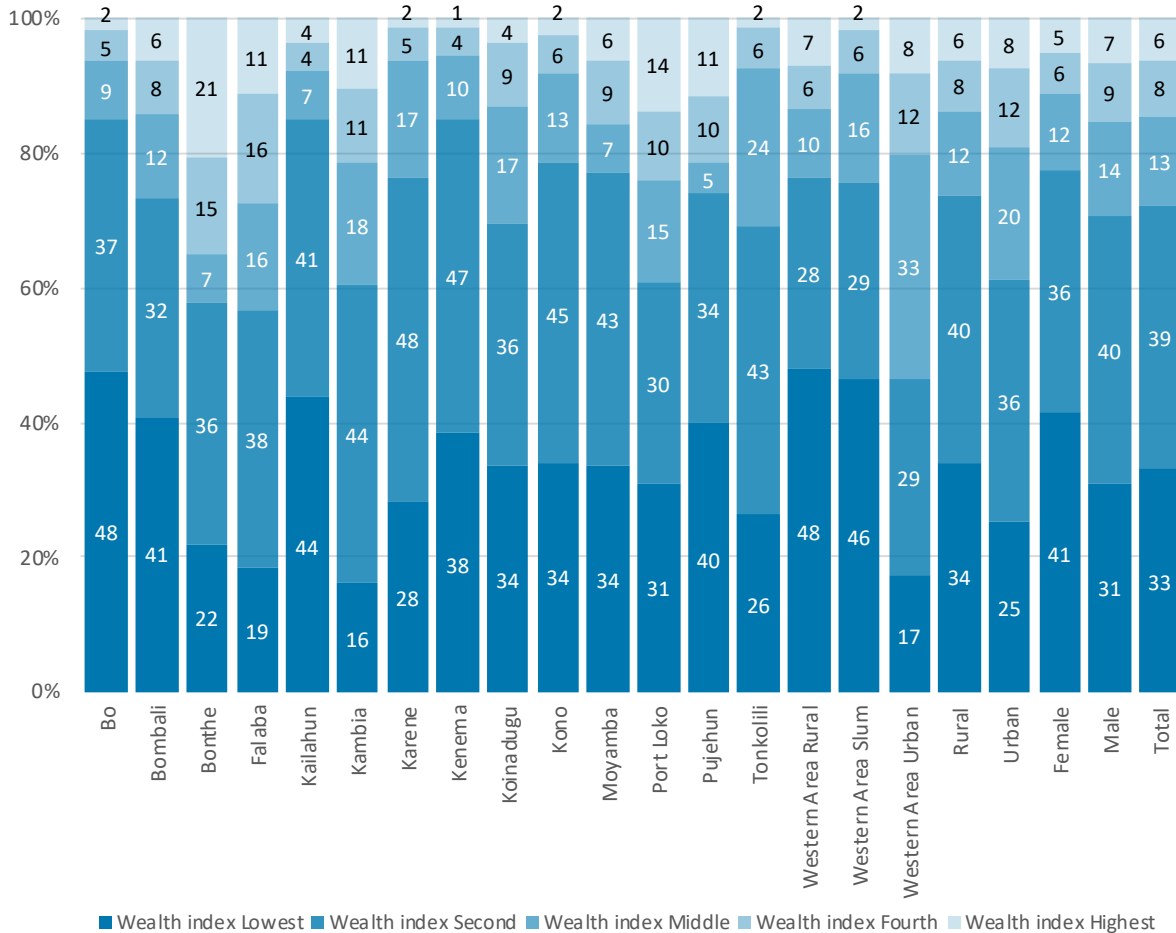
The wealth index<sup>10</sup> is a composite index that measures a household's assets and its ability to access and utilize services and facilities. The wealth index allows for identification of households that are falling in the lowest wealth quintile and how economic status affects the households' wellbeing when it comes to matters of health, nutrition, food security, education and so on. In Sierra Leone, the percentage of households that fall into the lowest wealth index almost doubled since the last CFSVA: 33 percent in 2020 from 17 percent in 2015.

Among the urban dwellers who make up the lowest wealth quintile, the

percentage have more than doubled since 2015 from 10 percent to 25 percent in 2020. In rural areas, the proportion of households in the lowest wealth quintile increased to 34 percent in 2020 from 20 percent in 2015.

Amongst female headed households, 41 percent are found in the lowest quintile while male headed households in this group are at 31 percent. This shows that female headed households are poorer than male headed and are linked to the lower asset ownership that women have, which limit their income options. In addition, female headed households have a higher dependency ratio, which would require a strong asset base to support all members of the household.

**Figure 7: Percentage of households and their wealth index, by district (CFSVA 2020)**



<sup>10</sup> The index is constructed through principal component analysis. Firstly, indicators common to urban and rural areas are used to create respective common factor scores (18 values) for each set of assets/services/facilities. Secondly, the area specific factor scores are combined to generate a national level wealth index. Finally, the index is divided into five different quintiles (lowest to highest) to determine the level of wealth of each household. Households falling into the lowest wealth quintile are the poorest in terms of their assets, services and facilities, while those in the highest quintile are better off.



Among the districts, Western Area Rural and Bo districts had the highest percentage of households falling into the lowest wealth quintile at 48 percent; followed by Urban Slums at 46 percent. The districts with the lowest proportion of households in the lowest quintile are Kambia (16 percent) and Western Area Urban (17 percent).

The district with the highest proportion of households in the highest wealth quintile is Bonthe with 21 percent but the district also has one of the highest proportions of food insecure as seen later in the report.

Across the districts, the highest increase in the proportion of households in the lowest wealth quintile compared to the CFSVA 2015 were recorded in Western Area Rural (from 15 to 48 percent),

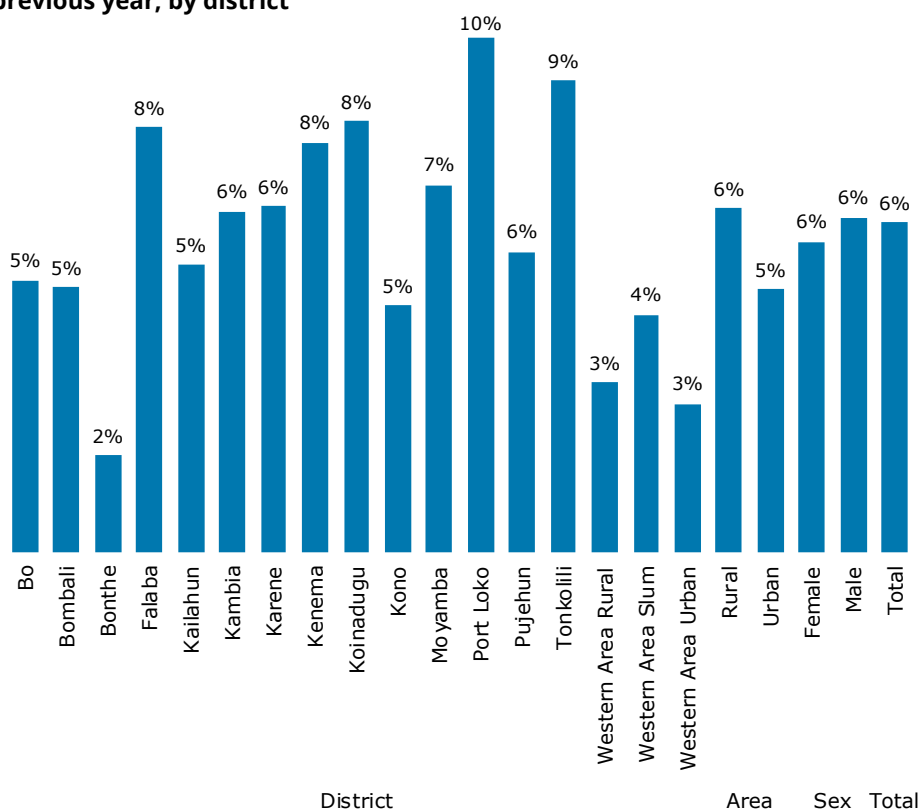
Western Area Slums (39 to 46 percent), Bo (16 to 48 percent), Bonthe (from 13 to 22 percent) and Kailahun (18 to 44 percent). None of the districts reported any decline in the percentage of households in the lowest quintile now compared to CFSVA 2015 (see Annex 9).

## Migration

For the purposes of this report, migration<sup>11</sup> is defined as:

1. **Short-term**, when the migrant intends to return home (e.g. when a crisis, such as the COVID-19 epidemic, is over); or
2. **Long-term**, when the migrant moves to another part of the country and does not know when he/she will return home. Most long-term migrants are people moving from rural to urban areas in search of better livelihood or educational prospects.

**Figure 8: Migration for at least two months during previous year, by district**



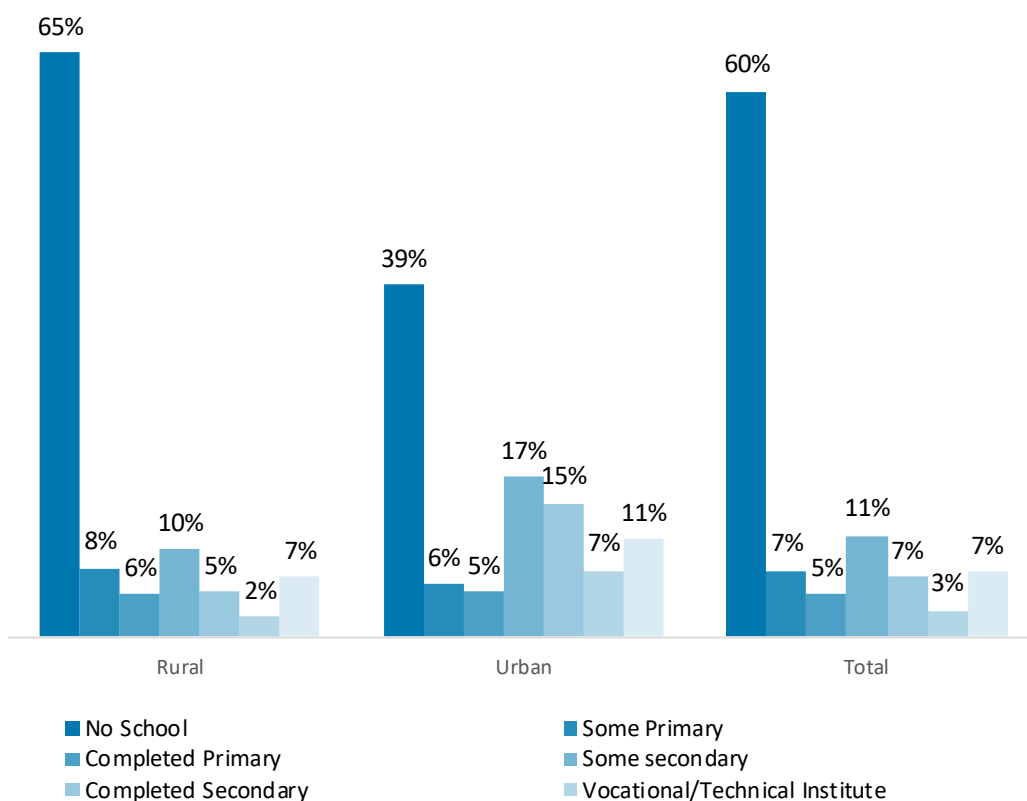
<sup>11</sup> The International Organization for Migration (IOM) defines a migrant as any person who is moving or has moved across an international border or within a State away from his/her habitual place of residence, regardless of (1) the person's legal status; (2) whether the movement is voluntary or involuntary; (3) what the causes for the movement are; or (4) what the length of stay is.

Six percent of the respondents reported having migrated or moved at least for two months during the past year. There was no difference in gender migration and a very slight difference (one percentage point) between urban and rural migration. This would indicate that equal amount of people moved back to the rural areas compared to urban migration and could be a result of COVID-19 restrictions that hit small traders in the urban areas. Port Loko had the highest migration rate at 10 percent, while Bonthe district had the lowest at only 2 percent.

## Education

A total of 46 percent of the population reported having received some level of education. Freetown (Western Area Urban) had the highest percentage of population (84 percent) who had received a level of education. The population with least education was in Karene at 33 percent. Note that this assessment did not assess level of literacy but whether the population had attended school. Interestingly more women than men reported to having received a level of education and this was also confirmed in the lower level classrooms that have more girls in attendance than boys. However, more girls drop out of school than boys before reaching secondary education.

**Figure 9: Education level of household head**



**Table 11: Population 15 years and above having received some education (%)**

District name	Male with some education	Female with some education	Total with some education
Bo	65%	46%	55%
Bombali	53%	37%	45%
Bonthe	48%	37%	42%
Falaba	48%	29%	38%
Kailahun	55%	35%	44%
Kambia	52%	39%	45%
Karene	42%	25%	33%
Kenema	54%	38%	46%
Koinadugu	41%	28%	34%
Kono	52%	40%	46%
Moyamba	59%	43%	51%
Port Loko	48%	40%	44%
Pujehun	47%	35%	41%
Tonkolili	45%	34%	39%
Western Area Rural	83%	71%	77%
Western Area Slum	83%	71%	77%
Western Area Urban	90%	79%	84%
Rural	49%	34%	41%
Urban	72%	63%	67%
Female	67%	38%	46%
Male	46%	49%	46%
<b>Total</b>	<b>40%</b>	<b>57%</b>	<b>46%</b>

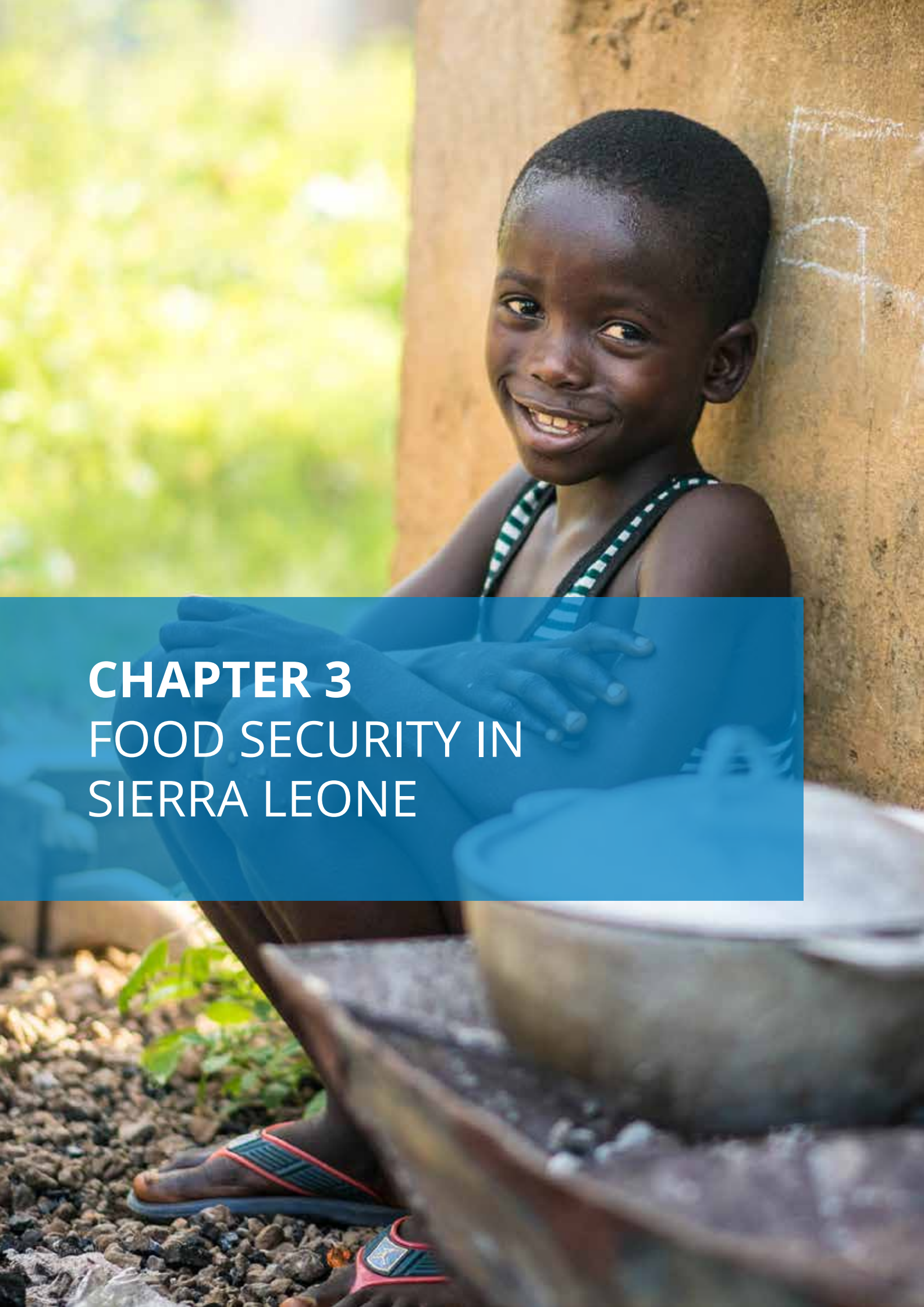


In urban areas, the level of education received is significantly higher at 67 percent compared to rural areas at 41 percent. At the district level, Western Area Rural (77 percent) had the highest percentage of people with education followed by Bo (55 percent) and Moyamba (51 percent).

Education level of household heads plays a significant role in household's earnings, its social status, health and level education of dependents. Most household heads in Sierra Leone are illiterate (60 percent), especially in rural areas where 65 percent never attended school. Overall, 7 percent had attended levels of primary school, 11 percent attended secondary school and 7 percent attended college or university. In urban areas, the situation is comparatively better, where 39 percent of household heads have no education, 15 percent had completed secondary education and 11 percent were college or university graduates.

The highest percentage of household heads with no education live in Koinadugu (75 percent), followed by Tonkolili (72 percent) and Karene (71 percent) districts.



A young child with dark skin and short hair is sitting on the ground, leaning against a large, dark metal pot. The child is wearing a green and white striped tank top and red and black sandals. The child is smiling and looking towards the camera. The background is a blurred outdoor setting with green foliage. The text is overlaid on a blue semi-transparent rectangle.

# CHAPTER 3

## FOOD SECURITY IN SIERRA LEONE

**Per definition, “Food security exists when people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life”.<sup>12</sup>**

Food security is a composite indicator of food consumption, expenditure share and coping strategies. An indication of the worsening situation can be observed from the proportion of household in the severe food insecurity status increasing from 7 percent in 2010 to 12 percent in 2020. That is an increase from 373,539 severely food insecure population in 2010 to 963,217 severely food insecure population in 2020. Today, the prevalence of food insecurity is at 57 percent, meaning that an additional 1,199,679 people are food insecure compared to 2015. In many districts, food security has gradually worsened since 2010, such as in Bo, Bombali, Bonthe and Kenema, while few witnessed a gradual improvement, such as in Port Loko, Pujehun, Tonkolili, Kambia, Koinadugu and Western Area Slums. See figures 10 and 11 to compare prevalence of food insecurity over the last 10 years and by district.

Food security had briefly improved in 2018 since the end of the Ebola outbreak in 2014/15, based on the analysis of the Food Security Monitoring System (FSMS), which is conducted by the WFP and MAF and has the same methodology as the CFSVA. The FSMS<sup>13</sup> data from September 2018 showed an overall

**Figure 10: Trends in food insecurity, 2010, 2015, 2020 (%)**



**Table 12: Food insecurity comparison 2010, 2015, 2020 (%) by district**

District	CFSVA 2010	CFSVA 2015	CFSVA 2020	Situation improved/worsened
Western Urban slums	40%	57%	33%	↓
Kambia	71%	67%	46%	↓
Western Area Rural	22%	42%	25%	↓
Kailahun	21%	71%	60%	↓
Port Loko	71%	61%	52%	↓
Tonkolili	74%	64%	57%	↓
Koinadugu	66%	52%	46%	↓
Pujehun	80%	69%	67%	↓
Kono	48%	56%	55%	↑
Bombali	26%	57%	58%	↑
Western Area Urban	23%	12%	16%	↑
Moyamba	76%	52%	66%	↑
Kenema	34%	55%	71%	↑
Bonthe	23%	53%	71%	↑
Bo	32%	37%	56%	↑
Karene			62%	↑
Falaba			69%	↑
<b>Total</b>	<b>45%</b>	<b>50%</b>	<b>57%</b>	

↑ Proportion of food insecure people increased  
 ↓ Proportion of food insecure people decreased

<sup>12</sup> World Food Summit, 1996: [http://www.fao.org/fileadmin/templates/faotally/documents/pdf/pdf\\_Food\\_Security\\_Concept\\_Note.pdf](http://www.fao.org/fileadmin/templates/faotally/documents/pdf/pdf_Food_Security_Concept_Note.pdf)  
<sup>13</sup> Sierra Leone Food Security Monitoring System Report. September 2018. <https://docs.wfp.org/api/documents/WFP-0000102326/download/>

national food insecurity rate of 44 percent. However, in 2019 the FSMS<sup>14</sup> showed again a higher prevalence of food insecurity at 53 percent. This would indicate that any improvement seen in 2018 was not because of any structural progresses in addressing the underlying causes of food insecurity in Sierra Leone but a temporary one that was caused by short lived favourable conditions.

The year 2020 witnessed further deterioration in food security. Restrictions on movements imposed to contain the spread of the COVID-19 significantly affected people's ability to farm food and access food. Rice producing districts and border areas with Guinea and Liberia were particularly affected. As a result of movement restrictions between districts, farmers were unable to transport marketable surpluses to the capital city or other urban centres, greatly reducing incomes. Moreover, cassava products and rice could not be exported to Guinea due to restrictions, which reduced the demand and farm-gate prices, especially of cassava.

## Food security situation 2020

According to the 2020 CFSVA, 57 percent of Sierra Leone's population is food insecure. Among the food insecure, 12 percent of households are severely food insecure, and 46 percent are moderately

food insecure. In rural areas, the level of food insecurity is much higher, with 61 percent of the population food insecure (11 percent severely and 48 percent moderately). Over 3.3 million people are food insecure in rural areas compared with 1.4 million people in urban areas. The highest number of food insecure population are in Kenema (527,571), followed by Kailahun (411,693), Bo (397,850), Bo (397,850), Pujehun (392,245) and Tonkolili (389,040).

**Table 13: Food security by population**

District	% food insecure	2020 Population	Food insecure Population 2020
Bo	56%	635,374	397,850
Bombali	58%	504,775	325,248
Bonthe	71%	236,170	187,311
Falaba	69%	248,644	190,678
Kailahun	60%	625,173	411,693
Kambia	46%	385,185	193,982
Karene	62%	340,781	238,324
Kenema	71%	666,793	527,571
Koinadugu	46%	247,029	123,640
Kono	55%	606,918	367,407
Moyamba	66%	348,312	256,269
Port Loko	52%	609,466	347,641
Pujehun	67%	520,958	392,245
Tonkolili	57%	622,339	389,040
Western Area Rural	25%	515,031	139,279
Western Area Slum	33%	150,000	54,735
Western Area Urban	16%	1,212,313	210,336
Rural	61%	4,899,591	3,304,230
Urban	39%	3,402,245	1,449,017
<b>Total</b>	<b>57.3%</b>	<b>8,301,836</b>	<b>4,753,247</b>

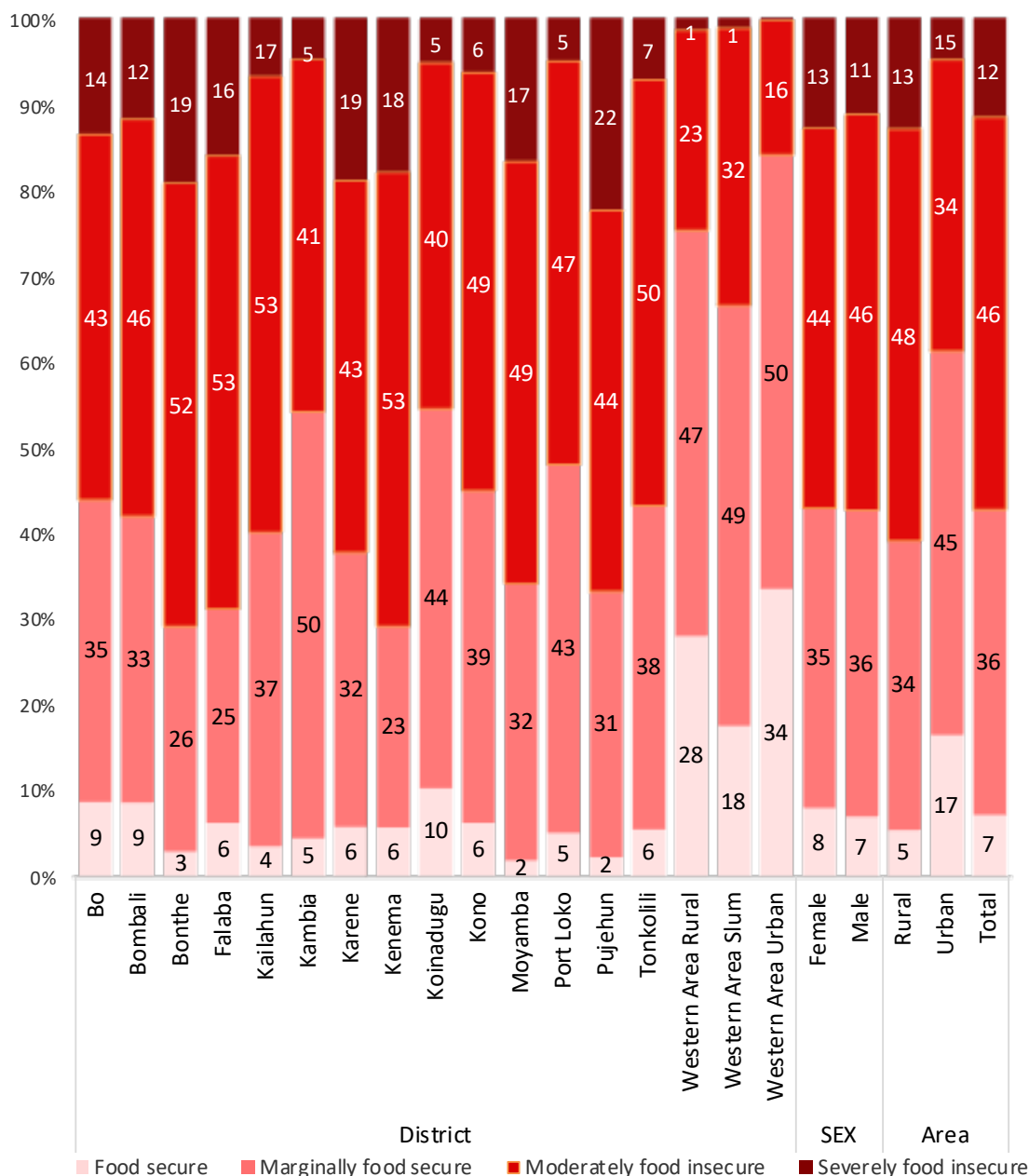
**Table 14: CARI Console**

Domain		Indicator	Food Secure	Marginally Food Secure	Moderately Food Secure	Severely Food Secure
Current Status	Food Consumption	Food Consumption Group	Acceptable 39%		Borderline 34%	Poor 27%
Coping Capacity	Economic Vulnerability	Food Expenditure Share	Share < 50% 20%	50% - 65% 30%	65% - 75% 21%	Share > 75% 29%
	Asset Depletion		31%	Stress 18%	Crisis 29%	Emergency 22%
Food Security Index			7%	36%	46%	12%

14 August 2019 Food Security Monitoring System Findings. September 2019. <https://docs.wfp.org/api/documents/WFP-0000109936/download/>



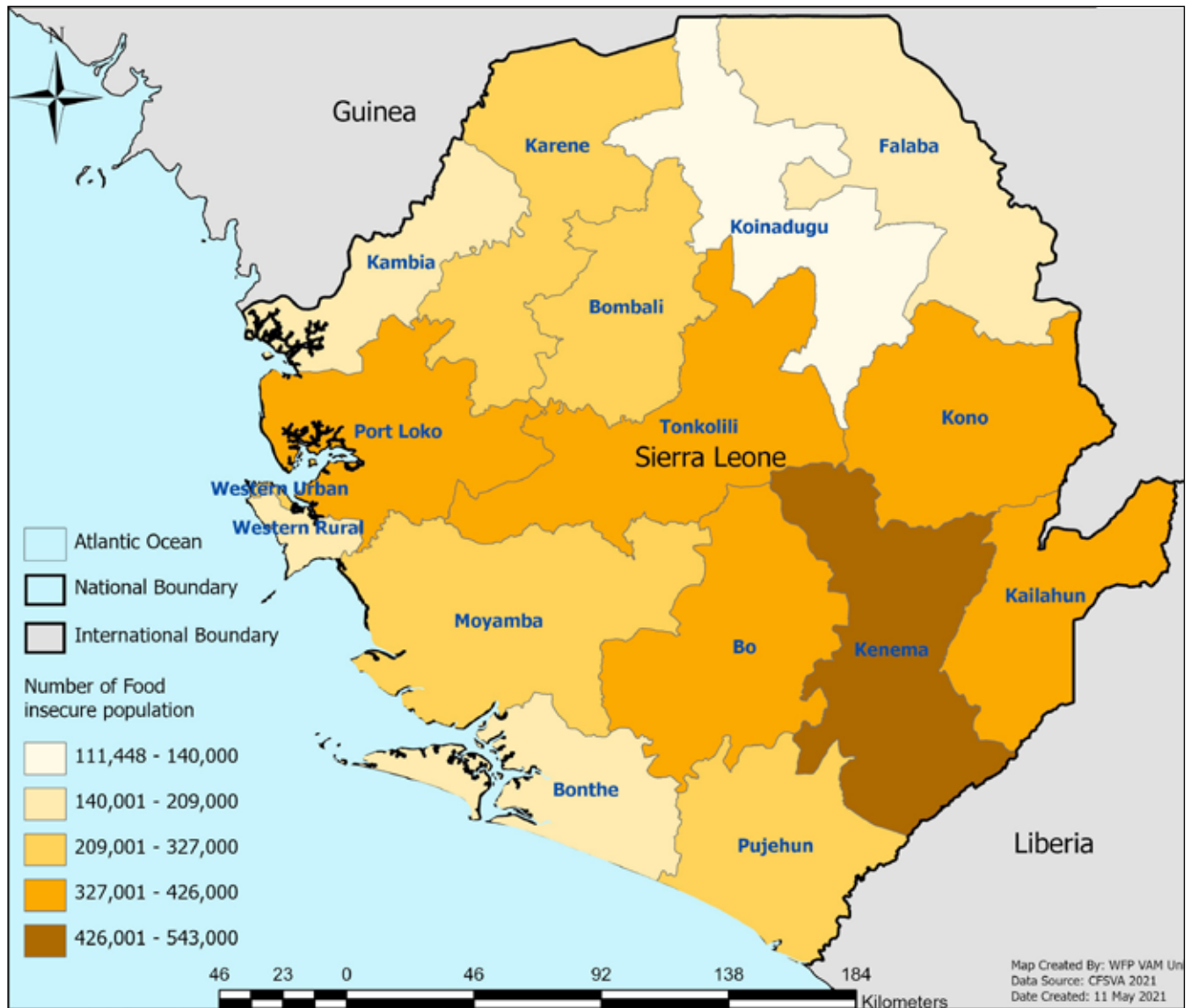
**Figure 11: Food insecurity comparison by district**



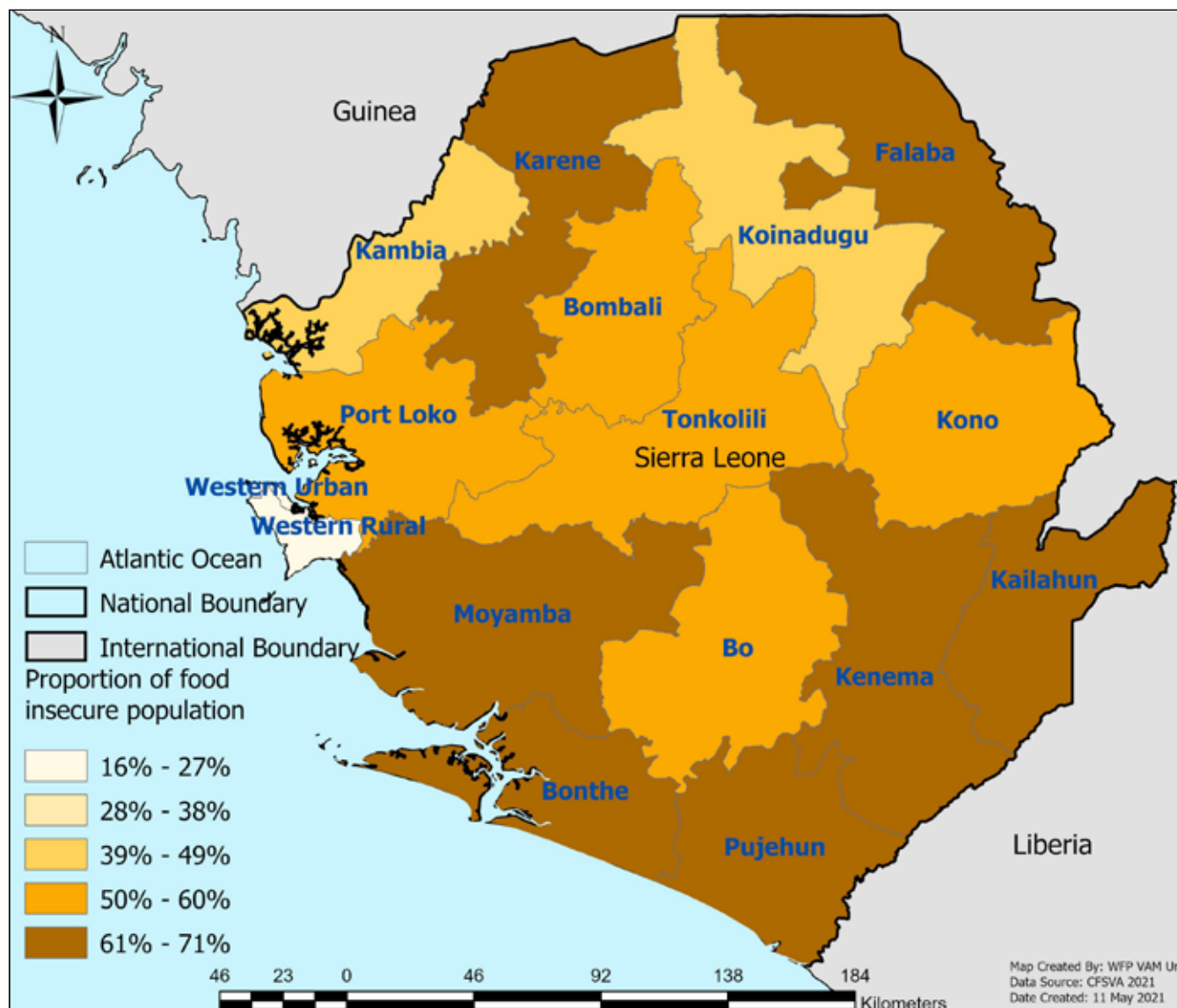
Food insecurity is spread across all of Sierra Leone’s districts, with different prevalence levels. Among the districts, the percentage of severely food insecure households is highest in Pujehun (22 percent), Bonthe (19 percent), Karene (19 percent) and Kenema (18 percent). The districts with the highest rates of moderately food insecure households are Kailahun (53 percent), Falaba (53 percent), Kenema (53 percent) and Bonthe (52 percent).

Among districts, the overall food insecurity is higher in Kenema (71 percent), Bonthe (71 percent), Falaba (69 percent), Pujehun (66 percent), Moyamba (66 percent) and Karene (62 percent). Conversely, districts with the highest percentage of food secure households are Western Area Urban (84 percent), followed by Western Area Slums (75 percent) and rural (66 percent).

Number of food insecure populations by district, CFSVA 2020

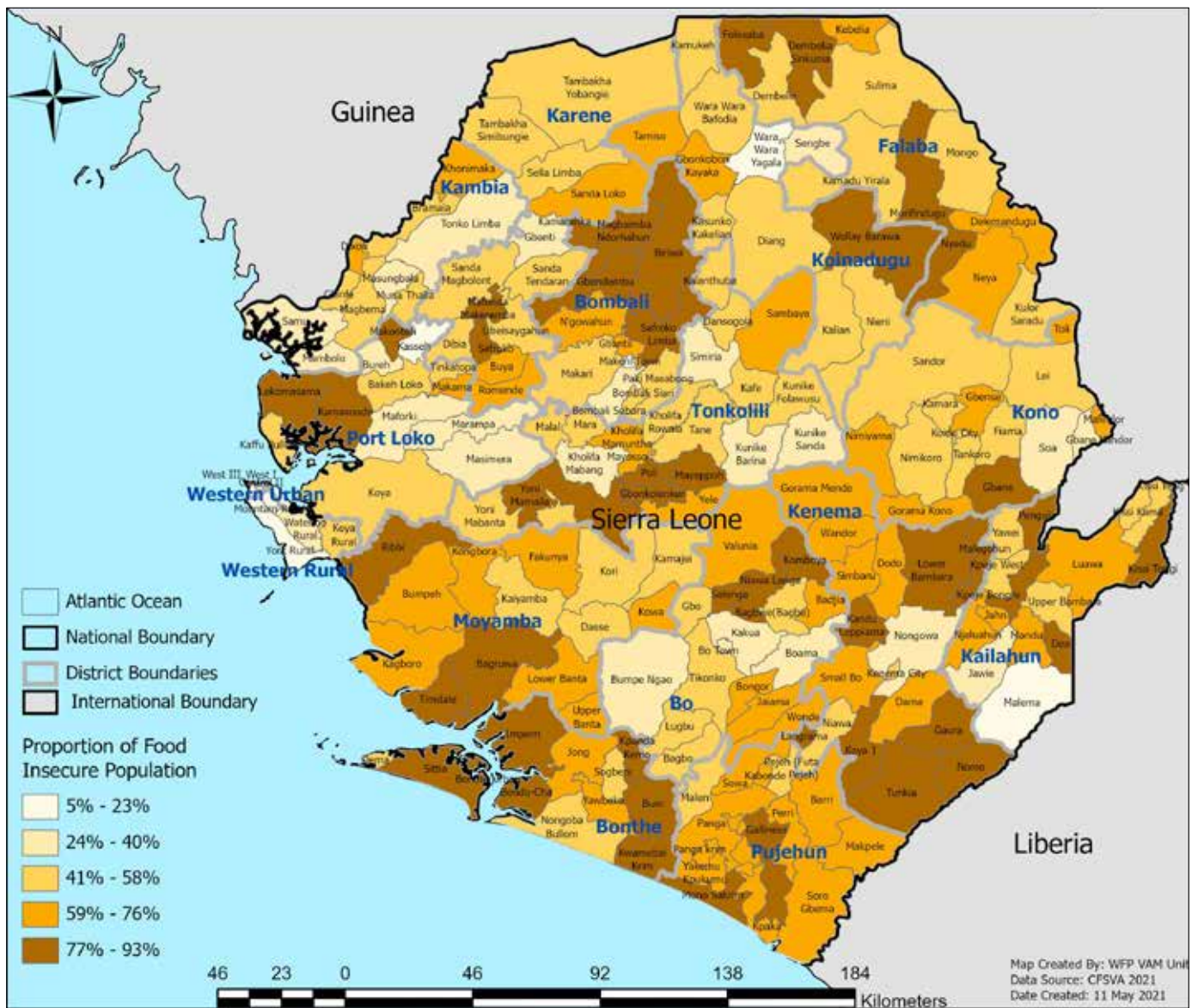


Proportion of food insecure population by district, CFSVA 2020





Proportion of food insecure population by chiefdom, CFSVA 2020



## Food security at chiefdom level

In total, a total 106 chiefdoms and wards (or 51 percent) have levels of food insecurity that are above the national average of 57 percent. Out of the 195 chiefdoms and 18 urban wards, 65 chiefdoms more than 70 percent of households are food insecure. The districts with the highest proportion of chiefdoms with food insecurity levels of over 70 percent are Kenema (9 out of 17 chiefdoms are food insecure), Bonthe (6 out of 12 chiefdoms are food insecure), and Kailahun (7 out of 15 chiefdoms are food insecure).

**Table 16: Number of chiefdoms by food insecurity rank**

Ranking	Percentage of households with moderate and severe food insecurity	No. of Chiefdoms
1	>70	65
2	>60-70	36
3	>50-60	32
4	>40-50	36
5	<=40	39

**Table 15: Number of chiefdoms by district by food insecurity rank**

District	>70% food insecurity	<60% - 70% food insecurity	<50% - 60% food insecurity	<40%-50% food insecurity	=<40% food insecurity	Total
<b>Level</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	
Bo	6	1	3	3	4	17
Bombali	6	0	1	3	3	13
Bonthe	6	4	1	1	0	12
Falaba	6	2	3	2	0	13
Kailahun	7	1	2	3	2	15
Kambia	0	2	2	2	4	10
Karene	4	2	4	3	0	13
Kenema	9	5	1	1	1	17
Koinadugu	0	2	1	5	2	10
Kono	1	5	4	3	2	15
Moyamba	6	4	1	3	0	14
Port Loko	3	1	2	2	5	13
Pujehun	5	7	1	1	0	14
Tonkolili	6	0	6	3	4	19
Western Area Rural	0	0	0	1	3	4
Western Area Slum	0	0	0	0	1	1
Western Area Urban	0	0	0	0	8	8

## Household food consumption

One of the three key indicators included in the above food security analysis is the Food Consumption Score (FCS). The FCS considers dietary diversity, frequency of food consumption and the nutritional importance of the foods consumed by a household. It is calculated by inspecting the frequency of food consumption from the different food groups over a 7-day reference period. Data shows that 27 percent of households have poor FCS, which is higher than the 20 percent reported in the 2015 CFSVA; 34 percent households (33.5 percent CFSVA 2015) have borderline consumption scores and 39 percent (46.5 percent CFSVA 2015) have acceptable FCS.

Households headed by women fare slightly worse (28 percent) in food consumption compared to households that are headed by men (26 percent). Acceptable FCS remain the same among households, regardless of whether they are male headed or female headed

as there are slightly more male headed households with borderline consumption.

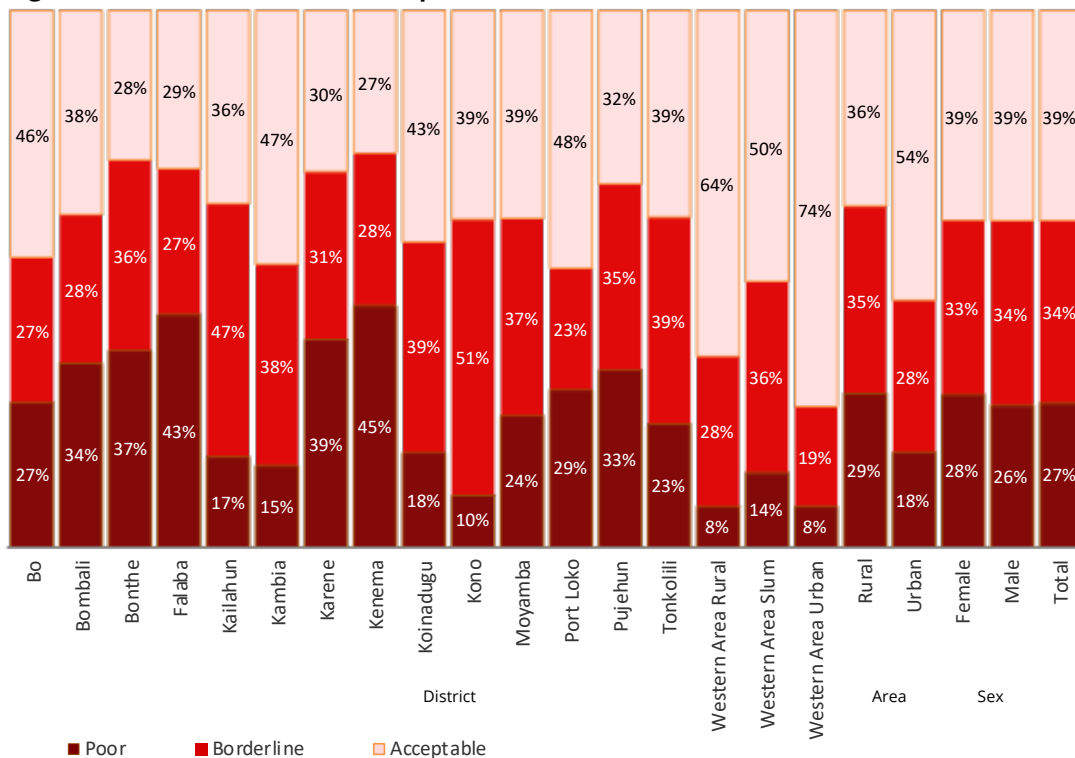
The percentage of poor FCS is higher in rural areas compared to urban areas. Close to a third (29 percent) of all rural households have a poor FCS compared with 18 percent in urban areas. In combination with borderline consumption score, this means that most rural households (61 percent) are highly vulnerable in terms of food consumption.

Among the districts, the highest percentage of households with poor FCS are found in Kenema (45 percent), Falaba (43 percent) and Karene (39 percent). The highest percentage of households with acceptable FCS are all based in Western Area, both Urban (74 percent), rural (64 percent) and slums (50 percent).

## Food expenditure share

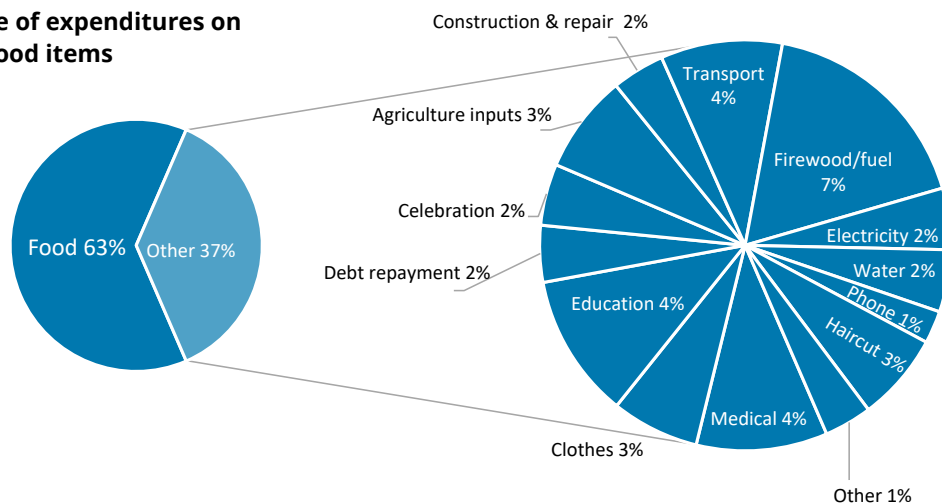
A vital indicator in assessing household food security is the share of expendi-

**Figure 12: Household food consumption score**





**Figure 13: Share of expenditures on food and non-food items**

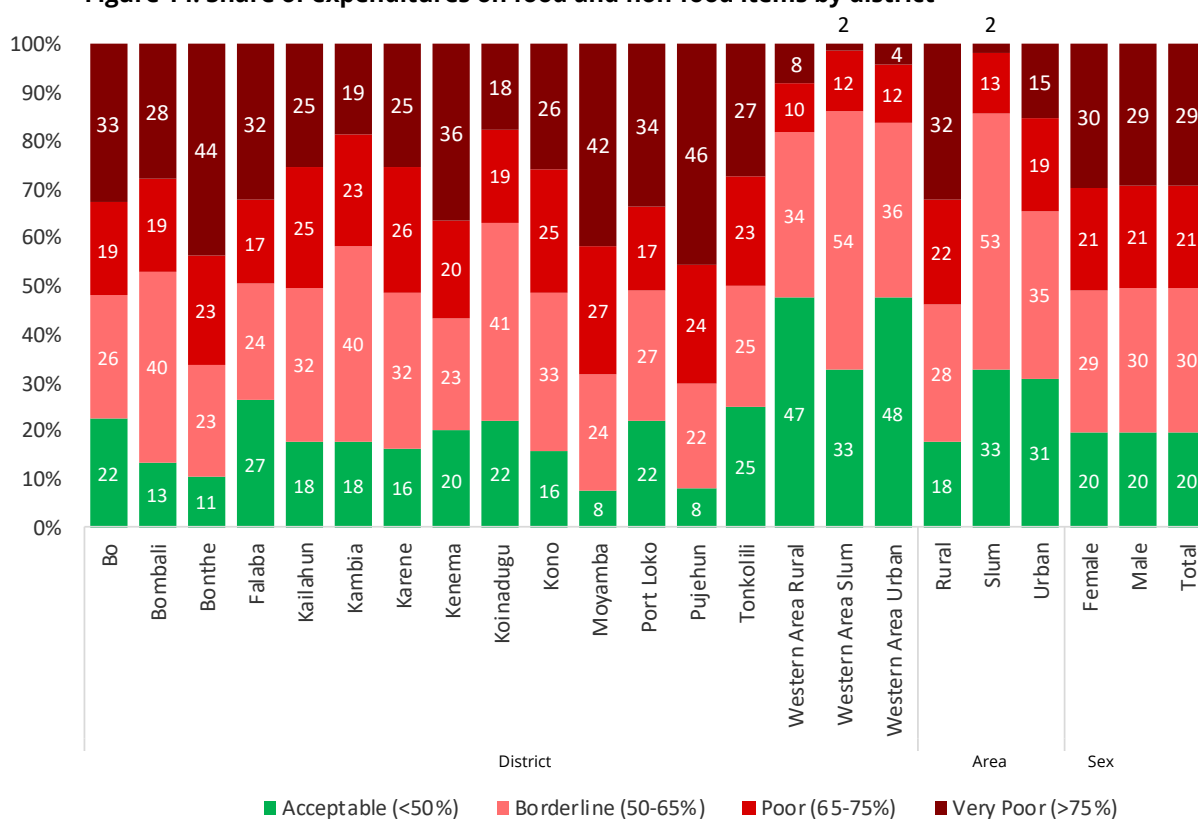


tures spent on food. When the level of income reduces or when prices increase, the share of food expenditure as a proportion of total expenditure also increased and for poor households this forces them to reduce spending on essential non-food items and services, such as education and health. In Sierra Leone, households spend an average 63 percent of their total expenditure on food, which increased from 59 percent in CFSVA 2015. The lower the household's income, the higher the percentage of expenditure will be on food. The share of expenditures devoted

to food categorises the households into four groups:

- 1. Very poor** (those who spend more than 75.0 percent of their budget on food);
- 2. Poor** (those who spend between 65.0 and 75.0 percent of their budget on food);
- 3. Borderline** (those who spend between 50.0 and 65.0 percent of their budget on food); and
- 4. Acceptable** (those who spend less than 50.0 percent of their budget on food).

**Figure 14: Share of expenditures on food and non-food items by district**



Among non-food expenditures, a household expenditure is highest on fuel and fire wood (6.5 percent), followed by education and health (4 percent).

In terms of spending, on average, 29 percent of households nationally (30 percent in CFSVA 2015) can be categorized as “very poor” in terms of their spending on food, while 21 percent (23 percent in CFSVA 2015) can be described as “poor”. This means that half (50 percent) of households surveyed are vulnerable to changes in either income or market prices to meet food needs.

Among the districts, the highest percentages of households with very poor expenditure share are found in Pujehun (46 percent), Bonthe (44 percent), Moyamba (42 percent) and Kenema (36 percent). When combining the very poor and poor groups, i.e. households who spend more than 65 percent of their

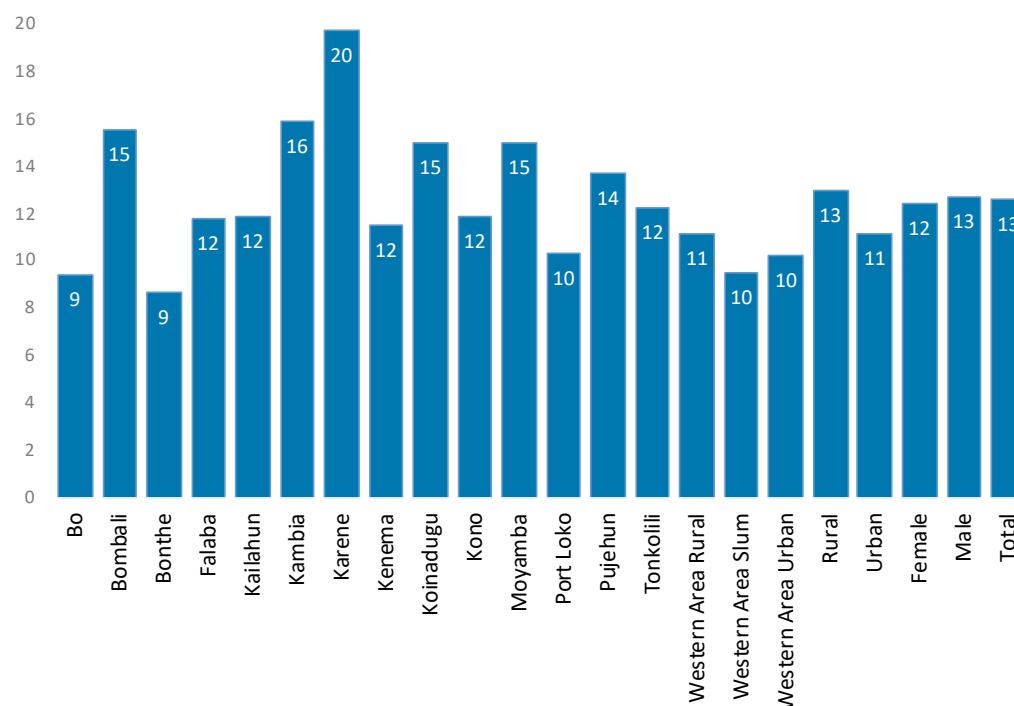
income on food, the same districts come on top with Pujehun (70), Moyamba (69 percent) and Bonthe (67 percent).

On the other hand, the highest percentage of households in the “acceptable” group is in Western Area Urban (48 percent).

## Coping strategies

During times of stress, households use certain strategies to mitigate the effect of natural, economic or political shocks. The Coping Strategies Index studies the activities taken by households to manage food shortages. The CFSVA took place during November and December 2020 when the harvest season is ongoing and when households are expected to use fewer coping strategies. However, this was not the case in 2020. The two coping indicators were included in the analysis.

**Figure 15: Reduced coping strategy index by district**



**The Reduced Coping Strategy Index (rCSI)**, also called food related CSI is used to assess the level of stress faced by a household due to a food shortage. It is measured by combining the frequency and severity of the food consumption-based strategies households are engaging in. It is calculated using the five standard strategies using a 7-day recall period.

The following are the five consumption based coping strategies:

1. Rely on less preferred and less expensive food
2. Borrow food or rely on help from relative(s) or friend(s)
3. Limit portion size at meals
4. Restrict consumption by adults for small children to eat
5. Reduce number of meals eaten in a day

The rCSI measures the stress level a household is facing when exposed to food shortage by assessing the frequency of adoption of the above mentioned 5 food-related coping mechanisms, as well as their relative severity. The higher the stress, the higher the behavioural responses and the index. The national rCSI is 13 and is similar to the 2015 CFSVA rCSI of 12. The index is higher in rural areas (13) compared to urban (11) areas.

Among the districts, the highest rCSI was found in Karene (20), Kambia (16) and Bombali (15). In Bombali, Kambia, Karene, Koinadugu, Moyamba and Pujehun the rCSI is higher than the national average, while the lowest rCSI was reported in Bonthe (9) and Bo (9).

**The Livelihood Coping Strategy Index (LSCI)** is used to understand longer-term

coping capacity of households and is classified into three severity levels, namely stress, crisis and emergency coping strategies and are based on a 30-day recall period. Stress strategies indicate a reduced ability to deal with shocks as the result of a current reduction in resources or increase in debts. Crisis strategies are often associated with the direct reduction of future productivity. Emergency strategies also affect future productivity, but are more difficult to reverse or more dramatic in nature than crisis strategies.

**Table 17: Livelihood-based coping strategies**

Stress	Crisis	Emergency
1. Sold household assets/ goods	5. Sold productive assets or means of transport	8. Sold house or land
2. Purchased food on credit	6. Reduced health and educational expenditures	9. Begged
3. Spent savings	7. Withdrawn children from school	10. Sold last female animal
4. Borrowed money		

Households use different strategies to minimize risks and to respond to and/or absorb shocks. Among the livelihood strategies, on average about 42 percent of households reported reducing non-food spending, with a higher percentage of households doing so in rural areas (43 percent). This indicates that when households experienced a shock they tended to divert the monetary resources they had available to buy food, either as a result of an increase in market prices or a reduction in their income levels. In both cases, the impact resulted in the increased vulnerability of the household to food insecurity.



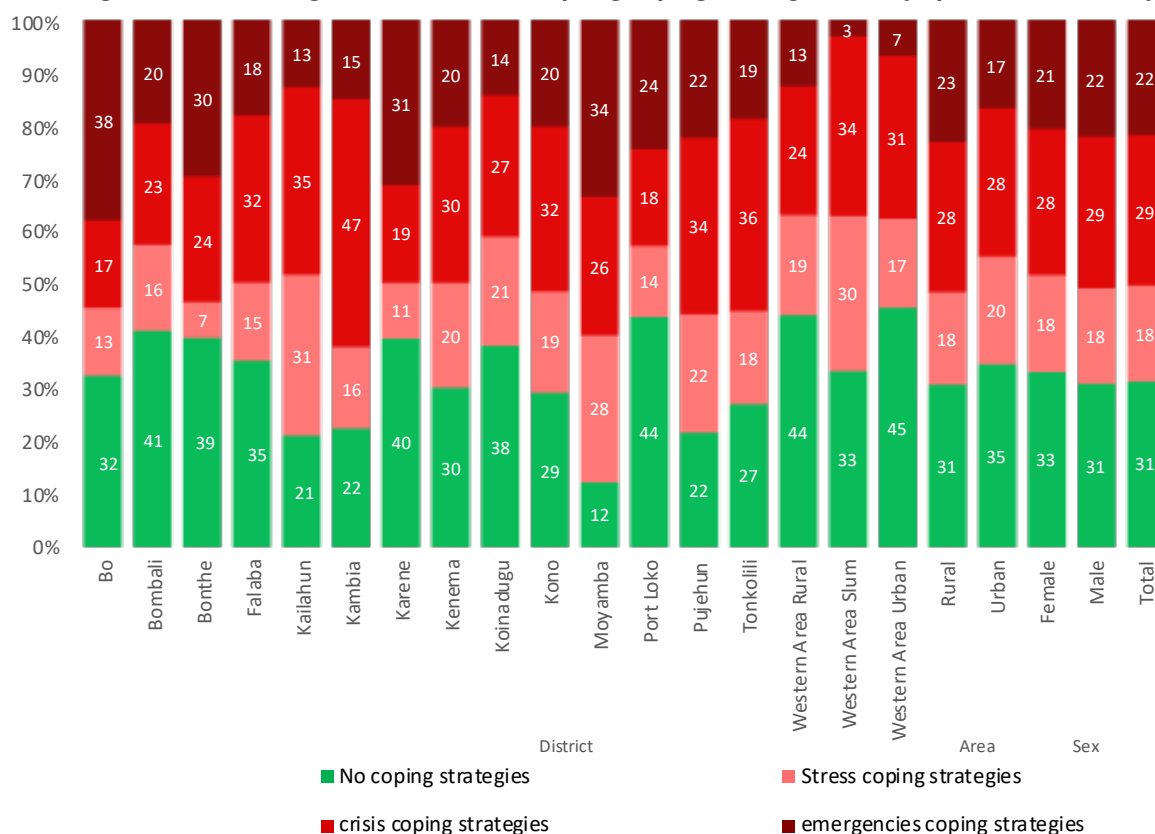
Households reducing the expenditure of non-food items in response to a shock, varied across the districts. The highest percentage was found in Kambia (56 percent), Moyamba (50 percent), Tonkolili and Pujehun (47 percent). The spending of household savings was another most commonly cited coping strategy (42 percent of households), with this proportion being higher in rural areas (43 percent) compared to urban areas (38 percent). Across the districts, the highest percentage of households who spent their savings to cope with the shock were found in Moyamba (70 percent), Kono (53 percent), Kailahun (52 percent) and Urban Slums (48 percent). Results indicated that begging was also common in the event of a shock, and was adopted by 15 percent of

households, followed by selling of households' assets (12 percent).

On average, 69 percent of households had adopted one or more types of livelihood coping strategies: 18 percent adopted stress strategies, 28 percent adopted crisis strategies and 22 percent adopted emergency strategies in the past 30 days prior to the assessment.

In rural areas, the percentage of such households is higher (69 percent) compared to urban areas (65 percent). The districts with the highest percentages of households who adopted a coping strategy were Moyamba (88 percent), Kailahun (79 percent), Pujehun (78 percent) and Kambia (78 percent).

**Figure 16: Percentage of households adopting coping strategies 30 days prior to the survey**







# CHAPTER 4

## FOOD AVAILABILITY



**Sierra Leone is a food deficit country that relies on imports to feed its population.** This section analyses the availability of food at national level and the constraints faced by farmers in producing food. According to MAF only 15 percent of arable land is cultivated.

## Agriculture

As shown in previous sections of this report, agriculture is the main livelihood for most rural Sierra Leonean households. However, low agricultural production is a key limiting factor to assuring food availability and thus food security. Overall, 56 percent of the households surveyed had access to land for agricultural production of which 64 percent of the households in rural areas have access to land, compared to only 21 percent of the households in the urban areas. Agricultural production depends on various factors, such as rainfall, water and pasture availability, irrigation and inputs such as seeds.

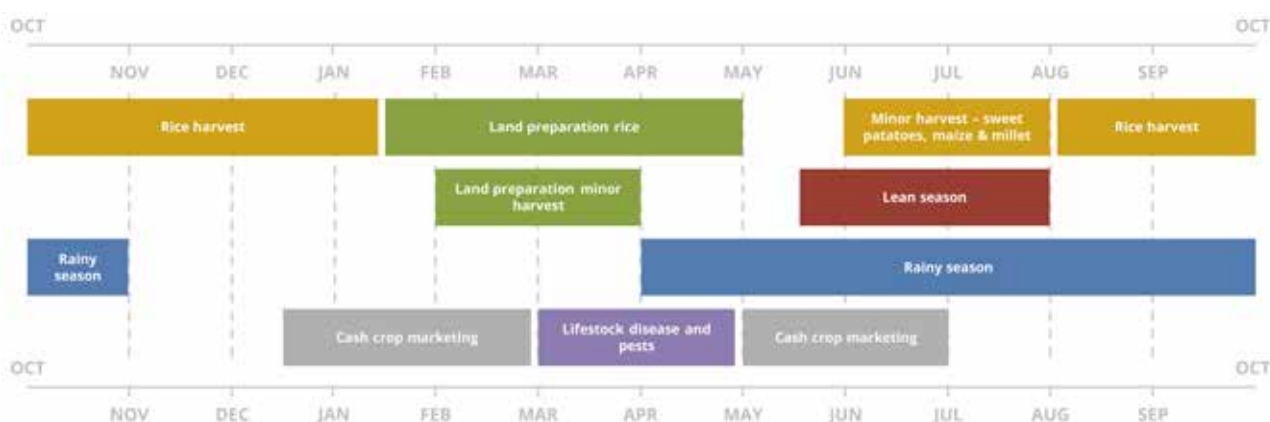
## Rainfall

Sierra Leone has a tropical climate with hot temperatures all year round, and a dry season in the typical winter months. The rainy season usually runs from May to November in the north and from April to November in the south. Annual rainfall is considerably high, especially in the coastal areas which experience 2,000 to 3,000 mm (80 to 120 inches) of rainfall on average every year.

The seasonal calendar below indicates a typical year where the rainy season begins in April and ends in November, and this coincides with the agricultural production in the country. The peak lean season, which falls two months into the rainy season, is a time for planting. Harvesting season usually begins in August.

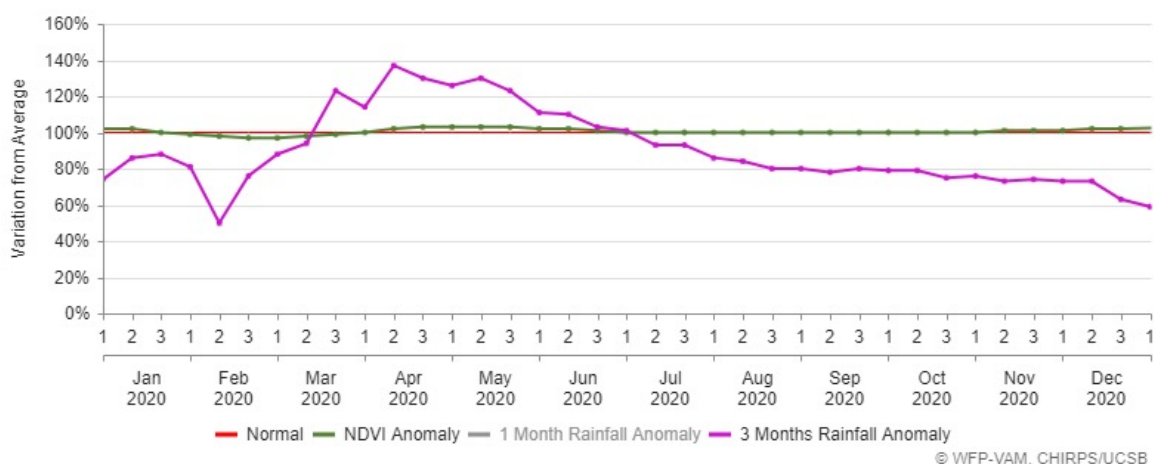
Figure 19 on the following page indicates that most parts of the country received 60 percent to 85 percent of average rainfall in the 6-months leading up to November 2020. For the start of

**Figure 17: Agriculture seasonal calendar**



Source: FEWSNET

**Figure 18: Rainfall in Sierra Leone in 2020**



the 2020 agricultural season, the country experienced a timely onset of the seasonal rains in late March and most parts of the country received 120 percent to 140 percent of average rainfall. This prompted farmers to start preparing land for the planting season in May. From July onwards, Sierra Leone received below average rainfall, which negatively impacted the 2020 harvest.

## National cereal supply

The 2020 national cereal availability as per the food balance sheet,<sup>15</sup> was estimated at 788,000 tonnes. The Import requirements for the 2020 marketing year were forecasted at an above average level of 507,000 tonnes due to a below average production that was 83 percent of average, but also because of an increase in demand by a growing urban population.

**Table 18: National cereal supply 2020**

CEREAL SUPPLY/DEMAND BALANCE FOR THE 2020 MARKETING YEAR (January/December)				
	Wheat	Rice	Coarse grains	Total cereals
<b>2020 Domestic Availability (000 tonnes)</b>	-	648	139	788
2019 production	-	568	139	708
Estimated stock draw/down	-	80	-	80
<b>2020 Utilization (000 tonnes)</b>	52	1 088	154	1 295
Food use	52	905	141	1 099
Non-food use	-	183	13	196
Exports	-	-	-	-
Estimated stock build-up	-	-	-	-
<b>2020 Import Requirements (000 tonnes)</b>	52	440	15	507
<b>Per Caput Consumption (kg/year)</b>	7	116	18	141
<b>2020 Comparison with the previous year and the recent average</b>				
<b>Production (000 tonnes)</b>				
Previous year's production	-	829	139	968
Previous five years' average production	-	731	120	851
<b>2019 production compared to average (%)</b>	-	78	116	83
<b>Import Requirements (000 tonnes)</b>				
Previous year's imports	45	340	15	400
Previous five years' average imports	45	326	12	383
<b>2020 Import requirements compared to average (%)</b>	116	135	127	132

<sup>15</sup> FAO/GIEWS



## Rice availability in the market

The CFSVA 2020 examined the availability and source of rice that are sold within the local markets. Overall, 86 percent of the communities across rural and urban districts indicated that imported rice was always available in nearest markets. In comparison, local rice was available only in 52 percent of the markets reflecting the national dependence on imported rice. Communities that reported local rice being available all year round were found in Port Loko (85 percent), Western Area Urban (83 percent) and Kono (73 percent). Communities with least access to local rice were found in Bonthe (13 percent), Karene (28 percent) and Moyamba (32 percent).

## Land cultivation and ownership

In Sierra Leone, most farmers own the land they cultivate (81 percent), while 14 percent of the households have access to communal land for agricultural activities. The proportion of farming households who own their land is highest in Koinadugu (96 percent), Falaba (88 percent), Kono (88 percent) and Kailahun (87 percent).

Communal land usage is quite complex and requires effective planning at the community level between farmers and local power bearers to ensure that land is optimally utilized. Farmers cultivating community land often have limited rights to the land, disincentivizing

**Table 19: Availability of local and imported rice in markets**

District	Imported rice availability Food insecure Population 2020				Local rice availability			
	Always	Most of the time	Never	Once in a while	Always	Most of the time	Never	Once in a while
Bo	96%	3%	0%	1%	46%	25%	0%	30%
Bombali	98%	0%	2%	1%	66%	31%	0%	4%
Bonthe	83%	12%	1%	5%	13%	61%	2%	25%
Falaba	54%	25%	8%	13%	44%	51%	0%	6%
Kailahun	94%	5%	1%	1%	43%	52%	0%	5%
Kambia	93%	7%	0%	0%	53%	43%	0%	4%
Karene	50%	35%	1%	14%	28%	50%	1%	22%
Kenema	86%	11%	1%	3%	44%	36%	0%	20%
Koinadugu	87%	8%	1%	4%	58%	33%	3%	6%
Kono	67%	23%	3%	7%	73%	26%	0%	1%
Moyamba	90%	9%	1%	1%	32%	37%	0%	32%
Port Loko	89%	11%	0%	0%	85%	15%	0%	1%
Pujehun	97%	2%	1%	1%	34%	26%	2%	39%
Tonkolili	97%	3%	0%	0%	66%	28%	0%	6%
Western Area Rural	96%	4%	0%	0%	61%	26%	0%	13%
Western Area Urban	100%	0%	0%	0%	83%	17%	0%	0%
Rural	85%	11%	1%	3%	51%	34%	0%	14%
Urban	96%	4%	0%	0%	53%	38%	0%	9%
<b>Total</b>	<b>86%</b>	<b>10%</b>	<b>1%</b>	<b>3%</b>	<b>52%</b>	<b>34%</b>	<b>0%</b>	<b>14%</b>

long-term investments in maintaining soil fertility, including the adoption of cropping strategies that can contribute toward long-term soil health and higher productivity. In contrast, farmers using community land often adopt highly environmentally degrading land use practices, such as slash and burn and shifting cultivation practices. The use of communal land is highest in Bonthe (30 percent), Tonkolili (20 percent) and Bombali (18 percent). The third most common type of land use arrangement among farming households is leasing (5 percent). The highest percentage of farmers using the leased land are reported in Western Area Rural (20.5 percent).

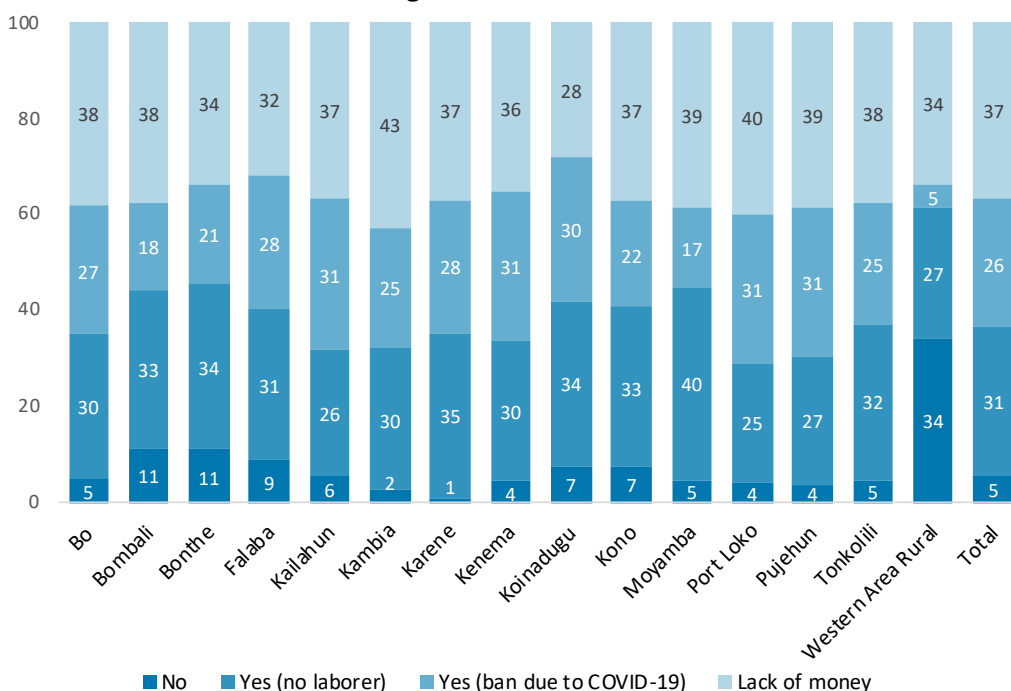
cultivate larger areas of land in the absence of modern agricultural technology and machinery. The majority (58 percent) of farmers reported that they are unable to find enough casual labourers, especially at crucial times in the agricultural cycle during land preparation, sowing and harvest periods. The main reason for the lack of casual labourers is a general shortage as the younger generation is not interested in farming (according to 31 percent of respondents), whilst 26 percent explained that restrictions of movement and social distancing during the COVID-19 outbreak prevented farming households from employing agricultural labourers.

### Constraints in farming

Agriculture in Sierra Leone is heavily labour intensive, thus one of the reasons for low agricultural production is farming households' lack of access to sufficient agricultural labourers to

The lack of money (37 percent) was also reported as a major constraint for farmers. In some districts the constraint for labours was much higher, for example in Koinadugu (64 percent), Karene (62 percent) and Kenema (60 percent). Money constraints were reported higher in Kambia (43 percent), Port Loko (40 percent) and Moyamba (39 percent).

**Figure 19: Percentage of farmers citing labour constraints in farming**



## Access to farming inputs

The level of farming inputs used in Sierra Leone is far below the requirements. Only 7 percent of farmers applied chemical fertilisers which greatly limit yield prospects. It should be noted that high market prices of chemical fertilisers impact farmer's access to the same, especially among the poorest. A 50kg bag of NPK fertiliser during the 2021 agricultural season in Moyamba cost US\$57 while the same cost only US\$13 in Nigeria.

The application of organic fertiliser is also low averaging 18 percent national-

ly. This can be partially explained by the low levels of farming households engaged in livestock rearing and the relative absence of composting of agricultural and food waste. The use of improved seeds by farmers increased by 7 percentage points compared to the last CFSVA in 2015 (from 10 percent to 17 percent); this is still considered extremely low and a major restraint in achieving better yield. The highest percentage of farmers using improved seed were found in Kailahun (48 percent), Western area Rural (26 percent) and Kambia (20 percent).

**Table 20: Inputs used in agricultural production in farming areas**

District	Chemical Fertilisers	Natural/ organic Fertilisers	Pesticides/ herbicides	Local Seed	Improved seed varieties	Improved Practices
Bo	4%	23%	3%	64%	13%	11%
Bombali	4%	13%	3%	53%	5%	5%
Bonthe	2%	10%	2%	40%	11%	7%
Falaba	14%	21%	16%	61%	12%	8%
Kailahun	2%	24%	8%	57%	48%	11%
Kambia	12%	26%	2%	81%	20%	9%
Karene	6%	16%	5%	90%	20%	13%
Kenema	8%	17%	8%	66%	14%	6%
Koinadugu	12%	18%	6%	77%	19%	15%
Kono	2%	10%	5%	66%	7%	3%
Moyamba	7%	18%	4%	62%	18%	6%
Port Loko	18%	27%	7%	70%	18%	11%
Pujehun	10%	15%	4%	66%	18%	8%
Tonkolili	3%	19%	1%	73%	13%	8%
Western Area Rural	31%	38%	3%	61%	26%	16%
<b>Total Rural</b>	<b>7%</b>	<b>18%</b>	<b>5%</b>	<b>67%</b>	<b>17%</b>	<b>9%</b>

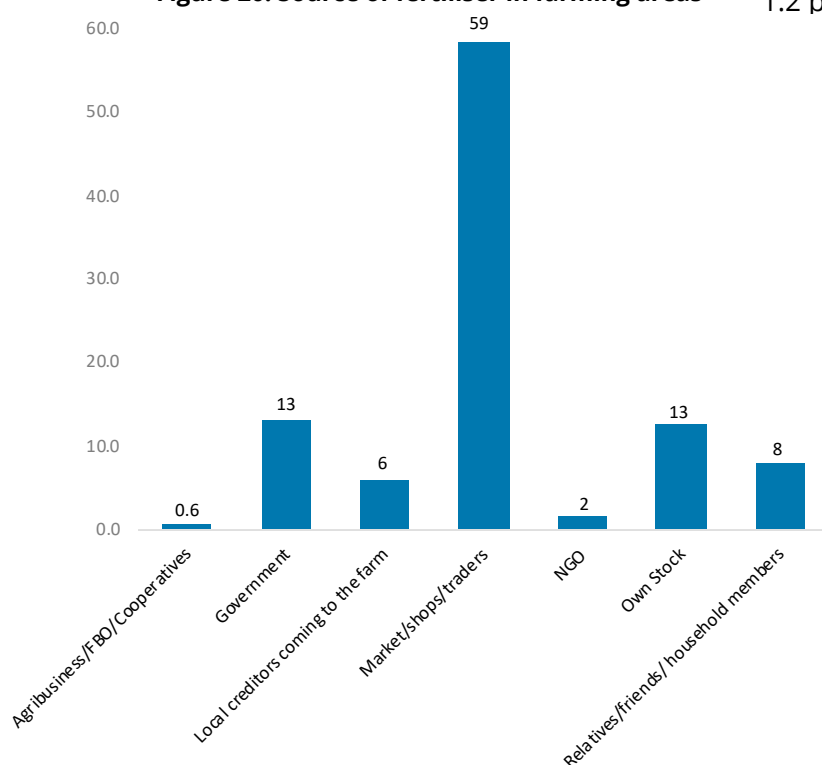
## Source of chemical fertilisers

The use of chemical fertilisers is an important contributing factor to enhance production. Of the very few who do use chemical fertilisers purchased it at the markets (59 percent), 13 percent received it from the Government, 13 percent used their own stock. A significant proportion (8 percent) of farmers received fertilisers from relatives and friends.

Agricultural Business Centres (ABCs) and Farmer Based Organizations also provided fertilisers to some members, contributing less than 1 percent of total provision.

The highest percentages of farmers who received chemical fertilisers from the Government were found in Koinadugu (69 percent), Tonkolili (26 percent) and Kailahun (23 percent).

**Figure 20: Source of fertiliser in farming areas**



## Farming tools

The type of tools used in farming determines the size of the landholding that a household can cultivate. Sierra Leone lags behind other African countries in terms of the usage of sophisticated agricultural tools.<sup>16</sup>

Close to 100 percent (97.5) farmers in Sierra Leone use hand tools from land preparation to harvesting. Hand tools are highly labour-intensive, such as ploughing and land preparation, and can limit the capacity of households to cultivate land. Relying solely on hand tools makes farming highly uneconomical and subsistent.

The adoption of modern farming machinery is extremely slow as the usage of 4-wheel tractors only increased from 0.2 percent in 2015 to 0.3 in 2020. Similarly, the use of hand tractors increased from 0.4 percent in 2015 to 1.2 percent over the same period.

Moreover, lack of specialized tools for labour intensive agricultural tasks also contributes towards the adoption of highly environmentally degrading slash and burn land preparation methods.

## Irrigation

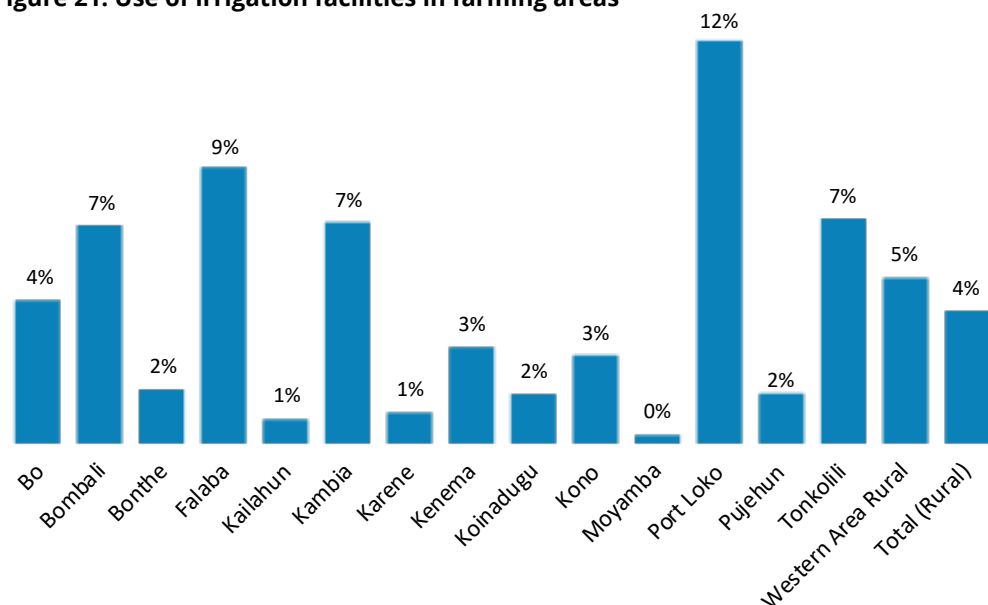
Adequate and regular irrigation is essential to achieving higher yields and intense cropping, especially in upland and boli land<sup>17</sup> areas. Irrigation is also important as rains become unpredictable rains and also during dry seasons. Irrigation is not commonly practiced in Sierra Leone. Only 4 percent of

<sup>16</sup> World Bank, World Development Indicators: Agricultural Machinery <http://data.worldbank.org/indicator/AG.AGR.TRAC.NO>

<sup>17</sup> An agricultural ecology-rainfed, flat land with low-middle elevation that has high potential for agriculture production. Generally vast areas that are suitable for mechanized agriculture. With irrigation, boli land can be cultivated twice a year.



**Figure 21: Use of irrigation facilities in farming areas**

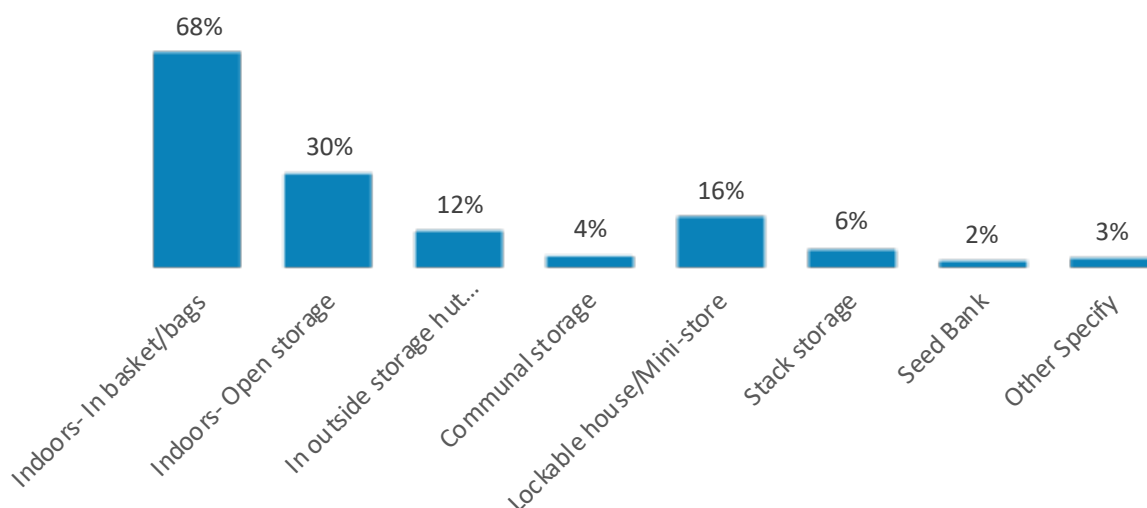


farmers use irrigation to enhance the production of agricultural crops. This was almost the same five years ago (5 percent). The percentage of farmers using irrigation was found highest in Port Loko (12 percent), Falaba (9 percent), Tonkolili and Kambia (7 percent). Irrigation was mostly used for growing vegetables, kitchen gardening, and for rice, cassava and tree plantations.

### Food storage facilities

The type of food storage used determines the magnitude of losses and quality of grain for human consumption during the off-season. Improper storage facilities contribute to extremely high post-harvest losses and insect infestation. Unfortunately, in Sierra Leone, majority of farmers have no proper storage facilities that reduces losses. Besides economic vulnerability, the inadequate storage facilities also compel farmers to quickly sell their surpluses rather than store agricultural products for sale when commodity prices increase or when their access to food is reduced.

**Figure 22: Storage facilities for food grains**



Farmers have extremely limited capacity to store food, especially cereals. Existing food storage facilities are inadequate and do not sufficiently minimize post-harvest losses. Harvested and stored crops are susceptible to infestations by insects, rodents and fungi.

Inappropriate storage of seeds also results in reduced germination and thus decreases potential future production.

The majority of farmers in Sierra Leone (68 percent) store foods in baskets and bags. Around 30 percent use indoor open spaces for storage. Nearly 12 percent use outside storage huts, 16 percent use mini stores in lockable houses or other structures, and 2 percent use communal stores.

The use of indoor but uncovered storage is most common in Bo (51 percent), Bonthe (45 percent) and Pujehun (40 percent).

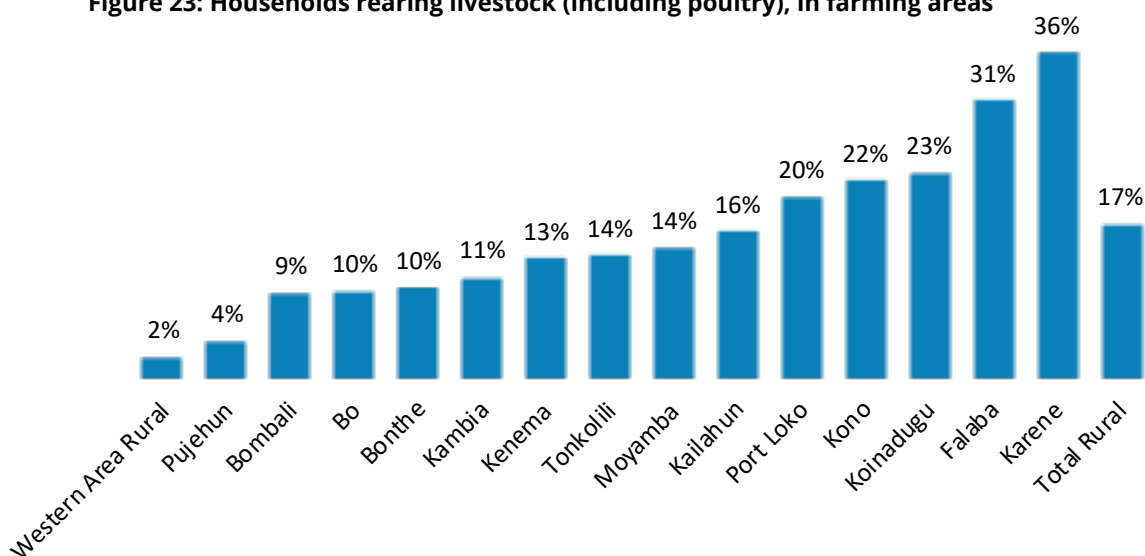
## Livestock rearing

In Sierra Leone, the average household's livestock holding is very low, especially

considering that most households are engaged in farming activities. On average, only 17 percent of households in rural areas keep livestock, including chickens. The highest percentages of livestock farmers are found in Karene (36 percent), Falaba (31 percent) and Koinadugu (23 percent). This is much lower than in 2015 when 29 percent households had livestock, including chickens.

The majority, 62 percent, of those who do rear livestock keep only chicken or goats. Rearing cattle and oxen, which are the main sources of dairy, is low with only 7 percent of households engaging in cattle rearing. This is limited to Falaba and Koinadugu districts, where 23 percent and 13 percent respectively keep cattle. The highest percentage of goats rearing was reported in Falaba (80 percent), Kambia (76 percent) and Karene (74 percent). Livestock holding not only represents an important source of food, it also provides an invaluable asset which can be used as a coping strategy in the event of a shock.

**Figure 23: Households rearing livestock (including poultry), in farming areas**





## CHAPTER 5

# FOOD ACCESSIBILITY



**Food access refers to a household's ability to obtain nutritious food in adequate qualities to lead a healthy life through different means, such as own production or purchases at the market.**

## Sources of food

Sierra Leoneans access food from a variety of different sources including market purchase, own production, fishing, hunting/gathering, loan, gift, aid and exchange of labour for food.

In both urban and rural areas, the market is the main source of the staple rice in 89 percent of cases in urban areas and 58 percent in rural areas. A household's own production accounts for 40 percent in rural areas, while 10 percent in urban areas.

A higher proportion of female headed households rely on the market for cereals (71 percent) compared with 61 percent of the male headed households. The high percentage of households purchasing rice from the market demonstrates a broader dependency on imported rice. This makes households highly vulnerable to price fluctuations and, in the event of an increase in global prices, can result in households reducing other non-food expenditures.

It should be noted that the 2020 CFSVA was carried out from November to December 2020, when farmers had started harvesting rice. Despite this, market purchase levels were higher compared to levels of consumption of own production.

## Rice production at household level

In Sierra Leone, only 2 percent of the farmers produce enough rice to meet the needs of their family for the whole year. The highest percentages of farmers (23 percent) can meet their rice needs for six months, while 19 percent can meet their needs for five months.

The fact that the level of subsistence is so low among farmers makes them vulnerable during the lean season, when access to food is reduced, or during times when global prices of food commodities increase, making imported food more expensive. It should be noted that even most farmers rely on imported food including rice in addition to the non-farmers, especially in urban areas.

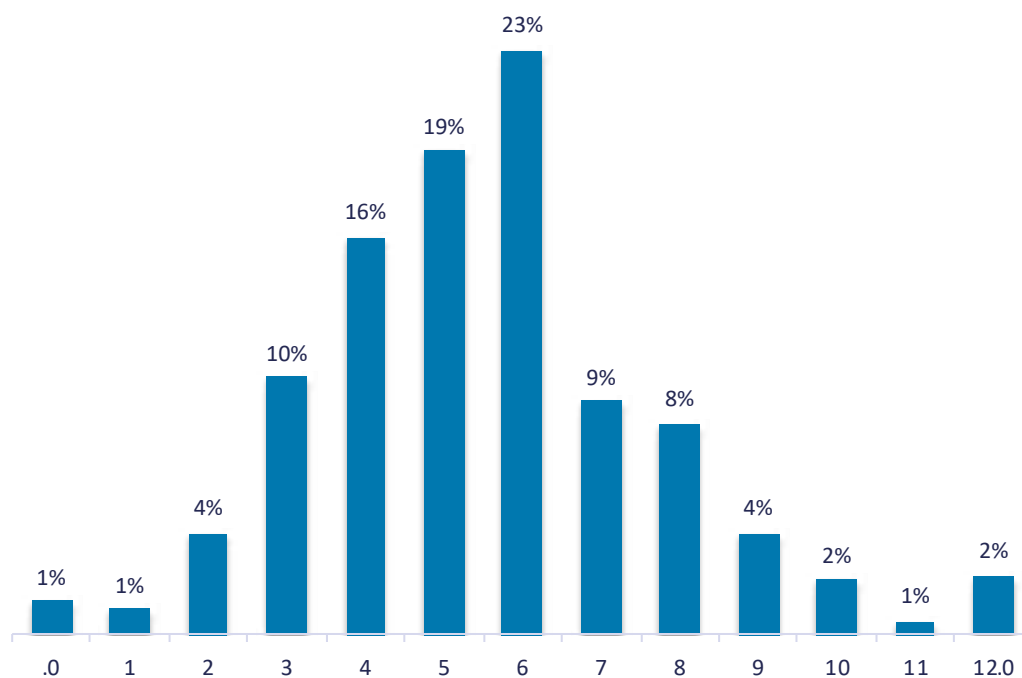
During the year, July, August and September are the months when many households experience difficulties in accessing food and this period coincides with the peak of the rainy season.

**Table 21: Sources of cereals**

Type	Exchange labour or items	Gift (food) from relatives or friends	Market (purchase on credit)	Market (purchase with cash)	Own production
Rural	1%	1%	1%	58%	40%
Urban	0%	0%	0%	89%	10%
Female	1%	1%	1%	71%	26%
Male	0%	1%	1%	61%	37%
Overall	0%	1%	1%	63%	35%



**Figure 24: Number of months households are self-sufficient in rice**

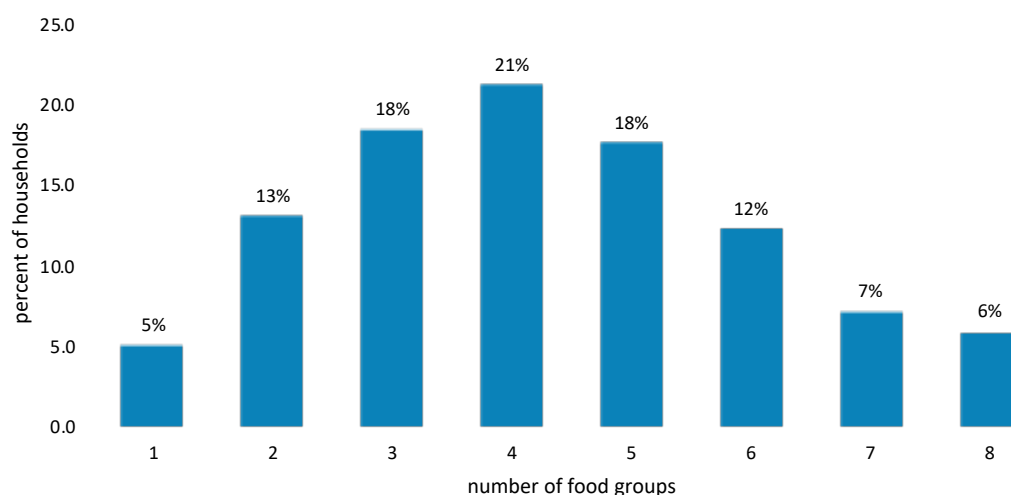


During these times some 82 percent households face food shortages, with a higher proportion in rural areas (85 percent) compared to urban areas (68 percent). Households engaged in livelihoods, such as gathering and selling of wild food, salt extraction, unskilled labour, sand and stone collection, petty trading, and fruit and vegetable farming were among the most vulnerable groups in terms of their ability to access food (see Annex 17 for district-wide details).

### Household dietary diversity score

The household dietary diversity score measures the number of food groups consumed by households during the 24 hours prior to the survey. Almost one in five households (18 percent) consumed food from only two groups. This is more than in 2015 when 14 percent had such a limited diet. On the other hand, some 43 percent of households consumed five or more food groups, which is similar to 2015 (42 percent). The highest percentage of households (21 percent) consume four food groups.

**Figure 25: Total number of food groups consumed by households in a day**



## Access to markets

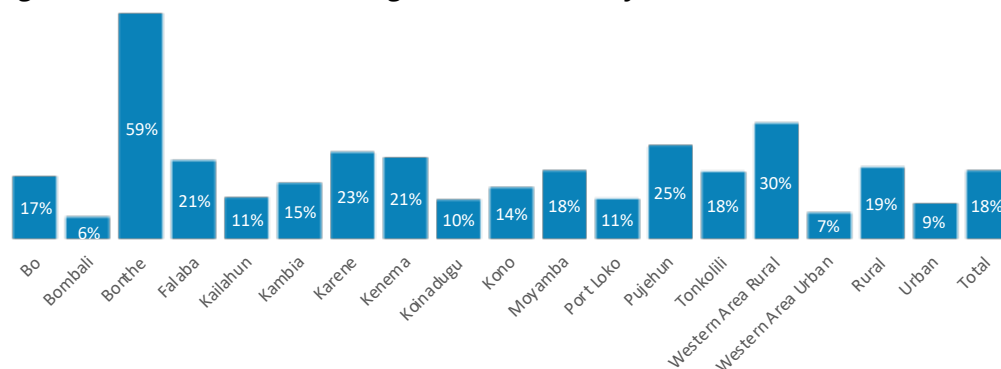
Access to markets is crucial for food security in Sierra Leone both for the consumers as well as farmers to sell their product. For the consumers, distance and the cost of travelling to the nearest market can have a significant impact on food access, especially for the poor and vulnerable households. Similarly, for farmers, poor market access can reduce food availability, as long distances to markets increase the production costs and reduce profitability. In certain cases, the cost of transportation to the market is higher than the selling price of the commodity and thus there is no incentive for the farmer to produce a surplus.

## Road access to communities and markets

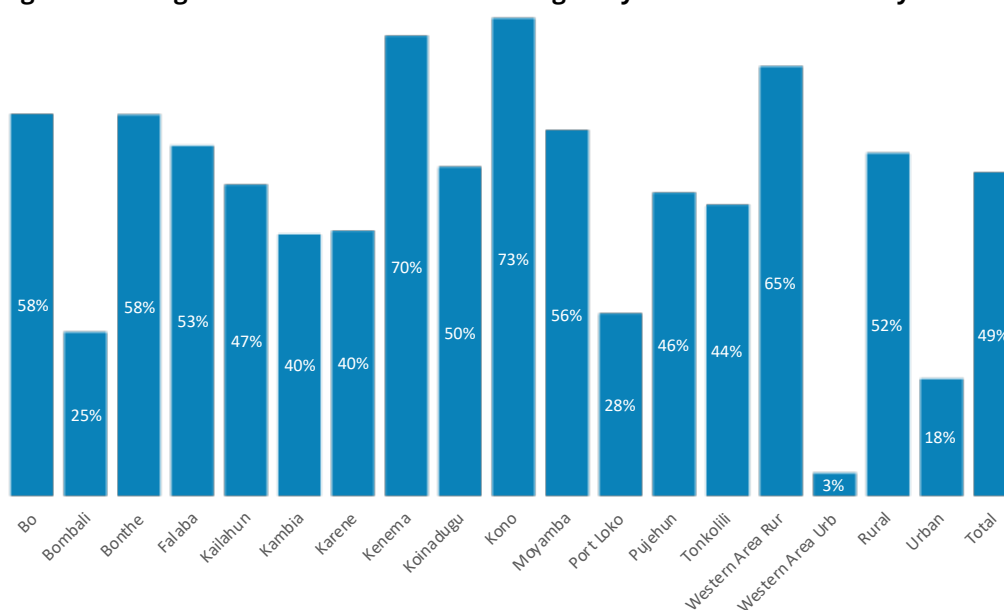
On average, 18 percent of the communities and villages are not accessed by vehicles. Inaccessibility by vehicles is a constraint in almost all rural areas and even in urban areas. Surprisingly, the percentage of inaccessible villages are highest in Western Area rural (30 percent), Pujehun (25 percent) and Karene (23 percent), followed closely by Kene-ma and Falaba. Bonthe district's major source of transportation is by boat (49 percent) as it is comprised of a number of islands.

The villages that are normally accessible by roads are however rendered inaccessible during heavy rainy season (July,

**Figure 26: Communities and villages not accessible by vehicles**



**Figure 27: Villages rendered inaccessible during rainy season when normally accessible**



August and September). Almost half (49 percent) of accessible villages are not accessible during the rainy season. The highest percentage of such villages are in Kono (73 percent), Kenema (70 percent), Western Area Rural (65 percent) and Bo (58 percent).

**Table 22: Distance of the community from the nearest road accessible by road transport**

District	Minutes	Miles
Bo	83	4.7
Bombali	75	4.7
Bonthe	178	15.2
Falaba	81	4.7
Kailahun	90	6.1
Kambia	78	5.3
Karene	112	7.7
Kenema	95	8.8
Koinadugu	78	3.8
Kono	59	3.5
Moyamba	97	6.4
Port Loko	72	6.0
Pujehun	107	10.6
Tonkolili	105	6.0
Western Area Rural	49	3.9
Western Area Urban	5	0.5
Rural	104	7.9
Urban	94	7.5
<b>Total</b>	<b>104</b>	<b>7.8</b>

As mentioned, a significant percentage of villages (18 percent) are inaccessible by roads throughout the year and residents have to travel a long distance to reach a road.

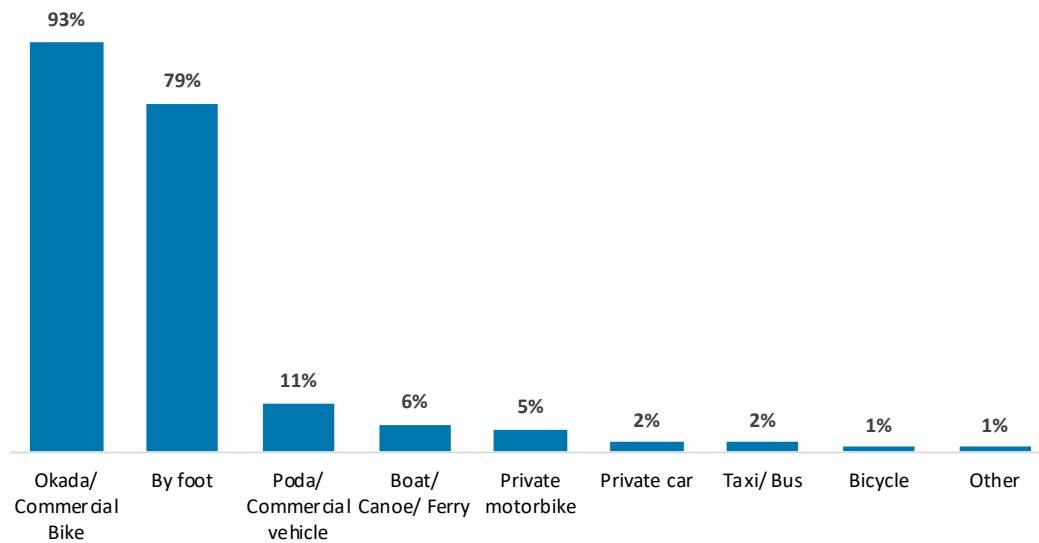
On average, the nearest accessible road for villages is 7.8 miles or one hour and 44 minutes away and functioning markets are on average 9.8 miles from the communities. Farmers who live in these villages face considerable challenges in transporting their produce to the markets due to poor accessibility.

Among the districts, the furthest distance to a road network was reported in Bonthe at 15.2 miles (or 3 hours by foot), Pujehun at 10.6 miles (almost 2 hours by foot) and Kenema at 8.8 miles (one hour and 35 minutes by foot). Bonthe and Pujehun are the coastal districts and use boats in certain areas. For coastal and riverine communities, the lack of road access poses a serious challenge to their ability to access food and essential social services, especially during the heavy rains when water levels rise and cause localized flooding, making it difficult for people to move in and out.

The households in Western Area Urban have the best market access with only 1.2 miles to the nearest market. This confirms that urban localities are the hub of commerce and trade for foodstuffs produced across the country, whilst higher population densities invariably result in higher concentration of market activity. This situation of poor accessibility, increased market prices and low supplies exacerbate the ability of the poorer households to access food, thereby increasing their food insecurity and vulnerability.

Distance to the nearest market has important implications in particular for female household members, who in accordance with the cultural gender division of labour, have the bulk of the responsibility for buying and selling foodstuffs. If the distance to markets is far, then this can have a significant impact on the ability of women and other household members to engage in income generating activities, such as tending to the upkeep of their own farms, thus directly competing with other domestic and income generating activities. If the responsibility to travel to markets is borne by children and

**Figure 28: Means of transportation to the nearest market**



distances are significant, this may also negatively impact their school attendance, and thus reduce their future income-earning potential. Furthermore, lengthy distances between farms and markets can significantly increase the cost of transporting produce to markets, reduce profit margins, increase related costs and reduce the competitiveness of local rice compared to imported rice.

In urban areas, people predominantly walk to markets because of easy access. In rural areas, paid transport is the first means of transport (46 percent) and next is walking (41 percent) to the nearest market. In rural areas the decision to walk to markets is mostly as a consequence of a lack of access to other more convenient and cost-effective options to travel longer distances.

Across the districts, the highest proportions of people walking to markets were found in Pujehun (64 percent), Falaba (64 percent), Kono (57 percent) and Bo (42 percent). Considering that households in these districts indicated that they have to travel 5–10 miles one way to the nearest market, this can pose a significant burden in terms of time and energy. Households that use paid

transport were reported highest in Karene (68 percent), Kambia (65 percent) and Port Loko (62 percent).

The data shows that 93 percent of the population in Sierra Leone use commercial motorbikes as a main means of transportation within districts and communities. Considering the level of poverty and economic hardship coupled with high transportation fares, majority of rural and urban dwellers prefer to walk (79 percent). Among the districts Bonthe (49 percent), Moyamba (15 percent), Pujehun (11.2 percent), Kambia (5 percent) and Port Loko (5 percent) use boat or canoe as their main means of transportation.

Transportation, as mentioned, can be costly depending on distance and remoteness. In urban areas, the cost of travelling to the market is the lowest, representing the much shorter distances that urban dwellers have to travel in comparison to their rural counterparts. In rural areas, the cost of transportation is far higher, ranging from an average of SLL 4,050 (approximately US\$0.40) in Western Area Rural, to a high of over SLL 21,000 (approximately US\$2.04) in Koinadugu.



**Table 23: Cost of travelling both ways to the nearest market in Sierra Leonean Leone (SLL)**

District	Mean
Bo	13,116
Bombali	12,180
Bonthe	18,754
Falaba	16,076
Kailahun	7,353
Kambia	11,955
Karene	19,404
Kenema	13,626
Koinadugu	21,226
Kono	9,897
Moyamba	15,451
Port Loko	9,092
Pujehun	11,123
Tonkolili	12,569
Western Area Rural	4,050
Western Area Urban	2,667
Rural	13,340
Urban	5,524
<b>Total</b>	<b>12,902</b>

In view of the very low household incomes in Sierra Leone, high transportation costs related to accessing food unquestionably have a negative impact on the overall purchasing power of the household and is consistent with the findings in the expenditure share section on non-food expenditure, which found that transportation costs were the highest non-food household expenditure.

The frequency with which the markets are held is also an important determinant of food access. For farming households looking to sell part of the produce, if markets are held very infrequently, this may result in reducing potential incomes as such households lack appropriate facilities to effectively store their produce. This means the produce may

deteriorate during the time lag between harvesting crops and selling produce at the next available and nearest market.

**Table 24: Regularity of the nearest market**

District	Daily	Weekly/Periodic	Both daily and weekly/periodic
Bo	45%	52%	2%
Bombali	38%	52%	10%
Bonthe	23%	68%	9%
Falaba	11%	62%	27%
Kailahun	41%	29%	31%
Kambia	30%	64%	6%
Karene	22%	71%	7%
Kenema	48%	37%	15%
Koinadugu	60%	39%	2%
Kono	44%	53%	3%
Moyamba	14%	68%	18%
Port Loko	55%	36%	9%
Pujehun	25%	62%	13%
Tonkolili	61%	29%	10%
Western Area Rural	87%	4%	9%
Western Area Urban	100%	0%	0%
Rural	37%	52%	12%
Urban	81%	12%	7%
<b>Total</b>	<b>40%</b>	<b>48%</b>	<b>11%</b>

In urban areas, a majority of respondents reported that markets were held on a daily basis. This again reflects the greater concentration of market activities in urban localities and the increased ability of urban households to access food. In rural areas more than half of the communities have access to weekly or periodic markets, while only 36 percent have daily markets. Among the districts the highest percentage of communities have only weekly or periodic markets are in Karene (71 percent), Bonthe and Moyamba (68 percent), and Kambia (64 percent).

The absence of daily markets is potentially a contributory factor to high levels

of food insecurity. Daily markets are also not feasible in areas that are thinly populated and dispersed, such as in Karene and in districts with riverine topography, such as in Bonthe. In addition, seasonal flooding in Bonthe and the fact that many households are engaged in fishing, whole communities can relocate on an annual basis. This potentially disrupts the establishing of permanent and regular markets.

## Market price trend

The 2020 CFSVA also used price monitoring data to look at price trend of key staples overtime. Overall, the prices of key staples continue to increase due to high inflation and depreciation of the Sierra Leonean Leone (SLL) against other currencies, especially the United States Dollar (USD).

### Staples rice and cassava price trend

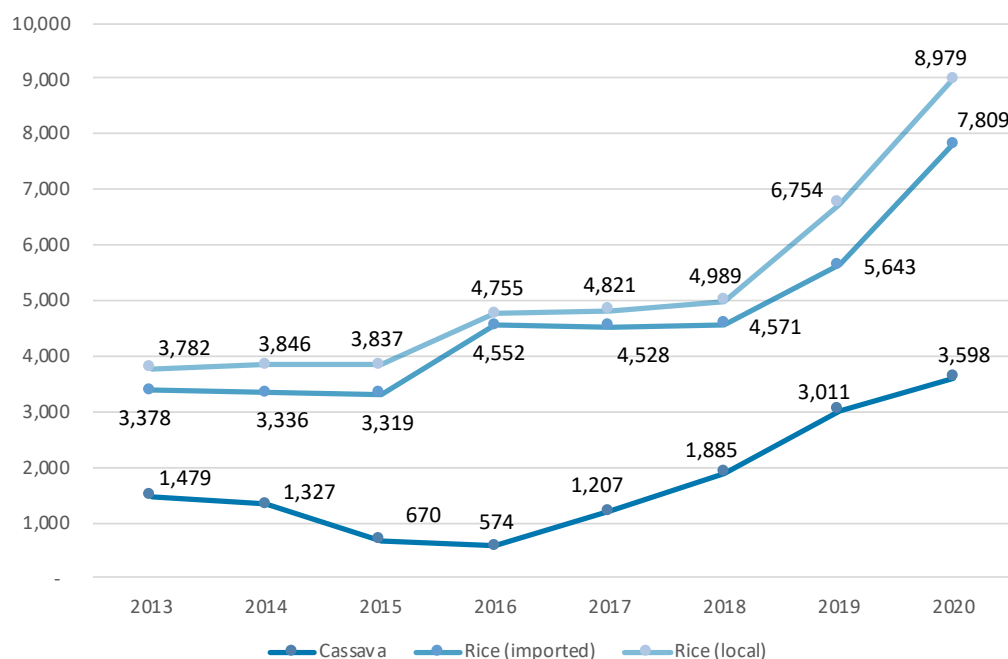
Rice is the main staple and the majority of households depend on market purchase for their consumption. Imported rice is widely consumed by households and the demand continues to

push prices upwards. The prices of both local and imported rice witness high increment when compared to the previous years. The average price of imported and local rice increased by 38 percent and 39 percent respectively compared to 2019.

Cassava is a close substitute of rice and it is consumed as gari and foo foo and is used in other local dishes that are widely consumed by Sierra Leoneans and in neighbouring Guinea and Liberia. As a result, a rise in the price of rice will also trigger the price of cassava to go up since it is cheaper than rice and thus demand for cassava increases when rice become unaffordable. The average price of cassava continues to increase across the country when compared to previous years. The price per kilogram of cassava increased 36 percent from SLL 3,011 in 2019 to SLL 3,598 in 2020.

When comparing the prices with 2015, the cost of rice has doubled and cassava has quadrupled which greatly affect poorer households food security and explains their reduced dietary diversity.

**Figure 29: Rice and cassava price trend per kg in SLL**



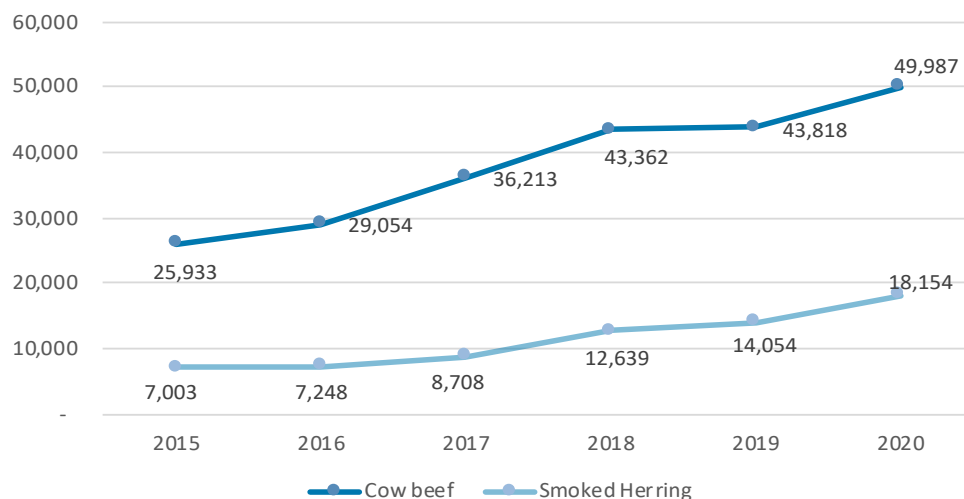
### Meat price trend

Fish and meat are typical food items in the food basket of Sierra Leone. However, beef is a luxury food item that most households cannot afford and poor households consume smoked herring as condiment when fish is unaffordable. The average prices of beef and fish continue to increase rapidly overtime. The price of cow meat recorded an increase of 48 percent from 2015 to 2020, whilst smoked herring recorded an increase of 60 percent. Comparing year on year, the price of cow meat increased by 12 percent from 2019 to 2020, whilst smoked herring increased by 22 percent.

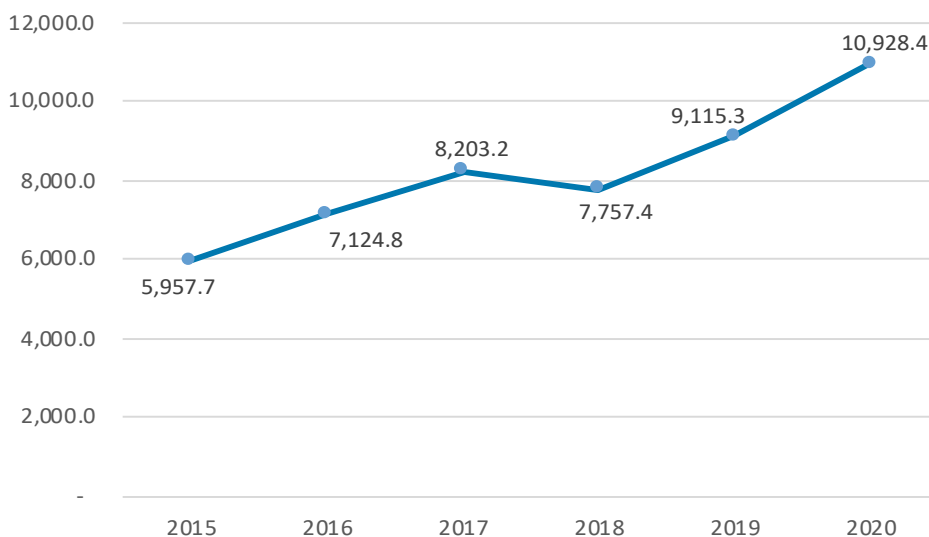
### Palm oil price trend

Palm oil is cultivated across most of the districts in Sierra Leone and is consumed by most households regardless of their economic status. Sierra Leone has a comparative advantage in the production of palm oil when compared to neighbouring Guinea and Liberia and it exports palm oil to these countries. Considering the high demand of palm oil over the years the price has continue to increase. The price of palm oil increased by 45 percent in five years (2015 to 2020) and increased by 16 percent from 2019 to 2020.

**Figure 30: Average prices of meat and fish products per kg in SLL**



**Figure 31: Average prices of palm oil per kg in SLL**



## Assistance

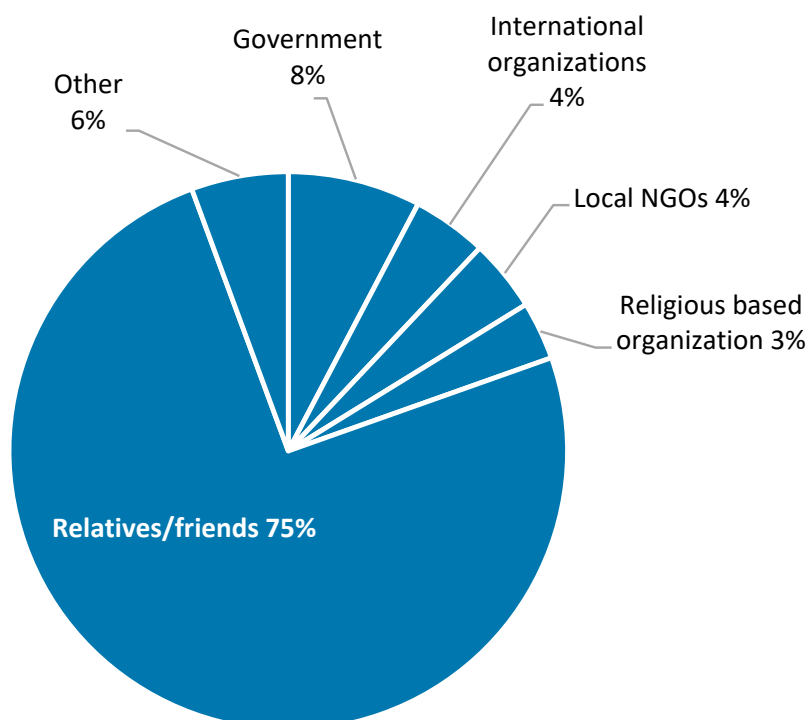
Overall, 13 percent of households received support, of which female headed households received slightly more support (15 percent) than male headed households (12 percent). Among the districts, the highest percentages of households that received support are from Kailahun (28 percent), Falaba (22 percent) and Kambia (19 percent). Major forms of assistance received by households were in the form of cash (41.5 percent), food (14 percent) and household items (12 percent). Urban households received more food assistance than households in rural areas (17 percent versus 13 percent). Households in urban slums have received more assistance in cash (68 percent) than rural households.

## Sources of assistance

Although, households reportedly received assistance from a number of different sources, but the majority of support came from relatives (75 percent). Other significant assistance was received from the Government (8 percent), INGOs and UN (4 percent), NGOs (4 percent) and religious organizations (3 percent). A great percentage of households (6 percent) received support from other sources, such as from within the community, through village chief, banking and others.

Across the districts, households in Tankolili received the highest support (29 percent), followed by Pejuhun (10 percent) and Moyamba (9 percent) from UN and INGOs. The highest proportions of recipient households receiving support from NGOs were in Karene (38 percent), Urban Slums (19 percent) and Tonkolili (9 percent).

**Figure 32: Sources of household support**





A photograph of a man and a young child outdoors. The man is shirtless, smiling, and looking down at the child. The child is wearing a blue shirt and a white diaper. The background is a blurred outdoor setting with trees and a building. A blue semi-transparent banner is overlaid on the lower half of the image, containing the chapter title.

## **CHAPTER 6** **UTILIZATION** **(HEALTH AND NUTRITION)**

**Utilization is the third pillar in the Food Security Framework.** Food utilization is the proper biological use of food where a proper diet provides sufficient energy, essential nutrients, hydration and includes adequate sanitation. Effective food utilization depends mainly on knowledge within the household of food storage and processing techniques, basic principles of nutrition and proper childcare.

Global Acute Malnutrition (GAM) is the presence of both moderate and severe acute malnutrition in a population. Three main factors directly contribute to GAM: inadequate food intake (i.e. a household's food security situation), inadequate healthcare services and environmental conditions (poor sanitation), and inadequate care practices for women and children.

### Nutritional status of children

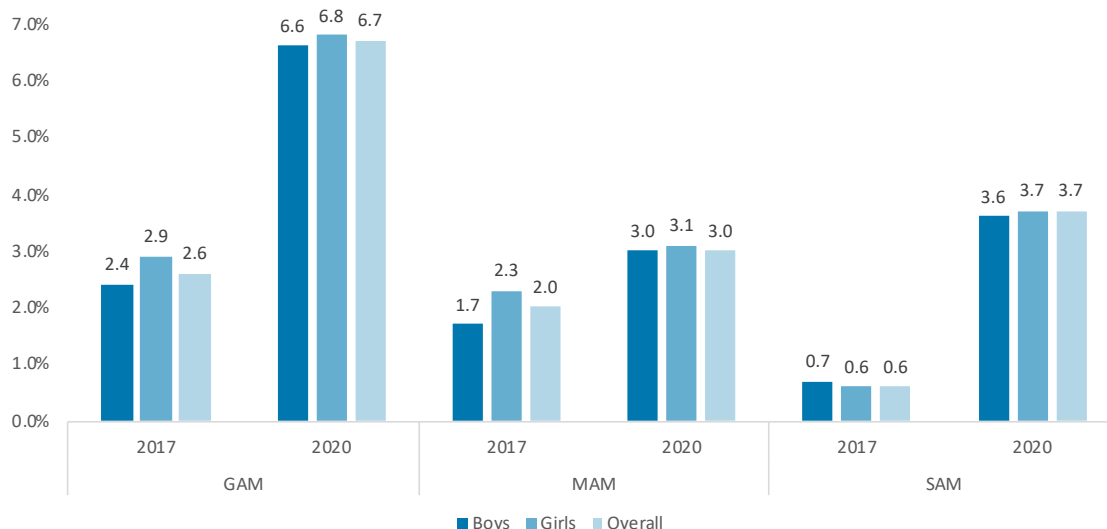
One outcome of poor food security is undernutrition. Since the yearly Standardized Monitoring and Assessment of Relief and Transitions (SMART) survey did not take place in 2020 due to the



COVID-19 pandemic, the CFSVA included the collection of MUAC of all children under the age of five within the households sampled for the CFSVA to provide an insight into the nutritional status of children under the age of five years. The children were also tested for bilateral pitting oedema.

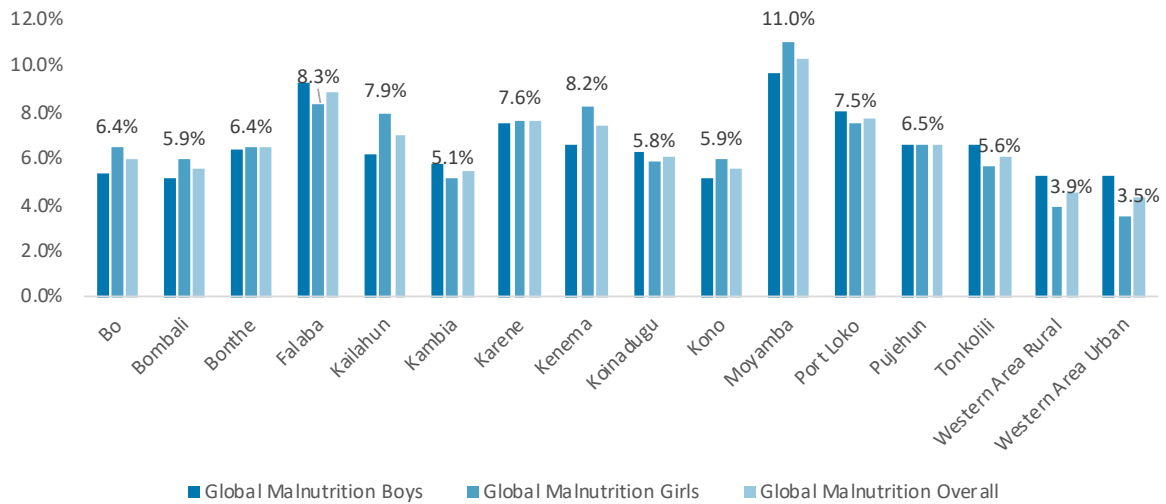
The MUAC showed a marked deterioration in acute malnutrition in 2020 (6.7 percent) compared to data from 2017<sup>18</sup> (2.6 percent). This is despite the fact that the data in 2017 was collected towards the end of the lean season while the CFSVA data was collected during the rice harvest. It is the severe acute malnutrition that has increased most, and thus 3.7 percent of the children are in critical risk of dying. There is no difference in prevalence among boys and girls who show a similar situation. Moyamba

**Figure 33: Trend comparison in MUAC in 2017 and 2020**



<sup>18</sup> National Nutrition survey 2017

**Figure 34: Global malnutrition by districts**



district is by far the worst with a GAM rate over 10 percent followed by Falaba (8.8 percent) and Port Loko (7.7 percent)

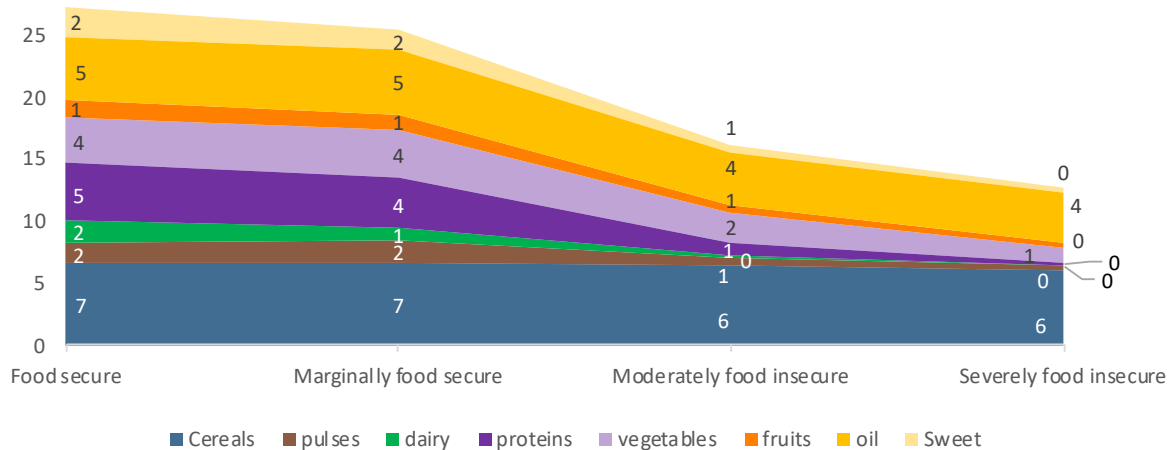
### Food diversity<sup>19</sup>

Households in Sierra Leone eat cereals (e.g. rice and cassava), oil and to some extent vegetables (e.g. cassava leaves and potatoes leaves, etc.) on a weekly basis irrespective of their level of food insecurity or poverty. However, the frequency greatly differs. Rice is the staple food and consumed by rich and poor households alike almost every day. Consumption of other food groups is not as common and mostly depends on the purchasing power of the household.

In view of low-income levels and increasing market prices, many households cannot afford a diverse diet on regular basis. This has implications for nutritional wellbeing, especially among vulnerable groups, such as pregnant and lactating women and children under five years of age.

The consumption of fruits and vegetables is inadequate even for the most food secure households as global nutritional guidelines advocate for daily intake of these food groups in order to prevent non-communicable diseases. Besides an almost daily intake of cereals, meat/fish and oil the food secure and marginally food insecure

**Figure 35: Food diversity by food security group (food eaten in the past seven days)**



<sup>19</sup> Food diversity means eating food from different types of food groups, which is important to maintain nutritious diet for good health. The more types of food groups people eat on a weekly basis, the higher probability of consuming enough nutrients that the body requires for a healthy life. The following are the included food groups: Cereals, pulses, dairy (milk and milk products), protein rich foods (meat, fish, eggs, etc.), vegetables, fruit, Oils/fats, and sugar.



households consume a much more diverse diet than the food insecure.

The severely food insecure group eat cereals daily, oil only four times and vegetables only once a week while the moderately food insecure consume vegetables twice a week. The food insecure households (moderate and severe) are not able to consume any protein rich food, including pulses, fruits and dairy on a weekly basis. This is a decline compared to 2015 when intake of vegetables was markedly higher among moderately and severely food insecure at five times a week.

## Consumption of food rich in vitamin A and iron

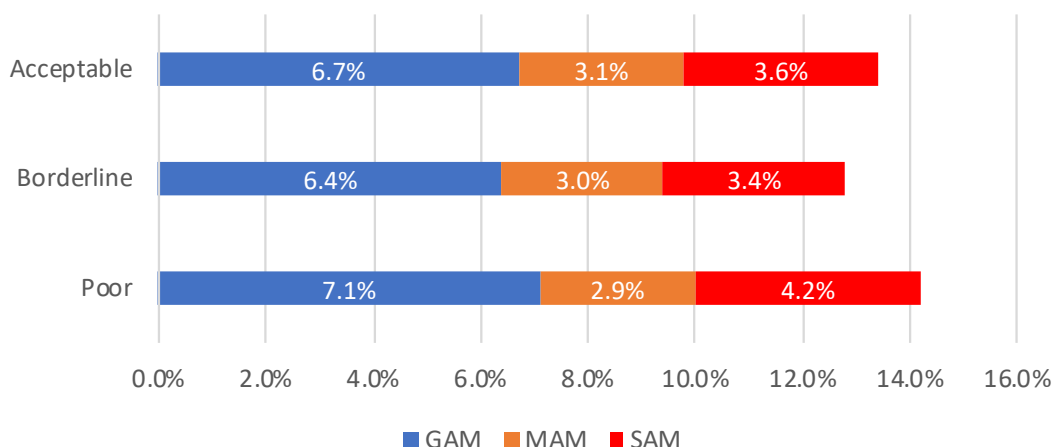
Micronutrient deficiency diseases (MNDs)—iron deficiency and vitamin A deficiency—are common in Sierra Leone. Micronutrient deficiencies can be caused by a variety of factors: Poverty, lack of access to a variety of micronutrient rich foods, cooking methods that do not conserve micronutrients, lack of knowledge of optimal dietary practices, and high incidence of infectious diseases. Overall, 5 percent of households did not consume foods rich in vitamin A in the seven days before the survey, and 47 percent did not consume foods rich in iron.

**Table 25: Consumption of foods rich in vitamin A and iron in last seven days**

		Vitamin A rich			Iron rich		
		never consumed	consumed sometimes	consumed at least daily	never consumed	consumed sometimes	consumed at least daily
District	Bo	8%	40%	53%	52%	26%	22%
	Bombali	4%	50%	46%	48%	35%	17%
	Bonthe	13%	60%	28%	24%	51%	26%
	Falaba	7%	60%	33%	49%	38%	13%
	Kailahun	4%	55%	41%	64%	27%	9%
	Kambia	1%	56%	43%	42%	36%	21%
	Karene	6%	39%	55%	57%	30%	13%
	Kenema	6%	42%	52%	62%	25%	14%
	Koinadugu	4%	41%	55%	52%	32%	16%
	Kono	2%	46%	51%	35%	61%	4%
	Moyamba	4%	38%	57%	26%	45%	29%
	Port Loko	5%	35%	59%	53%	28%	20%
	Pujehun	9%	58%	33%	46%	41%	13%
	Tonkolili	3%	63%	34%	53%	38%	9%
	Western Area Rural	2%	28%	70%	29%	50%	21%
	Western Area Slum	1%	29%	69%	28%	60%	12%
Western Area Urban	1%	31%	68%	29%	42%	29%	
Area	Rural	6%	50%	45%	49%	36%	15%
	Urban	3%	37%	61%	36%	42%	22%
Sex	Female	6%	47%	46%	45%	36%	18%
	Male	5%	47%	48%	47%	38%	16%
<b>Total</b>		<b>5%</b>	<b>47%</b>	<b>47%</b>	<b>46%</b>	<b>37%</b>	<b>16%</b>



**Figure 36: Household food consumption correlation with child wasting**



Households in urban areas were more likely to consume foods rich in vitamin A and iron: 61 percent consume food rich in vitamin A everyday and 22 percent consume iron-rich food daily. Households in rural areas 45 percent consume food rich in vitamin A everyday and 15 percent iron-rich food daily. Female headed households consume less frequently vitamin A and iron rich foods than male headed households.

The highest proportion of households that consumed vitamin A rich foods on a daily basis live in the Western Area Rural and Urban Slums (69 percent each), followed by Western Area Urban (68 percent). The households reporting the highest levels of consumption of iron rich foods on a daily basis are in Western Urban (29 percent), Moyamba (29 percent) and Bonthe (26 percent).

The high proportion of households never consuming iron rich foods is a cause for great concern across all districts, implying that iron deficiency (anaemia) is very likely, with concerning health implications, especially for pregnant women and children. The 2019 Sierra Leone Demographic and Health Survey (SLDHS) showed that 68 percent of children aged 6–59 months were anaemic.

The data shows that households with poor food consumption scores have a slightly higher prevalence of malnourished children, specifically severely malnourished children.

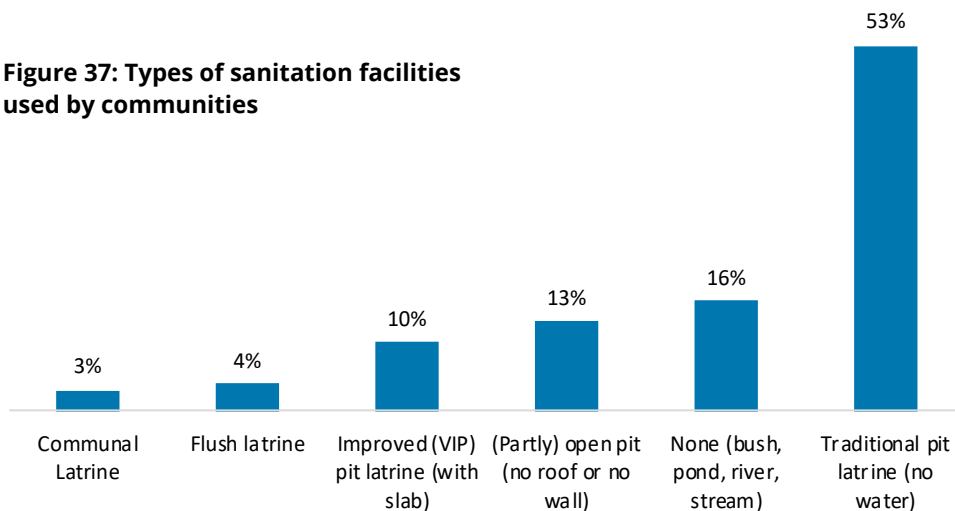
Environmental sanitation remains a challenge as access to improved sanitation facilities is still low, especially in rural communities. More than 56 percent of households in rural areas use unimproved toilet facilities with no water.

Poor access to sanitation may be a contributing factor to the few health problems experienced by children. However, more than 90 percent of caregivers practice hand washing at critical moments, which has also shown a positive increase in knowledge and practice.

### Access to sanitation

The 2020 CFSVA found that only 14 percent of households have access to improved sanitation facilities. The disparity in access to sanitation is glaring between urban and rural households. In urban areas, 46 percent of households have access to improved sanitation compared to just 8 percent in rural areas. Traditional pit latrines are

**Figure 37: Types of sanitation facilities used by communities**



the most common form of sanitation in both urban and rural areas, while approximately 16 percent of households have no latrine at all. In more than one-third of households in Bonthe (43 percent), Moyamba (37 percent) and Pujehun (34 percent) defecating in the open is a common practice, which has significant negative health implications.

**Critical moments of hand washing**

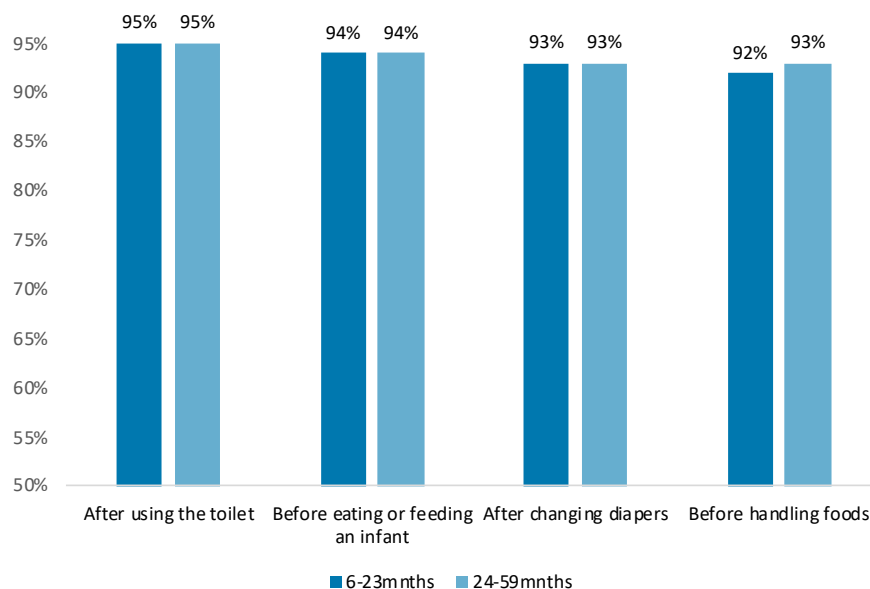
A common way nutrition is lost in children is because of diarrhoea or intestinal worm infestation, which is mostly attributed to poor WASH conditions. Overall, result show improvement as on average 93 percent of caregivers practiced hand washing at the critical moments as compared to the 2017

Sierra Leone National Nutrition Survey, which showed that only 30.6 percent of caregivers were washing their hands at the critical moments. There is a correlation between nutrition and hygiene as undernutrition does not only occur by lack of intake of inadequate food but also by nutrient loss. The data provides a strong basis of not only available water and soap for utilization but also improved practices by users above 90 percent.

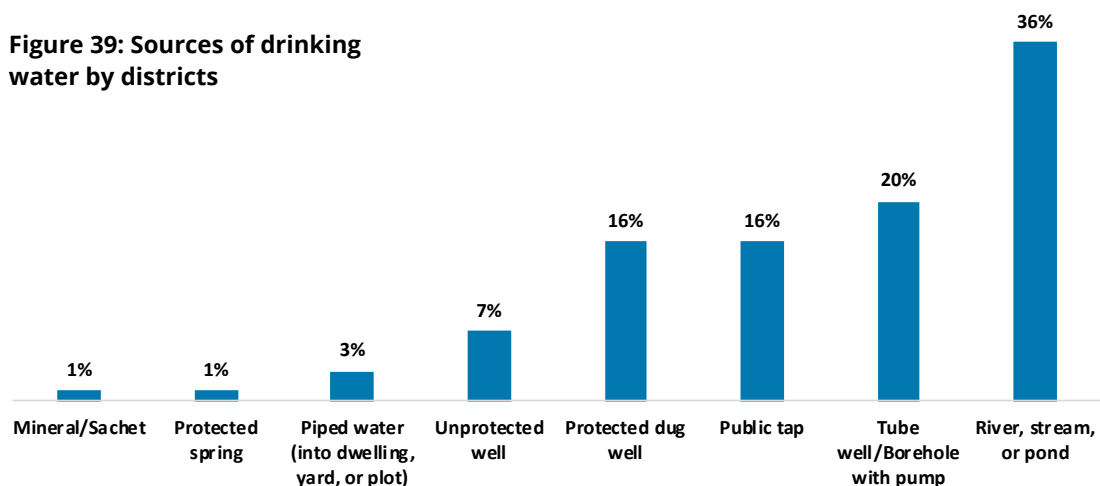
**Access to safe drinking water**

Some 57 per cent of households have access to safe drinking water that is sourced from either a bore hole (20 percent), a protected well or a public tap (both by 16 percent). However, a substantial percentage of the population (36 percent) use water from rivers or streams, which makes this group susceptible to water borne diseases.

**Figure 38: Critical moments of handwashing by caregivers**



**Figure 39: Sources of drinking water by districts**



A sizeable 42 percent of households that use unsafe drinking water live in rural communities compared to the 8 percent who live in urban areas. The highest proportion of households using unsafe drinking water sources are in Koinadugu and Karene districts with 49 percent, and Kono at 48 percent.

## Infant and young child feeding practices and food consumption

Improving health and nutritional status of children depends on appropriate feeding and care practices for infants and children, especially during the first 1,000 days of a child's life. According to the WHO/UNICEF guiding principles on infant and young child feeding, appropriate feeding practices are recommended: early initiation of breastfeeding within the first hour of birth, exclusive breastfeeding for infants aged 0–5 months without the introduction of other liquids, timely introduction of complementary foods at 6 months of age and continued breastfeeding for ages 12 to 23 months.

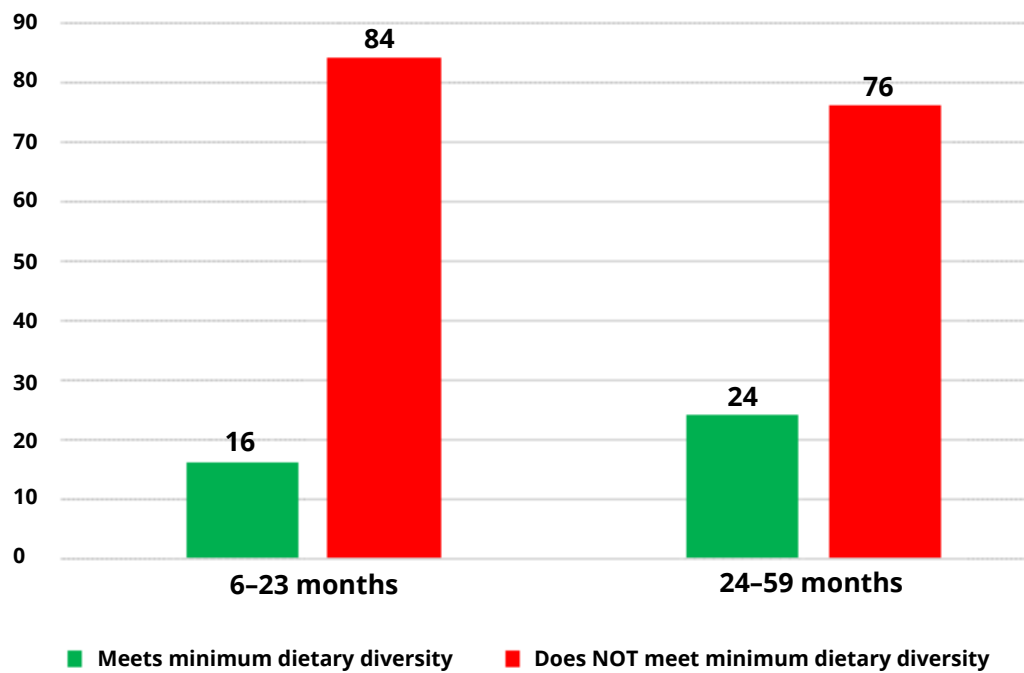
The CFSVA assessed the prevalence of children meeting the minimum acceptable diet, which constitutes minimum dietary diversity.<sup>20</sup> The data shows that 85 percent of children aged 6–23 months and 76 percent of children aged 24–59 months do not meet the required diet diversity, which indicates poor feeding practices. It also implies that nutritional needs are not met and these children are missing crucial micronutrients, which are needed for optimal growth and development.

## Child health

Some 82 percent of households with children aged 6–59 months showed a stable health condition with no illnesses in the two weeks before the data collection. This may indicate an improvement in health seeking behaviour of primary caregivers. However, data collection took place during the dry season when health related issues are less common than during the long rainy season. Amongst the 18 percent households who did have sick children, 78 percent suffered from fever which is a common symptom for many diseases, such as

<sup>20</sup> Breastfed child consumed foods from 5 out of 8 of the food groups during the previous day. <https://index.nutrition.tufts.edu/data4diets/indicator/minimum-acceptable-diet-mad>

Figure 40: Diet diversity among children under the age of 59 months in percentages (%)

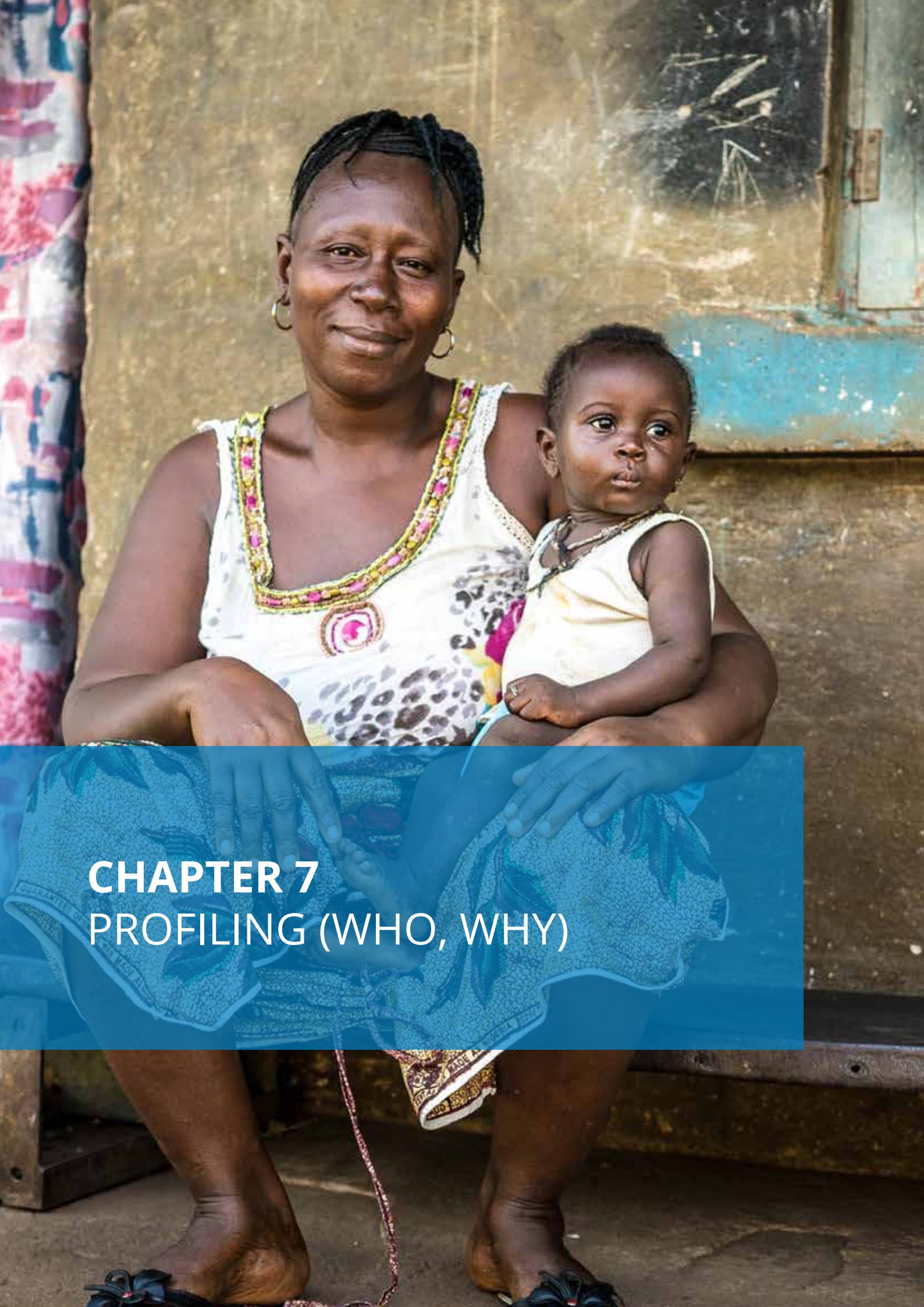


acute respiratory infection, pneumonia or malaria. Nine percent of children had a cough within the two-week period prior to data collection and 80 percent of households with a sick child reported to have consulted a health practitioner.

Knowledge of caregivers on first aid treatment in the event of diarrhoea among children had also improved. The 2019 Sierra Leone DHS indicated that only 75 percent of caregivers gave treatment for sick children, whereas in 2020, 82 percent of caregivers responded by giving oral rehydration solution to their children during episodes of diarrhoea.







## CHAPTER 7 PROFILING (WHO, WHY)

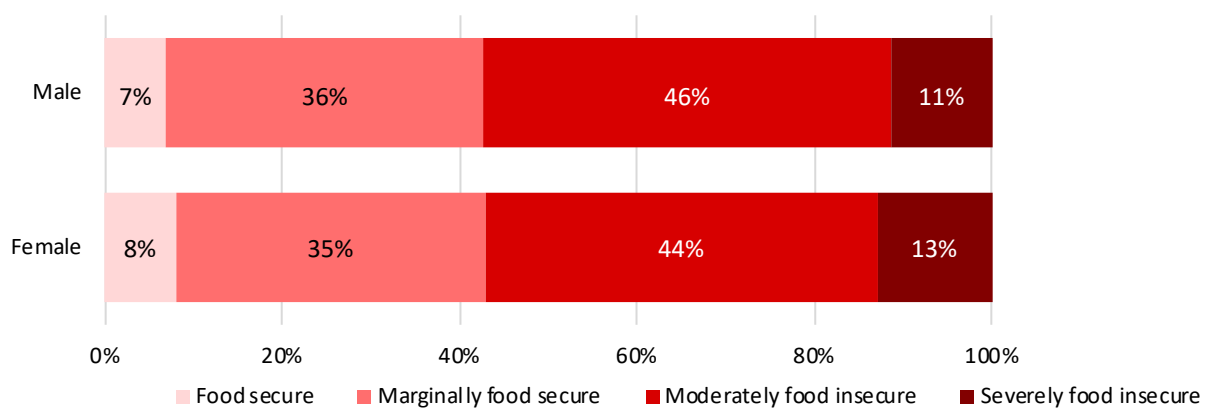
## Food security prevalence by gender

The level of food insecurity is the same among female headed households and male headed households at 57 percent. However, the prevalence of severely food insecure households is higher among female headed households at 13 percent compared with the 11 percent male headed households.

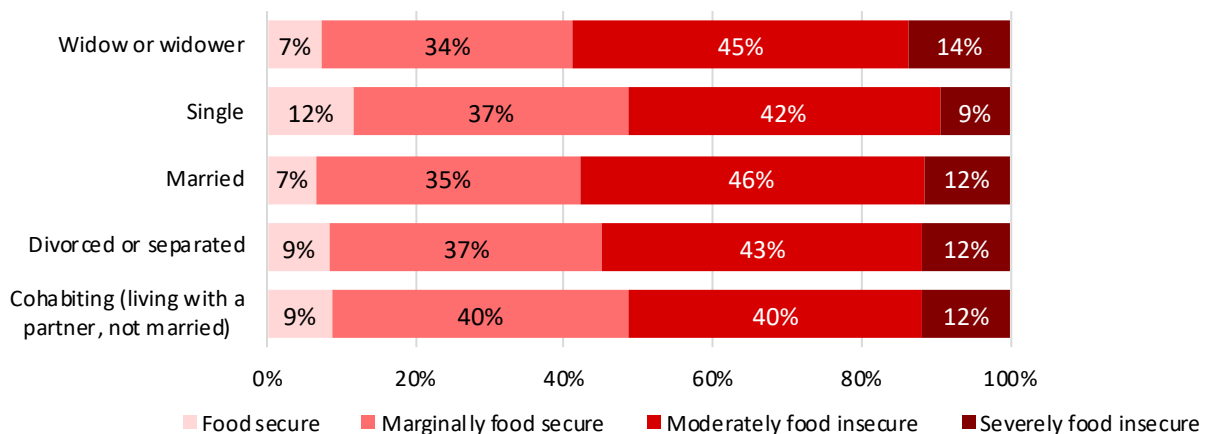
## Food security prevalence by marital status

Bases on the marital status, the prevalence of moderate and severe food insecurity is highest among widows and widowers (14 percent). The overall food insecurity is also highest among the widow/widowers at 59 percent. Singles are least food insecure even though the prevalence is also high among them at 51 percent.

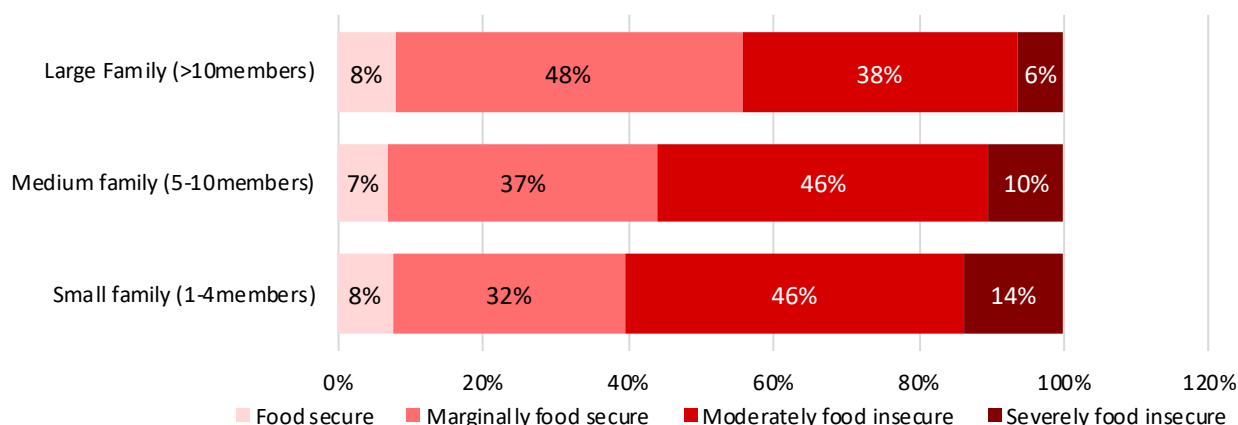
**Figure 41: Food security prevalence by gender of the household head**



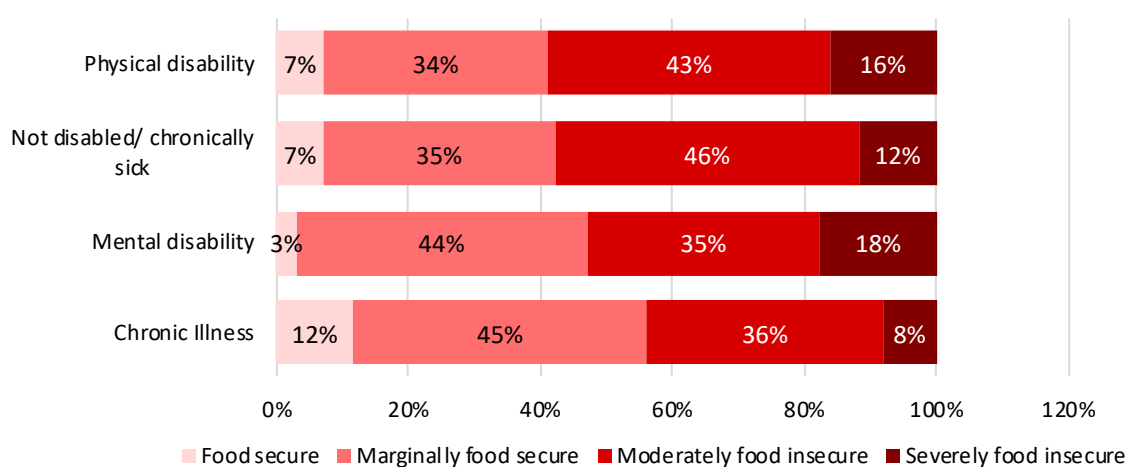
**Figure 42: Food security prevalence by marital status**



**Figure 43: Food security prevalence by size of household**



**Figure 44: Food security prevalence by disability type of the household head**



## Food security prevalence by household size

The prevalence of food insecure households is high among small sized families (less than 4 members) compared to large households that have more than 10 members. Sixty percent of small families are food insecure, and 44 percent of large families experience food insecurity. As the size of the family increases, the more food secure the households become. With the majority of households relying on agriculture-based livelihoods, larger families have more people to provide agricultural labour, which translates to more food productivity.

## Food security prevalence by disability

The prevalence of severely food insecure households is higher among physically and mentally disabled household heads (16 and 18 percent respectively) compared with 12 percent among non-disabled household heads. However, there is no difference in the overall food security situation and 58 percent of non-disabled households are food insecure compared to 59 percent among the physically disabled.

Among the three disabilities, those households headed by a person living with a physical disability have a higher rate of food insecurity (59 percent)



compared to those with a mentally disabled household head (53 percent) and chronically ill household head (44 percent).

## Food security prevalence by livelihoods

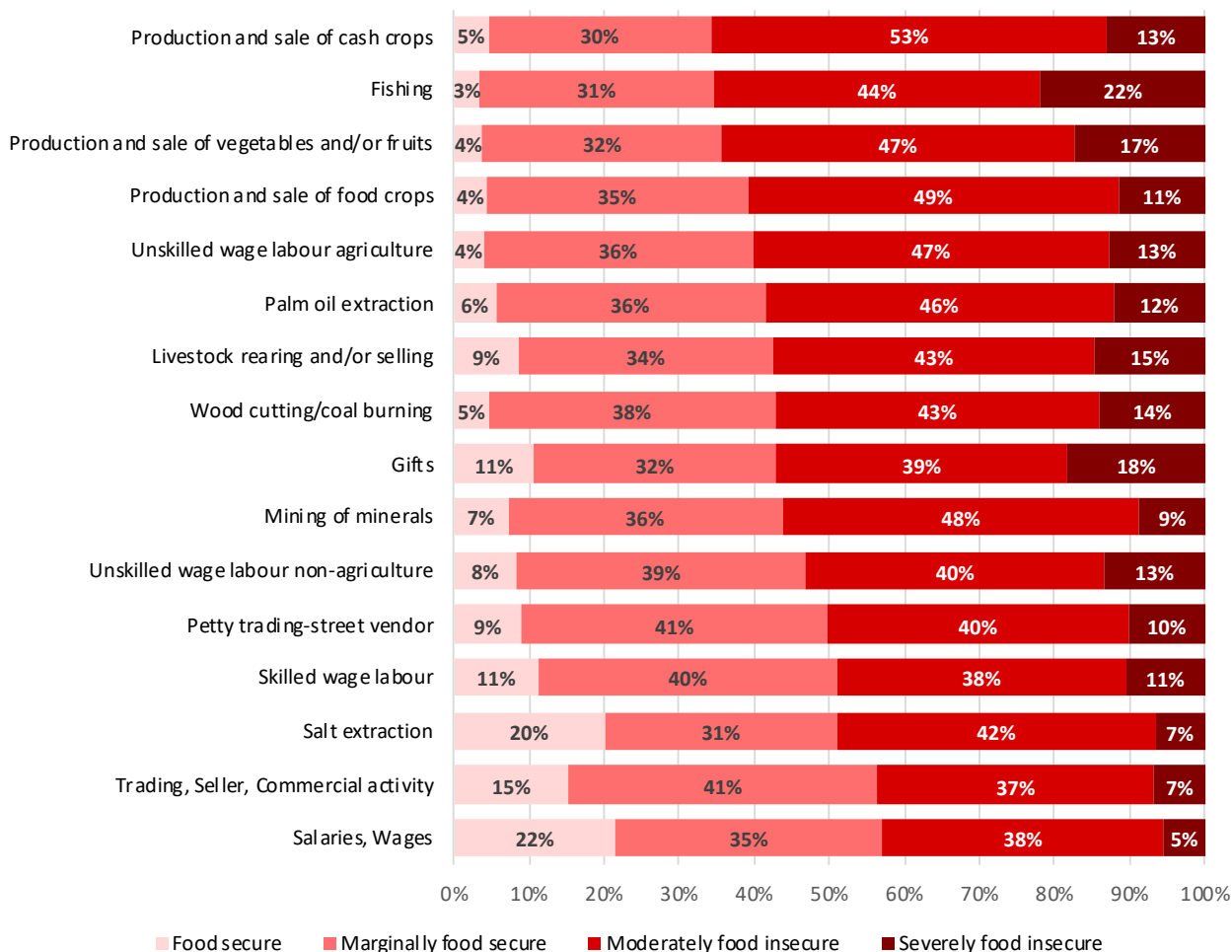
In Sierra Leone, the highest percentage of food insecure people are those involved in agricultural based livelihoods, such as production and sale of cash crops (66 percent), fishing (66 percent), production and sale of vegetables and fruits (64 percent), production and sale of food crops (61 percent) and unskilled wage labour (agriculture) (60 percent). These livelihood activities are mainly performed by households in rural areas that rely on agriculture for their income and food. Households

engaged in salaried work and trading are more food secure and these are mainly in the urban areas. Close to one in four fishing families are severely food insecure, followed by households relying on fruits and vegetable sales. The latter is a livelihood primarily done by women.

## Food security prevalence by household head's education level

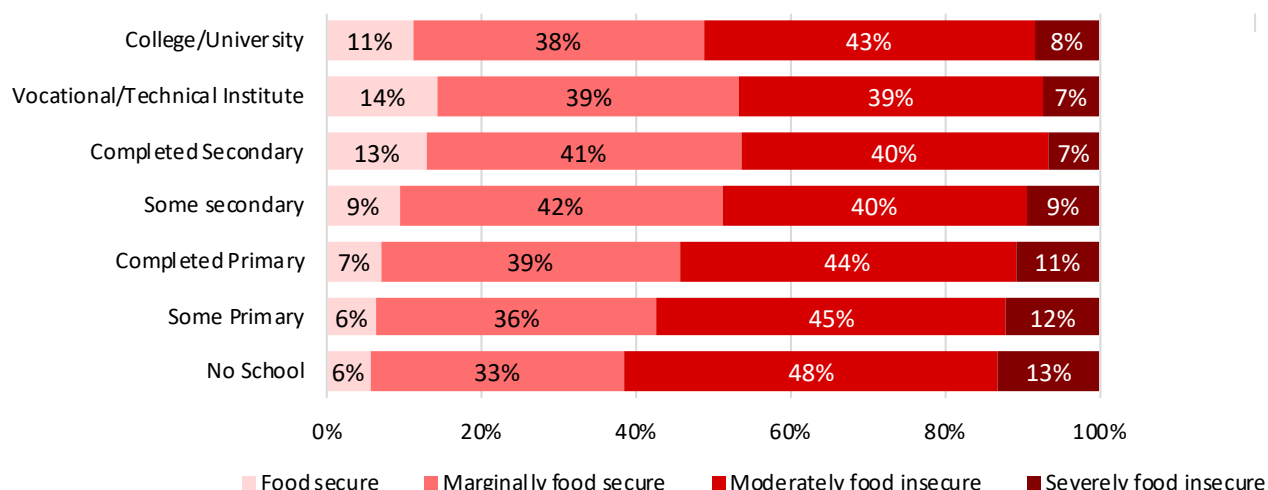
There is a direct correlation between education and food security. According to the CFSVA 2020, the higher the education level of the head of households, the better food security of the respective households.

**Figure 45: Food security prevalence by livelihood type**





**Figure 46: Food security prevalence by education level of the household head**

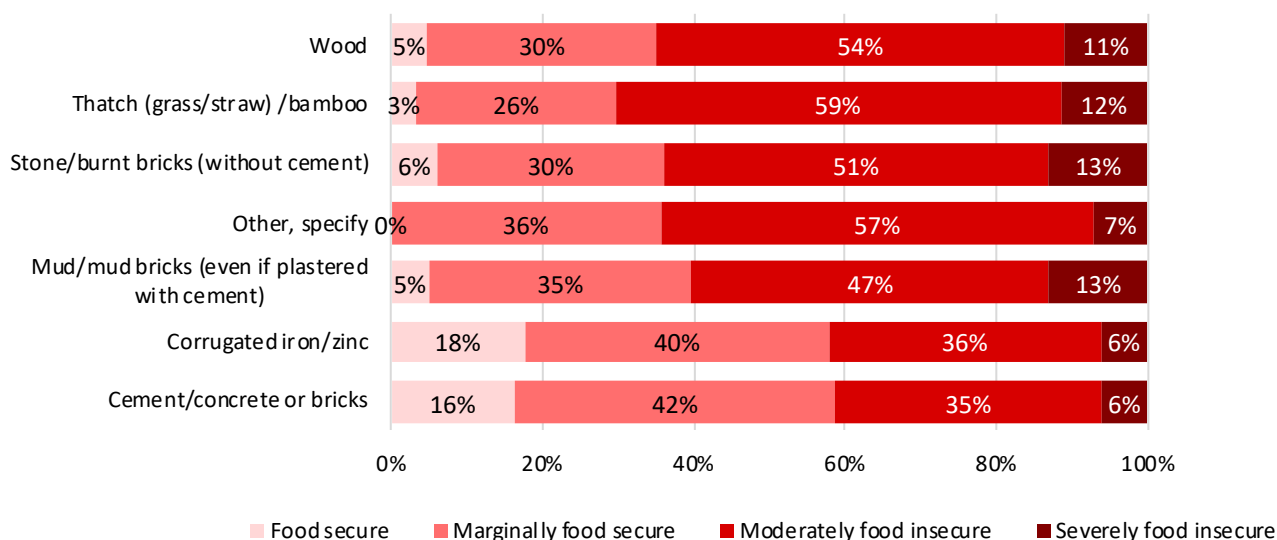


Across the country, households headed by a person without education have the highest rate of food insecurity (61 percent). The level of educational attainment of the household head is negatively correlated with food insecurity: the higher the level of education, the lower the level of food insecurity. The households headed by a vocationally educated person or a person who completed secondary education has better food security. As shown earlier in the report, women have less education than men as they often drop out before completing primary school.

### Food security prevalence by housing

Household structure and the material it is made of is often used as a wealth proxy indicator. Households living in temporary structures or poorly built structures show a high prevalence of food insecurity, such as thatched buildings made of grass, straw or bamboo (71 percent), wood houses (65 percent), stone or brick houses without cement (64 percent) and mud houses (60 percent). Households with proper corrugated iron roof and cement structures are significantly better off in terms of food

**Figure 47: Food security prevalence by housing structure**





security. The type of building material used is important in withstanding climatic shocks and thus, a household living in a poorly constructed house is more at risk of being severely affected by floods, windstorm and heavy rains.

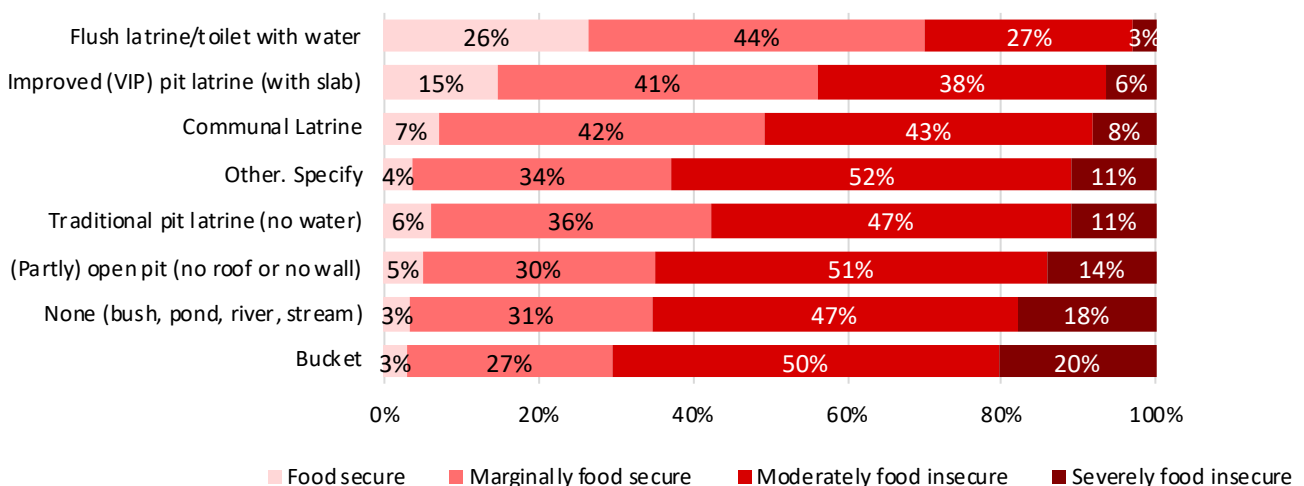
food secure the household is. Hence, the households with a flush latrine are among the most food secure (70 percent), followed by those households that have improved (VIP) pit latrines (56 percent) and those households using communal latrines (49 percent).

### Food security prevalence by access to water and sanitation

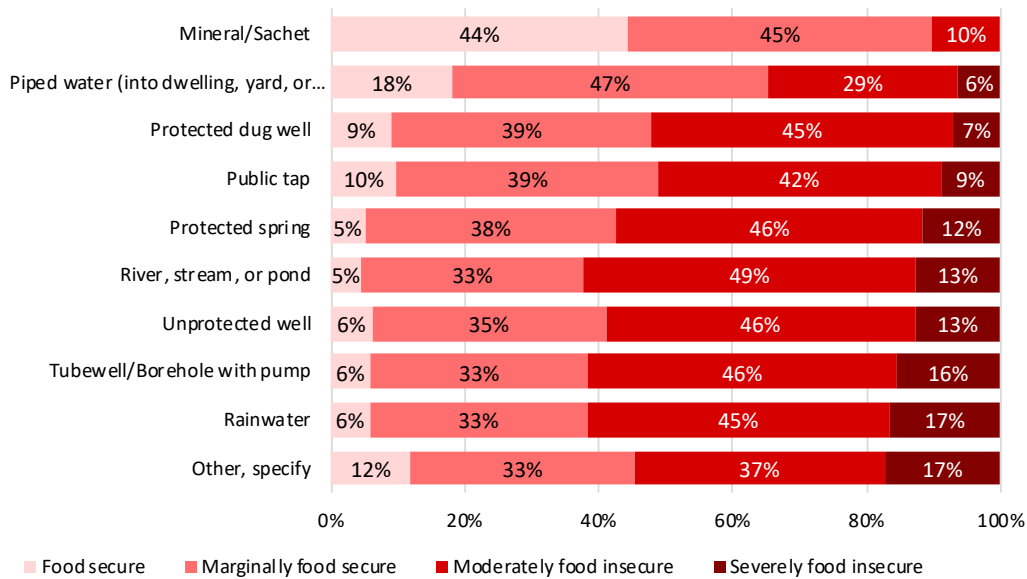
Dwellings with improved household sanitation facilities have a positive correlation with food security. Households using buckets or practising open defecation have much higher food insecurity (70 and 65 percent respectively). The better the sanitation facility, the more

There is also a positive correlation between households with access to a potable water source and food security. The water structure, especially in rural areas in Sierra Leone is highly inadequate, with many poor households relying on unimproved water sources for drinking water. In addition, drinking untreated water causes numerous health issues, including bacterial and parasitic infections that increase morbidity, compromises the physical and

**Figure 48: Food security prevalence by sanitation facilities available to households**



**Figure 49: Food security prevalence by sources of water**



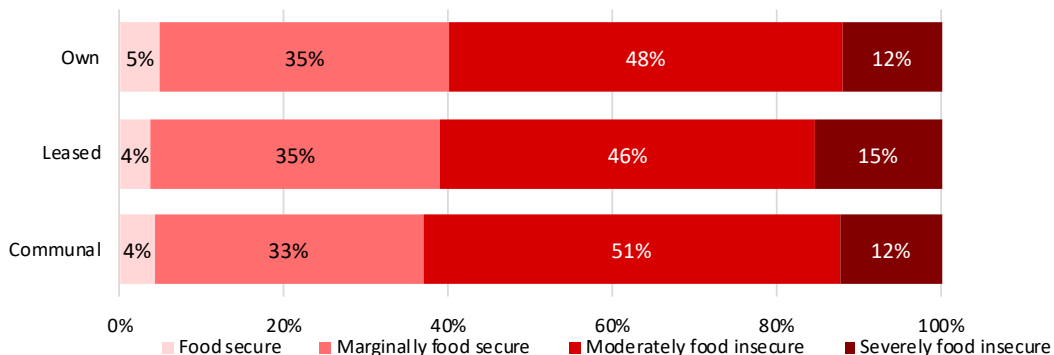
cognitive development of children, and results in sickness among labourers, thus compromising their ability to earn.

Households that have access to unprotected sources have a higher rate of food insecurity. For example, households using rivers, streams, rainwater or pond water have the highest rate of food insecurity (62 percent). On the other hand, those using mineral or sachet water are least food insecure (10 percent) followed by households drinking piped water (into dwelling, yard or plot) (35 percent). The findings suggest that the development of water and sanitation infrastructure have a positive impact on food and nutritional security.

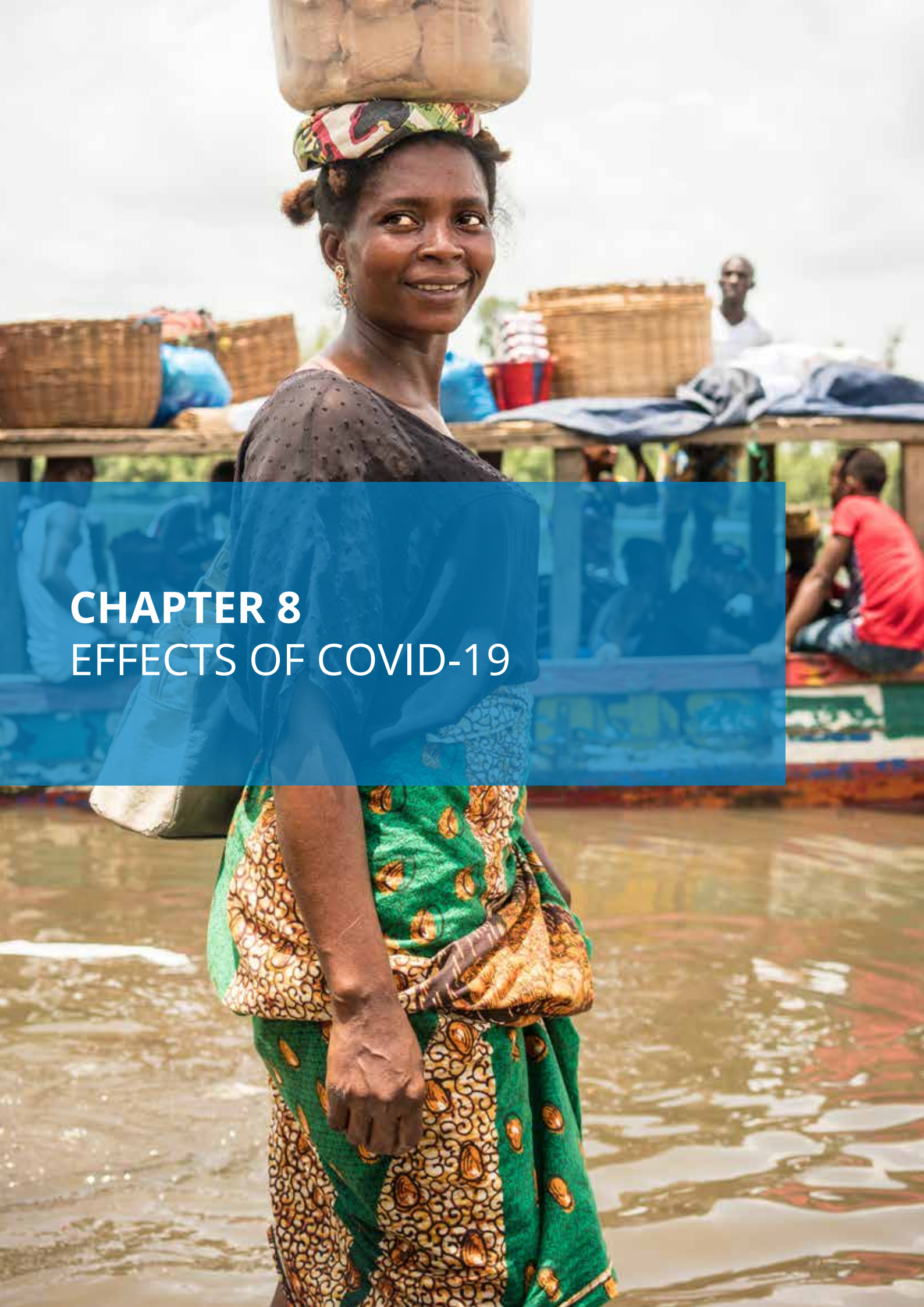
### Food security prevalence by access to cultivated land

The CFSVA 2020 further examined the food security level of different types of farmers. The graph below shows that there is hardly any difference in the overall level of food insecurity depending on land ownership. Food insecurity is experienced by 63 percent of farmers using communal land followed by 61 percent of farmers who lease land and 60 percent of land owners. However, the proportion of those leasing land have a higher percentage of severely food insecure (15 percent) compared with the other two groups where 12 percent are severely food insecure.

**Figure 50: Food security prevalence by access to cultivated land**







**CHAPTER 8**  
**EFFECTS OF COVID-19**



## Impact of COVID-19 on livelihoods

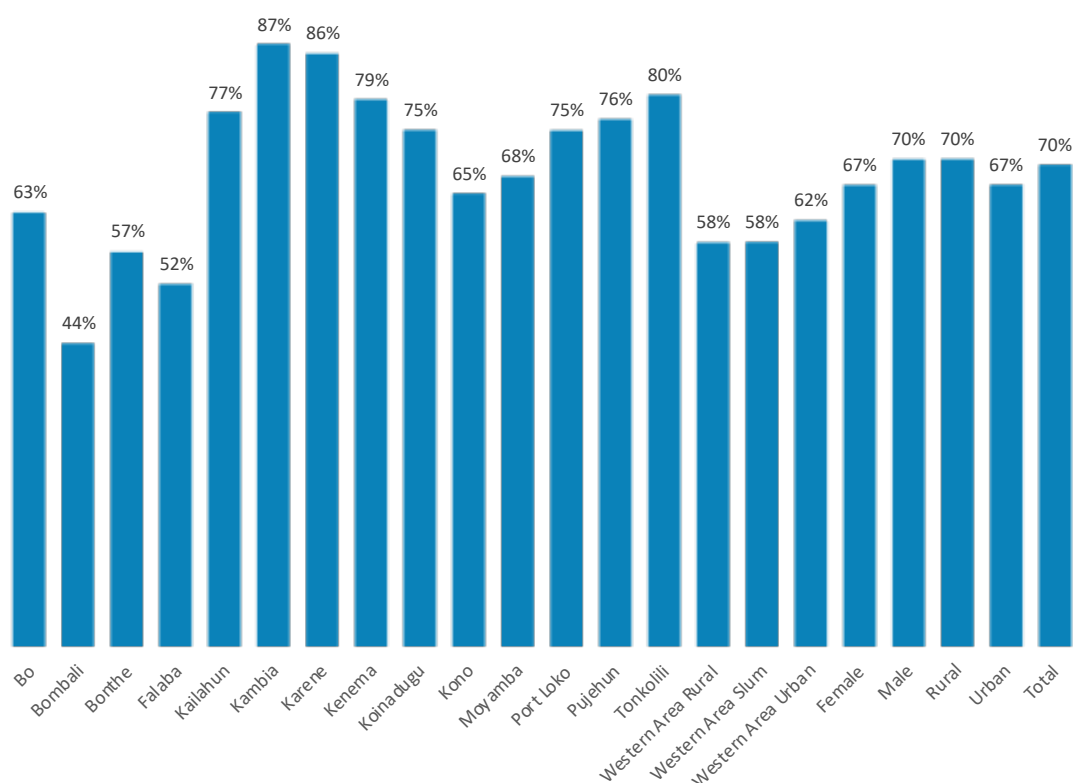
The COVID-19 pandemic had a devastating impact on livelihoods as people were unable to gather and conduct business as usual and also because of the restrictions in movement that were put in place to contain the spread of the virus. The negative impact was reported both in rural and urban areas as markets were shut down and a lockdown came into force. Farmers, labourers, small businesses, petty traders, transport service providers, shops, restaurants and the like were all forced to limit economic activities.

According to the CFSVA results, on average 70 percent of livelihoods were affected by COVID-19 nationwide. People living in rural areas were slightly more affected (70 percent) compared to those in urban areas (67 percent). The

livelihoods of women headed households were also slightly more affected compared to households headed by men (70 percent vs 67 percent). While all districts were affected, the highest percentages of households whose livelihoods were negatively affected were found in Kambia (87 percent), Karene (86 percent) and Tonkolili (80 percent). Least affected were people in Bombali, although 44 percent of the households also affected by the restrictions.

While all livelihoods were severely affected by the COVID-19 measures, petty traders were most affected (97 percent), followed by those relying on remittances from migrant labourers (87 percent), those producing and selling vegetables and fruits (85 percent), begging (81 percent) and those providing unskilled labour (81 percent; both agriculture and non-agriculture).

**Figure 51: Impact of COVID-19 on livelihoods, by district**



People working in the mining sector were also heavily affected due to the closure of mining activities and job losses. It should also be noted that COVID-19 also affected the hospitality sector, as visitors were restricted. This reduced the income of businesses engaged in the hospitality sector, and also resulted in job losses. The livelihoods that were least affected were those engaged in palm oil and palm wine businesses, salt extraction and those with stable salaried work.

Among farmers, 24 percent left part of their available land uncultivated during the 2020–21 cropping season, with the highest percentages found in Karene (44 percent), followed by Port Loko (34 percent) and Tonkolili (31 percent).

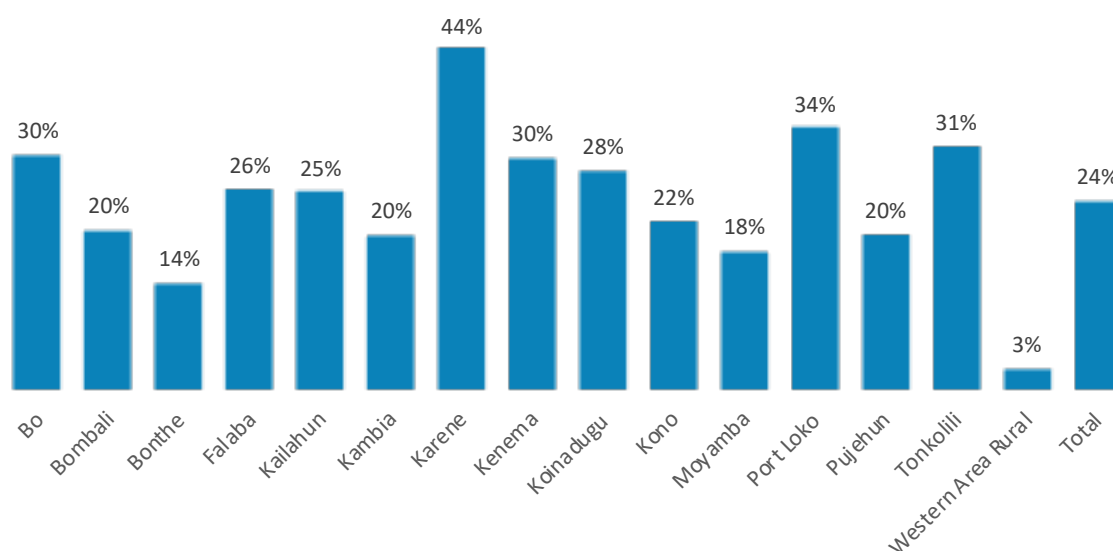
The main reasons reported by households, as mentioned above, were not having enough labour (22 percent),

lacking inputs, such as seeds, fertilisers, pesticides (19 percent), lacking tools and equipment (18 percent), and falling sick with COVID-19 itself (14 percent).

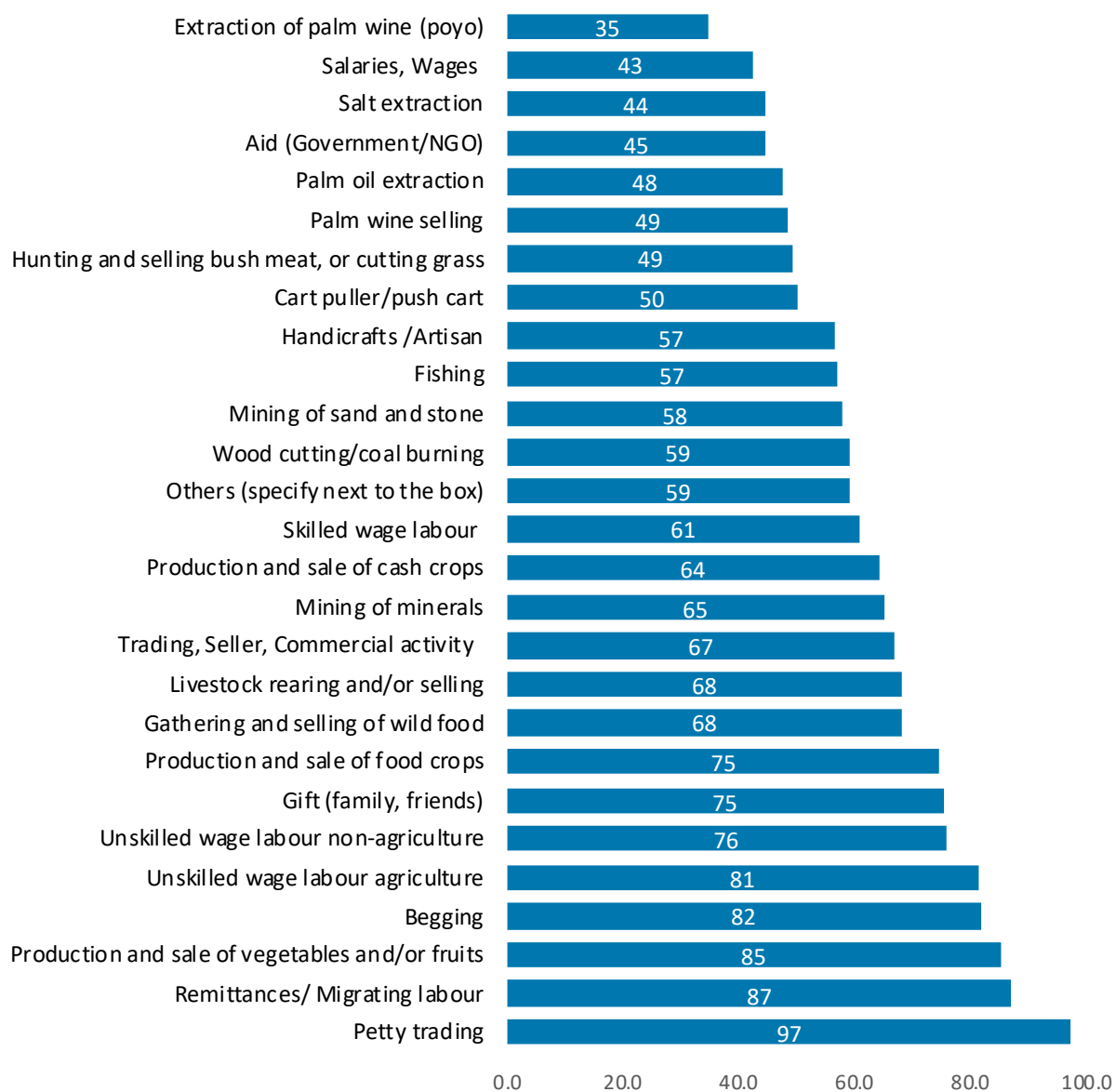
Among the districts, the highest proportion of farmers that reported COVID-19 pandemic as the main reason for leaving land uncultivated were in Koinadugu (23 percent), Kenema (18 percent), Falaba (18 percent) and Kambia (17 percent).

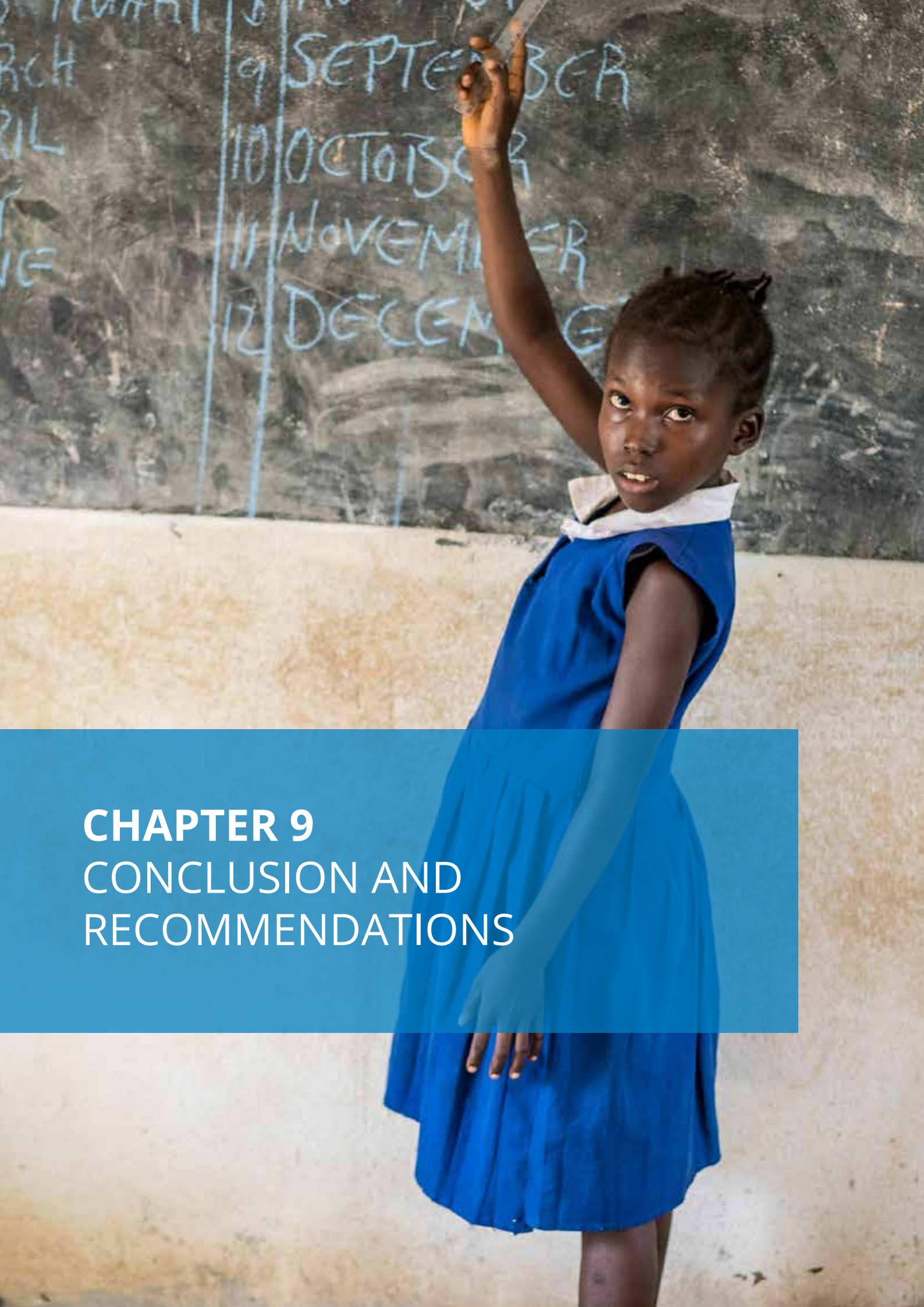
Majority of farmers that reported lack of labour in the community were in Koinadugu (29 percent), Moyamba (27 percent) and Karene (26 percent). Regarding a lack of necessary agricultural inputs, the highest proportion of households reporting this as a constraint was in Bombali (26 percent), followed by Western Area Rural (25 percent), Tonkolili (24 percent) and Port Loko (23 percent).

**Figure 52: Land left uncultivated in farming areas in 2020 due to COVID-19**



**Figure 53: Impact of COVID-19 on livelihoods by livelihood type in percentages**





**CHAPTER 9**  
CONCLUSION AND  
RECOMMENDATIONS



## Conclusion and Recommendations

Food insecurity is a result of structural issues that destabilize the food system in a country. While COVID-19 has had a serious impact on livelihoods and food security in Sierra Leone, it can only be partly attributed to the deterioration of food security over the past decade.

Old agricultural methods, poor yields due to insufficient and expensive agricultural inputs, unacceptably high harvest and post-harvest losses, uneconomical access to markets and high food prices are all factors that contribute to food insecurity in Sierra Leone. Unaffordability of healthy foods also leads to malnutrition and forces households to adopt unsustainable and negative coping strategies.

While Sierra Leone has several strong policies, implementation of these is lacking due to limited financial and personnel capacity investment. Coordination amongst players and partners needs strengthening, and strong leadership and accountability are needed at all levels in order to design projects that properly and holistically address the underlying causes of food insecurity.

Food insecurity reached acute levels in 2020, but as shown through the series of CFSVAs that WFP and MAF have implemented over the past 10 years, it is also a chronic status in Sierra Leone that impacts people from all walks of life.

Accordingly, the recommendations that were developed in 2015 remain relevant today. The overarching recommendation is to urgently invest and implement the policies that already exist, and to undertake the intimidating task of transforming the entire agricultural sector and value chains for nutritious food from production, harvesting, processing, packaging, storing, transporting, marketing, distributing and consuming.

MAF is currently embarking on a policy review to inform medium to long term policy formulation. The aim is to identify existing policies that are already sufficient to support a shift in approach that includes the private sector, policies that need to be bolstered, and areas that have complete policy gaps.

The following key recommendations were developed by a multi sectoral group of experts from the Government, the UN, NGOs and academia during a validation workshop that took place in March 2021.



## Thematic 1: Food access (market, transport and livelihood)

- Strengthen value chains of priority food (rice, cassava and vegetables) and cash (cocoa and coffee) crops.
- Promote farm gate product marketing.
- Improve feeder road networks, prioritizing high producing agricultural communities, to enhance access to market.
- Improve transportation linkages for coastal and island communities.
- Improve community social amenities to encourage rural settlement and discourage rural-urban migration, particularly among youths.
- Upgrade high performing Agricultural Business Centres (ABCs) and address governance issues in under-performing ABCs.

## Thematic 2: Agriculture, Livestock and Fisheries

### Agriculture

- Support mechanization and development of small scale irrigation systems.
- Provide improved seeds and inputs at subsidized rates.
- Expand rural electrification schemes targeting high production agricultural areas.
- Strengthen policies to ensure a conducive environment that can attract ethical private sector investments in agriculture.
- Support access to rural finance and insurance for Farmer Based Organizations, particularly those comprised of women, youth, and People Living with Disabilities.
- Roll-out the 2015 Land Policy to improve land tenure to encourage more responsible agricultural practices that conserve soil fertility.

- Support the adoption of climate-smart agricultural practices.
- Strengthen agricultural extension services, promoting increased roles for women and youth.
- Train farmers nationwide in appropriate usage of seeds and fertiliser.

### Livestock

- Provide support to livestock veterinary services and train personnel at community level.
- Improve livestock breeds.
- Establish disease surveillance and monitoring mechanisms.

### Fisheries

- Combat illegal, unreported and unregulated (IUU) fishing within the Inshore Exclusion Zone.
- Provide appropriate fishing gears to artisanal fishermen at subsidized rates.
- Establish cold chain facilities in high production fishing communities.
- Explore the potential for inland aquaculture.

## Thematic 3: Education

- Expand school feeding to deprived communities.
- Provide adult literacy classes, especially to women.

## Thematic 4: Health, nutrition, water, sanitation, and knowledge of hygiene practices

- Increase accessibility and affordability of nutritious foods through complementary feeding and nutrition education.
- Scale-up community health and hygiene promotion.





# ANNEXES



## Annex 1. District Food Security Classification

	Classification of Food Security				Total Food insecure
	Classification of Food Security	Marginally food secure	Moderately food insecure	Severely food insecure	
Bo	9%	35%	43%	14%	56%
Bombali	9%	33%	46%	12%	58%
Bonthe	3%	26%	52%	19%	71%
Falaba	6%	25%	53%	16%	69%
Kailahun	4%	37%	53%	7%	60%
Kambia	5%	50%	41%	5%	46%
Karene	6%	32%	43%	19%	62%
Kenema	6%	23%	53%	18%	71%
Koinadugu	10%	44%	40%	5%	46%
Kono	6%	39%	49%	6%	55%
Moyamba	2%	32%	49%	17%	66%
Port Loko	5%	43%	47%	5%	52%
Pujehun	2%	31%	44%	22%	67%
Tonkolili	6%	38%	50%	7%	57%
Western Area Rural	28%	47%	23%	1%	25%
Western Area Slum	18%	49%	32%	1%	33%
Western Area Urban	34%	50%	16%	0%	16%
Female	8%	35%	44%	13%	57%
Male	7%	36%	46%	11%	57%
Rural	5%	34%	48%	13%	61%
Urban	17%	45%	34%	5%	39%
Total	7%	36%	46%	12%	57%

## Annex 2. District Food Security Population

District	Total population 2020	Severely food insecure population	Moderately food insecure population	Food insecure 2020	% of HHs severely food insecure	% of HHs moderately food insecure	% of HHs food insecure (severe + moderate)
Bo	635,374	104,778	293,072	397,850	13.6%	42.5%	56%
Bombali	504,775	72,369	252,879	325,248	11.8%	46.2%	58%
Bonthe	236,170	55,187	132,124	187,311	19.3%	51.6%	71%
Falaba	238,060	48,479	142,199	190,678	16.1%	52.7%	69%
Kailahun	625,173	51,955	359,738	411,693	6.9%	53.0%	60%
Kambia	385,185	22,848	171,134	193,982	4.9%	41.0%	46%
Karene	331,026	78,401	159,923	238,324	19.0%	43.3%	62%
Kenema	666,793	145,531	382,040	527,571	18.0%	52.8%	71%
Koinadugu	247,029	15,769	107,871	123,640	5.3%	40.3%	46%
Kono	606,918	47,103	320,304	367,407	6.4%	48.6%	55%
Moyamba	348,312	70,744	185,525	256,269	16.8%	49.1%	66%
Port Loko	609,466	37,536	310,105	347,641	5.1%	46.9%	52%
Pujehun	520,958	141,519	250,726	392,245	22.4%	44.4%	67%
Tonkolili	622,339	54,691	334,349	389,040	7.3%	49.5%	57%
Western Area Rural	515,031	9,210	130,069	139,279	1.5%	23.3%	25%
Western Area Slum	150,000	2,266	52,470	54,736	1.2%	32.2%	33%
Western Area Urban	1,212,313	4,834	205,502	210,336	0.3%	15.6%	16%
Rural	4,899,591	762,673	2,541,557	3,304,230	13.0%	47.9%	61%
Urban	3,402,245	200,544	1,248,472	1,449,017	4.9%	33.9%	39%
Total	8,301,836	963,217	3,790,029	4,753,247	11.6%	45.7%	57.3%



### Annex 3. District Food Security Trend

District	% of HHs severely food insecure		% of HHs moderately food insecure		% of HHs food insecure (severe + moderate)		Total food insecure population	
	2020	2015	2020	2015	2020	2015	2020	2015
Bo	14%	8%	43%	29%	56%	37%	397,850	212,454
Bombali	12%	8%	46%	49%	58%	57%	325,248	342,493
Bonthe	19%	8%	52%	45%	71%	53%	187,311	106,387
Falaba	16%		53%		69%		190,678	
Kailahun	7%	7%	53%	63%	60%	71%	411,693	370,387
Kambia	5%	15%	41%	52%	46%	67%	193,982	231,301
Karene	19%		43%		62%		238,324	
Kenema	18%	10%	53%	46%	71%	55%	527,571	336,040
Koinadugu	5%	8%	40%	44%	46%	52%	123,640	211,802
Kono	6%	9%	49%	47%	55%	56%	367,407	283,230
Moyamba	17%	8%	49%	45%	66%	52%	256,269	166,029
Port Loko	5%	17%	47%	44%	52%	61%	347,641	377,035
Pujehun	22%	19%	44%	50%	67%	69%	392,245	237,411
Tonkolili	7%	14%	50%	50%	57%	64%	389,040	339,166
Urban Slums	1%	6%	32%	38%	34%	44%	54,735	26,820
Western Area Rural	2%	4%	23%	38%	25%	42%	139,279	183,825
Western Area Urban	0%	0%	16%	12%	16%	12%	210,336	129,187
<b>Average</b>	<b>12%</b>	<b>9%</b>	<b>46%</b>	<b>41%</b>	<b>57%</b>	<b>50%</b>	<b>4,753,247</b>	<b>3,553,568</b>

## Annex 4. Chiefdom Food Security Classification

District	Chiefdom	Classification of Food Security				Total Food insecure
		Food secure	Marginally food secure	Moderately food insecure	Severely food insecure	
Bo	Badjia	8%	33%	42%	18%	60%
	Bagbo	4%	40%	50%	6%	56%
	Bagbwe(Bagbe)	6%	52%	32%	10%	42%
	Bo Town	31%	31%	38%	0%	38%
	Boama	9%	59%	24%	8%	33%
	Bongor	3%	26%	58%	13%	71%
	Bumpe Ngao	3%	60%	37%	1%	37%
	Gbo	13%	35%	36%	15%	51%
	Jaiama	2%	37%	51%	10%	61%
	Kakua	33%	31%	31%	5%	36%
	Komboya	0%	23%	70%	8%	78%
	Lugbu	3%	55%	41%	1%	42%
	Niawa Lenga	4%	17%	43%	37%	80%
	Selenga	7%	16%	47%	30%	77%
	Tikonko	17%	36%	37%	10%	47%
	Valunia	0%	27%	33%	41%	73%
Wonde	3%	24%	53%	20%	73%	
Bombali	Biriwa	3%	18%	65%	15%	79%
	Bombali Seborá	3%	60%	28%	8%	36%
	Bombali Siari	33%	26%	36%	4%	41%
	Gbanti-1	9%	62%	29%	1%	30%
	Gbendembu	2%	21%	43%	35%	78%
	Kamaranka	1%	14%	77%	8%	86%
	Magbaimba Ndorwahun	1%	15%	57%	27%	84%
	Makari	5%	53%	38%	4%	42%
	Makeni City	19%	63%	18%	0%	18%
	Mara	18%	34%	45%	4%	49%
	Ngowahun	3%	24%	39%	33%	72%
	Paki Masabong	17%	29%	48%	6%	54%
	Safroko Limba	1%	16%	71%	12%	83%
Bonthe	Bendu-Cha	1%	23%	60%	16%	76%
	Bonthe Urban	1%	19%	52%	28%	80%
	Bum	0%	13%	69%	18%	87%
	Dema	6%	40%	38%	16%	55%
	Imperri	2%	12%	82%	4%	86%
	Jong	4%	29%	62%	5%	67%
	Kpanda Kemo	12%	13%	74%	1%	76%
	Kwamebai Krim	0%	14%	53%	33%	86%
	Nongoba Bullom	3%	43%	32%	22%	54%
	Sittia	0%	24%	36%	40%	76%
	Sogbeni	7%	52%	31%	10%	41%
	Yawbeko	1%	31%	30%	37%	67%
Falaba	Delemandugu	0%	37%	47%	16%	63%
	Dembelia	11%	46%	40%	3%	43%
	Dembelia-Sinkunia	2%	8%	90%	0%	90%
	Folosaba	1%	10%	63%	25%	88%
	Kamadu Yiraia	15%	39%	42%	4%	46%
	Kebelia	15%	16%	68%	1%	68%
	Kulor Saradu	5%	38%	52%	6%	58%
	Mongo	9%	40%	36%	15%	51%
	Morifindugu	1%	12%	54%	33%	88%
	Neya	9%	21%	62%	8%	70%
	Nyedu	3%	12%	43%	42%	85%
	Sulima	13%	35%	44%	8%	52%
	Wollay Barawa	1%	9%	46%	44%	90%

Chiefdom Food Security Classification continues

Kailahun	Dea	0%	13%	70%	18%	87%
	Jahn	0%	30%	50%	20%	70%
	Jawie	10%	66%	20%	4%	24%
	Kissi Kama	7%	41%	51%	1%	53%
	Kissi Teng	7%	49%	44%	0%	44%
	Kissi Tongi	4%	20%	72%	3%	76%
	Kpeje Bongre	0%	11%	84%	5%	89%
	Kpeje West	4%	51%	44%	0%	44%
	Luawa	1%	29%	68%	2%	70%
	Malema	11%	66%	19%	3%	22%
	Mandu	1%	25%	55%	19%	74%
	Njaluhun	1%	36%	48%	16%	64%
	Penguia	3%	19%	69%	9%	78%
	Upper Bambara	1%	43%	55%	1%	56%
	Yawei	3%	49%	47%	1%	48%
Kambia	Bramaia	7%	42%	42%	8%	51%
	Dixon	0%	35%	54%	11%	65%
	Gbinle	4%	47%	48%	1%	49%
	Khonimaka	3%	31%	54%	12%	66%
	Magbema	1%	45%	54%	1%	54%
	Mambolo	1%	65%	34%	1%	35%
	Masungbala	1%	72%	25%	2%	27%
	Muna Thalla	5%	50%	44%	1%	45%
	Samu	7%	57%	26%	10%	36%
	Tonko Limba	14%	53%	30%	3%	33%
Karene	Buya	1%	27%	32%	41%	73%
	Dibia	14%	40%	45%	0%	45%
	Gbanti-2	4%	24%	8%	64%	72%
	Libeisyagahun/Gbombahun	18%	38%	23%	21%	44%
	Mafonda Makerembay	1%	6%	76%	18%	93%
	Romende	1%	34%	32%	33%	65%
	Safroko	0%	18%	71%	11%	82%
	Sanda Loko	0%	31%	41%	28%	69%
	Sanda Magbolontor	16%	32%	52%	0%	52%
	Sanda Tendaran	6%	40%	46%	8%	54%
	Sella Limba	5%	40%	49%	6%	55%
	Tambakha Simibungie	3%	41%	50%	6%	56%
	Tambakha Yobangie	8%	44%	34%	14%	48%
Kenema	Dama	1%	34%	42%	23%	65%
	Dodo	6%	23%	46%	25%	71%
	Gaura	0%	23%	47%	30%	77%
	Gorama Mende	21%	11%	65%	3%	68%
	Kandu Leppiama	3%	21%	62%	14%	76%
	Kenema City	17%	36%	31%	16%	47%
	Koya-1	3%	7%	60%	31%	91%
	Langrama	1%	16%	63%	19%	82%
	Lower Bambara	1%	18%	64%	17%	81%
	Malegohun	1%	18%	64%	17%	81%
	Niawa	2%	43%	47%	8%	55%
	Nomo	0%	11%	58%	31%	89%
	Nongowa	16%	52%	26%	6%	32%
	Simbaru	6%	27%	51%	15%	67%
	Small Bo	7%	23%	56%	14%	69%
	Tunkia	1%	12%	55%	32%	88%
Wandor	11%	24%	60%	5%	65%	

Chiefdom Food Security Classification continues

Koinadugu	Diang	4%	50%	43%	3%	46%
	Gbonkobon Kayaka	4%	30%	59%	8%	66%
	Kalian	12%	44%	42%	2%	44%
	Kamukeh	17%	36%	40%	7%	46%
	Kasunko KaKellian	17%	38%	40%	6%	45%
	Nieni	6%	46%	45%	3%	48%
	Sengbe	12%	58%	29%	1%	29%
	Tamiso	8%	29%	51%	12%	63%
	Wara Wara Bafodia	8%	41%	38%	13%	51%
	Wara Wara Yagala	14%	68%	18%	0%	18%
Kono	Fiama	4%	43%	49%	4%	54%
	Gbane	0%	17%	48%	36%	83%
	Gbane Kandor	11%	56%	31%	2%	33%
	Gbense	1%	32%	51%	16%	67%
	Gorama Kono	8%	27%	63%	2%	65%
	Kamara	16%	43%	39%	1%	41%
	Koidu City	13%	42%	40%	4%	45%
	Lei	0%	43%	47%	10%	57%
	Mafindor	1%	37%	57%	5%	62%
	Nimikoro	14%	33%	52%	1%	52%
	Nimiyama	5%	34%	59%	2%	61%
	Sandor	4%	49%	46%	1%	47%
	Soa	17%	48%	35%	0%	35%
	Tankoro	1%	44%	44%	11%	55%
Toli	0%	35%	64%	1%	65%	
Moyamba	Bagruwa	1%	9%	69%	21%	90%
	Bumpeh	1%	27%	69%	4%	73%
	Dasse	1%	49%	40%	11%	51%
	Fakunya	0%	38%	34%	28%	62%
	Kagboro	4%	27%	55%	14%	69%
	Kaiyamba	3%	47%	40%	10%	50%
	Kamajei	11%	47%	16%	25%	42%
	Kongbora	1%	32%	54%	13%	67%
	Kori	2%	54%	29%	15%	45%
	Kowa	0%	32%	45%	23%	68%
	Lower Banta	1%	27%	66%	6%	72%
	Ribbi	3%	17%	45%	35%	81%
	Timdale	2%	15%	55%	28%	83%
	Upper Banta	0%	27%	69%	4%	73%
Port Loko	Bakeh Loko	7%	36%	54%	4%	58%
	Bureh	10%	57%	33%	0%	33%
	Kaffu Bullom	9%	37%	45%	10%	55%
	Kamasondo	3%	7%	73%	17%	90%
	Kasseh	1%	78%	21%	1%	21%
	Koya-2	2%	57%	34%	7%	41%
	Lokomasama	3%	14%	75%	8%	83%
	Maconteh	1%	13%	75%	10%	85%
	Maforki	6%	61%	31%	3%	34%
	Makama	7%	31%	59%	4%	62%
	Marampa	8%	53%	37%	2%	39%
	Masimera	11%	51%	36%	1%	38%
	Thainkatopa	0%	55%	43%	1%	45%



Chiefdom Food Security Classification continues

Pujehun	Barri	4%	29%	56%	11%	67%
	Galliness	0%	19%	28%	52%	81%
	Kabonde	0%	33%	50%	17%	67%
	Kpaka	0%	26%	17%	57%	74%
	Makpele	4%	34%	43%	20%	63%
	Malen	9%	43%	41%	8%	49%
	Mono Sakrim	0%	22%	71%	7%	78%
	Panga	7%	31%	44%	18%	62%
	Panga krim	2%	30%	53%	15%	68%
	Pejeh (Futa pejje)	1%	48%	37%	15%	51%
	Perri	1%	34%	35%	29%	64%
	Soro Gbema	1%	27%	31%	41%	71%
	Sowa	2%	25%	51%	22%	73%
	Yakemu Kpukumu	0%	32%	60%	8%	68%
	Tonkolili	Dansogoia	4%	38%	57%	1%
Gbonkolenkeni/Masankong		0%	11%	75%	14%	89%
Kafe		13%	34%	41%	11%	53%
Kalanthuba		8%	37%	40%	15%	55%
Kholifa Mabang		0%	65%	35%	0%	35%
Kholifa Mamuntha/Mayosso		0%	28%	59%	13%	72%
Kholifa Rowala		4%	52%	37%	7%	43%
Kunike Barina		13%	63%	23%	2%	25%
Kunike Folawusu		17%	33%	50%	0%	50%
Kunike Sanda		18%	53%	25%	4%	29%
Malal		0%	52%	36%	11%	48%
Mayeppoh		0%	18%	79%	3%	82%
Poli		0%	10%	81%	10%	90%
Sambaya		6%	35%	41%	19%	59%
Simiria		7%	57%	33%	3%	36%
Tane		6%	49%	43%	2%	45%
Yele		4%	21%	71%	5%	75%
Yoni Mabanta		1%	44%	43%	11%	54%
Yoni Mamaila		1%	16%	76%	7%	83%
Western Rural	Koya Rural	18%	39%	42%	1%	43%
	Mountain Rural	37%	43%	16%	3%	19%
	Waterloo Rural	31%	44%	24%	1%	25%
	York Rural	26%	62%	12%	1%	12%
Western Slum	Slum	18%	49%	32%	1%	33%
Western Urban	Central I	42%	46%	12%	1%	12%
	Central II	12%	57%	31%	0%	31%
	East I	31%	64%	5%	0%	5%
	East II	30%	42%	28%	0%	28%
	East III	18%	66%	16%	0%	16%
	West I	45%	39%	15%	1%	16%
	West II	54%	37%	8%	1%	9%
	West III	36%	54%	9%	1%	10%

## Annex 5. District Food Expenditure

	Categories of food expenditure			
	Acceptable (<50%)	Borderline (50-65%)	Poor (65-75%)	Very Poor (>75%)
Bo	22%	26%	19%	33%
Bombali	13%	40%	19%	28%
Bonthe	11%	23%	23%	44%
Falaba	27%	24%	17%	32%
Kailahun	18%	32%	25%	25%
Kambia	18%	40%	23%	19%
Karene	16%	32%	26%	25%
Kenema	20%	23%	20%	36%
Koinadugu	22%	41%	19%	18%
Kono	16%	33%	25%	26%
Moyamba	8%	24%	27%	42%
Port Loko	22%	27%	17%	34%
Pujehun	8%	22%	24%	46%
Tonkolili	25%	25%	23%	27%
Western Rural	47%	34%	10%	8%
Western Slum	33%	54%	12%	2%
Western Urban	48%	36%	12%	4%
Rural	18%	28%	22%	32%
Slum	33%	53%	13%	2%
Urban	31%	35%	19%	15%
Female	20%	29%	21%	30%
Male	20%	30%	21%	29%
<b>Total</b>	<b>20%</b>	<b>30%</b>	<b>21%</b>	<b>29%</b>

## Annex 6. District Livelihood Coping Strategy Index

		Summary of asset depletion			
		No coping strategies	Stress coping strategies	Crisis coping strategies	Emergencies coping strategies
District	Bo	32%	13%	17%	38%
	Bombali	41%	16%	23%	20%
	Bonthe	40%	7%	24%	30%
	Falaba	35%	15%	32%	18%
	Kailahun	21%	31%	36%	13%
	Kambia	22%	15%	47%	15%
	Karene	40%	11%	19%	31%
	Kenema	30%	20%	30%	20%
	Koinadugu	38%	21%	27%	14%
	Kono	29%	19%	31%	20%
	Moyamba	12%	28%	26%	34%
	Port Loko	44%	13%	18%	25%
	Pujehun	22%	22%	33%	22%
	Tonkolili	27%	18%	37%	19%
	Western Area Rural	44%	19%	24%	13%
	Western Area Slum	33%	29%	34%	3%
	Western Area Urban	45%	17%	31%	7%
Area	Rural	31%	18%	28%	23%
	Urban	35%	20%	28%	17%
Sex	Female	33%	18%	28%	21%
	Male	31%	18%	29%	22%
	Total	31%	18%	29%	22%

## Annex 7. District Food Consumption Score

District	Food Consumption Groups		
	Poor	Borderline	Acceptable
Bo	27%	27%	46%
Bombali	34%	28%	38%
Bonthe	37%	36%	28%
Falaba	43%	27%	29%
Kailahun	17%	47%	36%
Kambia	15%	38%	47%
Karene	39%	31%	30%
Kenema	45%	28%	27%
Koinadugu	18%	39%	43%
Kono	10%	51%	39%
Moyamba	24%	37%	39%
Port Loko	29%	23%	48%
Pujehun	33%	35%	32%
Tonkolili	23%	39%	39%
Western Area Rural	8%	28%	64%
Western Area Slum	14%	36%	50%
Western Area Urban	8%	19%	74%
Rural	29%	35%	36%
Urban	18%	28%	54%
Female	28%	33%	39%
Male	26%	34%	39%
<b>Total</b>	<b>27%</b>	<b>34%</b>	<b>39%</b>



## Annex 8. District Malnutrition

District	Global malnutrition			Moderate malnutrition			Severe malnutrition			Oedema
	Boys	Girls	Overall	Boys	Girls	Overall	Boys	Girls	Overall	
Bo	5.3%	6.4%	5.9%	1.9%	2.6%	2.2%	3.4%	3.8%	3.6%	2.3%
Bombali	5.1%	5.9%	5.5%	1.6%	2.4%	2.0%	3.5%	3.5%	3.5%	1.8%
Bonthe	6.3%	6.4%	6.4%	3.1%	3.5%	3.3%	3.1%	2.9%	3.0%	1.3%
Falaba	9.2%	8.3%	8.8%	4.7%	3.5%	4.1%	4.5%	4.8%	4.7%	2.7%
Kailahun	6.1%	7.9%	7.0%	3.2%	4.1%	3.6%	2.9%	3.9%	3.4%	1.7%
Kambia	5.7%	5.1%	5.4%	2.7%	3.3%	3.0%	3.0%	1.8%	2.4%	0.3%
Karene	7.5%	7.6%	7.6%	3.0%	3.0%	3.0%	4.5%	4.6%	4.6%	1.8%
Kenema	6.5%	8.2%	7.4%	2.8%	3.2%	3.0%	3.8%	4.9%	4.4%	2.4%
Koinadugu	6.2%	5.8%	6.0%	3.1%	2.3%	2.7%	3.1%	3.5%	3.3%	1.5%
Kono	5.1%	5.9%	5.5%	2.5%	2.6%	2.6%	2.9%	2.5%	3.2%	1.5%
Moyamba	9.6%	11.0%	10.3%	3.6%	5.0%	4.3%	6.0%	6.1%	6.0%	4.2%
Port Loko	8.0%	7.5%	7.7%	4.1%	3.0%	3.6%	3.9%	4.5%	4.2%	1.6%
Pujehun	6.6%	6.5%	6.6%	2.9%	3.0%	2.9%	3.8%	3.5%	3.7%	2.1%
Tonkolili	6.5%	5.6%	6.0%	3.0%	3.1%	3.0%	3.4%	2.5%	2.9%	1.3%
Western Rural	5.2%	3.9%	4.5%	2.6%	1.3%	1.9%	2.6%	2.6%	2.6%	1.0%
Western Urban	5.2%	3.5%	4.3%	2.5%	1.7%	2.1%	2.7%	1.7%	2.2%	1.1%

## Annex 9. Wealth Index

District		Wealth group now					Wealth group before COVID-19 value				
		Lowest	Second	Middle	Fourth	Highest	Lowest	Second	Middle	Fourth	Highest
	Bo	48%	37%	9%	5%	2%	50%	36%	8%	5%	1%
	Bombali	41%	32%	12%	8%	6%	43%	33%	12%	7%	6%
	Bonthe	22%	36%	7%	15%	21%	26%	32%	7%	15%	20%
	Falaba	19%	38%	16%	16%	11%	18%	39%	14%	15%	14%
	Kailahun	44%	41%	7%	4%	4%	45%	40%	7%	3%	5%
	Kambia	16%	44%	18%	11%	11%	16%	45%	18%	11%	10%
	Karene	28%	48%	17%	5%	2%	28%	48%	19%	4%	1%
	Kenema	38%	47%	10%	4%	1%	40%	45%	9%	4%	2%
	Koinadugu	34%	36%	17%	9%	4%	35%	35%	17%	9%	4%
	Kono	34%	45%	13%	6%	2%	35%	45%	13%	5%	3%
	Moyamba	34%	43%	7%	9%	6%	33%	44%	8%	9%	6%
	Port Loko	31%	30%	15%	10%	14%	35%	30%	14%	10%	12%
	Pujehun	40%	34%	5%	10%	11%	41%	35%	5%	10%	10%
	Tonkolili	26%	43%	24%	6%	2%	27%	42%	24%	5%	1%
	Western Area Rural	48%	28%	10%	6%	7%	48%	29%	9%	7%	6%
	Western Area Slum	46%	29%	16%	6%	2%	48%	30%	15%	4%	2%
	Western Area Urban	17%	29%	33%	12%	8%	20%	29%	31%	12%	7%
Area	Rural	34%	40%	12%	8%	6%	35%	39%	12%	7%	6%
	Slum	46%	30%	16%	6%	3%	47%	30%	15%	4%	3%
	Urban	25%	36%	20%	12%	8%	27%	37%	19%	11%	6%
Sex	Female	41%	36%	12%	6%	5%	42%	36%	11%	6%	5%
	Male	31%	40%	14%	9%	7%	32%	39%	14%	8%	6%
	Total	33%	39%	13%	8%	6%	34%	39%	13%	8%	6%

## Annex 10. Drinking Water Source

District name	Drinking water source in the dry season										Drinking water source in the rainy season										
	Mineral water /Sachet	Other specify	Piped water (into dwelling, yard, or plot)	Protected dug well	Protected spring	Public tap	Rainwater stream, or pond	River, stream, or pond	Tubewell/ Borehole with pump	Unprotected well	Mineral water /Sachet	Other specify	Piped water (into dwelling, yard, or plot)	Protected dug well	Protected spring	Public tap	Rainwater stream, or pond	Tubewell/ Borehole with pump	Unprotected well		
Bo	%	%	1%	13%	%	18%	%	34%	29%	3%	%	%	1%	13%	%	22%	13%	24%	28%	1%	
Bombali	%	%	3%	34%	1%	15%	%	23%	20%	5%	%	%	1%	28%	1%	6%	26%	16%	19%	3%	
Borhio	%	%	1%	12%	2%	16%	1%	27%	30%	11%	%	%	1%	4%	2%	13%	41%	17%	15%	6%	
Faaba	%	%	1%	12%	1%	7%	%	42%	25%	12%	%	%	1%	10%	2%	6%	25%	28%	22%	6%	
Kailahun	%	%	1%	17%	1%	14%	%	34%	27%	5%	%	%	1%	16%	%	12%	13%	22%	32%	4%	
Kambia	%	1%	%	11%	1%	19%	1%	42%	18%	6%	%	%	%	5%	%	13%	46%	23%	11%	2%	
Karame	%	%	%	8%	%	5%	%	49%	23%	14%	%	%	%	8%	1%	4%	30%	26%	24%	7%	
Kerema	%	%	1%	16%	1%	16%	%	32%	28%	5%	%	%	1%	15%	1%	13%	10%	28%	27%	4%	
Konadugu	%	1%	2%	19%	2%	11%	%	49%	12%	5%	%	%	2%	19%	1%	8%	32%	28%	9%	1%	
Kono	%	%	2%	9%	4%	21%	%	48%	15%	2%	%	%	1%	9%	2%	21%	10%	41%	14%	1%	
Moyamba	%	%	1%	19%	3%	7%	%	50%	9%	11%	%	1%	1%	14%	3%	7%	25%	40%	6%	4%	
Port Loko	%	%	2%	29%	1%	15%	1%	32%	14%	6%	1%	%	3%	18%	1%	9%	39%	18%	8%	4%	
Pujehun	%	%	5%	6%	1%	24%	1%	32%	26%	6%	%	%	4%	2%	%	16%	44%	21%	9%	4%	
Tonkolili	%	%	2%	14%	2%	7%	%	53%	14%	7%	%	%	2%	8%	2%	4%	49%	23%	10%	2%	
Western Rural	6%	%	14%	33%	%	22%	%	10%	13%	1%	7%	%	13%	25%	%	18%	23%	7%	7%	1%	
Western Slum	1%	%	27%	18%	%	51%	%	%	1%	2%	%	%	28%	17%	%	32%	22%	%	1%	2%	
Western Urban	12%	%	19%	7%	%	47%	%	1%	9%	4%	13%	%	18%	5%	%	37%	19%	%	6%	1%	
Sex																					
Female	1%	%	5%	16%	1%	20%	%	28%	22%	6%	2%	%	4%	13%	1%	16%	26%	19%	17%	3%	
Male	1%	%	3%	15%	1%	15%	%	38%	20%	7%	1%	%	2%	12%	1%	12%	28%	25%	16%	3%	
Area																					
Rural	%	%	2%	12%	1%	14%	%	42%	21%	7%	%	%	1%	10%	1%	12%	27%	28%	17%	3%	
Slum	1%	%	26%	17%	%	53%	%	%	1%	2%	%	%	25%	16%	%	35%	21%	%	1%	2%	
Urban	4%	%	7%	35%	1%	22%	%	8%	16%	5%	4%	%	7%	25%	1%	17%	26%	4%	12%	2%	
Total	1%	%	3%	16%	1%	16%	%	36%	20%	7%	1%	%	3%	12%	1%	13%	27%	24%	16%	3%	

## Annex 11. Water Source

District	Mineral/Sachet	Piped water (into dwelling, yard, or plot)	Protected dug well	Protected spring	Public tap	Rainwater	River, stream, or pond	Tube well/Borehole with pump	Unprotected well
Bo	0%	1%	13%	0%	18%	0%	34%	29%	3%
Bombali	0%	3%	34%	1%	15%	0%	23%	20%	5%
Bonthe	0%	1%	12%	2%	16%	1%	27%	30%	11%
Falaba	0%	1%	12%	1%	7%	0%	43%	25%	12%
Kailahun	0%	1%	17%	1%	14%	0%	34%	28%	5%
Kambia	0%	0%	12%	1%	19%	1%	42%	19%	6%
Karene	0%	0%	8%	0%	5%	0%	49%	23%	14%
Kenema	0%	1%	16%	1%	16%	0%	32%	29%	5%
Koinadugu	0%	2%	19%	2%	11%	0%	49%	12%	5%
Kono	0%	2%	9%	4%	21%	0%	48%	15%	2%
Moyamba	0%	1%	19%	3%	7%	0%	50%	9%	11%
Port Loko	0%	2%	30%	1%	15%	1%	32%	14%	6%
Pujehun	0%	5%	6%	1%	24%	1%	32%	26%	6%
Tonkolili	0%	2%	14%	2%	7%	0%	53%	14%	7%
Western Area Rural	6%	14%	33%	0%	22%	0%	10%	13%	1%
Western Area Slum	1%	27%	18%	0%	51%	0%	0%	1%	2%
Western Area Urban	12%	20%	7%	0%	47%	0%	1%	9%	4%
Rural	0%	2%	12%	1%	14%	0%	42%	21%	7%
Slum	1%	26%	17%	0%	53%	0%	0%	1%	2%
Urban	4%	7%	35%	1%	22%	0%	8%	18%	5%
<b>Total</b>	<b>1%</b>	<b>3%</b>	<b>16%</b>	<b>1%</b>	<b>16%</b>	<b>0%</b>	<b>36%</b>	<b>20%</b>	<b>7%</b>

## Annex 12. Sanitation Facilities

District	Flush latrine	Improved (VIP) pit latrine (with slab)	Communal Latrine	(Partly) open pit (no roof or no wall)	None (bush, pond, river, stream)	Traditional pit latrine (no water)
Bo	5%	9%	3%	3%	37%	43%
Bombali	3%	11%	0%	11%	3%	70%
Bonthe	2%	12%	1%	6%	43%	36%
Falaba	5%	4%	5%	26%	2%	59%
Kailahun	1%	4%	6%	11%	24%	49%
Kambia	1%	5%	3%	22%	3%	65%
Karene	1%	6%	1%	14%	5%	74%
Kenema	1%	8%	2%	22%	15%	49%
Koinadugu	2%	8%	1%	12%	5%	73%
Kono	2%	8%	1%	19%	9%	61%
Moyamba	1%	8%	2%	7%	37%	44%
Port Loko	7%	11%	4%	12%	4%	60%
Pujehun	2%	10%	3%	9%	34%	39%
Tonkolili	2%	5%	2%	16%	6%	70%
Western Area Rural	22%	34%	1%	5%	2%	35%
Western Area Slum	21%	15%	38%	6%	4%	13%
Western Area Urban	31%	50%	6%	1%	0%	12%
Rural	2%	6%	2%	14%	18%	56%
Urban	15%	31%	3%	7%	2%	41%
<b>Total</b>	<b>4%</b>	<b>10%</b>	<b>3%</b>	<b>13%</b>	<b>16%</b>	<b>53%</b>



## Annex 13. Tools used in farming

	District	Hand Tools	Animal traction	Hand Tractor/Power tiller	4 Wheel tractor
District name	Bo	99.8%	.2%	.5%	.1%
	Bombali	99.3%	2.9%	.8%	0.0%
	Bonthe	99.7%	.5%	.3%	.2%
	Falaba	99.9%	3.8%	2.1%	.9%
	Kailahun	99.9%	0.0%	.3%	.1%
	Kambia	99.8%	1.1%	.7%	.3%
	Karene	99.7%	.4%	.3%	.4%
	Kenema	99.8%	.4%	.5%	.1%
	Koinadugu	99.7%	1.4%	.5%	.3%
	Kono	99.9%	.1%	.4%	.1%
	Moyamba	99.7%	.4%	.6%	.2%
	Port Loko	98.8%	4.5%	7.0%	.6%
	Pujehun	99.8%	.2%	1.1%	.5%
	Tonkolili	98.6%	.8%	1.8%	.1%
	Western Area Rural	97.4%	0.0%	2.6%	5.1%
Sex	Female	99.5%	1.0%	1.0%	.4%
	Male	99.6%	1.1%	1.2%	.2%
Area	Rural	99.6%	1.1%	1.2%	.3%
	Urban	98.9%	.8%	.9%	.5%
	<b>Total</b>	<b>99.6%</b>	<b>1.1%</b>	<b>1.2%</b>	<b>.3%</b>

## Annex 14. Storage facilities

	District	Indoors- In basket/bags	Indoors- Open storage	In outside storage hut inboxes	Communal storage	Lockable house/Mini-store	Stack storage	Seed Bank	Other Specify
District name	Bo	64%	51%	17%	3%	6%	2%	0%	2%
	Bombali	73%	26%	1%	9%	8%	7%	0%	1%
	Bonthe	54%	45%	2%	1%	14%	4%	2%	6%
	Falaba	73%	24%	11%	5%	12%	4%	4%	2%
	Kailahun	67%	36%	2%	5%	19%	10%	8%	4%
	Kambia	67%	12%	4%	2%	32%	2%	2%	5%
	Karene	82%	31%	30%	5%	13%	1%	1%	3%
	Kenema	66%	37%	15%	3%	13%	8%	3%	3%
	Koinadugu	65%	26%	4%	3%	6%	6%	0%	2%
	Kono	75%	11%	4%	3%	13%	6%	6%	4%
	Moyamba	63%	36%	11%	1%	19%	4%	1%	3%
	Port Loko	64%	17%	13%	3%	31%	5%	2%	5%
	Pujehun	72%	40%	14%	4%	17%	7%	1%	4%
	Tonkolili	64%	22%	17%	2%	25%	9%	0%	1%
	Western Area Rural	64%	13%	3%	5%	8%	3%	3%	13%
Sex	Female	65%	29%	11%	3%	17%	5%	3%	4%
	Male	69%	30%	12%	4%	16%	6%	2%	3%
Area	Rural	69%	30%	12%	4%	16%	6%	2%	3%
	Urban	53%	29%	10%	4%	25%	4%	4%	4%
	<b>Total</b>	<b>68%</b>	<b>30%</b>	<b>12%</b>	<b>4%</b>	<b>16%</b>	<b>6%</b>	<b>2%</b>	<b>3%</b>

## Annex 15. Mode of transportation

District	Mode of transportation in Sierra Leone								By Boat, canoe, ferry	By other
	By foot	okada	By bicycle	By private motorbike	By private car	By commercial vehicle-poda	By taxi or bus			
Bo	83%	98%	1%	3%	3%	10%	1%	2%	1%	
Bombali	74%	99%	2%	12%	1%	10%	1%	0%	0%	
Bonthe	87%	54%	0%	1%	0%	10%	0%	49%	0%	
Falaba	82%	97%	0%	8%	2%	10%	2%	0%	0%	
Kailahun	87%	97%	1%	1%	2%	10%	1%	0%	1%	
Kambia	65%	95%	2%	20%	1%	9%	4%	5%	0%	
Karene	71%	97%	1%	11%	0%	20%	0%	1%	0%	
Kenema	88%	92%	1%	2%	6%	4%	0%	5%	3%	
Koinadugu	86%	97%	2%	0%	1%	14%	0%	0%	1%	
Kono	86%	96%	0%	3%	0%	11%	1%	0%	3%	
Moyamba	57%	94%	1%	5%	2%	24%	2%	15%	1%	
Port Loko	69%	97%	1%	6%	1%	13%	9%	5%	0%	
Pujehun	85%	78%	10%	6%	3%	7%	1%	11%	0%	
Tonkolili	87%	97%	0%	1%	0%	9%	2%	3%	1%	
Western Area Rur	48%	100%	0%	0%	4%	30%	17%	0%	0%	
Western Area Urb	72%	66%	3%	17%	17%	21%	3%	0%	0%	
Rural	81%	93%	1%	5%	1%	10%	2%	6%	1%	
Urban	62%	85%	3%	10%	7%	23%	3%	8%	0%	
Total	79%	93%	1%	5%	2%	11%	2%	6%	1%	

## Annex 16. Livelihoods

District	Production and sale of food crops	Handicrafts /Artisan (tailoring, weaving, carving, pottery, painter, etc)	Palm oil extraction	Wood cutting/coa l burning	Petty trading- street vendor, no permanent shop	Trading, Seller, Commercial activity (permanent shops or place of trading)	Remittances/ Migrating labour	Salaries, Wages (employees, longer-term)	Mining of sand and stone	Aid (Government, local NGO, international NGO)	Gift (family, friends)	Production and sale of cash crops	Hunting and selling bush meat, or cutting grass	Gathering and selling of wild food (bushyams, plums, baobabs, etc)	Extraction of palm wine (poyo)
Bo	29.4%	1.6%	4.0%	2.1%	5.6%	7.1%	0.0%	3.9%	.6%	.1%	1.8%	17.3%	.2%	.2%	.1%
Bombali	42.8%	2.0%	.5%	2.4%	6.5%	4.7%	.7%	2.8%	.4%	.9%	1.2%	9.5%	.3%	.2%	.5%
Bonthe	21.7%	3.4%	5.3%	1.1%	9.6%	5.1%	.8%	6.3%	.3%	.3%	.3%	11.9%	.2%	.2%	.1%
Falaba	50.2%	.4%	.3%	2.2%	3.0%	4.5%	.3%	2.4%	0.0%	0.0%	2.2%	7.1%	.2%	.2%	.1%
Kailahun	21.4%	1.6%	6.6%	.5%	10.0%	4.4%	.1%	2.0%	0.0%	.1%	1.3%	26.2%	.7%	0.0%	.4%
Kambia	41.0%	2.7%	2.5%	1.7%	6.5%	10.6%	0.0%	3.5%	0.0%	.3%	1.1%	6.6%	.1%	.3%	0.0%
Karene	53.1%	.1%	3.1%	3.3%	5.4%	1.8%	.6%	.8%	0.0%	0.0%	.1%	7.2%	0.0%	.1%	0.0%
Kenema	41.8%	1.2%	4.9%	2.5%	6.0%	4.7%	.2%	1.9%	.2%	.4%	1.2%	12.6%	.2%	.0%	.2%
Koinadugu	49.7%	1.0%	1.3%	.6%	3.8%	9.3%	.1%	2.8%	.1%	.4%	.4%	10.3%	0.0%	.6%	.3%
Kono	28.1%	1.4%	.5%	2.4%	5.6%	6.6%	0.0%	3.1%	.5%	.1%	.6%	23.2%	0.0%	.0%	.1%
Moyamba	42.3%	.5%	2.6%	3.9%	4.5%	6.7%	1.6%	4.7%	.1%	.0%	2.0%	10.8%	.2%	.4%	.0%
Port Loko	42.0%	1.5%	1.6%	3.5%	8.2%	7.8%	.7%	4.3%	.7%	.2%	.5%	7.1%	.1%	.1%	.1%
Pujehun	47.5%	1.0%	.7%	2.0%	3.7%	5.1%	0.0%	5.3%	.5%	.2%	.6%	8.6%	1.6%	.7%	.3%
Tonkolili	45.4%	1.1%	9.1%	2.4%	4.8%	4.3%	.4%	2.7%	.9%	.1%	1.7%	3.8%	.3%	.3%	.3%
Western Area Rural	4.8%	4.9%	0.0%	1.8%	17.7%	17.5%	.7%	13.6%	4.6%	.3%	1.8%	1.6%	0.0%	0.0%	0.0%
Western Area Slum	4.0%	1.6%	0.0%	.3%	25.9%	18.2%	0.0%	22.3%	1.1%	0.0%	0.0%	.5%	0.0%	0.0%	0.0%
Western Area Urban	.2%	5.3%	.1%	.3%	25.4%	23.2%	.2%	20.4%	.4%	.7%	4.6%	.1%	0.0%	.1%	0.0%
Rural	40.9%	1.4%	3.6%	2.3%	5.3%	4.7%	.7%	2.6%	.4%	.1%	1.1%	12.4%	.3%	.2%	.2%
Slum	3.9%	1.5%	0.0%	.4%	27.5%	17.6%	.3%	22.1%	1.2%	0.0%	0.0%	.4%	0.0%	0.0%	0.0%
Urban	15.1%	2.8%	.6%	1.2%	16.2%	18.6%	.4%	13.6%	.7%	.9%	2.1%	3.8%	.1%	.3%	.1%
Total	36.6%	1.6%	3.1%	2.1%	7.3%	6.9%	.4%	4.5%	.4%	.2%	1.2%	11.0%	.3%	.2%	.2%

District	Palm wine selling	Production and sale of vegetables and/or fruits	Begging	Cart puller/push cart	Others (specify next to the box)	Livestock rearing and/or selling	Salt extraction	Fishing	Mining of minerals (gold, diamond, iron, bauxite)	Unskilled wage labour agriculture	Unskilled wage labour non-agriculture	Skilled wage labour (including taxi, boda boda, okada driver/bike riding)
Bo	.8%	1.4%	.5%	0.0%	5.1%	.6%	.1%	.3%	8.5%	3.0%	1.1%	4.7%
Bombali	1.0%	1.1%	.2%	0.0%	5.3%	2.1%	.1%	.1%	.5%	5.7%	3.2%	5.6%
Bonthe	.2%	.2%	.1%	0.0%	1.4%	.3%	0.0%	22.9%	0.0%	1.5%	1.6%	5.2%
Falaba	.1%	.9%	.2%	0.0%	2.5%	9.4%	0.0%	.4%	.7%	4.5%	3.3%	5.3%
Kailahun	.4%	.9%	.0%	.0%	5.0%	.6%	0.0%	.7%	1.1%	8.8%	2.8%	4.3%
Kambia	.3%	.1%	0.0%	0.0%	2.6%	2.3%	.3%	2.0%	0.0%	7.8%	1.3%	6.7%
Karene	.1%	.8%	0.0%	0.0%	7.6%	10.2%	.0%	.8%	.1%	1.7%	1.9%	.7%
Kenema	.5%	.7%	.1%	0.0%	2.5%	3.5%	0.0%	.4%	4.5%	4.4%	1.2%	4.0%
Koinadugu	.9%	1.8%	.3%	0.0%	3.3%	4.0%	0.0%	.1%	3.1%	.8%	1.4%	3.8%
Kono	.5%	1.8%	.0%	0.0%	1.2%	6.7%	0.0%	.1%	10.4%	1.5%	1.4%	4.0%
Moyamba	.4%	1.6%	.1%	0.0%	2.7%	.9%	.6%	4.7%	.0%	1.9%	2.5%	4.0%
Port Loko	.2%	4.0%	.2%	.1%	1.8%	2.5%	.1%	3.4%	.1%	3.4%	2.3%	4.0%
Pujehun	.3%	.7%	.1%	0.0%	1.0%	.7%	.0%	8.5%	.5%	3.9%	2.3%	4.3%
Tonkolili	.6%	1.5%	0.0%	.3%	1.5%	1.5%	.2%	1.0%	9.7%	2.2%	1.8%	2.1%
Western Area Rural	1.0%	1.0%	.3%	.2%	3.1%	0.0%	0.0%	2.1%	0.0%	1.0%	9.5%	12.5%
Western Area Slum	0.0%	.5%	0.0%	1.1%	4.2%	.3%	.6%	4.7%	0.0%	.3%	4.5%	10.0%
Western Area Urban	0.0%	.1%	.7%	0.0%	3.0%	.2%	1.0%	.7%	.1%	.4%	4.9%	8.0%
Rural	.5%	1.2%	.1%	.0%	3.0%	3.2%	.0%	3.3%	3.3%	3.6%	2.0%	3.9%
Slum	0.0%	.4%	0.0%	1.0%	4.0%	.3%	.6%	4.5%	0.0%	.3%	4.3%	9.9%
Urban	.2%	1.2%	.2%	.0%	3.2%	1.6%	.6%	1.0%	1.6%	2.6%	3.7%	7.6%
Total	.4%	1.2%	.2%	.1%	3.1%	2.9%	.1%	3.0%	3.0%	3.4%	2.3%	4.5%



## Annex 17. Type of livestock holding, by district, in farming areas

District	Cattle/oxen	Goats	Sheep	Pig	Chicken/ducks
Bo	4%	32%	13%	0%	75%
Bombali	4%	70%	30%	1%	44%
Bonthe	2%	51%	19%	0%	62%
Falaba	23%	80%	60%	0%	64%
Kailahun	2%	37%	10%	1%	80%
Kambia	4%	76%	65%	0%	30%
Karene	7%	74%	49%	1%	63%
Kenema	1%	52%	37%	1%	57%
Koinadugu	13%	70%	41%	0%	51%
Kono	5%	73%	40%	2%	53%
Moyamba	2%	53%	18%	3%	78%
Port Loko	7%	67%	43%	0%	68%
Pujehun	10%	63%	41%	0%	57%
Tonkolili	2%	58%	32%	0%	59%
Western Area Rural	7%	29%	7%	0%	86%
Female	4%	49%	29%	0%	71%
Male	8%	66%	40%	1%	60%
Rural	7%	64%	38%	1%	62%
<b>Total</b>	<b>7%</b>	<b>63%</b>	<b>38%</b>	<b>1%</b>	<b>62%</b>

## Annex 18. CFSVA Field team

### 2020 CFSVA Field Team

No	Names	Role
1	Sahib Haq	International Consultant
2	Ballah Musa Kandeh	National Coordinator/ VAM officer
3	Allison Dumbuya	Coordinator
4	Aminata Shamit Koroma	Coordinator
5	Keprifri Lakoh	Coordinator
6	Momodou M. Kamara	Coordinator
7	Mohamed Ajuba Sheriff	Coordinator
8	Silleh Bah	Sampling Support
9	Edward Y. Kargbo	Monitor
10	Umaru M. Sankoh	Monitor
11	Sulaiman Lansana	Monitor
12	Ibrahim Sie	Monitor
13	Foday Marrah	Monitor
14	Bonnie Fofanah	Monitor
15	Khalil Mansaray	Monitor
16	Alie Kanu	Monitor
17	Simeon B. Mansaray	Monitor
18	Abubakarr Sowe	Monitor
19	James P. Moriba	Monitor
20	Margaret Bangura	Monitor
21	BaiBai Sesay	Monitor
22	Alimami Mac-Kargbo	Monitor
23	Sahr Joseph Kaifneh	Monitor
24	Mustapha Nyallay	Monitor
25	Andrew A. Samura	Supervisor
26	Duramany A Kamara	Supervisor
27	Sinneh Kamara	Supervisor
28	Timothy Barlay	Supervisor
29	Allieu Bah	Supervisor
30	Abdul Rahim Mansaray	Supervisor
31	Yusuf Kamara	Supervisor
32	Mohamed F. Kargbo	Supervisor
33	Belinda Rugiatu Nadema	Supervisor
34	Idrissa M. Kamara	Supervisor
35	Tennehma Rogers	Supervisor
36	Kabba Kandeh	Supervisor
37	Fatmata Lamrana Bangura	Supervisor
38	Bernard Abass Kargbo	Supervisor
39	Sia Betty Pessima	Supervisor
40	Moses Kamara	Supervisor
41	Melvina Ekundayo Luke	Supervisor
42	Abdul Aziz Kamara	Supervisor
43	Momodou Yillah	Supervisor
44	Mohamed Bah	Supervisor
45	Gbassay Kamara	Supervisor
46	Karefalla Samura	Supervisor
47	Anthony Kanu	Supervisor
48	Isata Aminata Kamara	Supervisor
49	Augustine Peter Johnny	Supervisor
50	Samuel Sahr Saffa	Supervisor
51	Mabinty Kamara	Supervisor
52	Ibrahim Alaffia Sesay	Supervisor
53	Joseph D. Kamara	Supervisor
54	Amos Diggay Kamara	Supervisor
55	Ahmed Muctar Lewally	Supervisor
56	Andrew M Kargbo	Supervisor
57	Theresa Ellie	Supervisor
58	Byron Sumah	Supervisor
59	Mamadou Lamrana Jalloh	Supervisor
60	Sahr K. Davowa	Supervisor
61	Joseph Samuel	Supervisor
62	Hawa Makavorie	Supervisor
63	Hindolo A Momoh	Supervisor
64	Mohamed B. Moigua	Supervisor
65	Mohamed Conteh	Supervisor
66	Kabba Ndambel	Supervisor
67	Senessie Daniel	Supervisor
68	Oluwole Coker	Supervisor
69	Sulaiman A. Tholley	Supervisor
70	Saudatu Gagigor	Supervisor
71	Amadu Wurrie Bah	Supervisor
72	Alhaji A. Koroma	Supervisor
73	Zainab Mabinty Koroma	Supervisor
74	Caroline Spaine	Supervisor
75	John Sankoh	Supervisor
76	Alie Abdulai Fofanah	Supervisor
77	Amidu Kargbo	Supervisor
78	Sulaiman Sankoh	Supervisor
79	Tira S. Kargbo	Supervisor
80	Julius P. Kargbo	Supervisor
81	Alhaji Hassan Sasey	Supervisor
82	Momoh Kamara	Supervisor
83	Mohamed Wurrie Barrie	Supervisor
84	Abdul Karim Conteh	Supervisor
85	Ibrahim Turay	Supervisor
86	Alpha Umar Bah	Supervisor
87	Foday Marrah	Supervisor
88	Alfred Yokie	Supervisor
89	Ibrahim Bash-Kay Sheriff	Supervisor
90	Kemoh Bockarie	Supervisor
91	Sarian Aruna	Supervisor
92	Allieu Fullah	Supervisor
93	Samuel Mattia	Supervisor
94	Ann Marie George	Supervisor
95	Sheku Jalloh	Supervisor
96	Mohamed Francis Minah	Supervisor
97	Mary Mattia	Supervisor
98	John M. Koroma	Supervisor
99	Fannah Mansaray	Supervisor
100	Edrissa M. Kabba	Supervisor
101	Julius Kargbo	Supervisor
102	Maureen Luseni	Supervisor
103	Wilson Sellu	Supervisor
104	Lansana Kai Banyan	Supervisor
105	Amara Nelwa	Supervisor
106	Alhaji Nallo	Supervisor
107	Tamba T. Karimu	Supervisor
108	Alie Y Kamara	Supervisor
109	Gassimu Kargbo	Supervisor
110	Kadijatu Turay	Supervisor
111	Lydia Jennifer Hawa Kamara	Supervisor
112	Sorie Fornah	Supervisor
113	Sorie Kandeh	Supervisor
114	Augustine Conteh	Supervisor
115	Rosaline B Abdallah	Supervisor
116	Maada M Koroma	Supervisor
117	David D. Kamara	Supervisor
118	Juliana Lahai	Supervisor
119	Adama S. Kamara	Supervisor
120	Mary Edward Kamara	Supervisor
121	Hawanatu Kamara	Supervisor
122	Alhaji Kamara	Supervisor
123	Alfred Kargbo	Supervisor
124	Fatima Turay	Supervisor
125	Foday Abubakarr Suma	Supervisor
126	Betty Simbo	Supervisor
127	Brima Kamara	Supervisor
128	John A. S Turay	Supervisor
129	Alimamy Smart Kanu	Supervisor
130	Abdulrahman Kargbo	Supervisor
131	Momoh Sallieu Bangura	Supervisor
132	Francis H. Kargbo	Supervisor
133	Abdul Gassama	Supervisor
134	Zainab Fofanah	Supervisor
135	M'balu Turay	Supervisor
136	Alimamy Sesay	Supervisor
137	Issa Conteh	Supervisor
138	Ismail Kamara	Supervisor
139	Umu Umaro Koroma	Supervisor
140	Haja Kadija Jakitay	Supervisor
141	Sinkarie Koroma	Supervisor
142	Hannah Neville	Supervisor
143	Umaru M. Sankoh	Supervisor
144	John B Turay	Supervisor
145	Bernard Y Kamara	Supervisor
146	Martha Marco	Supervisor
147	Isaac Yilla	Supervisor
148	Fatmata Lansana	Supervisor
149	Matilda Adebisi Nicol	Supervisor
150	James Kamara	Supervisor
151	Isatu Kamara	Supervisor
152	Abibatu Saccob Kallon	Supervisor
153	Emanuel Johnson	Supervisor
154	Mariamata Kargbo	Supervisor
155	Kadiatu Kanu	Supervisor
156	Paul D. Frank	Supervisor
157	Abraham M B Konteh	Supervisor
158	Brima Lansana	Supervisor
159	Micheal Sannoh	Supervisor
160	Binty Phebean Fofana	Supervisor
161	Zainab Lahai	Supervisor
162	Anthony Baali Fatorma	Supervisor
163	Gerald King	Supervisor
164	Zainab Tabu Bah	Supervisor
165	Moses Morlai Sesay	Supervisor
166	Hassanatu Jalloh	Supervisor
167	Zainab Madonna Sow	Supervisor
168	Naomi D. Sesay	Supervisor
169	Ibrahim Sama Brewah	Supervisor
170	Mary Gbangbanah	Supervisor
171	Denis Browne	Supervisor
172	Abu Bakarr Kabia	Supervisor
173	Zainab Serry Kamara	Supervisor
174	Prince Tucker	Supervisor
175	Rhye P. Sankaituah	Supervisor
176	Sewa Kanu	Supervisor
177	Zainab Jannah	Supervisor
178	Fanda Kalie Sesay	Supervisor
179	Juliana Conteh	Supervisor
180	Haja Mariama Sawaneh	Supervisor
181	Isata Kandeh	Supervisor
182	Sarah Satta Jone	Supervisor
183	Smart Brewah	Supervisor
184	Jeneba Kamara	Supervisor
185	Ishaika Adamu	Supervisor
186	Memunatu sankoh	Supervisor
187	Maybel K. Vandii	Supervisor
188	Isha Kargbo	Supervisor
189	Kadija Bah	Supervisor
190	Janet Saffiatu Kamara	Supervisor
191	Peter Sesay	Supervisor
192	Paul Simeon Sesay	Supervisor
193	Phebean Mariama Fofana	Supervisor
194	Michris Tommy	Supervisor
195	Mariatu Favour A. Kamara	Supervisor
196	Alpha Moses Marrah	Supervisor
197	Musu Kpana	Supervisor
198	Mohamed Osman Bangura	Supervisor
199	Kaday Beatrice Timbo	Supervisor
200	David Praise Boima	Supervisor
201	Abdul B. Serry	Supervisor
202	Muriel Gray	Supervisor
203	Gloria Adjivon	Supervisor
204	Umu Mansaray	Supervisor
205	Solomon Moiforay	Supervisor
206	Lansana Kebbie	Supervisor
207	Amadu Yapo Sesay	Supervisor
208	Elizabeth J. Kargbo	Supervisor
209	Abdul K. Kamara	Supervisor
210	Messie Mohamed	Supervisor
211	Alpha Dawo	Supervisor
212	Alfred Mohamed Kanu	Supervisor
213	Amadu Gborie	Supervisor
214	Unis Mohamed Amara Kamara	Supervisor
215	Mahawa Conteh	Supervisor
216	Joseph Kalie Koroma	Supervisor
217	Mohamed Kanu	Supervisor
218	Gibrilla Caulker	Supervisor
219	Hassan Kanu	Supervisor
220	Sheka Fofanah	Supervisor
221	Timmy K Ngegba	Supervisor
222	Idris Mansaray	Supervisor
223	Samuel Alie Konteh	Supervisor
224	James Ngebeh	Supervisor
225	Cecilia Sesay	Supervisor
226	Michael Kelly	Supervisor
227	Esther Fatmata Dawondeh	Supervisor
228	Olabisi Williams	Supervisor
229	Mamoud Saccob	Supervisor
230	Momodou Juldeh Bah	Supervisor
231	Abdul Rahman Kamara	Supervisor
232	Andrew Bob Johnny	Supervisor
233	Alusine Kamara	Supervisor
234	Nanah Daniella Samura	Supervisor
235	Moigua Rogers	Supervisor
236	Alex Sorsoh Koroma	Supervisor
237	Mariatu Kargbo	Supervisor
238	Kadiatu B. Koroma	Supervisor
239	Yusuf Kamara	Supervisor
240	Isata Jabbie	Supervisor
241	Bintu Jannah	Supervisor
242	Aiah Philip Pessima	Supervisor
243	Susan Gblossowa	Supervisor
244	Mohamed Brima	Supervisor
245	Timothy Mafinda	Supervisor
246	Sarah Saffa	Supervisor
247	Emanuel Aiah Gborie	Supervisor
248	Michael K. Ngaujah	Supervisor
249	Francis Osino Brown	Supervisor
250	Jonathan Aiah Kaifneh	Supervisor
251	Samuel Tamba Emmanuel Ngaujah	Supervisor
252	Magnus Conteh	Supervisor
253	Marian Sankoh	Supervisor
254	Sahr P Jabba	Supervisor
255	Noah Jalloh	Supervisor
256	Alusine Dumbuya	Supervisor
257	Abu Bangura	Supervisor
258	Akintola Pratt	Supervisor
259	Juliana Aminata Koroma	Supervisor
260	Sheik Umarr Bangura	Supervisor
261	Mohamed M T Sesay	Supervisor
262	Ramatu Bangura	Supervisor
263	Moses O. Bangura	Supervisor
264	Khadib Jalloh	Supervisor
265	Abdulai Kabba	Supervisor
266	Isha Kanu	Supervisor
267	Mohamed S. Mansaray	Supervisor
268	Alhassan Suma	Supervisor
269	Abdul Karim Kargbo	Supervisor
270	Chernor Alusine Kamara	Supervisor
271	Kadiatu M. Conteh	Supervisor
272	Alie Bangura	Supervisor
273	Mohamed Tarawallie	Supervisor
274	Mohamed B Bonah	Supervisor

CFSVA Field team continues

275	Ignicious Lukullay	Enumerator	347	Ferenkeh Turay	Enumerator	419	Ben K Sesay	Enumerator
276	Steven J. Lahai	Enumerator	348	Adama Bangura	Enumerator	420	Umaru Demba Kargbo	Enumerator
277	Dominic Caulker	Enumerator	349	Dauda D. Kamara	Enumerator	421	Lahai Konneh	Enumerator
278	Sallieu Kargbo	Enumerator	350	Joseph Sesay	Enumerator	422	Ethna Mattia	Enumerator
279	Sebatu Beah	Enumerator	351	Andrew Sankoh	Enumerator	423	Samuel A. Torkpoh	Enumerator
280	Jacob Darbre	Enumerator	352	Sheku Vandi	Enumerator	424	Sulaiman K. Gassama	Enumerator
281	Aminata Conteh	Enumerator	353	Umaru Deen Sesay	Enumerator	425	Joyalyn S. Lamin	Enumerator
282	Abdul Bangura	Enumerator	354	Ibrahim Tarawallie	Enumerator	426	Marthus Alie	Enumerator
283	Sia Annie Missah	Enumerator	355	Momoh T. Kamara	Enumerator	427	Banda Bangura	Enumerator
284	Mustapha K Nuwoma	Enumerator	356	Alhajie Foday Kamara	Enumerator	428	Alpha U. Barrie	Enumerator
285	Edwin Francis Alpha	Enumerator	357	Abu Sesay	Enumerator	429	Musa Bakarr	Enumerator
286	Amanda Robert	Enumerator	358	Sia Elizabeth Quee	Enumerator	430	Nusratu Coker	Enumerator
287	Solomon Lebbie	Enumerator	359	David B Conteh	Enumerator	431	Alhaji Fomba	Enumerator
288	Sheku Sheriff	Enumerator	360	Ibrihim Trawallie	Enumerator	432	Mabel B. Kalilu	Enumerator
289	Willie Konneh	Enumerator	361	Thomas D Morsay	Enumerator	433	Noah Hassan	Enumerator
290	Musu Kamanda	Enumerator	362	Abdul Serry Kamal	Enumerator	434	Sahr Solomon Ansumana	Enumerator
291	Isatu S. Jalloh	Enumerator	363	Kadiatu Y. Fofanah	Enumerator	435	Fatmata Kallon	Enumerator
292	Alusine Bakarr Koroma	Enumerator	364	Sigismund O'Brien Titus Fwery	Enumerator	436	Daniella Daphne Forster	Enumerator
293	Memuna Jalloh	Enumerator	365	Augustine F. Dumbuya	Enumerator	437	Doris Tamu	Enumerator
294	Etta F. Charles	Enumerator	366	Kadiatu Kanu	Enumerator	438	Thomas Amidu Kanu	Enumerator
295	Abraham Mansaray	Enumerator	367	Victoria Kargbo	Enumerator	439	Mustapha Koroma	Enumerator
296	Abdul Aziz Sesay	Enumerator	368	Samba Kamara	Enumerator	440	Sheik Mamud Caulker	Enumerator
297	Yusufu Ghandi	Enumerator	369	Mohamed Amara Kamara	Enumerator	441	Evette Sellu	Enumerator
298	Mohamed M. Momoh	Enumerator	370	Umaru Amara	Enumerator	442	Monica Safula Moigua	Enumerator
299	Sylvester Kallon	Enumerator	371	Ansumana Tarawalie	Enumerator	443	Aminata Nyallay	Enumerator
300	Kadie Fofanah	Enumerator	372	Fatu Tarawalie	Enumerator	444	Janet Dugba	Enumerator
301	Margaret P. Sapha	Enumerator	373	Martha Tarawalie	Enumerator	445	Nancy Wuyango	Enumerator
302	Mohamed Kandeh Sama	Enumerator	374	Amos Fanna Kamara	Enumerator	446	Francis Jaward	Enumerator
303	Kumba Solokoh	Enumerator	375	Hawa Mohamed Kandeh	Enumerator	447	Francis B Ngaujia	Enumerator
304	Samuel Samai	Enumerator	376	Ibrahim Jalloh	Enumerator	448	Yankuba Keletigie Janneh	Enumerator
305	Teresa Nyanday Kamara	Enumerator	377	Morrison Kuyateh	Enumerator	449	Matthew M Kenneh	Enumerator
306	Kadiatu Conteh	Enumerator	378	Sulaiman Koroma	Enumerator	450	Osman A Kanu	Enumerator
307	Ronald Gooding	Enumerator	379	Abu Jeremiah Sahr	Enumerator	451	Ibrahim Mohamed Fonnine	Enumerator
308	Madieu Jalloh	Enumerator	380	Gibril Santigie Sesay	Enumerator	452	Kenneth Swaray	Enumerator
309	Joseph Gegbe	Enumerator	381	Sheku Alhaji Kamara	Enumerator	453	Patrick Turay	Enumerator
310	Alphan Sippo Kebbie	Enumerator	382	Aminata Wurie	Enumerator	454	Mania Theresa Lahai	Enumerator
311	Frank B. Koroma	Enumerator	383	Gibril Kamara	Enumerator	455	Kadija Keila	Enumerator
312	Foday Kanu	Enumerator	384	Mohamed Turay	Enumerator	456	Harriet G. Conteh	Enumerator
313	Aminata M. Kamara	Enumerator	385	Alusine Ibrahim Koroma	Enumerator	457	Mohamed S Sannoh	Enumerator
314	Memunatu Baidina	Enumerator	386	Mustapha Momoh Koroma	Enumerator	458	Vandy F. Kabba	Enumerator
315	Hassan Turay	Enumerator	387	Catherine Saffa	Enumerator	459	Kadijatu A. Koroma	Enumerator
316	Saidu Bangura	Enumerator	388	Foday Mamoud Kamara	Enumerator	460	Mohamed K. Kamara	Enumerator
317	Mohamed Lansana	Enumerator	389	Martha Adima Jengo	Enumerator	461	Yusuf Adamu	Enumerator
318	Foday B. Turay	Enumerator	390	Tamba Ngeba	Enumerator	462	Mohamed D Morray	Enumerator
319	Kandeh Kargbo	Enumerator	391	Junisa Kamara	Enumerator	463	Mohamed S. Kamara	Enumerator
320	Mohamed Conteh	Enumerator	392	Fatmata Yokie	Enumerator	464	Idrissa Kamara	Enumerator
321	Albert Nallo	Enumerator	393	Yusufu Bamayange	Enumerator	465	Mohamed M Nyallay	Enumerator
322	Lucy A. K. Muana	Enumerator	394	Baimba Mansaray	Enumerator	466	Francis Hindolo Kangajua	Enumerator
323	Mary M. Kailie	Enumerator	395	Simbard Macarthy	Enumerator			
324	Ishmael Bendu	Enumerator	396	Olamedea Princess Edith John	Enumerator			
325	Bockarie Dukullay	Enumerator	397	Rose Tewoh Keima Moiwo	Enumerator			
326	Brima Lakoh	Enumerator	398	Dinah Tucker	Enumerator			
327	Gabriel Maxwell Allieu	Enumerator	399	Samuel Kondoba	Enumerator			
328	Amadu Shaw	Enumerator	400	Osman Jalloh	Enumerator			
329	Alpha Jalloh	Enumerator	401	Maryline Williams	Enumerator			
330	Alhaji Abubakar Barrie	Enumerator	402	Gabriel Fillie	Enumerator			
331	Moses I.P Korsu	Enumerator	403	Coker Hannah Y	Enumerator			
332	Mohamed Kaira Sow	Enumerator	404	Joseph Sheku Kamara	Enumerator			
333	Thomas Morlu Kamara	Enumerator	405	Kosia David	Enumerator			
334	Salamatu Kamara	Enumerator	406	Mariama M. George	Enumerator			
335	Mohamed Sahid Turay	Enumerator	407	Zainab B. Sesay	Enumerator			
336	Sonny Albert Kargbo	Enumerator	408	Raymond Sharkah	Enumerator			
337	Fayia Fallah	Enumerator	409	Mohamed Kagbeni	Enumerator			
338	Ibrahim Forlan-Mac Joe	Enumerator	410	Paul Koroma	Enumerator			
339	Tenneh Rogers	Enumerator	411	Ndelei M'baindu Sam	Enumerator			
340	Mohamed A Koroma	Enumerator	412	Foday Sallia Kanneh	Enumerator			
341	Moses Konneh	Enumerator	413	Joseph M. Brainard	Enumerator			
342	John L. Fayia	Enumerator	414	Ruth M. Kainwo	Enumerator			
343	Abu Bakarr Borway	Enumerator	415	Margaret Boima	Enumerator			
344	Mary Y. George	Enumerator	416	Sheka Koroma	Enumerator			
345	Alimamy S. Kamara	Enumerator	417	Mohamed Senesie	Enumerator			
346	Fatmata M Kovuoma	Enumerator	418	Brima Kallon	Enumerator			







# STATE OF FOOD SECURITY IN SIERRA LEONE 2020

## Comprehensive Food Security and Vulnerability Analysis

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