Food and Agriculture Organization of the United Nations

SIERRA LEONE

Food security and agricultural livelihoods in the context of COVID-19

Monitoring report
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REQUIRED CITATION

FAO. 2021. *Sierra Leone | Agricultural livelihoods and food security in the context of COVID-19: Monitoring report – May 2021.* Rome. https://doi.org/10.4060/cb4396en

ISBN 978-92-5-134288-6

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Abbreviations

CILSS	Permanent Interstate Committee for drought control in the Sahel (*Comité permanent inter-États pour la lutte contre la sécheresse au Sahel*)
COVID-19	Coronavirus disease 2019
E-FSMS	Emergency Food Security Monitoring System
FAO	Food and Agriculture Organization of the United Nations
FEWS NET	Famine Early Warning Systems Network
FIES	Food Insecurity Experience Scale
GDP	Gross domestic product
GIEWS	Global Information and Early Warning System on Food and Agriculture
HHS	Household hunger scale
IPC	Integrated Food Security Phase Classification
MAFFS	Ministry of Agriculture, Forestry and Food Security
NDVI	Normalized Difference Vegetation Index
RPCA	Food Crisis Prevention Network (*Réseau de prévention des crises alimentaires*)
USAID	United States Agency for International Development
WFP	World Food Programme

Key highlights

Crisis drivers

- Sierra Leone has seen an increase in inflation and a depreciation of its currency over the past three years, to a great extent due to its high dependency on food imports despite a gross domestic product (GDP) mostly comprised by agricultural activity. The coronavirus disease 2019 (COVID-19) pandemic has aggravated this crisis situation through the introduction of movement restrictions that affected the agriculture sector at large, as well as food systems and the overall economy.
- Total cases reached 2 346 and there have been 74 reported deaths by the end of October 2020, after which the public health situation has stabilized and certain COVID-19 restrictions have been eased since then.

Crop production

- Nearly 60 percent of surveyed farmers reported difficulties in accessing seeds as they were more expensive and more difficult to access than before. However, vegetable seeds were less accessible than rice seeds, as they are mostly imported while rice seeds are mostly produced domestically.
- Nonetheless, 45 percent of surveyed rice farmers reported having planted larger areas than last year, which was still below average crop production areas. In addition, wage labour was reported as being more expensive and less available due to current movement restrictions, but farmers were still able to access their land.
- No major hazard was reported during the cropping season, except for some localized floods. With differences across districts, the 2020 rice harvest starting in September–October is expected to be within the previous 5-year average. The expected harvests are also favourable for the two other main crops (cassava and ground nuts) but are facing higher production costs than usual.

Livestock production

- The trade of cattle, mainly raised in the northern areas of Sierra Leone, was most affected by COVID-19 restrictions and their impact on weekly markets and transport logistics, resulting in lower sales.

- In the poorer Eastern Province where small ruminants are dominant and sales are local, households sold more animals in the face of economic constraints.
- Access to feed and veterinary services were also affected by the COVID-19 restriction measures. Overall, livestock producers faced a drop in demand for their products in relation to the previous year.

Fish production

- Sierra Leone's fisheries sector takes place inland, along coastal areas and in open seas. Sea fishing was banned during the peak of the COVID-19 restriction measures, resulting in a drop in overall fish catch. In addition, fisherfolk faced difficulties in marketing their products, in part due to a drop in demand and because of difficulties in accessing fishing material and key inputs.

Marketing of agricultural products

- The marketing of agricultural products was affected by the movement restrictions put in place to limit the spread of the pandemic, which included the closure of borders and weekly markets, in addition to the introduction of restrictions on inter-district travel and the use of public transportation.
- Over 50 percent of surveyed farming households reported having sold fewer agricultural products than last year during the same period: fisherfolk and livestock producers were the most affected.
- Districts with a large vegetable production, such as Koinadugu, Falaba and Moyamba, were more affected than other districts, since the production of perishable goods was particularly vulnerable to border closures and movement restrictions. What's more, producer prices decreased most significantly for livestock products, in line with the reported decrease in demand.
- These bottlenecks throughout food chains resulted in lower availability of food in local markets and higher prices of food products, reaching crisis levels in the second quarter 2020 with rice prices increasing by 44 percent in relation to last year.

Livelihoods and food security

- Main shocks reported by respondents included the movement restriction measures and the economic shocks experienced due to increased prices and income losses. In addition, 67 percent of households reported a decrease in income compared to last year; this income loss was slightly more marked among female-headed households (71 percent) than male-headed households (66 percent).
- Of Sierra Leone's population of 7.6 million, over one million people were estimated to be in need of assistance according to the last food security analysis of the Cadre Harmonisé conducted in March 2020. According to the World Food Programme (WFP), food insecurity has increased over the past two years (2018–2019).
- The implementation of the household survey coincided with the peak of the lean season when food insecurity is expected to be high; however, these food insecurity levels appeared higher this year than usual. Respondents reported a significant decrease in their consumption of animal products, with half of surveyed households reporting having consumed fewer meat and milk products; however, one third of surveyed households reported having consumed less cereals than last year during the same period.
- Against this backdrop, 73 percent of households suffer from hunger, according to the Household hunger scale (HHS), and among this group, 6 percent suffer from severe hunger. Farming households have experienced slightly higher levels of hunger than non-farming households, just like female-headed households have also experienced higher hunger levels vis-à-vis male-headed households.
- Nearly 80 percent of households reported having had to resort to unusual strategies to cope with difficulties in accessing food, and 45 percent reported having engaged in high-risk or degrading jobs; this was particularly the case among the surveyed farming households.

Needs and assistance

- Most key informants reported that assistance programmes taking place before the COVID-19 outbreak had been disrupted, but that new assistance was also underway. Main needs, as expressed by surveyed crop-producing households, include cash assistance (26 percent), seeds (21 percent) and food assistance (17 percent). Similarly, the main needs expressed by surveyed livestock-producing households include cash assistance (31 percent), veterinary assistance services and inputs (18 percent) and food assistance (17 percent).

Prospects

- Food consumption levels should improve progressively from September 2020 with the rice harvest expected to be within the 5-year average. In the absence of further restriction measures, the availability of staple foods should improve, although high fuel prices would still constrain their transport and distribution.

- Real food prices driven by the country's depreciated currency may remain higher than usual, while income losses suffered by households over the past months will be met with limited or exhausted coping capacities. In turn, this will limit household budget and restrain their demand for more expensive food items, such as meat. Food insecurity is therefore likely to remain at a higher level than usual during the rice harvesting season (September–October), driven by a constrained access to food.

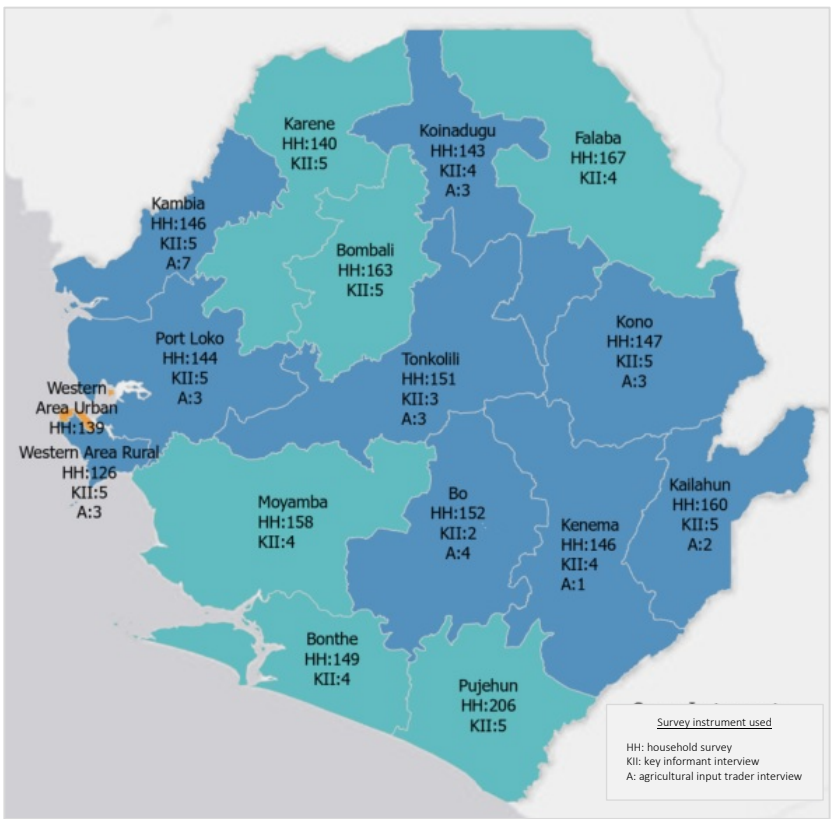
Methodology

With financial support from the United States Agency for International Development (USAID), the Food and Agriculture Organization of the United Nations (FAO) leads the establishment of a data and analysis facility in the context of the coronavirus disease (COVID-19) and other shocks. The objective of the facility is to improve decision making in support of the food security and livelihoods of all actors in key agricultural, livestock and fisheries value chains in high priority food crisis countries, with a focus on producers.

The first round of data collection took place in Sierra Leone between July and August 2020. Three tools were used to this end.

1. A household survey designed to be statistically representative for both the agricultural and overall population at the district level, with a total of 2 437 respondents interviewed by phone using random digit dialling between 9 July and 12 August 2020.
2. A key informant survey targeting district agricultural officers (crop, livestock and fisheries) from the Ministry of Agriculture, Forestry and Food Security (MAFFS), providing qualitative information and technical expertise, with a total of 65 respondents from all 15 districts interviewed by phone between 10 July and 21 August 2020.
3. An agricultural input traders survey, with a total of 29 respondents from 9 districts interviewed by phone between 10 July and 2 August 2020.

Figure 1. Survey instruments and sample size, by district



Source: FAO, 2020; FAO assessment results.

The household-level survey was conducted through random digit dialling integrated with telephone list-based sampling, stratified at the Admin 1 (province) and Admin 2 (district) levels. The survey was conducted by Geopoll using computer-assisted telephone interviewing for all three monitoring assessment tools mentioned above. For the household survey, quotas of agricultural households were set for each district, with a minimum of 90 agricultural households targeted in each district out of a total of 130 households targeted per district, in order to be representative of both the overall population and the agricultural population in each area. Ultimately, the total sample was comprised by 2 437 households, who replied to the questions with reference to the previous three months and *vis-a-vis* the same time period under otherwise usual circumstances.

Information from the household interviews is triangulated with information from 65 key informants (district extension officers from the MAFFS) and from 29 agricultural input vendors, collected using closed-ended questions, which were equally framed with reference to the previous three months and in relation to the same time period under otherwise normal circumstances. The contacts of the key informants and agricultural input traders were provided by the MAFFS and FAO Sierra Leone.

The sample size of respondents by district for each of the three monitoring assessment tools and the different categories of household respondents is presented in Table 1.

Table 1. Sample size, by district, survey instrument and type of agricultural activity

District	Province / Area	Total household respondents	Households not involved in agriculture	Households involved in agriculture	Household respondents to survey's crop section	Household respondents to survey's livestock section	Household respondents to survey's fisheries section	Number of key informants interviewed	Number of agricultural input vendors interviewed
Bo	Southern Province	152	41	111	107	4	-	2	-
Bombali	Northern Province	163	53	110	100	7	1	5	4
Bonthe	Southern Province	149	41	108	86	10	7	4	-
Falaba	Northern Province	167	53	114	89	25	-	4	-
Kailahun	Eastern Province	160	43	117	113	4	-	5	2
Kambia	North West Province	146	47	99	92	6	1	5	7
Karene	North West Province	140	42	98	90	7	-	5	-
Kenema	Eastern Province	146	47	99	95	3	-	4	1
Koinadugu	Northern Province	143	41	102	89	10	-	4	3
Kono	Eastern Province	147	47	100	94	4	-	5	3
Moyamba	Southern Province	158	55	103	83	12	7	4	-
Port Loko	North West	144	48	96	86	6	4	5	3
Pujehun	Southern Province	206	69	137	114	11	7	5	-
Tonkolili	Northern Province	151	46	105	94	10	1	3	3
Western Area Rural	Western Area	126	59	67	47	6	13	5	3
Western Area Urban	Western Area	139	96	43	26	9	8	-	-
TOTAL		2 437	828	1 609	1 405	134	49	65	29

Source: FAO, 2020; FAO assessment results

In this report, when speaking of agricultural households or farming households, this refers to the respondents who reported being involved in any agricultural activity, be it crop, livestock, fisheries or forestry activities. If involved in more than one type of activity, they were then asked to identify their main one; the questionnaire section for the related sub-sector was then administered based on their response.

Expert estimations provided by FAO Sierra Leone were used for two districts (Falaba and Karene), as these districts were created in 2017 and official census information is not yet available for them. The number of active phone lines per household was also used for probability weights, as well as the proportion of the agricultural and non-agricultural household population at the district level. The product of these weights was used as the final weight for analysis. All results from the household survey presented in this report are weighted. The table including both weighted and unweighted counts of respondents, by category and disaggregated at the level used for the analysis of results, can be found in Annex 1 (Table 4).

Moreover, telephone interviews involve some limitations compared to face-to-face surveys, the most common of which is the possible bias caused by the exclusion of households living in isolated areas without coverage by mobile phone networks or of those who do not own a mobile phone. According to the 2020 Global System for Mobile Communications (GSMA) Mobile Connectivity Index, the number of active sim cards in Sierra Leone represents 88 percent of the population (GSMA, 2020). However, there is no data on the proportion of the population owning and regularly using a mobile phone, in particular in rural areas, and no information on the characteristics of households who do not have access to mobile phone services in relation to different vulnerability indicators. It can be assumed, however, that these households are likely to be less wealthy and have poorer access to services in general and, therefore, may also be less able to cope with shocks. In the absence of evidence in this respect, this assumption cannot be substantiated, but there is a possibility that the current survey may be excluding particularly vulnerable populations, especially in rural areas. Research to validate this assumption could be conducted in future face-to-face surveys.

In addition to the main household survey conducted in August 2020, for which results are presented in this report, FAO Sierra Leone also collected data using the Food Insecurity Experience Scale (FIES) module in a dedicated additional survey round in September 2020, when the rice harvest season had already started. This round of data collection, however, with 1 554 sample points, was only designed to produce results disaggregated up to the Admin 1 (province) level. This FIES data collection has been coordinated by the FAO Statistics Division, and has been conducted with the specific aim to compile data for Sustainable Development Goal (SDG) Indicator 2.1.2 for Sierra Leone in 2020, as well as to assess the potential impact of the COVID-19 pandemic on the household experience of food insecurity. In both cases, FIES data was collected remotely via telephone interviews, using a 30-day recall period. Even though these two samples differed in terms of coverage, appropriate post-stratification sample weights have been applied in order to make the estimates comparable.

Background

Agriculture in Sierra Leone

Sierra Leone lies in the West Coast of Africa, spans 72 000 km^2 and has a population of 7.65 million, as of 2018. Topographical elevations range from less than 50 meters above sea level in the coastal areas to more than 500 meters above sea level in the highlands. Sierra Leone has a monsoon humid tropical climate with two distinct seasons: rainy season from May to October, and dry season from November to April. Annual rainfall averages about 3 000 mm, ranging from 2 000 mm in the North to 4 000 mm in the South. Rainfall distribution is unimodal, peaking in August. Even though the country has very high levels of rainfall, it also has a prolonged dry season during which many streams and rivers stop flowing. Water shortages are a common occurrence, given an annual rainfall of only 500 mm and lasting for only 160 to 170 days in some agro-climatic regions. The onset of rainfall varies a lot, and this has important consequences for the dominant practice of rain-fed agricultural production.

The majority the country's soils are ferralitic and with low natural fertility (e.g. low pH, organic matter content and cation exchange capacity). They are also characterized by low water-holding capacity due to the generally coarse nature of the topsoil, which is the result from centuries of weathering under a high-rainfall regime.

This climatic backdrop is important given that agriculture is the country's main economic driver, with crop, livestock and forestry production and fisheries employing about two- thirds of the labour force and accounting for more than 60 percent of GDP in 2020[1]. In terms of major crops produced, rice is the major food crop, followed by cassava and potato. Other crops cultivated include maize, groundnuts, sorghum, palm oil and millet. After agriculture, mining is the second major sector of Sierra Leone's economy.

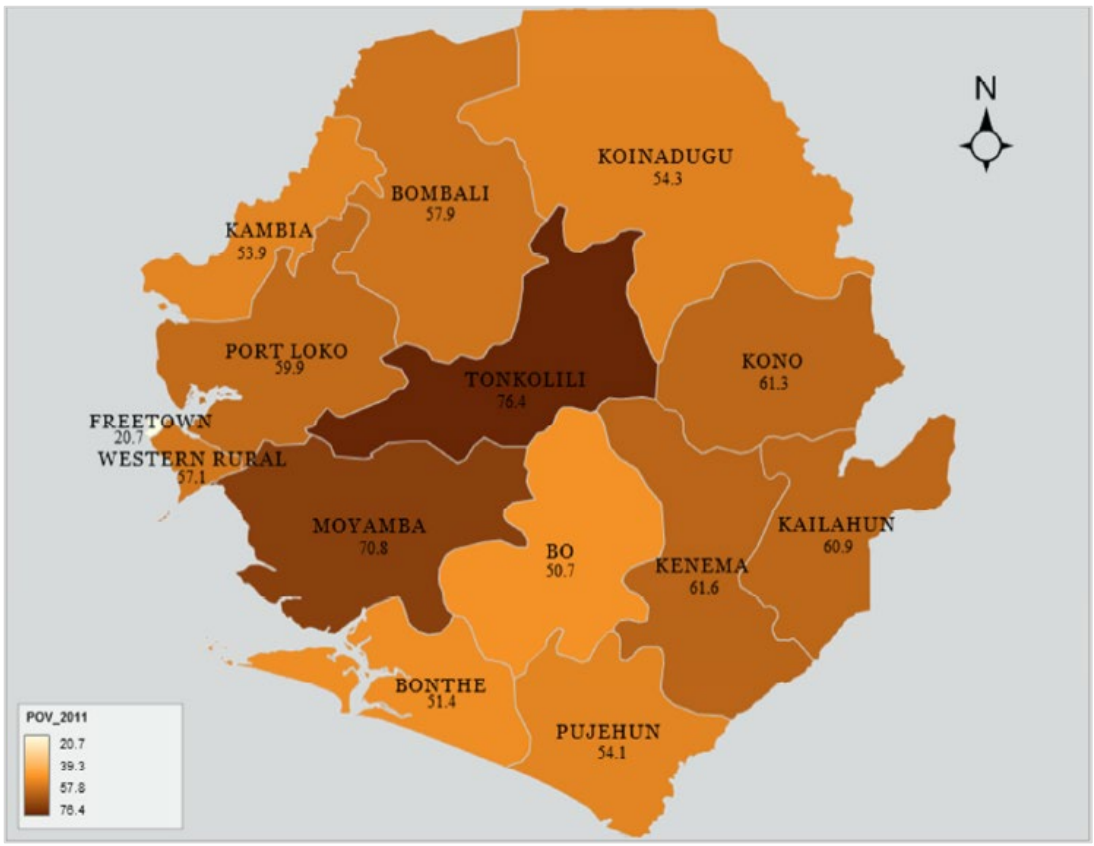
[1] For more information, see https://bit.ly/3wYyOGE.

Poverty and vulnerability profile

Sierra Leone's economy is subject to many international market shocks: it is reported that 80 percent of foodstuffs consumed in the country are imported. Yet, of the estimated 5.4 million hectares of fertile arable land, 75 percent remains uncultivated (International Trade Administration, 2020). Inflation, youth unemployment, high illiteracy levels and food insecurity are some of the major challenges. About 66 percent of the population is poor (47 percent in urban areas versus 79 percent in rural areas), and about 26 percent of people cannot afford the minimum requirement of 2 700 calories (per-adult equivalent). The national poverty profile of Sierra Leone reveals that rural households headed by farmers have the highest prevalence (83 percent) and the highest incidence (39 percent) of poverty, with subsistence farmers being among the poorest of all (Figure 2).

Figure 2. Poverty headcount, by district

(based on the 2011 Sierra Leone Integrated Household Survey [SLIHS])



Source: World Bank and Statistics Sierra Leone, 2016

COVID-19 and other risk factors in the country

Crisis context

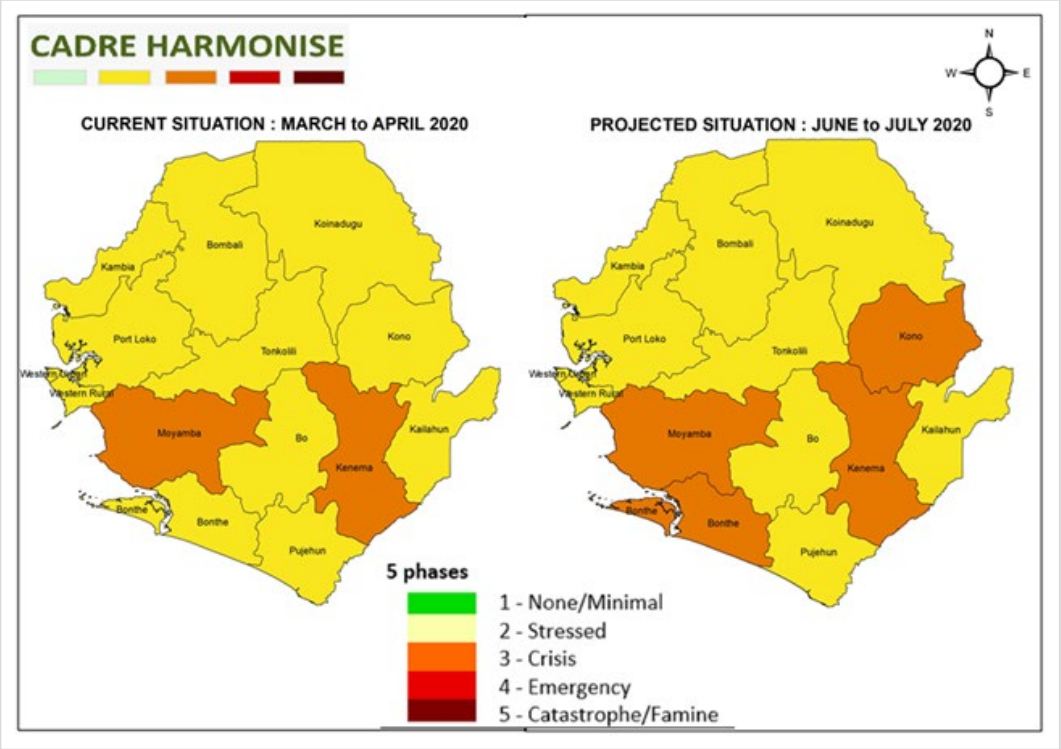
Food access was already constrained before the COVID-19 outbreak due to inflation and exchange rate depreciation for the past three years (African Development Bank, 2020), in addition to a high dependency on food imports. Despite the fact that agriculture is at the core of Sierra Leone's economy, domestic production by smallholder farmers, most of whom are subsistence farmers, is insufficient to feed the country's population of 8 million people.

Consequently, Sierra Leone imports over 70 percent of food consumed, with an average cereal import of 350 000 million tonnes against a domestic production of 1.3 million tonnes per year over the 2014–2018 period. Prior to the COVID-19 outbreak, it was projected that 425 000 tonnes of cereals would likely be imported during the 2019/20 marketing year (FAO GIEWS, 2020a), as crop production for 2019–2020 was 15 percent below the five-year average due to erratic rainfall patterns (RPCA, 2020). These import needs are likely to have further increased given the negative impacts on food supply chains resulting from the COVID-19 pandemic and the associated land border closures.

According to the latest Cadre Harmonisé analysis from March 2020 (CILSS, 2020), it was estimated that about 1 million people needed food assistance from March to May 2020. This number was expected to increase to 1.3 million during the lean season (June–August 2020) if no mitigation actions were adopted (Figure 3). This was without taking into consideration the COVID-19-specific impacts that remained uncertain at the time.

Figure 3. Current and projected food security situation in Sierra Leone

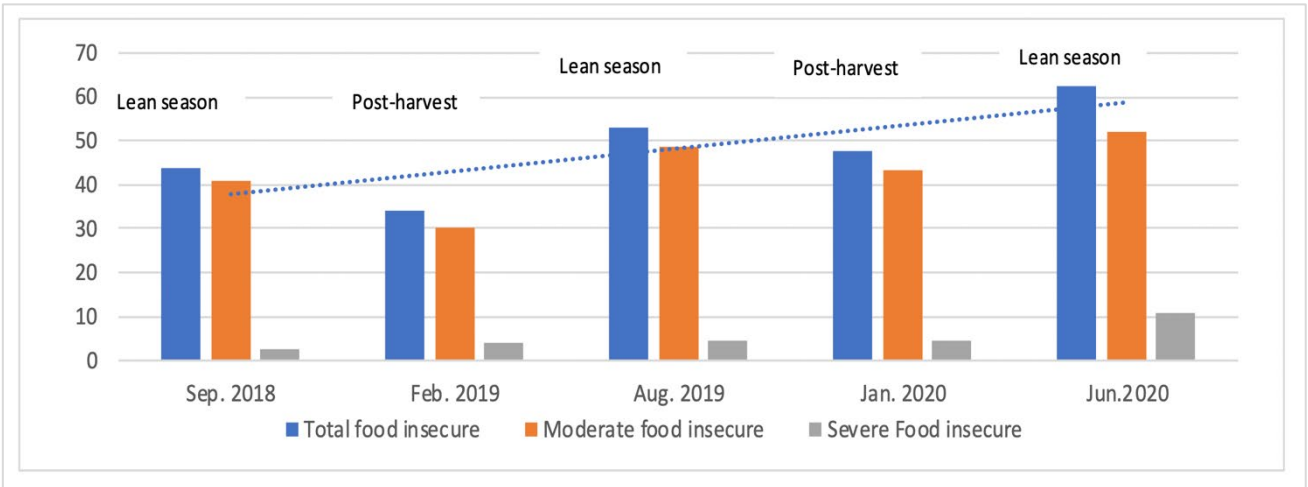
(based on Cadre Harmonisé analysis, March 2020)



Source: CILSS, 2020

Data from the Emergency Food Security Monitoring System (E-FSMS) conducted in June 2020 (MAFFS *et al*., 2020) also shows trends of increasing food insecurity over the past two years (Figure 4). In this context, 63 percent of the population was reported as food insecure in June 2020 (at the start of the lean season), 48 percent in January 2020 (post-harvest period) and 54 percent in August 2019 (lean season).

Figure 4. Food insecurity trends (September 2018–June 2020)

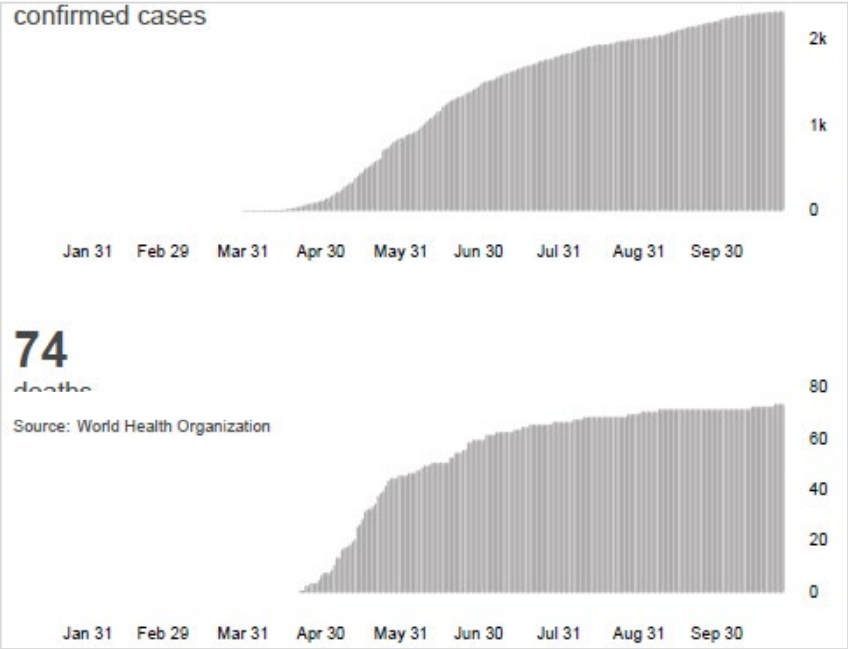


Source: MAFFS, WFP and FAO, 2020

COVID-19

The first COVID-19 case in Sierra Leone was reported on 31 March 2020 and, as of 28 October, Sierra Leone had reported 2 366 confirmed cases and 74 deaths (Figure 5). Restriction measures were put in place in March, including lock-downs, movement restrictions and market closures. In addition, the fear of contracting the virus led over 60 percent of the population to stay at home and reduce their frequentation of markets, resulting in a general economic slowdown and income losses for many.

Figure 5. Confirmed COVID-19 cases and deaths in Sierra Leone
(as of 28 October 2020)



Source: WHO, 2020

Since the onset of the pandemic, the Government of Sierra Leone has implemented several policies and measures designed to curb the spread of the virus, including a slightly different approach from other countries by implementing short-term national lockdowns of three days each, combined with policies of social distancing and a ban on inter-district travel, instead of imposing long-term lockdowns (FAO, 2020). The Government acted decisively since the start by implementing preventive measures, including the President's declaration on 24 March of a 12-month national state of emergency. Since late June and, as of November 2020, the Government has been progressively easing the following restrictions (IMF, 2020).

1. *Border control and closures*
   - Mandatory quarantine on entering the country and closure of land borders.
   - International passenger flights were suspended from March until July 22, when Lungi International Airport re-opened.
2. *Social distancing measures*
   - Educational institutions were closed on March 31.

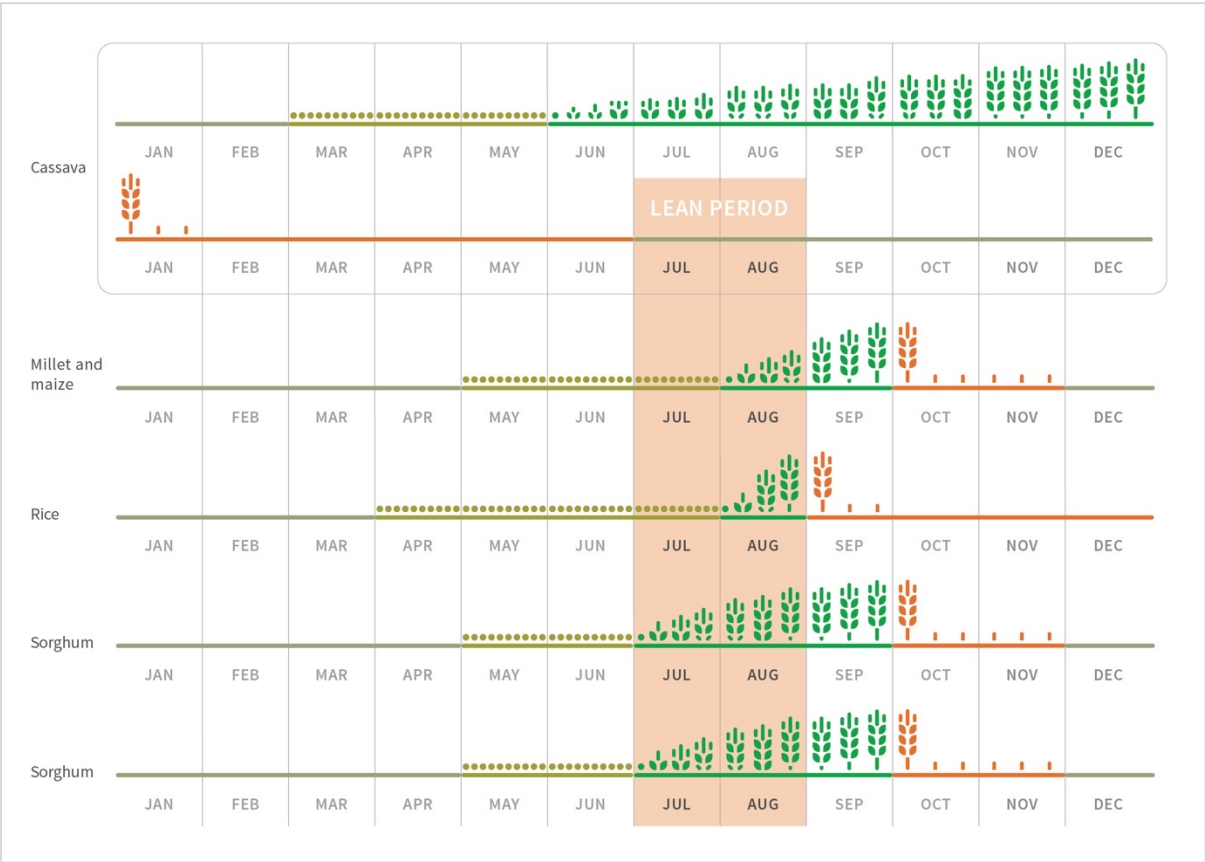
- Schools reopened for six weeks starting on July 1 for exams and reopened formally in September.
- Social gatherings of more than 100 people were discouraged.
- Use of public beaches was restricted.
- Opening hours for entertainment industry were shortened.
- Number of passengers on public transport was limited, and the use of face masks in public areas was required.
- In Freetown, a special bus service was introduced to transport health workers to and from work.
- Places of worship were allowed to reopen on July 13.

3. *Lockdown measures*
    - Sierra Leone implemented two full lockdowns (April 5–7 and May 3–5), during which everyone was required to stay home.
    - A partial lockdown – in place since April – restricted non-essential inter-district travel.
    - Reduced public working hours (from 9.00 to 16.00 hours).
    - National curfew introduced (initially from 21.00 to 7.00 hours, which was later shortened from 23.00 to 5.00 hours).
    - The Government lifted restrictions on inter-district travel on June 23 and lifted the curfew on October 26, although restrictions on large gatherings remain in place.

Agricultural production

Sierra Leone has two distinct seasons: a rainy season that runs from May to October and a dry season spanning from November to April. The bulk of the country's cereal production is composed of rice, which is typically planted between April and July and harvested between September and December (Figure 6). The lean season, which is the period between two harvests when the food stocks are depleted, usually starts in June or July and lasts until the rice harvest starts in September.

Figure 6. Sierra Leone crop calendar



Source: FAO GIEWS, 2020a

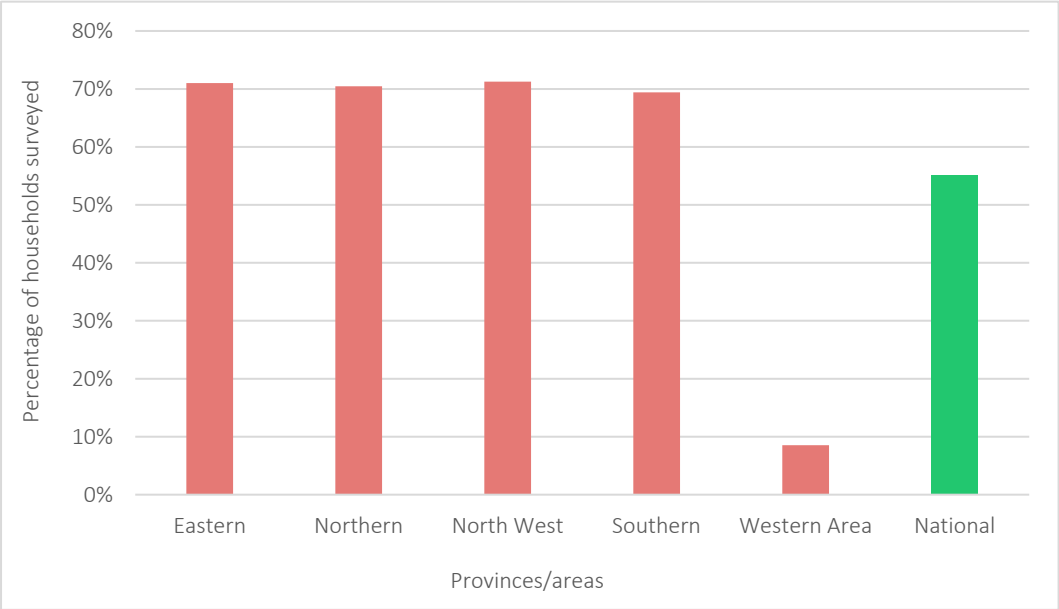
Crop production

The 2020 crop season in Sierra Leone

According to the assessment, 55 percent of household respondents are involved in crop production. Not accounting for the Western Area, whose crop production levels are substantially lower than the other provinces, crop production rises to about 70 percent (Figure 7). Of all surveyed households, 42 percent rely on agriculture as their main income-generating activity, with 36 percent of them having reported growing rice as their main crop (n = 507). Other main crops grown at the time of the survey were cassava and ground nut (Figure 8).

Figure 7. Proportion of surveyed households involved in crop production, by province

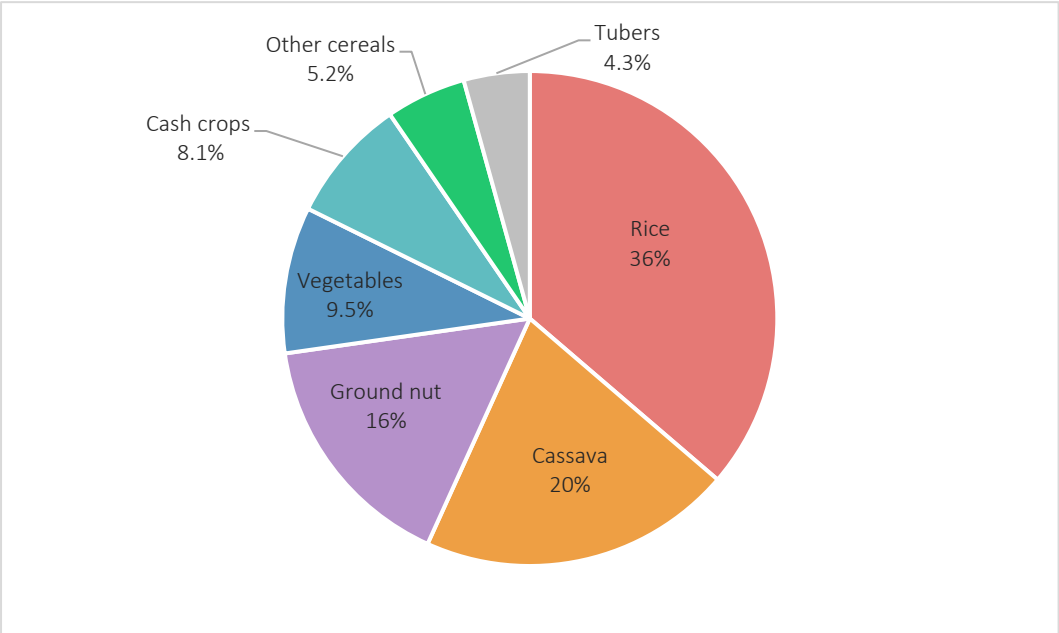
(n = 2 437)



Source: FAO, 2020; FAO assessment results

Figure 8. Main crop cultivated at the time of the survey, as reported by surveyed crop-producing households

(n = 1 403)

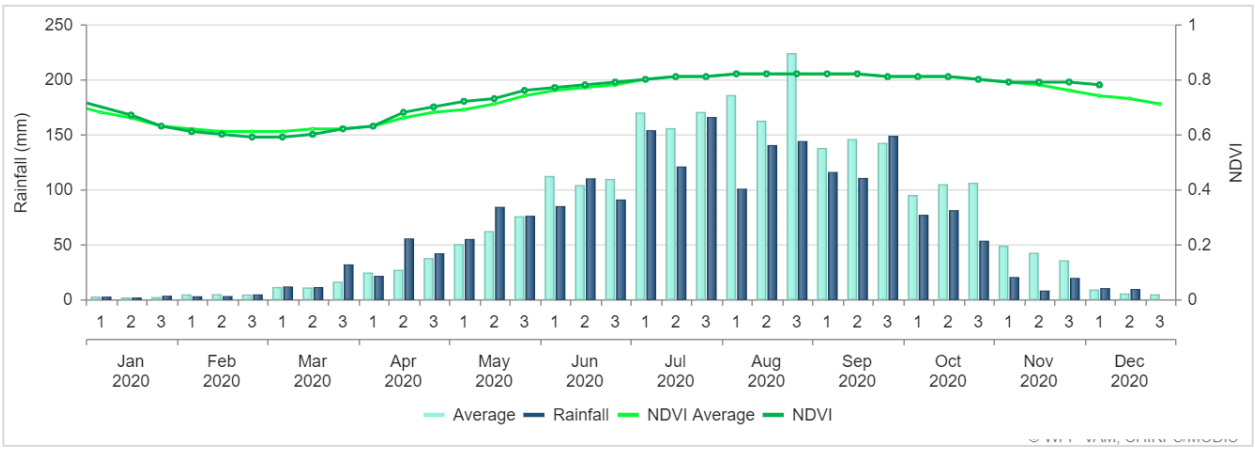


Source: FAO, 2020; FAO assessment results

Cereal production levels in 2019 were 15 percent below the 5-year average and 29 percent below 2018 production levels (RPCA, 2020). Following a timely onset of seasonal rains in late March, planting operations for paddy rice took place between April and May from the southern to the northern parts of the country, with harvests expected to start in September. Planting operations therefore took place during the peak of the restriction measures.

Rainfall has been adequate until May and slightly below average during the period of June–August, but the Normalized Difference Vegetation Index (NDVI) was within average (WFP, 2020b) (Figure 9), indicating that crops did not suffer from water deficiency, as was confirmed by the FAO Agriculture Stress Index System (ASIS) (FAO GIEWS, 2020b).

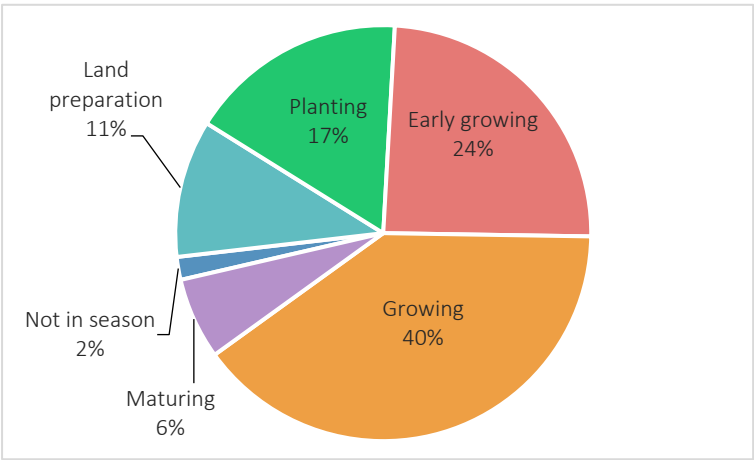
Figure 9. Decadal rainfall and NDVI in Sierra Leone in 2020, against long-term average (1994–2013)



Source: WFP, 2020b

Nearly half of surveyed households who grow rice as their main crop (n = 507) indicated the crop was in its growing and maturing stage by mid-August (Figure 10). This confirmed that the harvest should start in a timely manner in September.

Figure 10. Stage of rice growth as reported by surveyed households growing rice as their main crop at the time of survey (n = 506)

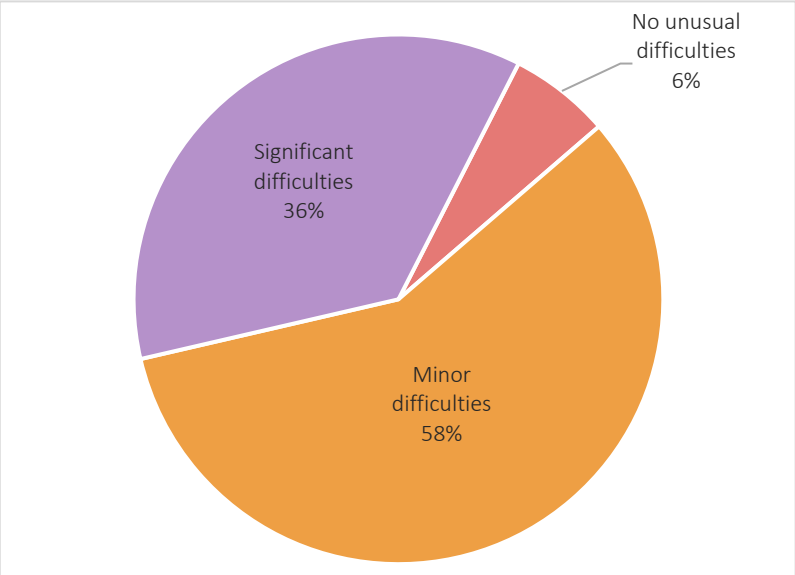


Source: FAO 2020; FAO assessment results

Difficulties experienced during the 2020 cropping season

Almost all interviewed households cultivating rice as their main crop still reported having faced unusual difficulties in the three months before the survey (around the April–July period), and 36 percent reported having had serious difficulties during this period (Figure 11).

Figure 11. Distribution of unusual difficulties reported by surveyed households growing rice (n = 506)



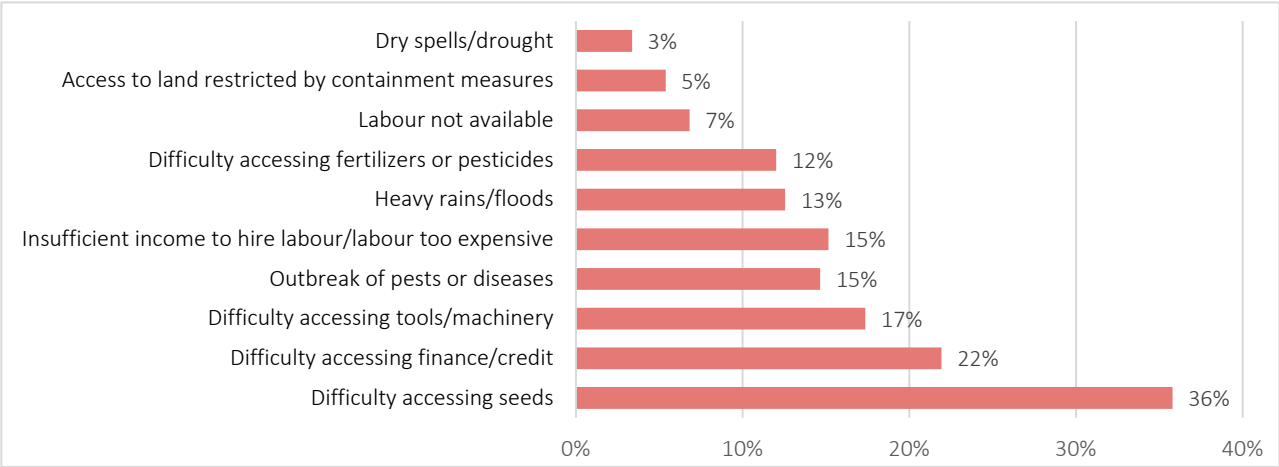
Source: FAO 2020; FAO assessment results

The main difficulties reported by crop growers are as follows (Figure 12).

- Difficulty in accessing inputs, including seeds (36 percent of surveyed households), finance and/or credit (22 percent), tools and machinery (17 percent) and fertilizers or pesticides (12 percent).
- The lack of labour was a significant issue for 22 percent of crop growers (it was too expensive for 15 percent of them and unavailable altogether for the remaining 7 percent). This was confirmed by the key informants, as over half (16 out of 30) indicated that wage labour is not fully allowed and available as usual, and nearly half (13) reported that wage rates are higher than usual.
- Hazards such as the outbreak of pests and diseases (15 percent of surveyed households), including the grasscutter rodent, grasshoppers and fall armyworm, in addition to heavy rains (13 percent).
- Restricted access to land due to containment measures, however, was only reported by 5 percent of surveyed households and dry spells by only 3 percent.

Figure 12. Main unusual difficulties with crop production reported by surveyed households involved in crop production as their main agricultural activity

(n = 1 403)

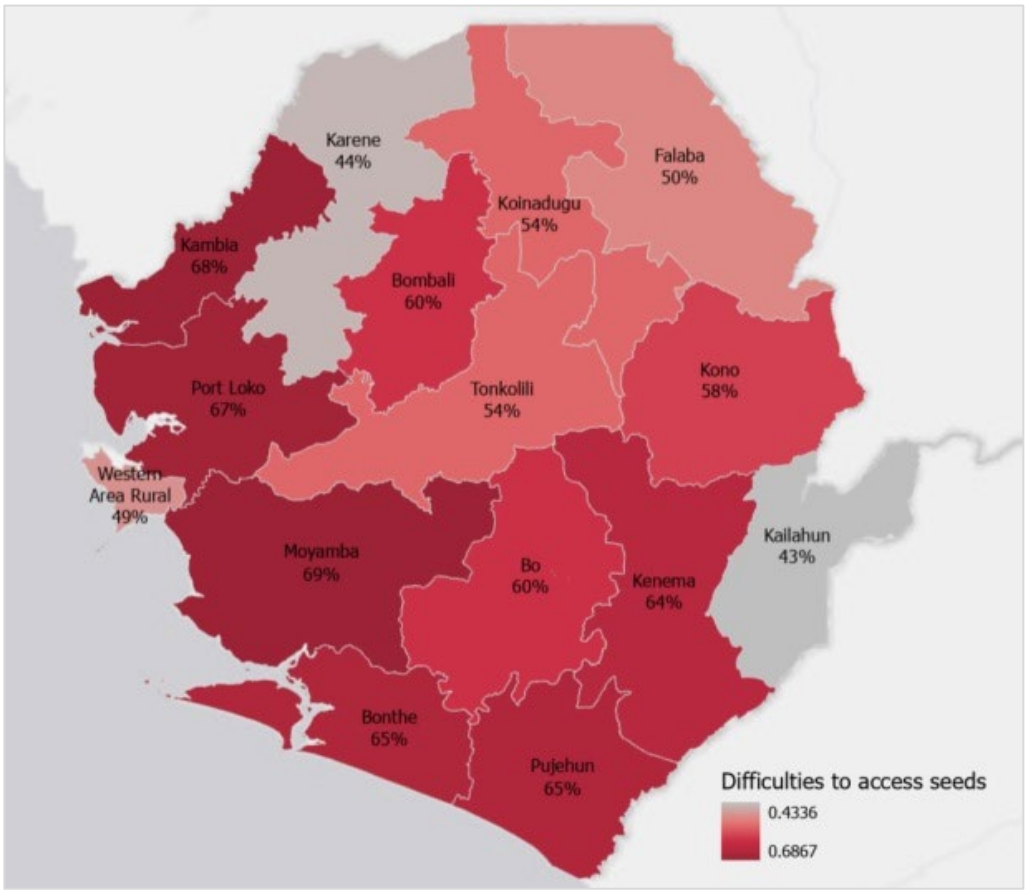


Source: FAO, 2020; FAO assessment results

Access to seeds

When asked specifically whether they faced difficulties in accessing seeds over the past three months, 58 percent of all 1 403 surveyed crop producers the national level confirmed having experienced these types of limitations, with certain differences identified across districts (Figure 13). Nearly 70 percent of these surveyed households reported difficulties in the northwestern coastal districts of Kambia, Port Loko and Moyamba, compared to 50 percent in the eastern bordering districts of Kailahun, Karene and Falaba.

Figure 13. Geographic distribution of surveyed crop-producing households according to their reported difficultiies in accessing seeds over the past three months, by district



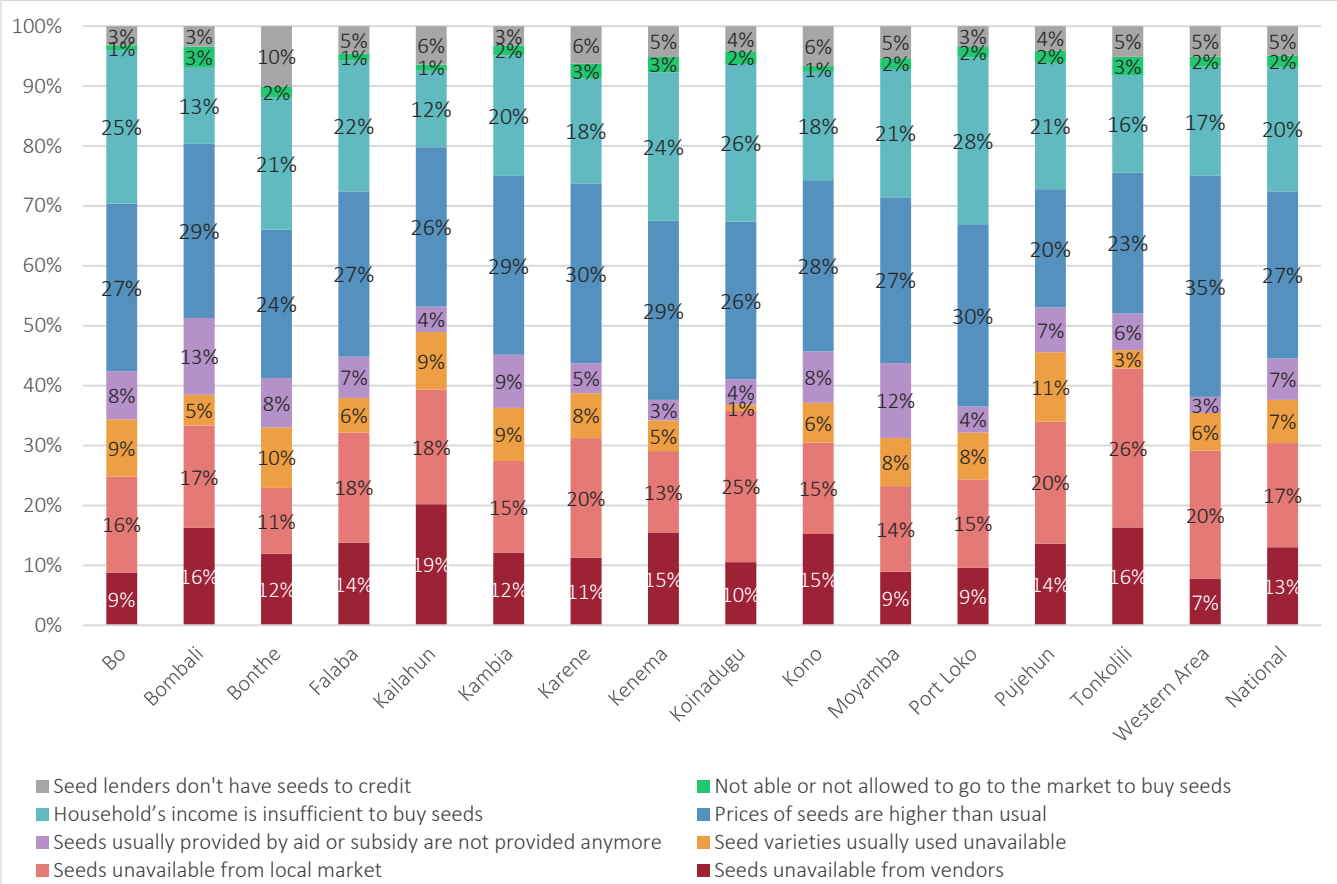
Source: FAO, 2020; FAO assessment results

The main difficulty reported by the surveyed crop-producing hosueholds in accessing seeds relates to the economic access to seeds, either because seed prices were higher than usual (as reported by 27 percent of surveyed crop-producing hosueholds nationawide) or because their income was insufficient to buy them (20 percent) or they lacked the option to buy seeds on credit (5 percent).

They also faced issues of availability, with surveyed households reporting seeds not being available from local markets (17 percent) or from vendors (13 percent). Other issues of unavailability of specific seed varieties (7 percent) were also reported, in addtion to disruption in seed assistance (7 percent) (Figure 14).

Figure 14. Main difficulties in accessing seeds in the past three months, as reported by surveyed crop-producing households

(n = 813)



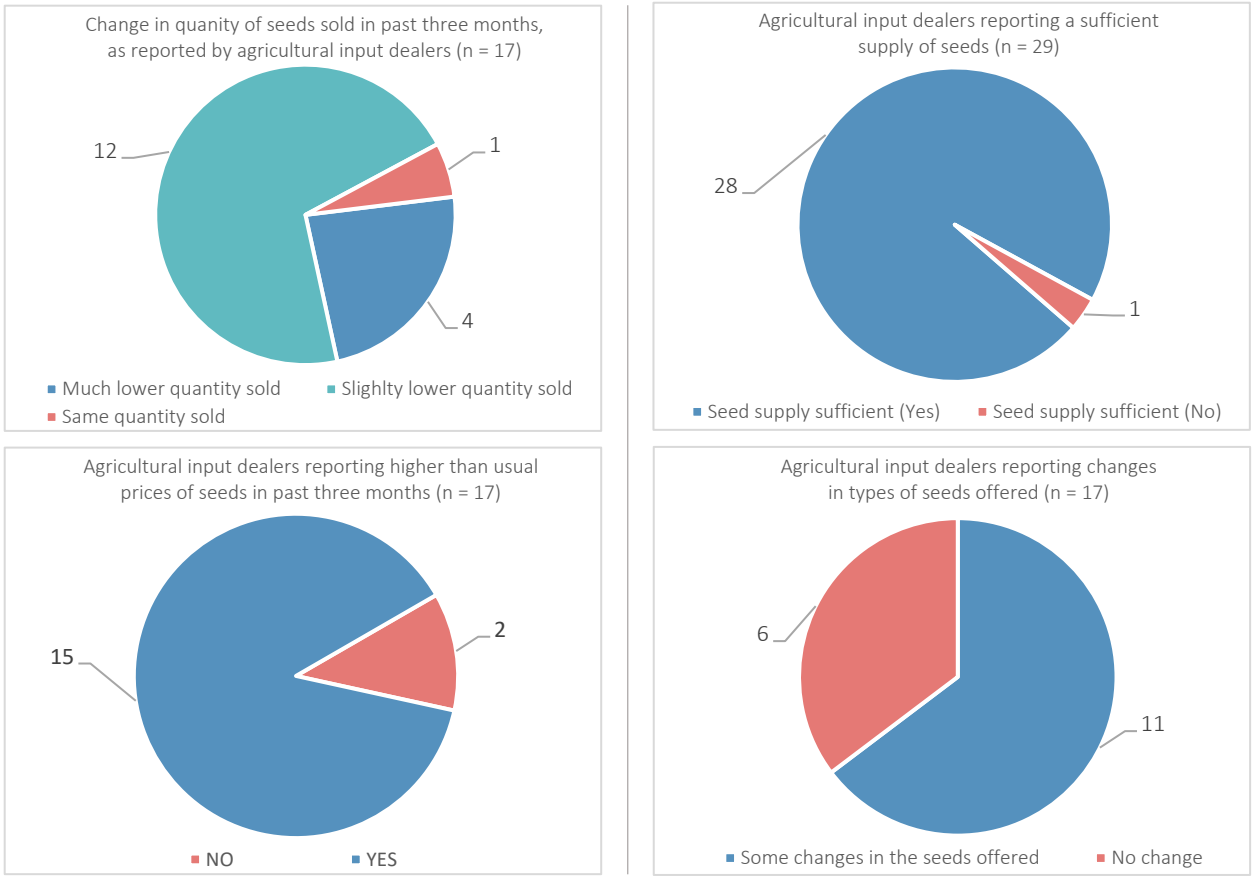
Source: FAO, 2020; FAO assessment results

The COVID-19-specific restriction measures, including border closures, initially affected agricultural inputs until they became exempted as essential goods. Considering that vegetables seeds are usually imported, as opposed to rice seeds that are produced domestically by agricultural cooperatives, these restriction measures affected mostly the import of vegetable seeds. Transaction costs were, however, higher than usual for all seeds, and their access resulted more difficult as not all districts have seed vendors. In turn, this required farmers to travel to other districts, which was more challenging with the restriction measures in place.

The interviews carried out with 29 agricultural input dealers from nine districts, all of whom operated from their own shop, also shed light on the difficulties specific to seed access. Almost all agricultural input dealers reported lower quantities of seeds sold than usual over the past three months (Figure 15); they also reported fewer clients. Moreover, they also reported having faced significant difficulties while working under the restriction measures in place with respect to supply and transportation of agricultural inputs. Although they reported having a sufficient supply of seeds on offer, two-thirds of them also indicated that the types of seeds offered were different than those usually on stock.

As such, the economic access to seeds seems to be the major challenge experienced among farmers, with nine out of ten agricultural input dealers reporting higher than usual prices of seeds and higher demand for purchase on credit from clients, which over the course of the past three months they have been granting to a lesser extent than usual.

Figure 15. Changes in sales, supply, types and prices of seeds over the past three months, as reported by agricultural input dealers

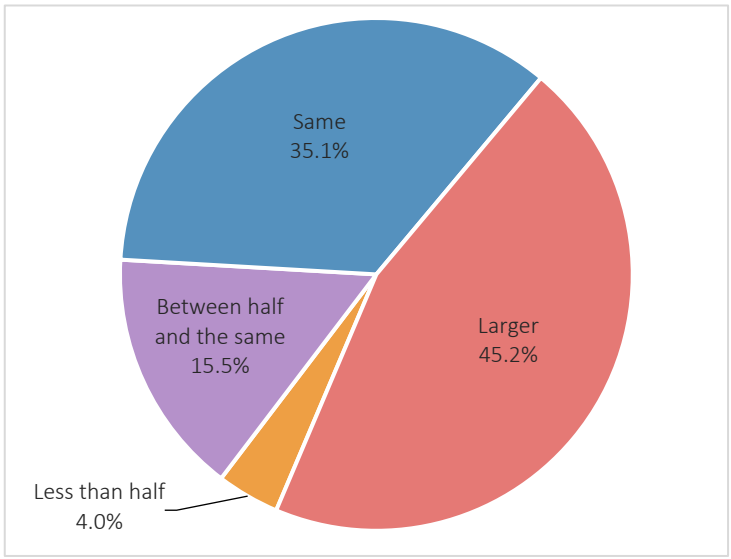


Source: FAO, 2020; FAO assessment results

Expected crop production for the 2020 main season

Despite the additional difficulties faced, nearly half of surveyed households who grow rice as their main crop reported having planted larger areas than last year, with 20 percent of households reporting having planted smaller areas (Figure 16). This confirms that the access to rice seeds was still possible, despite the higher prices mentioned before. Another factor that possibly contributed to the increase in area planted of rice crops may be the support provided by the MAFFS for the cultivation of rice across the country this season using mechanical ploughing and harrowing.

Figure 16. Change in area planted with rice crops compared to last year, as reported by rice-producing households surveyed (n = 496)[2]



Source: FAO, 2020; FAO assessment results

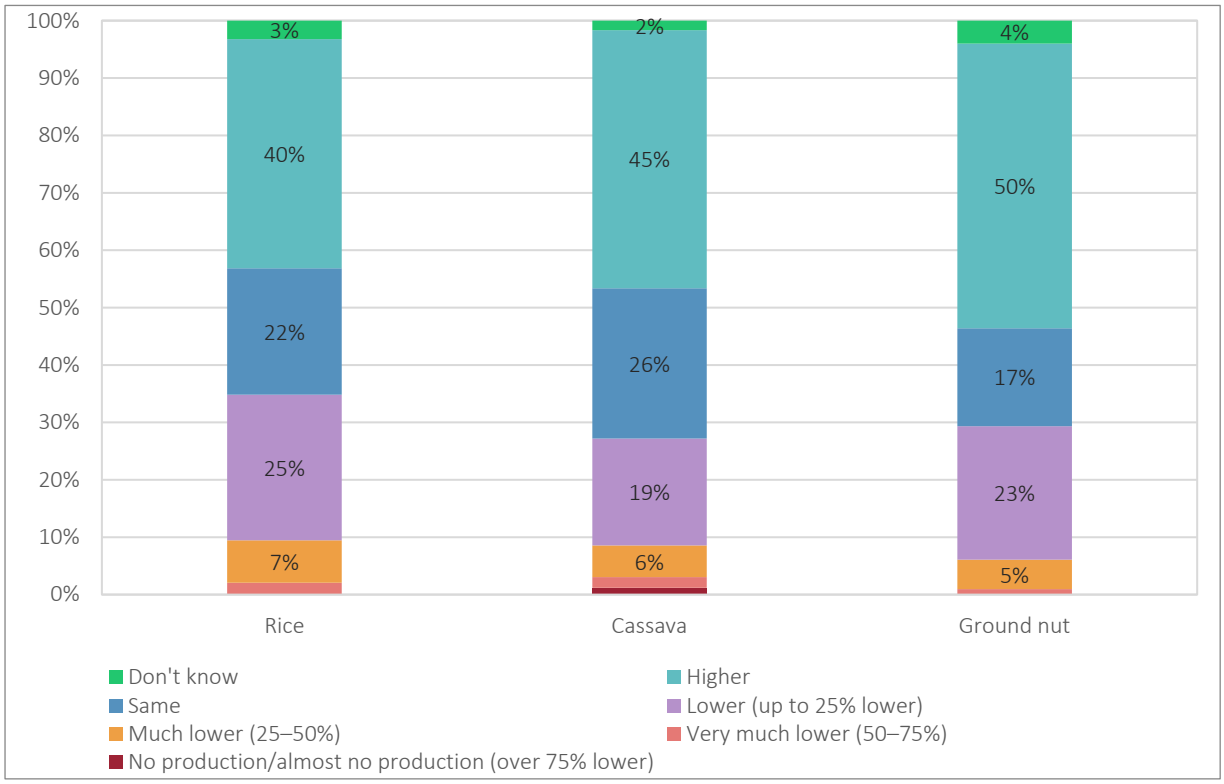
When asked to estimate the level of rice production expected from the harvest starting in September compared to a normal year, responses from the surveyed households were mixed. Forty percent expected a higher production against 39 percent expecting a lower than usual production; 22 percent expected the same (Figure 17).

On the other hand, the expectations from the district agricultural officers from the MAFFS serving as key informants were slightly more optimistic, with over half of the 31 respondents expecting a higher production than usual and around one-third expecting a lower production (Figure 18). Therefore, rice production is expected to be around average or slightly above average this year nationwide despite half of rice-producing households reporting having planted a larger area than last year.

As for the two other main crops, cassava and groundnuts, production expectations slightly more positive, especially for groundnut for which 50 percent of the groundnut-producing households surveyed expect a higher production for the harvest starting in August (Figure 17).

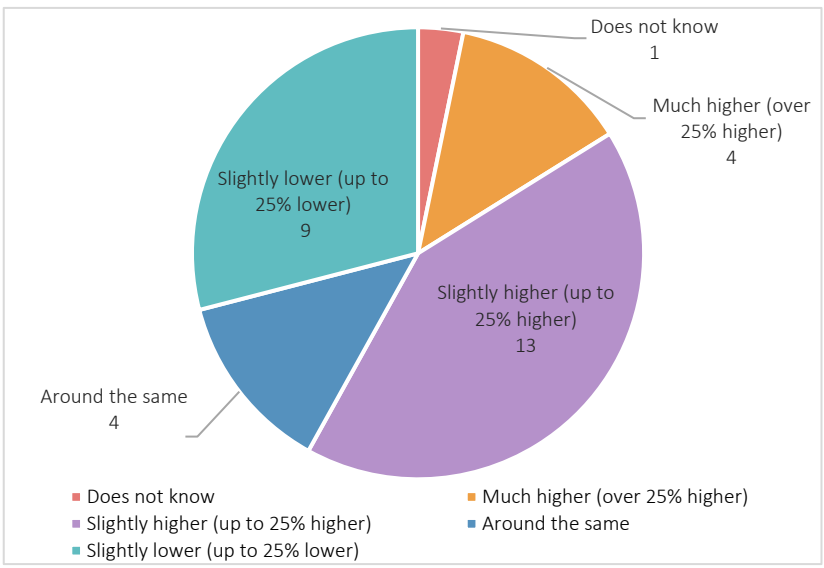
[2] Of the rice-producing households surveyed, only one of them reported having been unable to plant this season. Given the small percentage it represents (0.2 percent), it is not shown in Figure 17.

Figure 17. Expected production for three main crops this season compared to last year, as reported by crop-growing households surveyed



Source: FAO, 2020; FAO assessment results

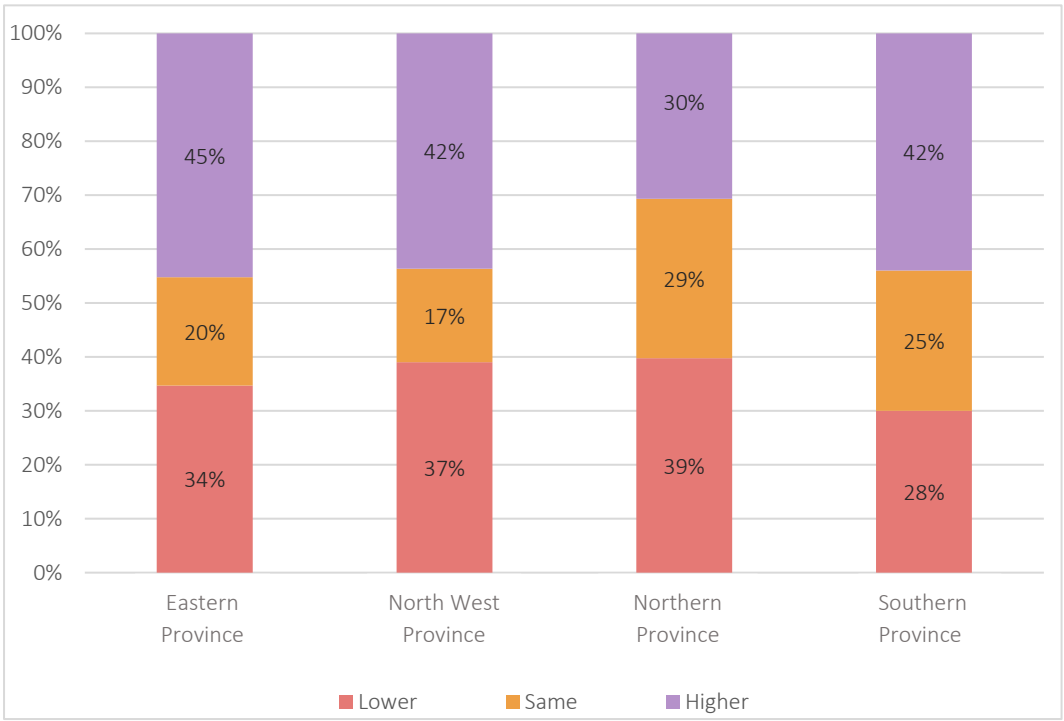
Figure 18. Expected rice production levels compared to last year, as reported by district agricultural officers (n = 31)
(number of district agricultural officers)



Source: FAO, 2020; FAO assessment results

Although the sample size is too small to be representative of the rice producers at the district level, the indicative results point to substantial differences across districts, with respondents in Bonthe reporting the lowest level of production expectations (80 percent of them are expecting lower production levels and 15 percent of them are expecting an increase in their production levels), while respondents in Bo and Kenema respondents represented the highest prevalence of higher production expectations (60 percent of respondents were expecting higher production levels) in relation to last year. It is worth noting that a series of floods occurred in Bonthe, which is the main rice-producing district (Table 2), thus explaining the lower production expectations among households there. Since the samples at the district level were not sufficiently large, rice production expectations are reported at the provincial level instead (Figure 19).

Figure 19. Expected change in rice production levels compared to last year, as reported by surveyed households whose rice is their main crop produced (by province) (n = 352)



Source: FAO, 2020; FAO assessment results

Table 2. Rice production levels (in tonnes) for 2019, by district/area

District/area	Production (tonnes)	Share of national production (percent)
Bo	163 687	14
Bombali	189 983	16
Bonthe	146 519	13
Kailahun	14 227	1
Kambia	57 805	5
Kenema	68 249	6
Koinadugu	115 162	10
Kono	24 787	2
Moyamba	145 461	12
Port Loko	109 605	9
Pujehun	58 700	5
Tonkolili	57 514	5
Western Area	17 719	2
National	**1 169 418**	**100**

Source: MAFFS, WFP and FAO, 2020

As mentioned before, rice production levels are expected to be between average and above average this year, which implies an increase compared to 2019 when production levels were 15 percent below the 5-year average, according to the Food Crisis Prevention Network (RPCA).

Livestock production

Livestock sector in Sierra Leone

The livestock industry contributed accounted for about 5.7 percent to the agricultural GDP in 2015. Despite this low contribution to GDP, livestock rearing is an important agricultural activity, with over 74 percent households involved in livestock production (Statistics Sierra Leone, 2017), even though most of it is practiced under traditional livestock management systems. While less than 5 percent of the population owns cattle, 75 percent of all households involved in livestock production raise at least sheep and/or goats. As such, livestock represent an economically important source of income, in addition to contributing to household food security. In addition, livestock is often required for various cultural and ceremonial functions. Nonetheless, production levels are very low for all livestock species and demand far exceeds supply. In turn, consumption of livestock products has been low due to high costs and increasing poverty levels (FAO and ECOWAS, 2016).

Against this backdrop, it is worth noting that cattle and small ruminant are primarily kept for subsistence, and animals are sold only when the owners are in dire need of cash as a negative coping mechanism. Small ruminants are generally a good source of short-term cash needs for families, especially in paying school fees for children or for medical bills.

The main livestock species contributing to the meat and milk value chains are cattle, goats, sheep and pigs, with all animals being of indigenous types found in the traditional sector. In terms of household income and wellbeing, cattle owners generally have higher incomes than crop farmers. In Sierra Leone, there is only one breed of cattle, the Ndama, used for both meat and milk production. Of the meat producing animals, cattle are the

most important as they produce most of the red meat and ruminants provide about 21 percent of protein in the average diet of Sierra Leoneans. These cattle, meat and milk value chains, moreover, are dominated by the Fulahs, who make up about 5 percent of the population.

About 85 percent of rural households are involved in mixed crop-livestock systems, involving small ruminants and chickens, while pigs are the least widely owned type of livestock, constituting less than 1 percent of the entire livestock population in the country.

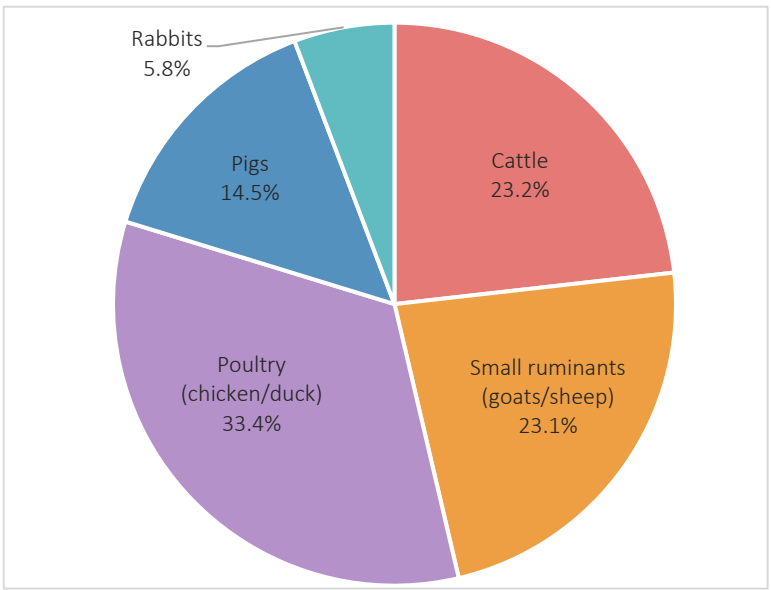
Difficulties in livestock rearing and changes in livestock ownership

As crop production is a more widespread and economically important activity than livestock rearing in Sierra Leone, only 134 surveyed household respondents reported their involvement in livestock production as their main activity; thus, the sample is too small among livestock producers for these results to be representative at the subnational level. Results are therefore presented at the national level, with some indicative patterns only at the provincial level.

When asked about the main animal they own, one-third of the surveyed livestock-producing households reported poultry. This was followed by 25 percent of housheolds each, whose main type of animal owned was small ruminants and cattle. Lastly, pigs and rabbits were reported as main animals owned in smaller proportions (Figure 20). This being said, cattle is more important and prevalent in the northern and northwestern provinces where the Fulahs reside, and small ruminants are the main animal owned by over half of livestock owners in the poorer Eastern Province, while poultry farming is more dominant in the southern and western provinces.

Figure 20. Main type of animal owned, as reported by surveyed households whose main agricultural activity is livestock production

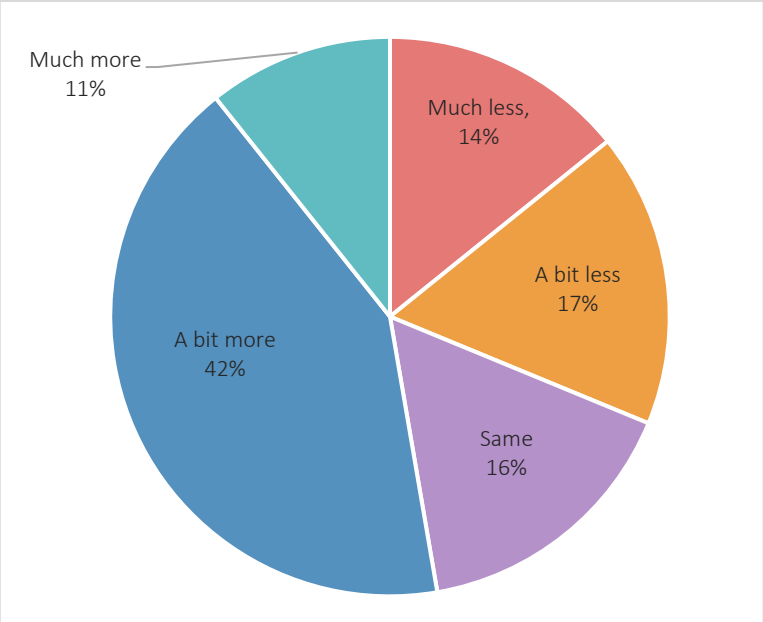
(n = 134)



Source: FAO, 2020; FAO assessment results

When asked to compare the current number of animals owned with the number owned at the same time last year, 31 percent of surveyed livestock-producing households reported having fewer animals now, while 53 percent indicated having more. Therefore, there has been no significant decrease in livestock ownership among this group of household respondents (Figure 21). Nonetheless, animals whose numbers decreased the most are small ruminants, followed by poultry. In line with this, livestock-producing respondents from the Eastern Province reported the largest decrease in animal ownership, as small ruminants are predominant there.

Figure 21. Change in livestock ownership compared to last year,
as reported by surveyed households whose main agricultural activity is livestock production
(n = 134)



Source: FAO, 2020; FAO assessment results

Owners of cattle and pigs reported their herds to be larger than last year, which may be due to having faced constraints in selling their animals given the closures of weekly markets and inter-districts travel restrictions. This may very well be the case since livestock sales usually take place on weekly market days within the districts where buyers meet. Beyond the weekly market days, brokers go directly to communities, especially during the lean season, to buy directly from the livestock farmers at a price lower than they can sell on the weekly market days. However, the restrictive travel measures prevented livestock traders from travelling for this purpose.

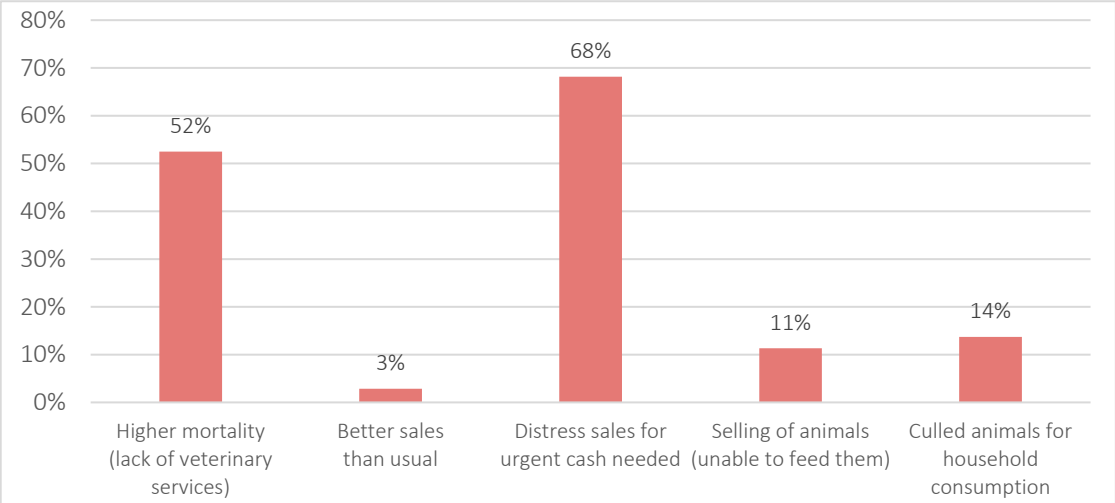
Another reason could be the lower than usual demand for meat[3], as reported by the surveyed household respondents and the key informants interviewed. This may have been likely due to concerns around food safety raised by warning messages related to COVID-19 and animal products, as well as due to economic constraints overall among

[3] See the "Food supply and markets – Marketing of agricultural products" sub-section of this report further below for more information.

buyers. These difficulties forced livestock producers to keep a higher inventory of animals as they were likely unable to sell them.

Among the surveyed households who reported a reduction in the number of animals owned (mostly small ruminants and poultry), the main reason given by nearly 70 percent of respondents was the negative coping mechanism of "distress sales for urgent need of cash" (Figure 22). This would explain the particular decrease in the number of small ruminants, used to address income shortages, as they are mostly owned by poorer households and mostly traded locally. In addition, over half of respondents who reported a decrease in the number of animals owned also indicated a higher mortality rate among their animals due to a lack of veterinary services. The lack of feed, however, was not reported as a major reason for selling animals, with only around 10 percent of respondents mentioning it.

Figure 22. Main reason for decreases in the number of main animals owned, as reported by surveyed households whose main agricultural activity is livestock production (n = 41)



Source: FAO, 2020; FAO assessment results

Once again, the surveyed households reporting the highest number of unusual difficulties with raising their animals in the previous three months were owners of small ruminants, with 40 percent of them reporting minor difficulties and 45 percent of them reporting major difficulties. The majority of these households are from the Eastern Province, although the sample is too small for results to be reliable at the provincial level.

Among the top two difficulties reported in raising animals, over 60 percent of surveyed households pointed to the difficulty to access feed. This was a major issue for these households; however, it was not the main cause affecting animal sales (Figure 24). In addition, the constrained access to pasture was reported by 30 percent of surveyed households, as well as the constrained access to water, as reported by 23 percent of them.

In addition, the availability of grazing land, as reported by the key informants, was generally good. However, certain issues with respect to grazing land were only pointed out by some key informants in the Northern Province and Southern Province. In terms of

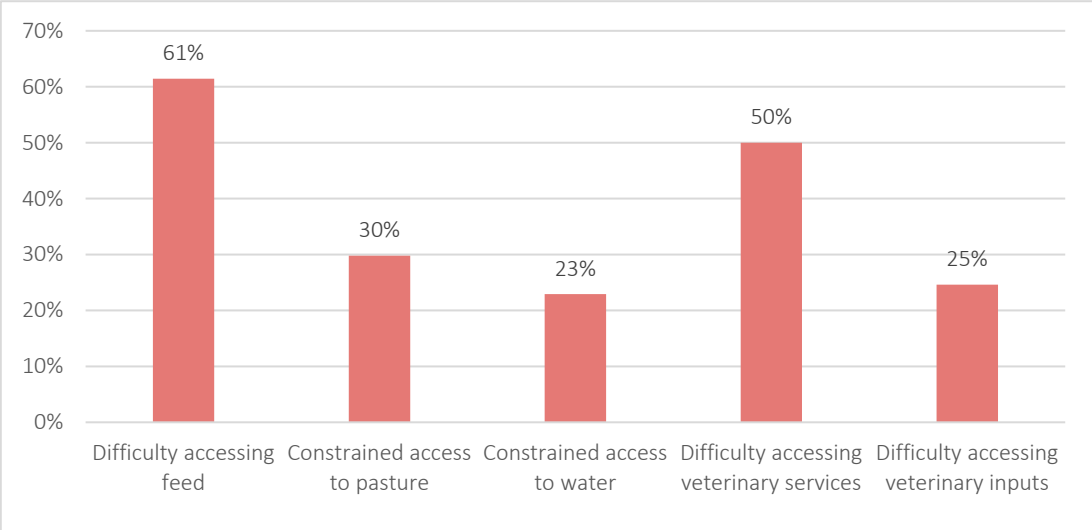
water availability, no particular critical issues were raised, with two-thirds of key informants reporting water availability to have been sufficient, while one-third of them reported water availability as limited. Given that livestock is mostly raised for subsistence with little purchase of feed (FAO and ECOWAS, 2016), this would indicate that the issue with respect to accessing feed has been mostly caused by movement restrictions when needing to take the animals to pasture, rather than on the poor quality of pasture or constraints in purchasing commercial feed. Indeed, out of the 30 agricultural input dealers interviewed, only one of them was selling animal feed.

As for the difficulty in accessing veterinary services and key inputs, these were highlighted as the other main constraints experienced by these households (Figure 23). Fifty percent and 25 percent of surveyed livestock-producing households, respectively, cited difficulties in terms of accessing veterinary services and inputs. This is relevant given that period of March–April is also the peak period for outbreaks of animal diseases (FEWS NET, 2013). With this in mind, over two-thirds of key informants reported livestock diseases as the main shock over the past three months, with peste des petits ruminants as the main disease. Among these key informants, half of them consider these outbreaks as particularly unusual.

In addition, the key informants reported tensions between farmers and herders, as was also reported by the MAFFS pre-harvest assessment (October 2020) as a recurrent issue.

Figure 23. Top two difficulties in raising livestock, as reported by surveyed households whose main agricultural activity is livestock production and who reported difficulties

(n = 105)



Source: FAO, 2020; FAO assessment results

Fisheries production

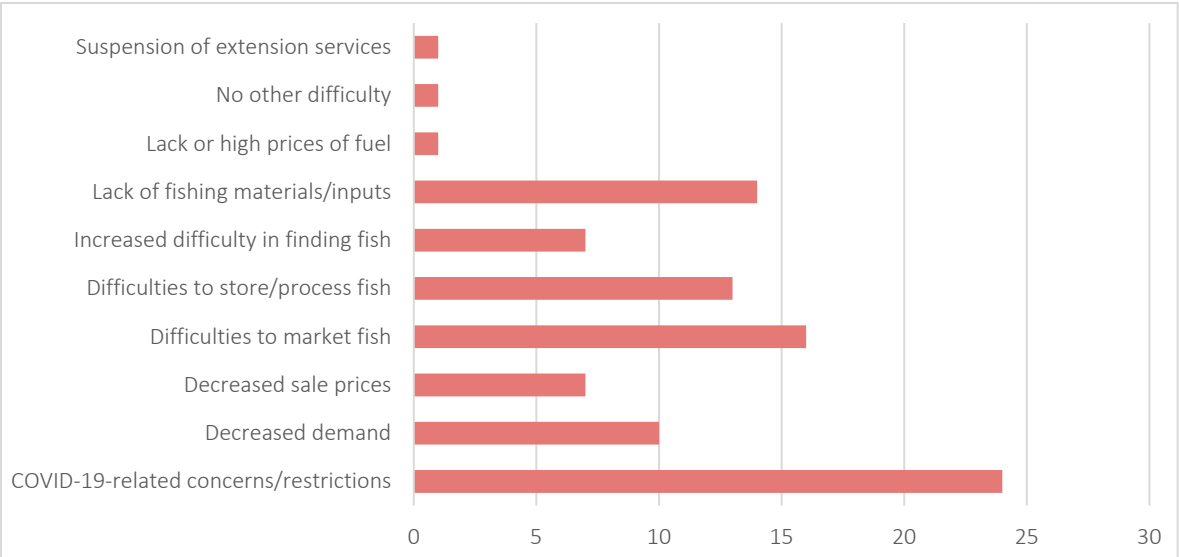
The sample of surveyed households who reported being involved in fisheries as their main agricultural activity was very small, with only 49 respondents, therefore only trends can be presented and disaggregated results are not possible.

Half of these households interviewed were involved in inland fisheries (e.g. lakes, ponds and rivers), and around a quarter of them each worked in coastal fisheries and in open-sea fishing.

Over two-thirds of fisherfolk reported a decrease in the number of fish caught over the past three months compared to usual times for the same period. All reported unusual difficulties were mostly linked to marketing issues, such as difficulties in accessing markets, storing or processing fish and decreasing demand and prices (Figure 24). Half of these households also pointed to the restrictions and concerns specific to COVID-19, and nearly one-third of them reported difficulties in accessing fishing material and key inputs.

Figure 24. Top two most prevalent difficulties experienced over the past three months, as reported by surveyed fisherfolk households

(n = 47)



Source: FAO, 2020; FAO assessment results

As a result of the COVID-19 restrictions implemented in Sierra Leone, fisherfolk were prevented from going to fish at sea, which resulted in production losses and social tensions. Although these findings are only indicative due to a low sample size specific to fisherfolk households, fisherfolk appear to have been particularly affected by the COVID-19 outbreak and its indirect effects on the sector and their livelihoods.

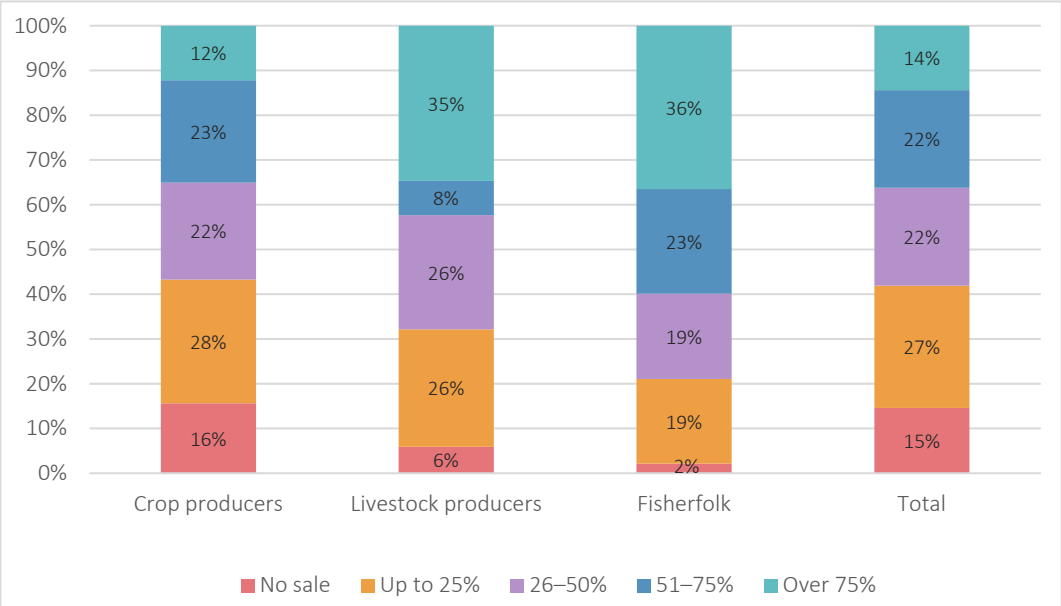
Food supply and markets

Marketing of agricultural products

All surveyed households involved in agricultural activities (n = 1 590) were asked about the marketing of their production. This led to a sample size of 1 368 agricultural households marketing some of their production at this time of the year and who answered the questions for this section.

Most of these surveyed agricultural households reported usually selling some of their production. The share of production usually sold is the highest among fisherfolk, who reported normally selling their entire production, and over one-third of them reported selling over 75 percent of it. They were followed by livestock producers, who reported similar proportions in the amount of production usually sold for this time of the year. However, the proportion of crop production sold was lower, as reported by crop producers, as their production is mostly destined to household food consumption (Figure 25).

Figure 25. Share of production usually sold by surveyed households, by type of agricultural production
(n = 1 590)

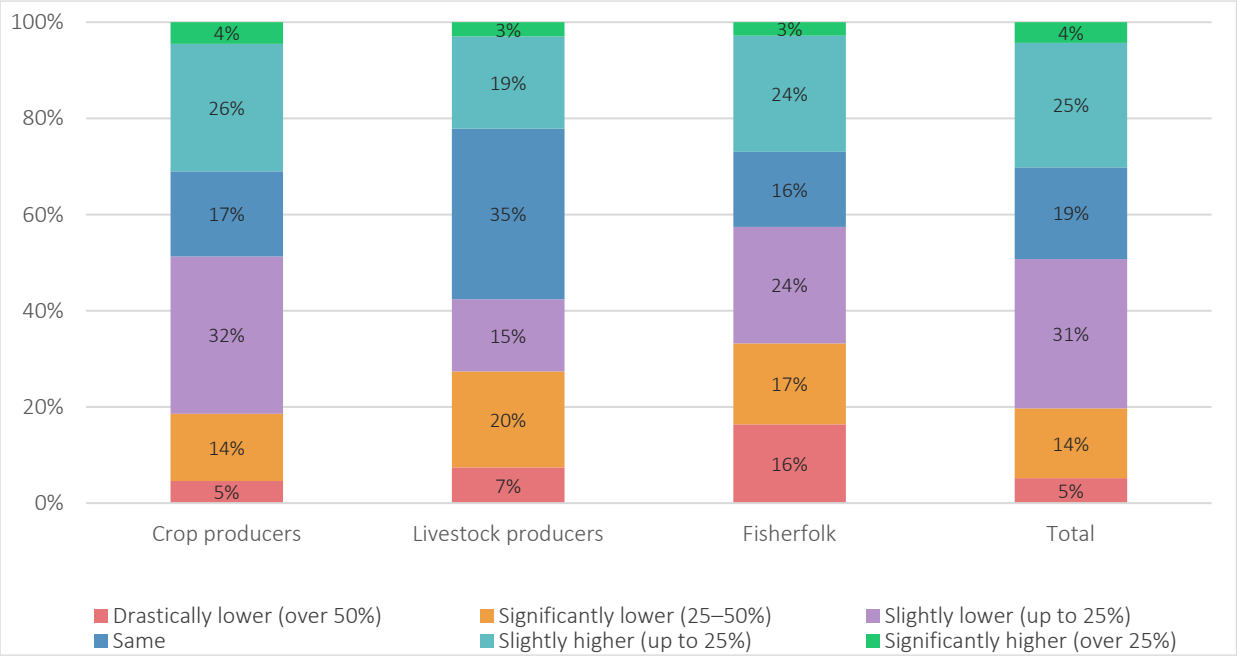


Source: FAO, 2020; FAO assessment results

When comparing the level of sales for agricultural products over the past three months with the same period last year, 50 percent of surveyed households reported a lower volume of sales, while nearly 30 percent reported higher sales (Figure 26). Among this group of households, the decrease in the level of sales was higher for the fisheries sector. In terms of the geographical distribution of these fluctuations in sales, the most significant decrease in sales for all agricultural products was reported in the Falaba, Moyamba and Bonthe districts (Figure 27).

Figure 26. Change in the level of sales of agricultural products over the past three months compared to the same period last year, by type of agricultural production

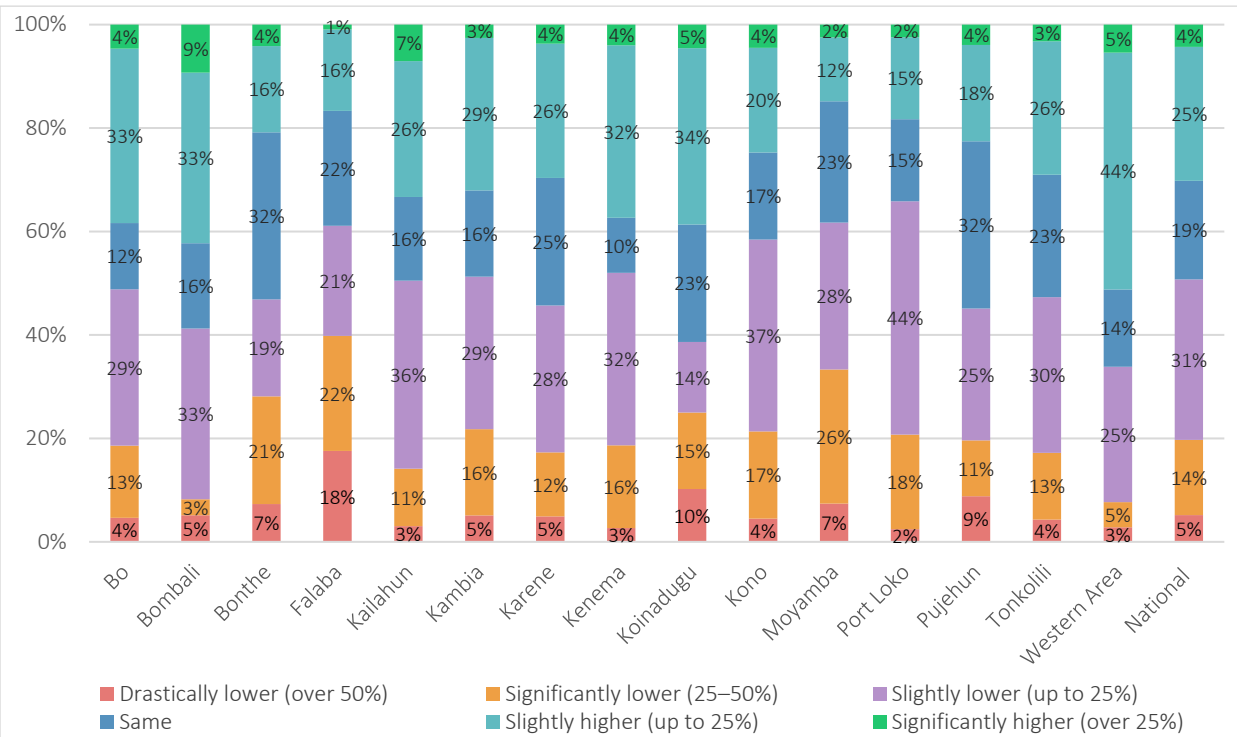
(n = 1 368)



Source: FAO, 2020; FAO assessment results

Figure 27. Change in the level of sales of agricultural products over the past three months compared to the same period last year, by district

(n = 1 368)

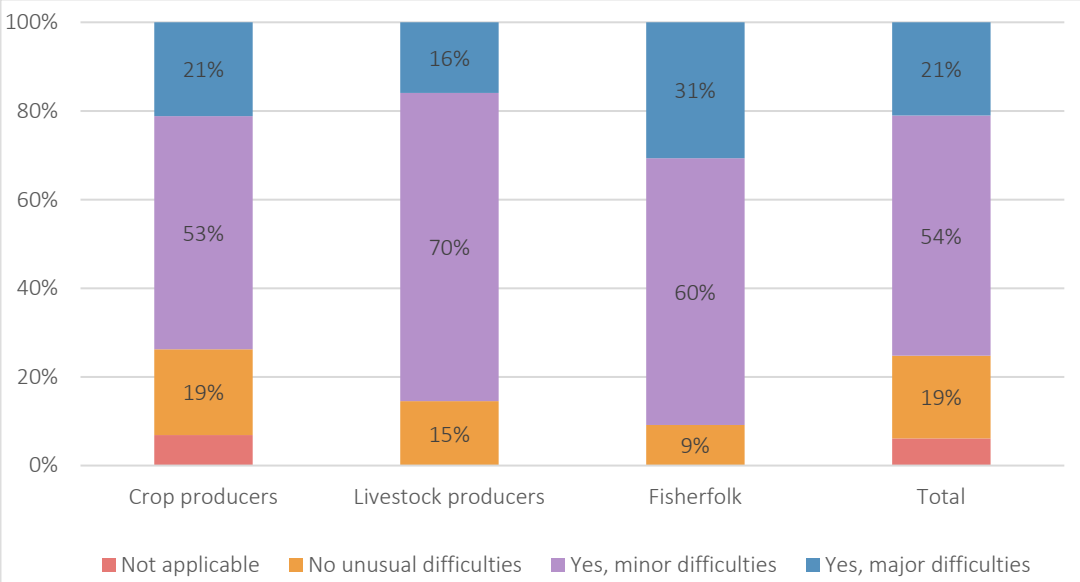


Source: FAO, 2020; FAO assessment results

In parallel, fisherfolk households reported the highest levels of difficulties with the marketing of their production over the past three months, with nearly one-third of them reporting major difficulties. In turn, over 85 percent of households involved in livestock production reported difficulties with the marketing of their animals or animal-based products, closely followed by 74 percent of crop farmers (Figure 28). With respect to crop farmers, crop marketing over the past three months mainly concerned vegetables, a particularly perishable crop product, and ground nut. At the time of the survey, the rice harvest had not yet arrived.

Figure 28. Unusual marketing difficulties over the past three months, by type of agricultural production

(n = 1 368)



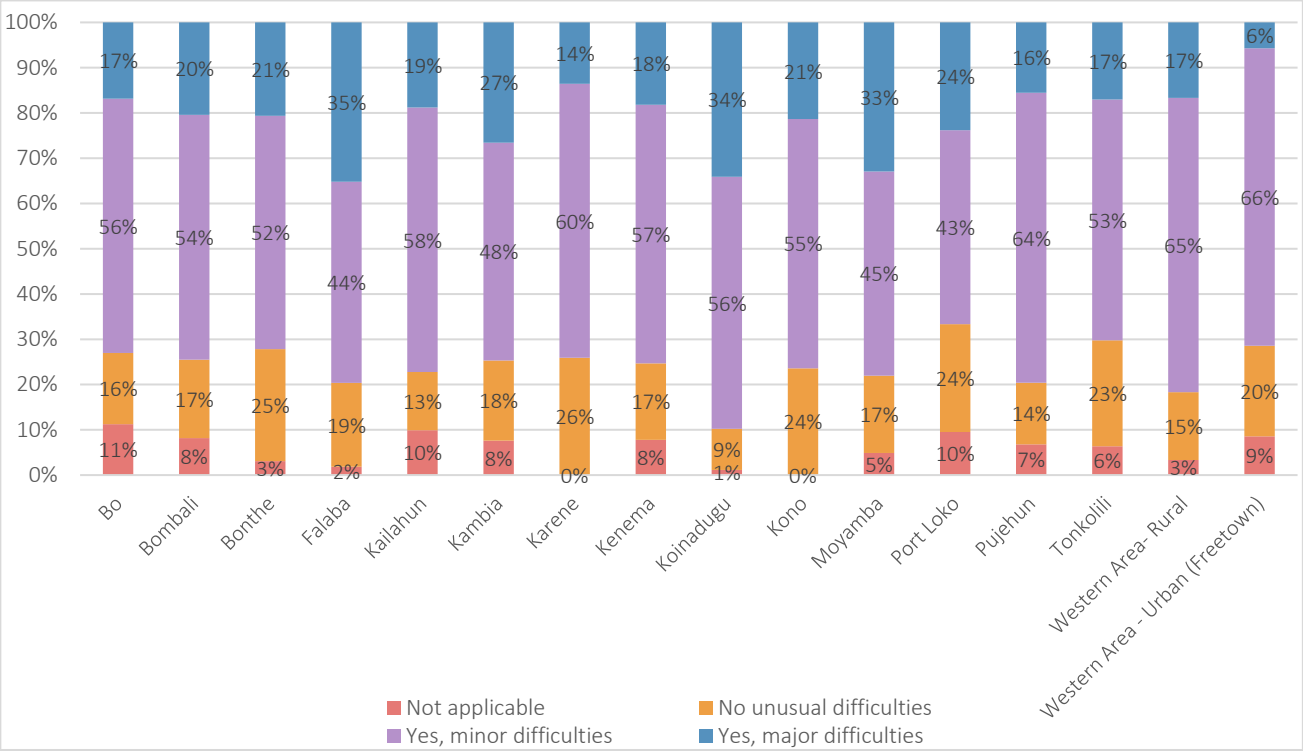
Source: FAO, 2020; FAO assessment results

The marketing of agricultural production overall appears to have been more problematic in the Falaba, Koinadugu and Moyamba districts, where over one-third of surveyed households reporting major difficulties (Figure 29). In this context, it is worth noting that the Falaba and Koinadugu districts are high-producing areas and mostly rely on bordering and weekly markets. Therefore, the closure of neighbouring borders and weekly markets may have highly affected crop marketing. Similarly, inter-district lockdowns was also a major factor leading to a decrease in livestock marketing in the Koinadugu and Falaba districts, both of which represent the major hub of livestock sales in Sierra Leone.

The Moyamba district, on the other hand, is a major vegetable and fruit producing district that relies on daily road markets as a primary channel of distribution and sales and on weekly markets as secondary channel. In this case as well, inter-district lockdowns and roadblocks that limited the movement of vehicles along the main highway interrupted crop marketing in the Moyamba district, which was further affected by the weekly market closures.

Figure 29. Prevalence of unusual marketing difficulties over the past three months, by district

(n = 1 368)



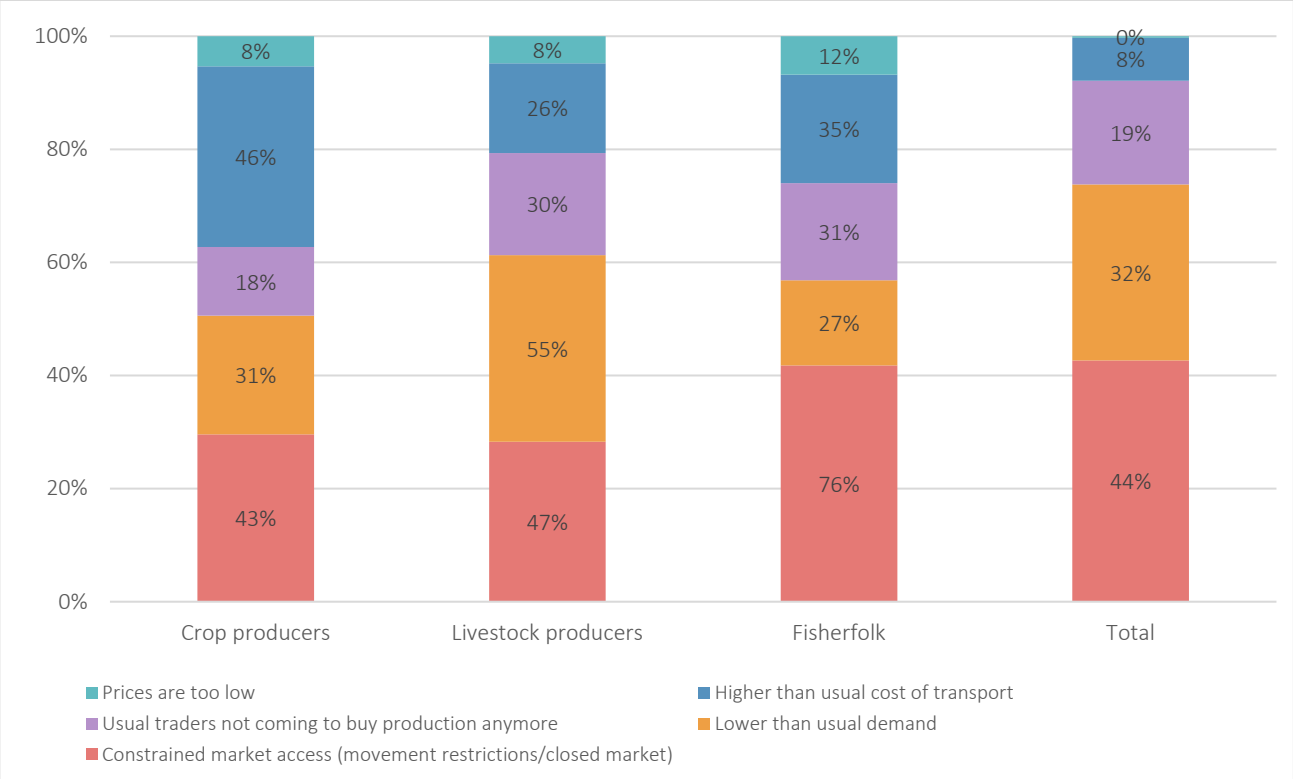
Source: FAO, 2020; FAO assessment results

Overall, the constrained access to markets was reported as the main cause of marketing difficulties by those surveyed households selling crop, livestock and/or fish products (Figure 30). Crop marketing was more affected by transportation costs and delays, given that vegetables, the main crop on sale in during this period, are highly perishable products.

The marketing of livestock products, on the other hand, was more affected by the decrease in demand due to income constraints among consumers. In addition, 51 out of the 64 key informants interviewed also indicated that the transportation channels for agricultural products were suffering disruptions, which may help explain the higher costs in transportation, compounded by increases in fuel prices over the past two years.

Figure 30. Main marketing difficulties over the past three months, by type of agricultural activity

(n = 971)

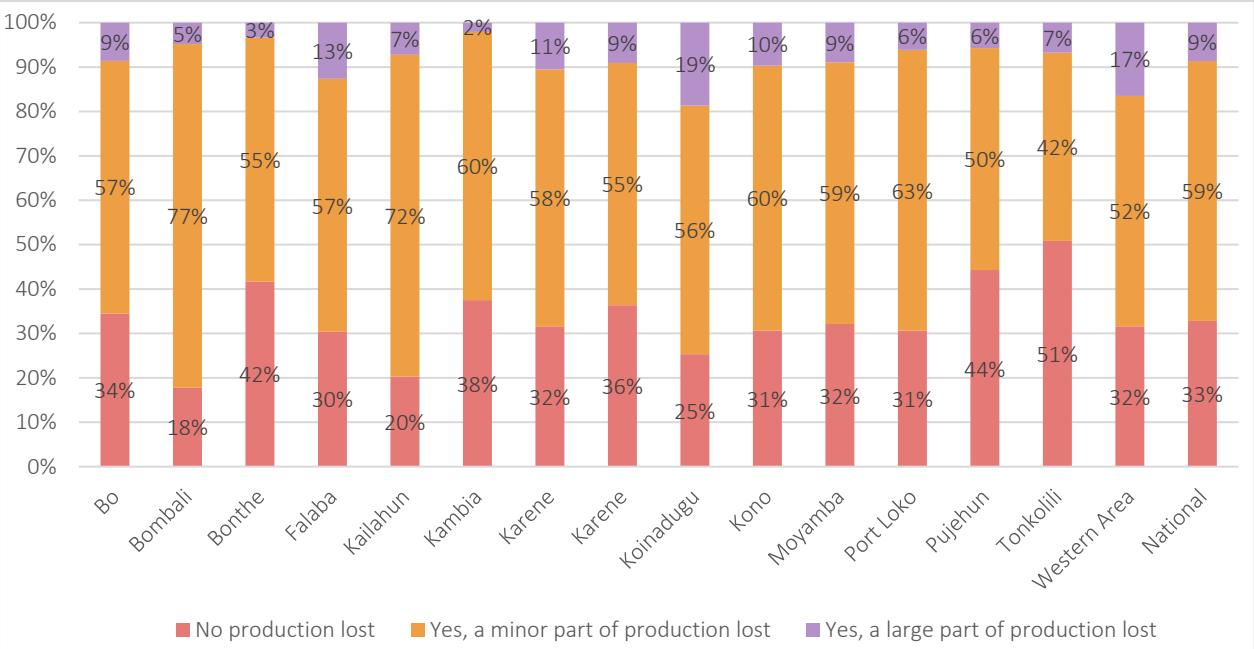


Source: FAO, 2020; FAO assessment results

As a result of these marketing difficulties, two-thirds of respondents reported having had to lose part of their agricultural production, but less than 10 percent of them reported that a large part of their production went to waste, with these losses being particularly higher in the Bombali, Kailahun and Koinadugu districts. The proportion of surveyed households reporting a loss of production due to marketing difficulties was similar among respondents involved in crop, livestock and fish production, yet it was slightly higher among crop producers, 68 percent of whom reported losses, compared to 63 percent of livestock producers and 62 percent of fisherfolk (Figure 31).

Figure 31. Prevalence and degree of agricultural losses reported by surveyed households as a result of marketing difficulties over the past three months, by district

(n = 934)



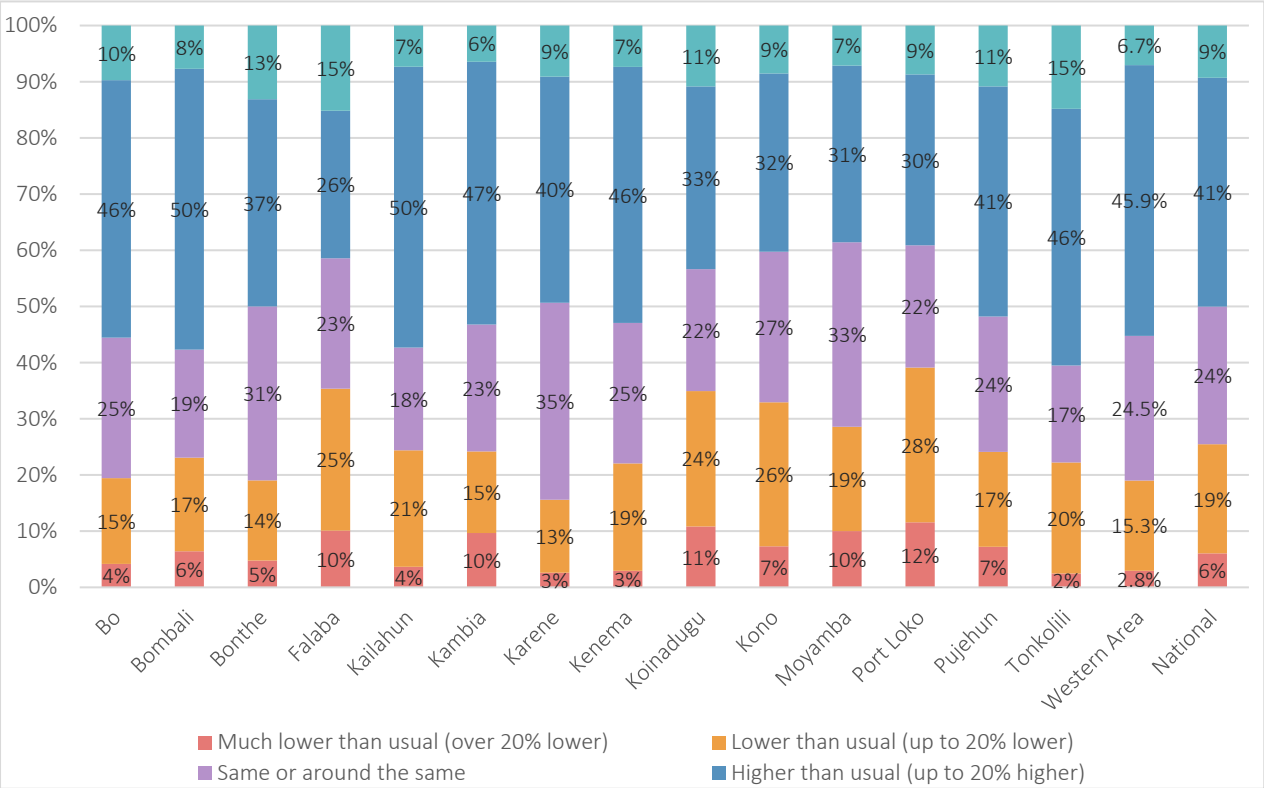
Source: FAO, 2020; FAO assessment results

In assessing producer prices, half of surveyed households selling agricultural products reported their prices to be higher than last year for the same period, while one quarter of them reported lower prices than usual. There was, however, some geographic discrepancy, with a higher proportion of households reporting lower prices in the Port Loko, Koinadugu and Falaba districts. However, all districts appear to have been affected in a consistent fashion in terms of lower prices available to producers (Figure 32).

This decrease in prices was reported by a higher proportion of households selling livestock and animal-based products (39 percent), followed by households selling fish products (28 percent) and those selling crops(24 percent) (Figure 33). This trend, comparatively unfavourable for livestock producers, is likely related to the lower demand than usual that affected livestock-producing households, as mentioned before.

Figure 32. Change in producer prices over past three months compared to the same period last year, by district

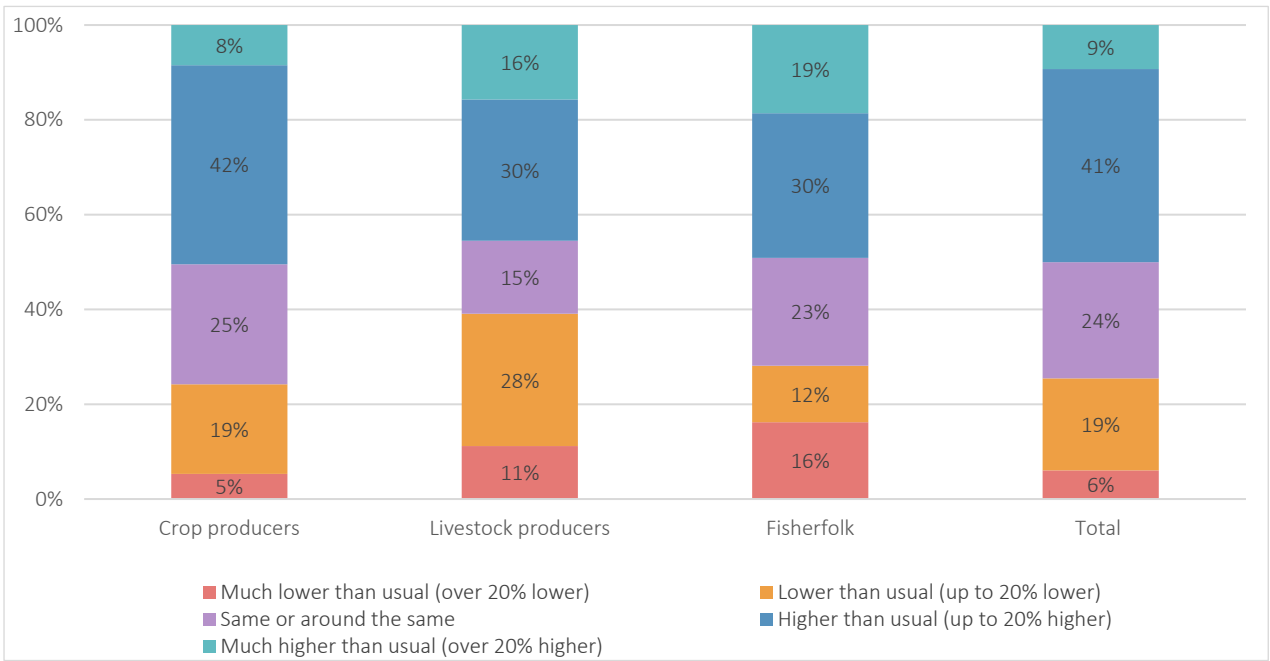
(n = 1 185)



Source: FAO, 2020; FAO assessment results

Figure 33. Changes in producer prices over the past three months compared to the same period last year, by type of agricultural activity

(n = 1 185)



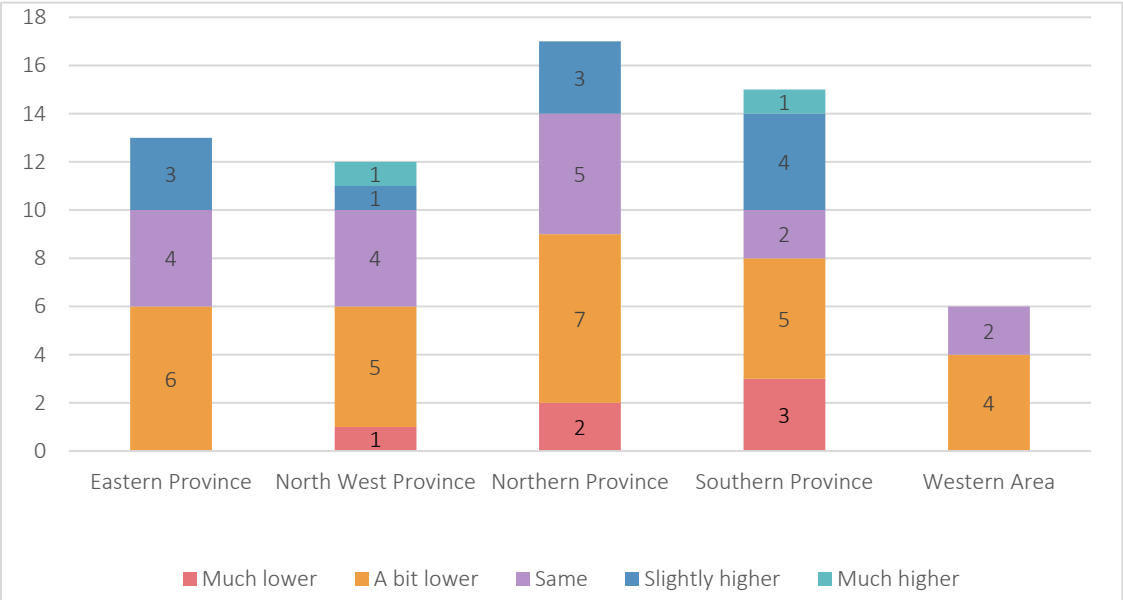
Source: FAO, 2020; FAO assessment results

Food availability and prices

According to FAO GIEWS data from May 2020, markets were well supplied with both local and imported commodities across the country (FAO GIEWS, 2020a). During the survey, over half of the 65 key informants estimated that food availability in markets was lower than usual, pointing to a degradation of the food supply over the past three months due to the movement restrictions and interruption to transportation channels (Figure 34). Imports of food and agricultural inputs were initially affected by the restrictions, which were then lifted for essential products. However, the higher transportation and transaction costs still affected their trade and ultimately led to an increase in prices.

Figure 34. Food availability levels in markets compared to the same period in usual times, as reported by district agricultural officers

(n = 65)

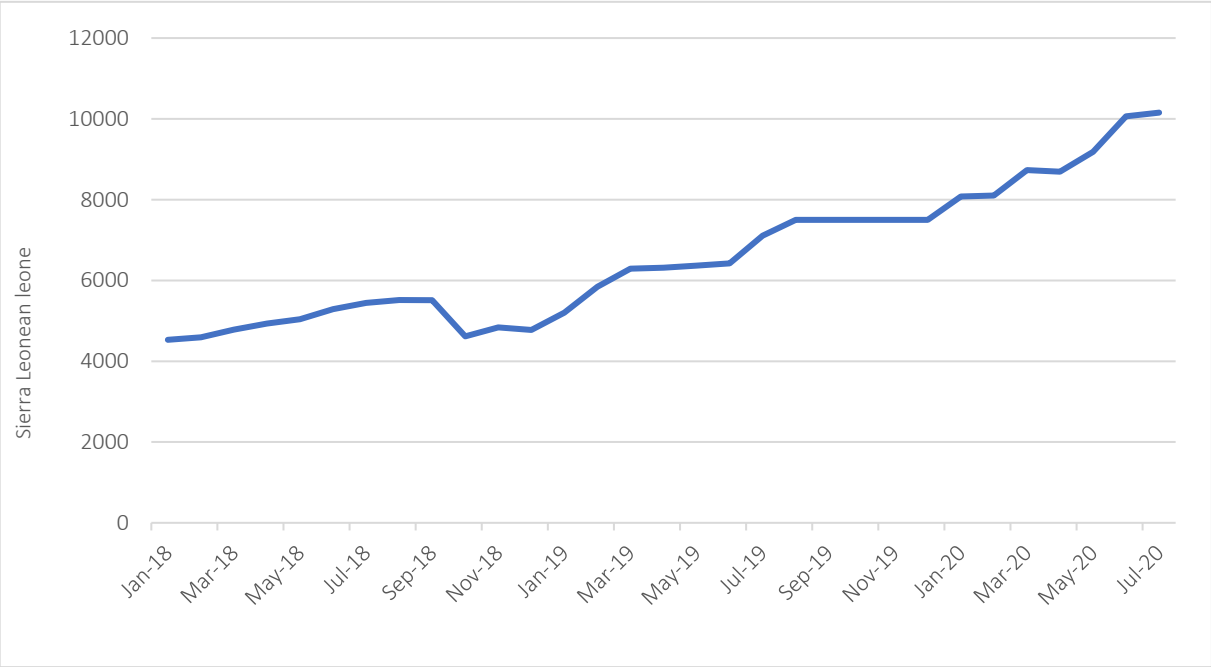


Source: FAO, 2020; FAO assessment results

Staple food prices have been increasing since 2018 due to certain macroeconomic factors, including a high inflation rate, the liberalization of the exchange rate and the weakening of the local currency. According to WFP, food prices reached crisis levels (the highest of four levels) in 12 out of the 13 monitored markets during the second quarter of 2020. In this context, rice prices were 44 percent higher than the previous year for the same quarter, cassava prices were 31 percent higher and oil was 11 percent higher (Figure 35) (WFP, 2020a).

Figure 35. Local retail prices for rice (national average)

(January 2018–July 2020)



Source: WFP, 2020a

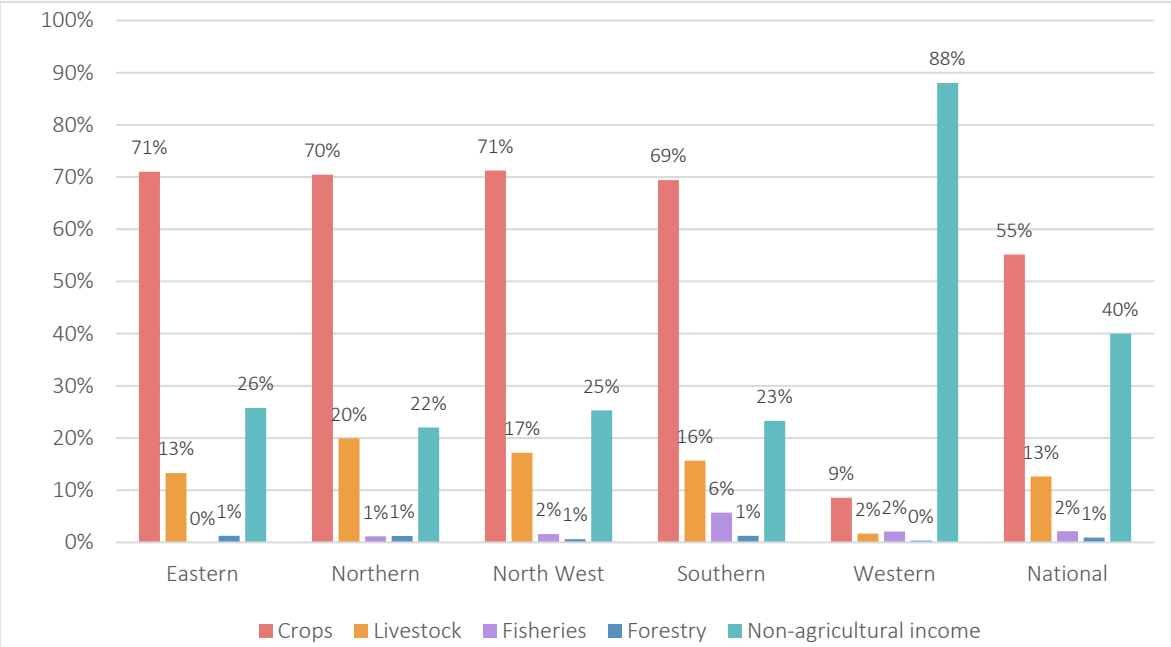
Livelihoods, incomes and coping strategies

Livelihoods and income

Involvement in agricultural activity is high nationwide, with 66 percent of households within the sample of the survey reporting to be working in this sector, and with up to 78 percent of households in the Northern Province involved in either crop, livestock, fisheries or forestry production. When asked to identify the main agricultural activity that contributes to their food consumption and income generation, around 55 percent of surveyed households identified crop production (Figure 36).

Figure 36. Proportion of respondents involved in different agricultural activities, by province

(n = 2 437)

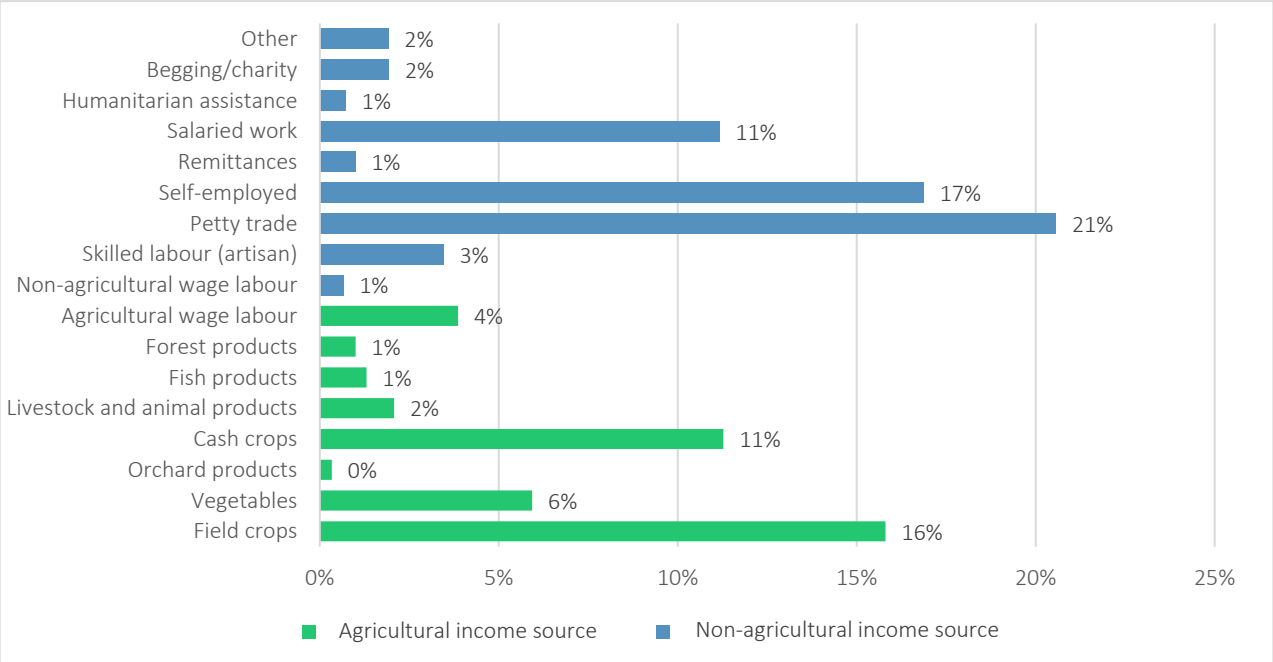


Source: FAO, 2020; FAO assessment results

The main income sources are petty trade (21 percent) and self-employment (17 percent), yet, overall, 42 percent of households reported obtaining their income from some type of agricultural activity (Figure 37).

Figure 37. Main source of income among surveyed households over the past three months, by agricultural and non-agricultural source of income[4]

(n = 2 437)



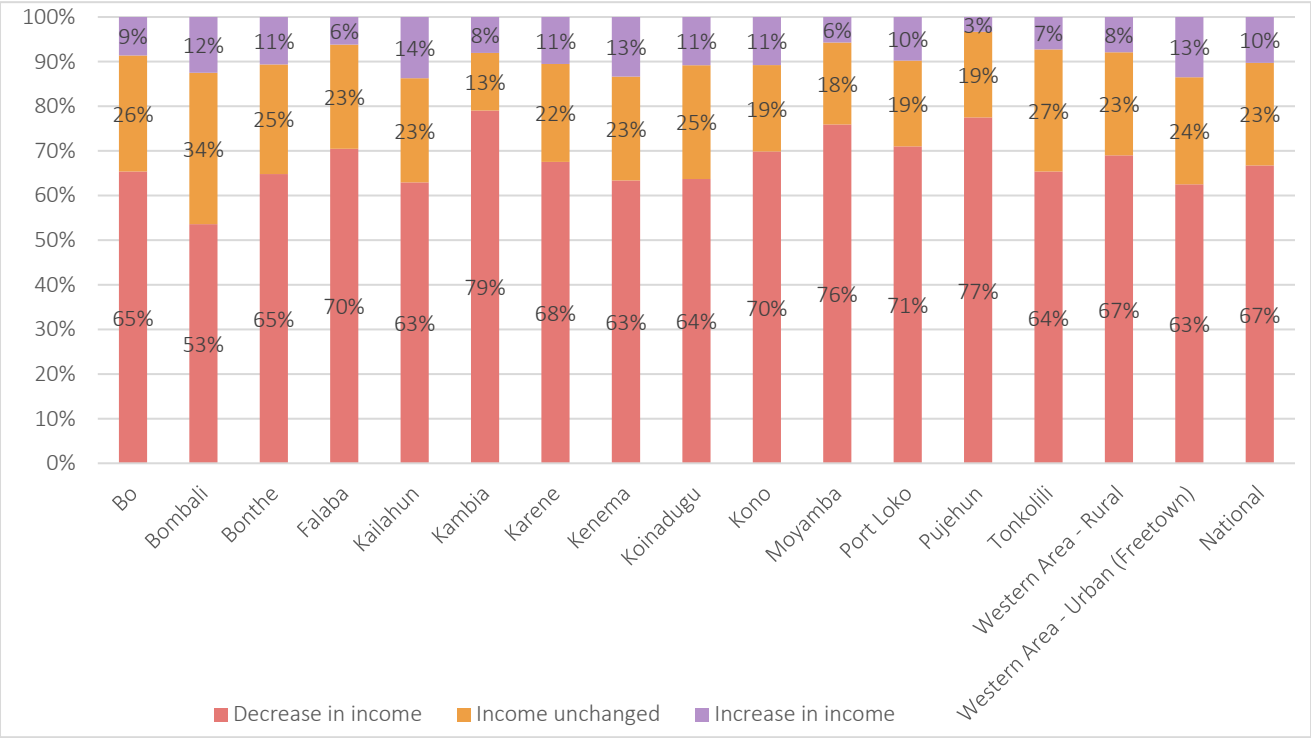
Source: FAO, 2020; FAO assessment results

In terms of changes in income levels among the surveyed households, 67 percent of them reported a decrease in total income compared to last year, with disparities between districts, such as 53 percent of households reporting a decrease in Bombali and over 76 percent of households in the Kambia, Moyamba and Punjehun districts (Figure 38).

[4] Humanitarian assistance, as reflected in Figure 38, refers to cash-for-work and other forms of cash-based assistance.

Figure 38. Change in income levels among surveyed households over the past three months compared to the same period last year, by district

(n = 2 435)



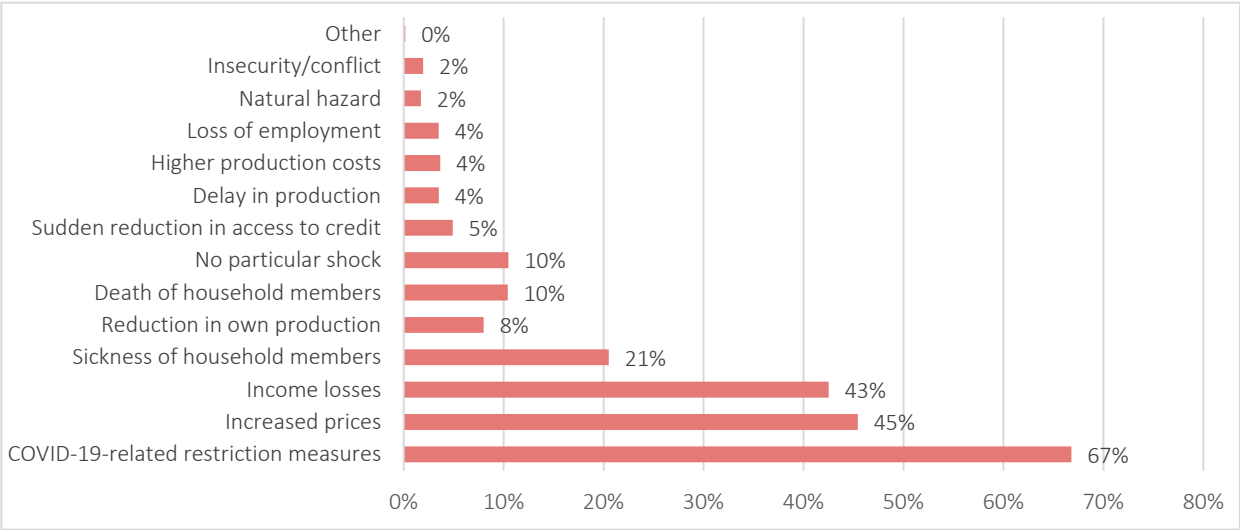
Source: FAO, 2020; FAO assessment results

When asked about what type of shocks they had faced over the past three months, the surveyed households predominantly reported the COVID-19 restriction measures as the main shock, for 67 percent of households. This was followed by economic shocks due to increased prices (45 percent) and income losses (43 percent), thus pointing to economic difficulties (Figure 39).

It should be noted that 21 percent of surveyed households also reported the sickness of a household member as a shock, which may not be directly linked to a COVID-19 infection but to the lower access to health services in the context of the current public health crisis.

Figure 39. Main shocks faced by surveyed households over the past three months

(n = 2 437)



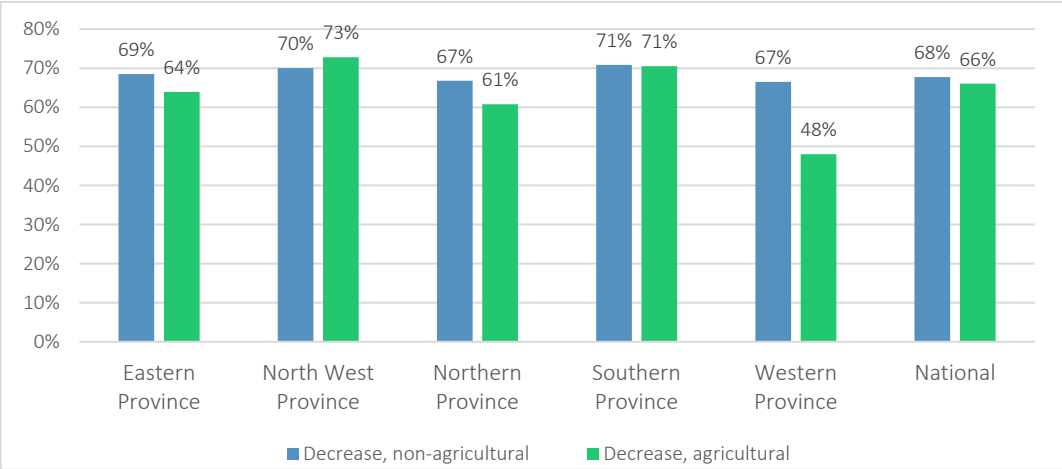
Source: FAO, 2020; FAO assessment results

In looking at the main characteristics of surveyed households who suffered a decrease in income, it appears that there is no major difference in income fluctuations between households drawing their main income from agriculture and those obtaining income from other sources, with 66 percent of households dependent on agriculture reporting income changes and 68 percent dependent on other income sources reporting income losses.

In addition, households obtaining the majority of their income from agriculture suffered fewer losses compared to others in the more urbanized Western Province (Figure 40). However, it is worth noting that initial income levels were typically much lower for agricultural households, especially during the lean season; therefore, lower income losses among agricultural households does not necessarily indicate a comparatively lower degree of economic constraints experienced.

Figure 40. Decrease in total income levels among agricultural and non-agricultural surveyed households over the past three months compared to the same period last year

(n = 2 437)



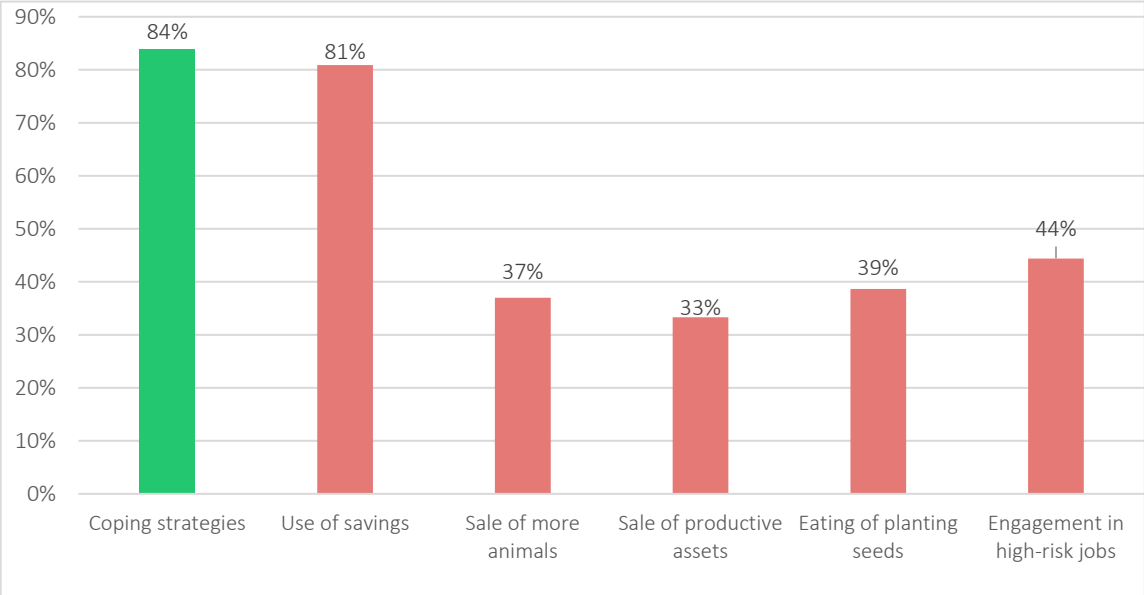
Source: FAO, 2020; FAO assessment results

Livelihood coping strategies

Surveyed households were asked whether they had resorted to coping strategies that they would otherwise avoid due to a lack of food or access to food. This represented a simplified version of the Livelihood Coping Strategies Index (LCSI), which categorizes households into categories of Stress, Crisis or Emergency, according to the most severe strategy used. In this respect, 84 percent of households reported having resorted to coping strategies over the past month and, among this group of households, a high proportion of them reported having resorted to strategies considered in the Emergency category, with 44 percent engaging in high-risk or degrading jobs (Figure 41).

Although this simplified version of the LCSI cannot be compared with baselines on the full indicator collected in the past, it still appears to be very high. The assessment revealed that overall agricultural households resorted more to the most severe coping strategy (51 percent of households), by engaging in degrading jobs, compared to non-farming households nationwide (35 percent of households). This points to a higher degree of economic constraints encountered by farming households (Figure 42).

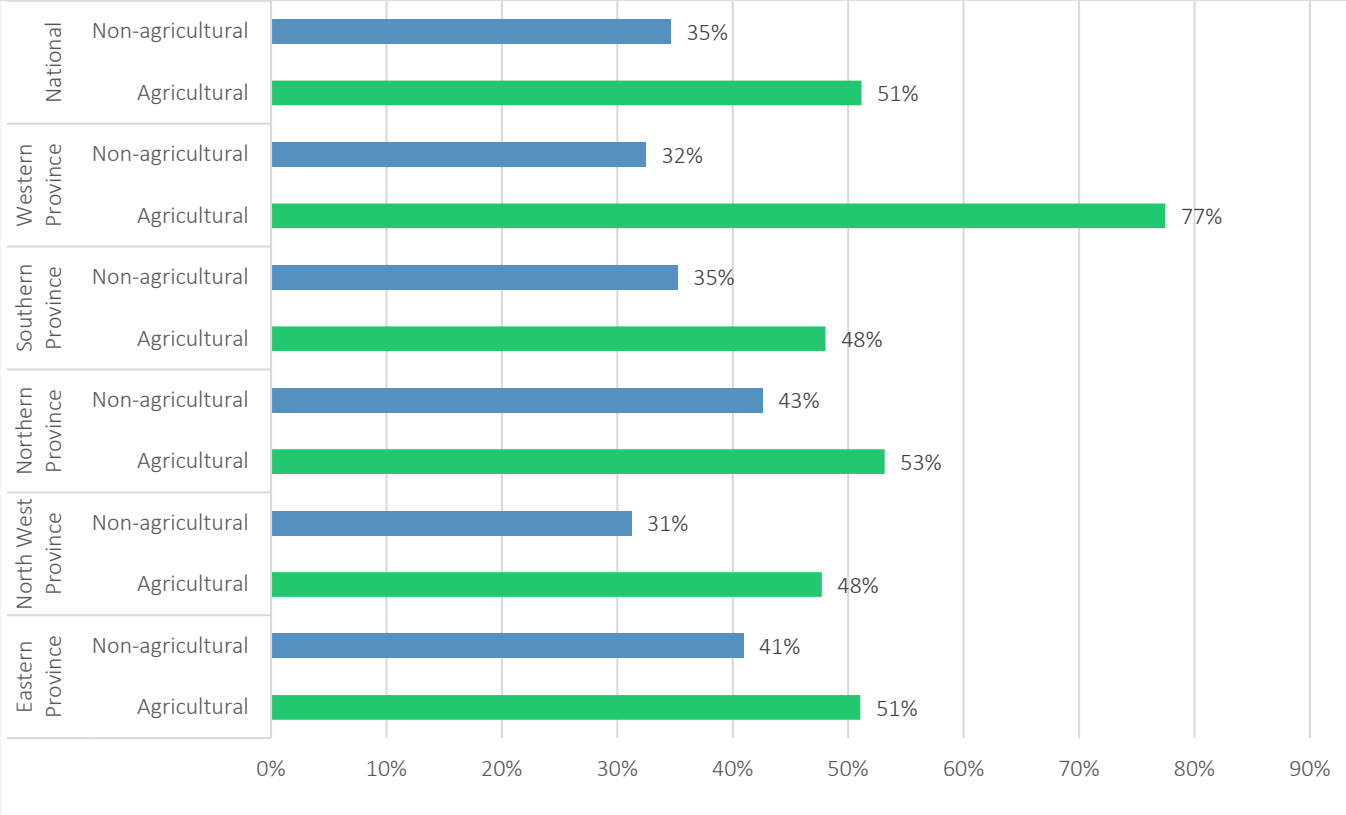
Figure 41. Proportion of surveyed households reporting having used coping strategies in response to lack of/access to food over the past three months (green), by type of coping strategy (red)
(n = 2 437)



Source: FAO, 2020; FAO assessment results

Figure 42. Proportion of surveyed households resorting to high-risk, degrading or exploitative jobs in the past three months to cope with lack of, or access to, food, by agricultural and non-agricultural household and province

(n = 2 437)



Source: FAO, 2020; FAO assessment results

Food security

Access to food and prevalence of hunger

As the survey coincided with the peak of the lean season in the period of July–August, it is expected for it to have identified higher levels of seasonal food insecurity than would have otherwise be identified during the rest of the year. As presented thus far, data from the E-FSMS conducted in June 2020 confirms this pattern of seasonal food insecurity, in addition to indicating a trend of increasing food insecurity over past two years. In this context, 63 percent of the population was identified as food insecure in the 2020 lean season (June) compared to only 54 percent in the 2019 lean season (August), and 48 percent was identified as food insecure in the 2020 post-harvest season (January) compared to 34 percent in the 2019 post-harvest season (February).

Furthermore, the survey included questions around food consumption and hunger for the entire sample of 2 437 respondents. In order to assess the food insecurity situation of this sample, the survey included an extended FIES module that also included frequency follow-up questions to the three more severe items of the perceived experience of food insecurity, thus allowing to compute the HHS. Results can therefore be reported with reference to the categories of "moderate hunger" and "severe hunger" typically used as part of the HHS.[5]

In addition to the survey conducted in August 2020, FAO also collected FIES data in a dedicated additional round in September 2020, when the rice harvest season had already begun. This round of data collection, however, was only designed to produce results disaggregated up to the Admin 1 (province) level.[6]

The analysis of FIES data reveals that 68.6 percent of the population represented by the agricultural livelihood sample were suffering of moderate or severe hunger during July–August, at the peak of the lean season, whereas in September, at the beginning of the rice harvest, the prevalence of moderate or severe food insecurity had fallen to 43.1 percent (Table 3). It is worth noting that the proportion of the population suffering from severe food insecurity is very low, at 5.8 percent in July–August and 7.2 percent in September 2020. The difference between these two periods is within the margin of error, therefore it cannot be concluded that there has in fact been a worsening of the severe food insecurity situation.

Taking into account the difference in the methods used and factoring in the margins of error that the FIES methodology allows to compute, these results are fairly consistent with the food insecurity levels reported recently by the E-FSMS,[7] which point to a

[5] According to the official HHS manual, household are classified as having suffered from "moderate hunger" if they report a household hunger score of 2–3, and from "severe hunger" if they report a score of 4–6. See http://bit.ly/3a4G0q4 and https://bit.ly/3aYYQj1 (Table 6, Page 13).

[6] This second data collection has been coordinated by the FAO Statistics Division and has been conducted with the specific aim to compile the SDG Indicator 2.1.2 for Sierra Leone in 2020 and to assess the potential impact of the COVID-19 pandemic on it. For more details, see **FAO** (forthcoming). *Food insecurity in Sierra Leone 2020. Estimating the impact of COVID-19.* FAO Statistics Division Report.

[7] See MAFFS *et al.*, 2020. The report does not include confidence intervals around the estimated percentages and number of people. It is thus difficult to conduct a proper comparison by way of Table 3.

deterioration of the food security situation over the past two years. It seems that the COVID-19 pandemic, alongside a worse lean season due to below-average harvests in 2019 and a macroeconomic deterioration for the past three years may have imposed a toll on an already serious food security situation at the peak of the lean season. The new harvest starting in September 2020 is bound to bring a seasonal trend of improvement of food security, but only after the harvest is completed will it be possible to compare with these figures against previous years in order to appreciate the concrete effects of the new harvest on household food insecurity. This will be captured in the next round of monitoring, which is due to take place in January–February 2021.

Table 3. Prevalence of hunger in July–August and September 2020,
(by administrative unit, type of household and gender of the household head)

	July-August 2020		September 2020	
	Moderate + severe hunger	Severe hunger	Moderate + severe hunger	Severe hunger
By region				
Eastern Province	71.0 (±4.5)	6.3 (±1.5)	40.5 (±9.2)	6.7 (±4.2)
Northern Province	71.6 (±4.1)	6.2 (±1.3)	49.4 (±27.8)	6.5 (±10.4)
North West Province	72.7 (±4.6)	6.7 (±1.6)	47.9 (±10.9)	9.2 (±5.9)
Southern Province	71.8 (±4.1)	6.7 (±1.3)	44.6 (±10.4)	7.2 (±4.3)
Western Province	61.2 (±8.0)	3.7 (±1.5)	37.5 (±7.6)	5.8 (±3.7)
National	**69.1 (±2.6)**	**5.8 (±0.7)**	**43.1 (±4.9)**	**7.2 (±2.4)**
By district				
Bo	67.6 (±8.2)	6.4 (±2.6)	-	-
Bombali	68.1 (±7.3)	5.6 (±2.3)	-	-
Bonthe	74.8 (±7.6)	8.2 (±3.1)	-	-
Falaba	78.5 (±7.1)	7.1 (±2.7)	-	-
Kailahun	75.2 (±7.0)	7.0 (±2.7)	-	-
Kambia	73.5 (±8.3)	6.7 (±2.8)	-	-
Karene	76.2 (±7.2)	8.3 (±3.2)	-	-
Kenema	66.8 (±8.3)	5.9 (±2.5)	-	-
Koinadugu	78.0 (±7.5)	8.2 (±3.2)	-	-
Kono	72.3 (±7.2)	6.1 (±2.5)	-	-
Moyamba	71.4 (±7.6)	5.9 (±2.5)	-	-
Port loko	69.6 (±7.9)	5.7 (±2.4)	-	-
Pujehun	78.0 (±5.7)	7.4 (±2.4)	-	-
Tonkolili	70.2 (±7.3)	5.7 (±2.4)	-	-
Western area rural	72.2 (±9.1)	5.4 (±2.7)	-	-
Western area urban (Freetown)	56.9 (±10.5)	3.0 (±1.9)	-	-
By type of household				
Agricultural	74.2 (±2.3)	6.9 (±0.9)	-	-
Non-Agricultural	61.7 (±5.3)	4.2 (±1.0)	-	-
By gender of the household head				
Male-headed households	68.9 (±2.8)	5.7 (±0.7)	-	-
Female-headed households	70.0 (±6.3)	6.2 (±1.5)	-	-

Source: FAO, 2020; FAO assessment results; FIES September 2020 survey

By looking at the results across provinces and districts, and by considering the larger margins of uncertainty due to the smaller sample sizes, the prevalence of food insecurity is relatively lower in Western Area (Urban) than in the rest of the country, particularly because of more income generating opportunities available in the capital (Freetown).

By looking at the distribution of FIES and HHS scores by type of household, it becomes clear that agricultural households tend to have higher food insecurity and hunger scores than non-agricultural households. Also, the prevalence of food insecurity is slightly higher among female than male-headed households, but this difference is not statistically significant.

The reason for these findings may be that, during the lean season when households rely on markets to access food, farming households appear to have been facing even higher economic constraints, thereby further affecting their access to food during this period.

Food consumption

The survey included questions on the consumption of specific food groups and asked of the households' experience on changes observed over the previous three months compared to what was deemed usual for that period of the year.

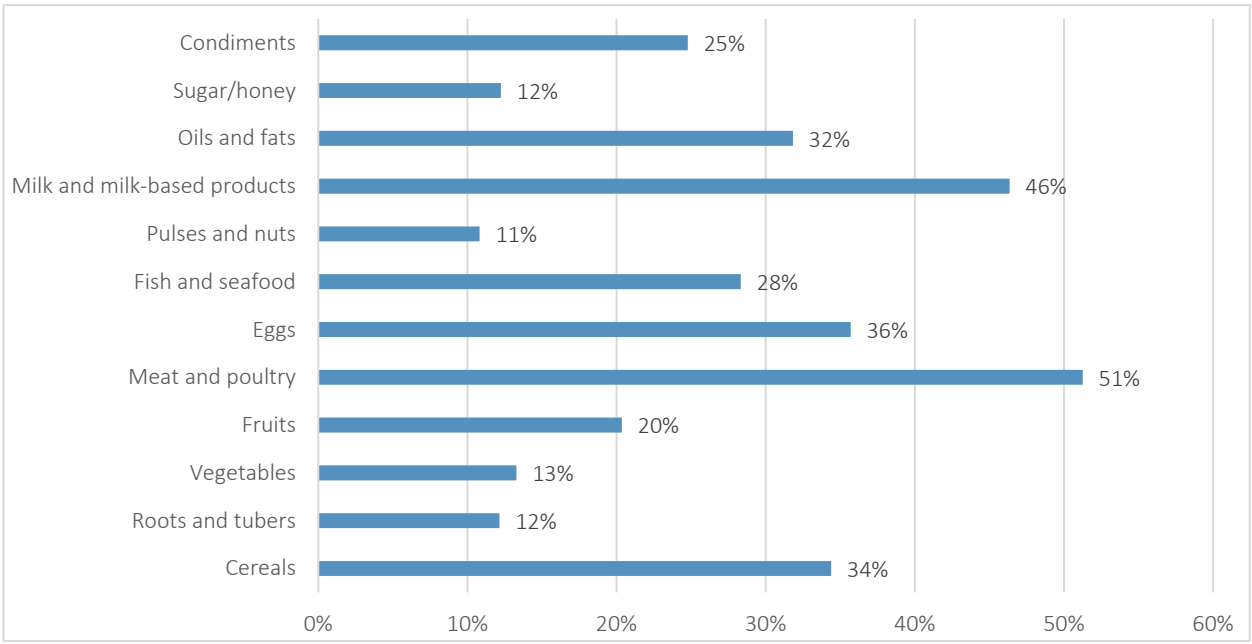
When asked about which food groups they have been consuming less over the past three months compared to usual for the same period, animal products were reported by the highest proportion of households, with 51 percent of households reporting having consumed less meat and poultry, 46 percent consuming fewer milk and dairy products and 36 percent consuming fewer eggs (Figure 43).

The decrease in meat consumption is particularly marked outside the Western Area, reflecting income constraints (Figure 44). However, even the consumption of cereals decreased for 34 percent of surveyed households, pointing to a decrease, not only in quality and diversity, but in the quantity of food consumed as well (Figure 45).

These responses indicate that the access to more expensive, protein-rich foods may have been particularly constrained in this period, thus pointing to potentially harmful consequences on the nutritional quality and dietary diversity of surveyed households.

Figure 43. Proportion of surveyed households reporting having consumed fewer quantities than usual among twelve food groups over the past three months

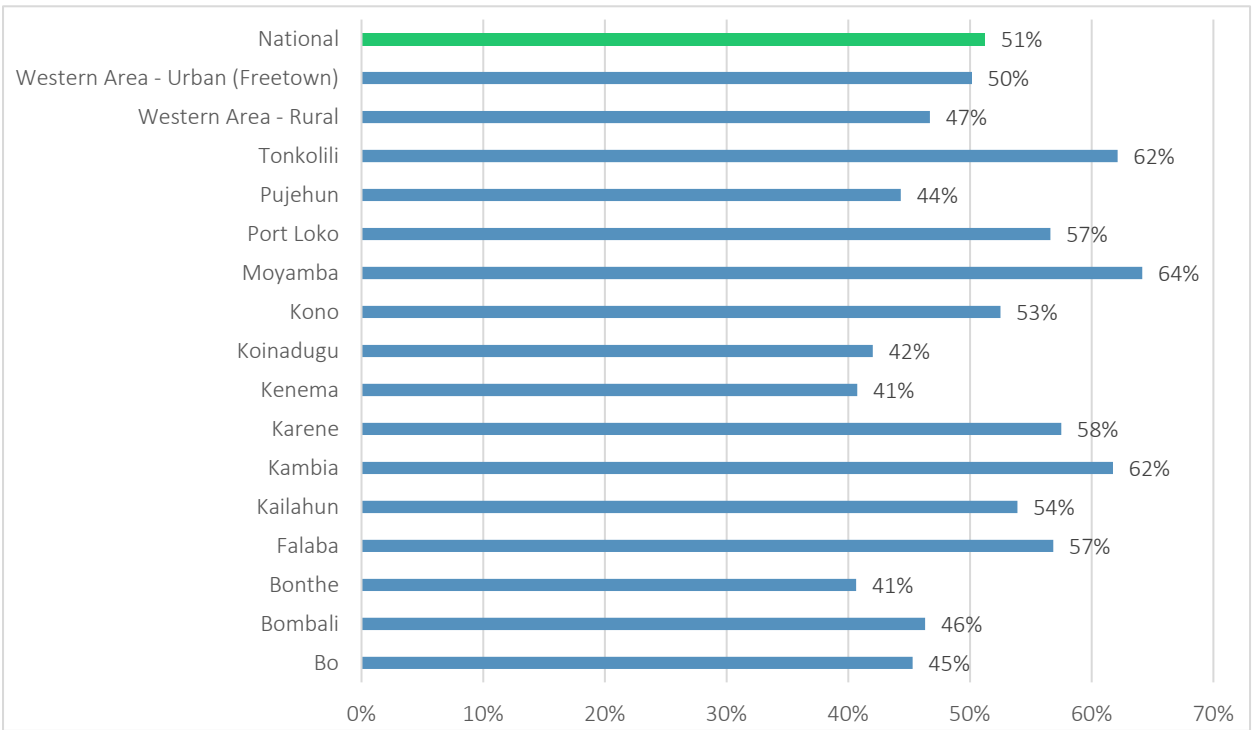
(n = 2 437)



Source: FAO, 2020; FAO assessment results

Figure 44. Proportion of surveyed households reporting having consumed less meat and poultry than usual over the past three months, by district

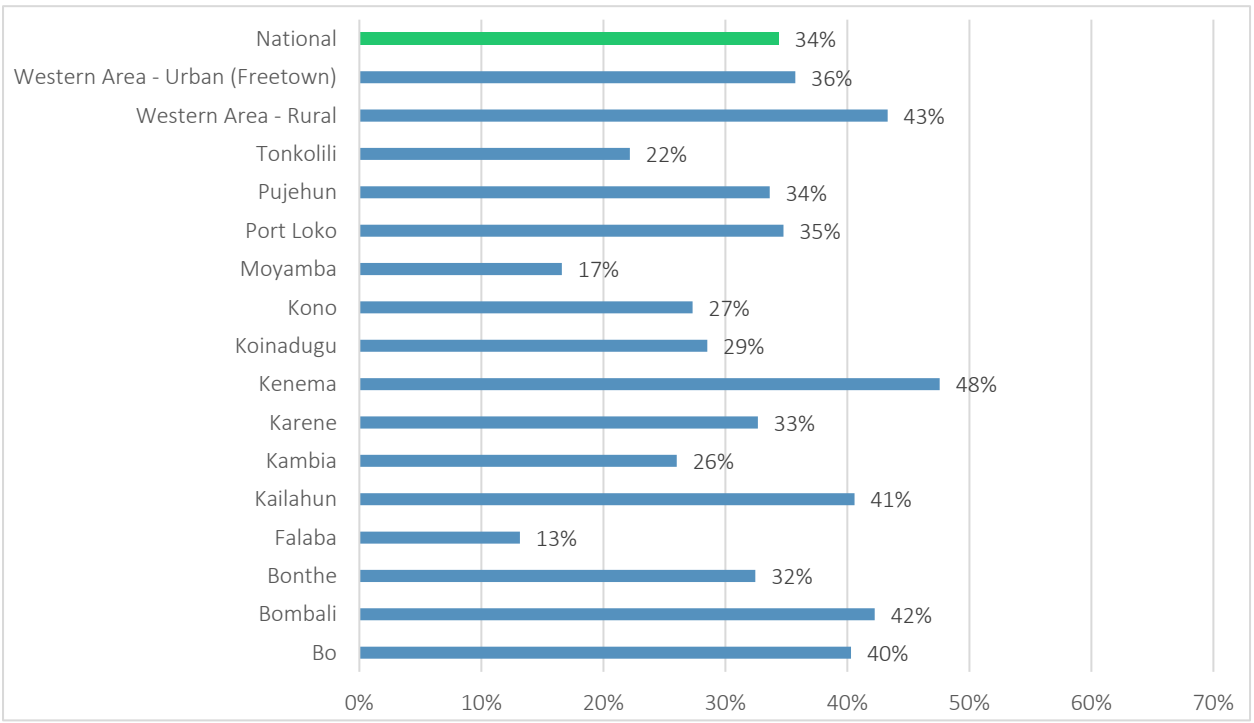
(n = 2 437)



Source: FAO, 2020; FAO assessment results

Figure 45. Proportion of surveyed households reporting having consumed fewer cereals than usual over the past three months, by district

(n = 2 437)



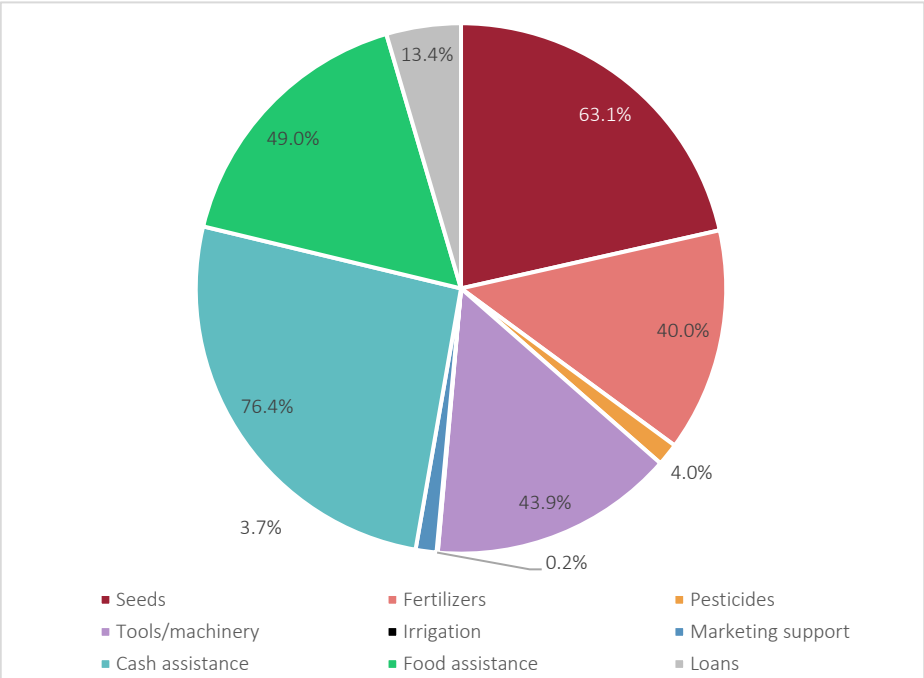
Source: FAO, 2020; FAO assessment results

Most affected population groups and needs

Needs expressed by surveyed households

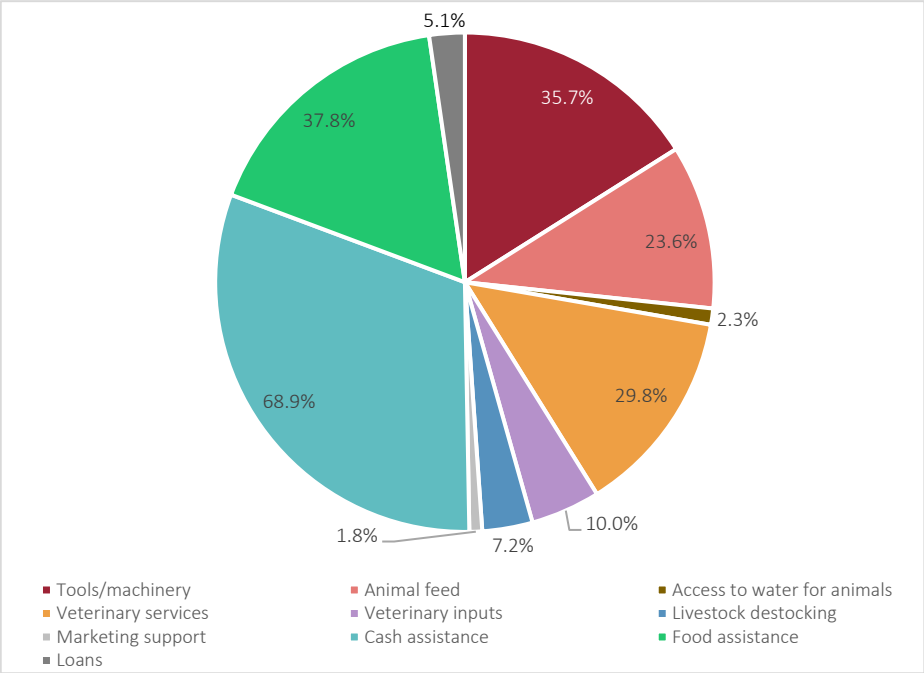
All surveyed agricultural households (n = 1 588) were asked about the needs for assistance they may have to support their agricultural production in the short run (over the coming three months). The main needs expressed by crop producers were cash assistance (26 percent), seeds (21 percent) and food assistance (17 percent) (Figure 46). Similarly, the main needs expressed by livestock producers were also cash assistance (31 percent), veterinary services and inputs (18 percent) and food assistance (Figure 47).

Figure 46. Percentage of crop-producing households reporting short-term assistance needs (n = 1 339)



Source: FAO, 2020; FAO assessment results

Figure 47. Percentage of livestock-producing housheolds reporting short-term assistance needs (n = 127)



Source: FAO, 2020; FAO assessment results

Disruption in assistance

Two-thirds of agricultural district officers interviewed as key informants reported that some assistance programmes were taking place before the COVID-19 outbreak, yet most of them indicated that this assistance had been disrupted ever since. However, nearly two-thirds of them also indicated that new assistance was taking place since the COVID-19 outbreak, in the form of food and agricultural input assistance.

Nearly all key informants reported that their work as district agriculture or fishery officers had been disrupted by the outbreak and the restrictions in place. Against this backdrop, over half of them reported being able to adapt and continue performing most of their work in a different way (e.g. by phone), while others reported having been very limited in the options available to them to continue working. This points to a gap in required technical assistance for farmers during the main season for crop production and with respect to preventing and combatting animal pests and other diseases in a timely fashion.

It is worth noting, however, that all key informants have received guidelines on how to prevent and manage the risks COVID-19 in their work, and over two-thirds of them have received some form of personal protective equipment.

Conclusion

Key prospects

The COVID-19 pandemic and its knock-on effects have aggravated a pre-existing crisis driven by the deterioration of economic activity and stability in Sierra Leone over the past two years.

Food consumption should improve progressively from September 2020 with the rice harvest expected to be within the 5-year average. In the absence of further restriction measures, the availability of staple foods should improve, although high fuel prices would still constrain transportation logistics and distribution costs. What's more, food prices driven by macroeconomic instability may remain higher than usual, while income losses suffered by households over the past months and eroded coping capacities will limit household budgets and restrain their demand for more expensive products, such as meat and other animal products.

It is therefore likely that food insecurity levels will be higher than usual throughout the remainder of the season, mainly driven by a constrained access to food.

Recommendations

1. Crop production
    - In terms of agricultural support, there is a window in October–November for planting some vegetables and tubers, while the next main crop season for rice will start in April 2021.
    - There is an opportunity for seed voucher assistance, as two-thirds of agricultural input dealers (20 out of 28) indicated they would be able to respond to a 50 percent increase (in client demand) in two to four weeks, while others indicated they would need over one month. All agricultural input dealers were willing to participate in a voucher programme, but a more in-depth seed system analysis may be needed in order to properly design seed voucher interventions.
    - The access to improved inputs must be supported and strengthened at least at the district level through agricultural input dealer schemes to ensure that farmers have reliable access to improved inputs. Most districts do not have dealers of improved inputs, so farmers have to travel across districts to purchase them; this inaccessibility of inputs was heightened during the observation of inter-district lockdowns.
    - Support to increase agricultural production should be substantiated by evidence of improvements in marketing opportunities to avoid over-production that would result in a drop in farm gate prices and a waste of produce; these efforts could also be combined with a support for marketing production.
    - Support to agricultural production should rely on agro-ecological approaches to increase soil fertility and productivity while increasing resilience to shocks and quality of products and reducing production costs.

2. Livestock production
    - Livestock health programmes should be supported.
    - Access to pasture and tensions between crop and livestock farmers need to be monitored.
3. Livelihoods
    - The main driver of the crisis is economic in nature and the main need expressed by respondents was cash assistance.
    - Agricultural farming households, and especially female-headed households, appear as particularly vulnerable. Women groups could also be supported, in particular for vegetable production and marketing.
    - Small and medium enterprises in agri-food processing and marketing businesses employ a large number of people including youth. During the lockdowns, these businesses laid off their employees resulting in loss of jobs and affected livelihoods. These businesses were also unable to meet demands of consumers. Thus, ensuring support to agri-food small and medium enterprises can respond to post-harvest loss suffered by farmers, meet demands of consumers and help restore the livelihoods of unemployed informal workers.
    - There is also an opportunity to start investing in building capacities of vegetable producers to process, preserve, package and market their production to reduce waste and income losses. This would help overcome certain current bottlenecks while also address structural issues along vegetable market chains. This approach can build on women-led vegetable farmer groups and be combined with the strengthening of financial and marketing literacy for sustainability.
    - Market access and channels for agricultural producers can also be strengthened by linking different actors of the chain, for example by organizing a business forum between hotels, restaurants, supermarkets, fast-food shops, agri-food processors and vegetable growers. One-stop shop markets can also bring producers closer to buyers.
    - An integrated approach, such as the caisses de resilience developed by FAO, would allow the combination of activities in order to address several of these needs to consolidate community resilience by strengthening household social, productive and financial capacities.
4. Monitoring
    - The ongoing situation will need to be monitored over the coming months, further investigating further salient issues identified in this first monitoring assessment round, such as the situation of households involved in fisheries.
    - FAO, in partnership with the MAFFS and Statistics Sierra Leone, is establishing a monitoring system to assess the impact of COVID-19 and other drivers on food security and agricultural livelihoods. With this in place, the system will include three to four rounds per year, the next one due to take place in January–February 2021.

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Annex 1: Unweighted sample size and weighted count of surveyed respondents

Table 4. Unweighted sample size and weighted count of respondents, by category of survey respondent

(disaggregated at the level used in the analysis of results)

District	Province	Total household respondents		Households involved in agriculture		Households not involved in agriculture		Household respondents to Crop section		Household respondents to Livestock section		Household respondents to Fisheries section	
		unweighted	weighted	unweighted	weighted	unweighted	weighted	unweighted	weighted	unweighted	weighted	unweighted	weighted
Kailahun	Eastern	160	164	117	149	141	141	113	141				
Kenema	Eastern	146	210	98	134			95	129				
Kono	Eastern	147	155	97	105			93	103				
Kambia	North West	146	110	99	93	138	105	92	87				
Karene	North West	140	125	97	92			90	86				
Port Loko	North West	144	177	96	122			86	109				
Bombali	Northern	163	120	107	84	199	90	99	78				
Falaba	Northern	167	43	114	38			89	30				
Koinadugu	Northern	143	61	99	53			89	46				
Tonkolili	Northern	151	174	105	134			94	117				
Bo	Southern	152	194	111	130	217	119	107	128				
Bonthe	Southern	149	68	103	58			86	47				
Moyamba	Southern	158	125	102	105			83	85				
Pujehun	Southern	206	107	132	83			114	71				
Western Area Rural	Western	126	174	66	52	156	533	47	39				
Western Area Urban	Western	139	430	43	18			26	11				
TOTAL		**2 437**	**2 437**	**1 586**	**1 450**	**851**	**987**	**1 403**	**1 305**	**134**	**104**	**49**	**41**

Source: FAO, 2020; FAO assessment results

Annex 2: Household questionnaire

Q #	Q Name	English
NA	Optin	Optin
NA	CallDispo	Phone number: #CATI_MOBILENUMBER# 1)Someone answers 2)Answering machine 3)No Answer 4)Hang Up/Refusal 5)Call Back 6)Under Review 7)Disconnected
NA	Introduction	Hello sir/ma'am, my name is #OPERATOR#, and I am calling from GeoPoll Polling Agency on behalf of the United Nations Food and Agriculture Organization (FAO). Currently, FAO is conducting a survey in your community to understand Covid-19 impacts on food security, agricultural production and livelihoods. Sir/ma'am, we remind you that all the information will be strictly kept confidential and be used only for the purpose of the survey. The survey will take about 20-30 minutes of your time and you will receive #TOPUP#! of communication credit as an incentive for the participation of the survey. 1)CONTINUE
NA	Agree	Are you interested in participating in this survey? 1)Yes 2)Not now but another time in the week 3)No
NA	WhenCallBack	When would it be a good time to call back you back? [RECORD HH/MM/DD/MM OF CALLBACK]
NA	CallbackMessageEN	Thank you, we will call you back at #WhenCallBack# you requested. Thank you again and have a great day! [OPERATOR: ENTER CALL NOTES BELOW, WHO YOU SPOKE TO AND WHAT THEY SAID]
NA	Ineligible	You are ineligible for this survey. Thank you for your time and please look out for future GeoPoll surveys! For more information visit GeoPoll.com
NA	Refusal	Thank you for your time, you will be removed from today's survey.

1	RESPName	What is your name? [OPERATOR: RECORD THE RESPONDENT'S NAME. ENTER 99 FOR REFUSED]
2	RESPAge	How old are you? [OPERATOR: RECORD THE AGE IN YEARS – ROUND UP TO NEAREST WHOLE NUMBER. IF THE RESPONDENT GIVES BIRTH YEAR, REPEAT THE QUESTION. ENTER 00 for DON'T KNOW]
3	ADMIN1Name	Currently, which Region does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION] 1)EASTERN PROVINCE 2)NORTHERN PROVINCE 3)NORTH WEST PROVINCE 4)SOUTHERN PROVINCE 5)WESTERN AREA 6)NONE OF THE ABOVE 7)DON'T KNOW 8)REFUSED
4	ADM2_Eastern	Currently, which District in Eastern Province does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION] 1)KAILAHUN 2)KENEMA 3)KONO 4)NONE OF THE ABOVE 5)DON'T KNOW 6)REFUSED

5	ADM2_Northern	Currently, which District in Northern Province does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION] 1)BOMBALI 2)FALABA 3)KOINADUGU 4)TONKOLILI 5)NONE OF THE ABOVE 6)DON'T KNOW 7)REFUSED
6	ADM2_North_West	Currently, which District in North West Province does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION] 1)KAMBIA 2)KARENE 3)PORT LOKO 4)NONE OF THE ABOVE 5)DON'T KNOW 6)REFUSED
7	ADM2_Southern	Currently, which District in Southern Province does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION] 1)BO 2)BONTHE 3)MOYAMBA 4)PUJEHUN 5)NONE OF THE ABOVE 6)DON'T KNOW 7)REFUSED

8	ADM2_Western	Currently, which District in Western Area does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION] 1)WESTERN AREA RURAL 2)WESTERN AREA URBAN [FREETOWN] 3)NONE OF THE ABOVE 4)DON'T KNOW 5)REFUSED
9	VillageName_Kailahun	Currently, in which Chiefdom in Kailahun does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION] 1)DEA 2)JAWIE [JAWEI] 3)KISSI KAMA 4)KISSI TENG 5)KISSI TONGI 6)KPEJE BONGRE [PEJE BONGRE] 7)KPEJE WEST 8)LUAWA 9)MALEMA 10)MANDU 11)NJALUAHUN 12)PENGUIA 13)UPPER BAMBARA 14)YAWEI 15)NONE OF THE ABOVE 16)DON'T KNOW 17)REFUSED

10	VillageName_Kenema	Currently, in which Chiefdom in Kenema does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION] 1)DAMA 2)DODO 3)GAURA 4)GORAMA MENDE 5)KANDU LEPPIAMA 6)KOYA 7)LANGRAMA 8)LOWER BAMBARA 9)MALEGOHUN 10)NIAWA 11)NOMO 12)NONGOWA [INCLUDING KENEMA CITY] 13)SIMBARU 14)SMALL BO 15)TUNKIA 16)WANDOR 17)NONE OF THE ABOVE 18)DON'T KNOW 19)REFUSED

11	VillageName_Kono	Currently, in which Chiefdom in Kono does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION] 1)FIAMA 2)GBANE 3)GBANE KANDOR 4)GBENSE 5)GORAMA KONO 6)KAMARA 7)KOIDU 8)LEI 9)MAFINDOR 10)NIMIKORO 11)NIMIYAMA 12)SANDOR 13)SOA 14)TANKORO 15)TOLI 16)NONE OF THE ABOVE 17)DON'T KNOW 18)REFUSED

12	VillageName_Bombali	Currently, in which Chiefdom in Bombali does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION] 1)BIRIWA 2)BOMBALI SEBORA [BOMBALI SHEBORA] 3)GBANTI KAMARANKA 4)GBENDEMBU NGOWAHUN 5)LIBEISAYGAHUN 6)MAGBAIMBA NDORWAHUN [MAGBAIAMBA NDOWAHUN] 7)MAKARI GBANTI 8)MAKENI 9)PAKI MASABONG [PAKI MASSABONG] 10)SAFROKO LIMBA 11)SANDA LOKO 12)SANDA TENDARAN 13)SELLA LIMBA 14)TAMBAKHA 15)NONE OF THE ABOVE 16)DON'T KNOW 17)REFUSED

13	VillageName_Falaba	Currently, in which Chiefdom in Falaba does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION] 1)DELEMANDUGU 2)DEMBELIA MUSAIA 3)DEMBELIA SIKUNIA 4)FOLASABA-KAMBA 5)KABELIA 6)KAMADUGU-YIRAIA 7)KULOR-SERADU 8)MONGO 9)MORIFINDUGU 10)NEYA 11)NYEDU 12)SERADU 13)SULIMA 14)NONE OF THE ABOVE 15)DON'T KNOW 16)REFUSED
14	VillageName_Koinadugu	Currently, in which Chiefdom in Koinadugu does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION] 1)DEMBELIA-SINKUNIA [DEMBELIA SIKUNIA] 2)DIANG 3)FOLOSABA DEMBELIA 4)KASUNKO 5)MONGO 6)NEYA 7)NIENI 8)SENGBE 9)SULIMA 10)WARA WARA BAFODIA 11)WARA WARA YAGALA 12)NONE OF THE ABOVE 13)DON'T KNOW 14)REFUSED

15	VillageName_Tonkolili	Currently, in which Chiefdom in Tonkolili does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION] 1)GBONKOLENKEN 2)KAFE SIMIRIA 3)KALANSOGOIA 4)KHOLIFA MABANG 5)KHOLIFA ROWALA 6)KUNIKE 7)KUNIKE BARINA 8)MALAL MARA 9)SAMBAYA 10)TANE 11)YONI 12)NONE OF THE ABOVE 13)DON'T KNOW 14)REFUSED
16	VillageName_Kambia	Currently, in which Chiefdom in Kambia does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION] 1)BRAMAIA [BRIAMA] 2)GBINLE DIXING 3)MAGBEMA 4)MAMBOLO 5)MASUNGBALA 6)SAMU 7)TONKO LIMBA 8)NONE OF THE ABOVE 9)DON'T KNOW 10)REFUSED

17	VillageName_Karene	Currently, in which Chiefdom in Karene does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION] 1)BUYA 2)DIBIA 3)GBANTI 4)LIBEISAYGAHUN-GOMBAGU 5)MAFONDA 6)MAKEREMBAY 7)ROMENDE 8)SAFROKO 9)SANDA LOKO 10)SANDA MAGBOLONTOR 11)SANDA TENDAREN 12)SELLA LIMBA 13)TAMBAKHA SIMIBUNGIE 14)TAMBAKHA YOBANGIE 15)NONE OF THE ABOVE 16)DON'T KNOW 17)REFUSED
18	VillageName_Port_Loko	Currently, in which Chiefdom in Port Loko does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION] 1)BUREH KASSEH MAKONTEH 2)BUYA ROMENDE 3)DIBIA 4)KAFFU BULLOM 5)KOYA 6)LOKOMASAMA 7)MAFORKI 8)MARAMPA 9)MASIMERA 10)SANDA MAGBOLONT 11)TINKATUPA MAKA SAFROKO 12)NONE OF THE ABOVE 13)DON'T KNOW 14)REFUSED

19	VillageName_Bo	Currently, in which Chiefdom in Bo does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION] 1)BADJIA 2)BAGBO 3)BAGBWE [BAGBE] 4)BO KAKUA 5)BOAMA 6)BUMPE NGAO 7)GBO 8)JAIAMA BONGOR 9)KAKUA 10)KOMBOYA 11)LUGBU 12)NIAWA LENGA 13)SELENGA 14)TIKONKO 15)VALUNIA 16)WONDE 17)NONE OF THE ABOVE 18)DON'T KNOW 19)REFUSED

20	VillageName_Bonthe	Currently, in which Chiefdom in Bonthe does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION] 1)BENDU-CHA 2)BUM 3)DEMA 4)IMPERRI 5)JONG 6)KPANDA KEMO 7)KWAMEBAI KRIM 8)NONGOBA BULLOM 9)SITTIA 10)SOGBENI 11)YAWBEKO 12)NONE OF THE ABOVE 13)DON'T KNOW 14)REFUSED
21	VillageName_Moyamba	Currently, in which Chiefdom in Moyamba does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION] 1)BAGRUWA 2)BUMPEH 3)DASSE 4)FAKUNYA 5)KAGBORO 6)KAIYAMBA 7)KAMAJEI 8)KONGBORA 9)KORI 10)KOWA 11)LOWER BANTA 12)RIBBI 13)TIMDALE 14)UPPER BANTA 15)NONE OF THE ABOVE 16)DON'T KNOW 17)REFUSED

22	VillageName_Pujehun	Currently, in which Chiefdom in Pujehun does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION] 1)BARI 2)GALLINES PERI 3)KPAKA 4)MAKPELE 5)MALEN 6)MANO SAKRIM 7)PANGA KABONDE 8)PANGA KRIM 9)PEJEH [FUTA PEJEH] 10)SORO GBEMA 11)SOWA 12)NONE OF THE ABOVE 13)DON'T KNOW 14)REFUSED
23	VillageName_Western_Area_Rural	Currently, in which Chiefdom in Western Area Rural does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION] 1)KOYA RURAL 2)MOUNTAIN RURAL 3)WATERLOO RURAL 4)YORK RURAL 5)NONE OF THE ABOVE 6)DON'T KNOW 7)REFUSED

24	VillageName_Western_Area_Urban	Currently, in which Chiefdom in Western Area Urban (Freetown) does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION] 1)CENTRAL I 2)CENTRAL II 3)EAST I 4)EAST II 5)EAST III 6)SIERRA LEONE 7)WEST I 8)WEST II 9)WEST III 10)NONE OF THE ABOVE 11)DON'T KNOW 12)REFUSED
25	Quota_Reached	[OPERATOR: DO NOT READ. ANSWER QUESTION BELOW.] THIS RESPONDENT REPORTED THEY LIVE IN: #ADM1# #ADM2# 1)THE GOAL FOR THIS LOCATION HAS BEEN ACHIEVED - END SURVEY 2)THE GOAL FOR THIS LOCATION IS OPEN - CONTINUE SURVEY
26	RESPSex	WHAT IS THE GENDER OF THE RESPONDENT? [OPERATOR: LISTEN TO THE VOICE AND CHECK THE BOX WHETHER THE RESPONDENT IS MALE OR FEMALE.] 1)MALE 2)FEMALE 3)DON'T KNOW 4)REFUSED

27	HHHSex	Is the head of your household male or female? [Household: people who have been eating from the same pot for the past 6 months. The head of household is the person who makes most of the decisions and generally is the main earner of the household.] [OPERATOR: CHOOSE ONLY ONE OPTION] 1)MALE 2)FEMALE 3)DON'T KNOW 4)REFUSED
28	HHHEdu	Have you ever attended school? If so what is the highest level of school you attended? [OPERATOR: CHOOSE ONLY ONE OPTION] 1)No education 2)Primary 3)Junior Secondary 4)Senior Secondary 5)Higher 6)DON'T KNOW 7)REFUSED
29	HHSize	How many members in your family eat from the same kitchen/pot? [OPERATOR: RECORD THE NUMBER OF HOUSEHOLD MEMBERS THAT EAT FROM THE SAME KITCHEN. ENTER 88 FOR DON'T KNOW or 99 FOR REFUSED]
30	AgricActivityInvolved	Which of these agricultural activities (if any) are you involved in? [OPERATOR: MULTIPLE RESPONSE] 1)Crop production 2)Livestock production 3)Fisheries/aquaculture 4)Reliance on forest products/natural resources 5)None 6)DON'T KNOW 7)REFUSED

31	MainAgricActivity	Which of these productions is the most important for your household, in terms of food consumption and/or income generation? [OPERATOR: SINGLE RESPONSE] 1)DON'T KNOW 2)REFUSED
32	MainIncomeSource	What has been your main source of income over the past three months? [OPERATOR: SINGLE RESPONSE] 1)Sale of field crops 2)Sale of vegetables 3)Sale of orchard products 4)Sale of cash crops 5)Sale of livestock and livestock products 6)Sale of fish and sea products 7)Sale of forest products 8)Agricultural wage labour 9)Non-agricultural wage labour 10)Skilled labour [artisan] 11)Petty trade 12)Self-employed 13)Remittances 14)Salary 15)Humanitarian assistance [cash for work and other forms of cash-based assistance] 16)Other forms of assistance [begging / charity] 17)Other 18)DON'T KNOW 19)REFUSED
33	TotalIncomeShare	What share of your total income, **in percentage,** has come from this source of income? 1)The totality or almost [over 75%] 2)The large majority [50 to 75%] 3)A significant part [25 to 50%] 4)DON'T KNOW 5)REFUSED

34	MainIncomeSource2	What has been your 2ND main source of income over the past three months? [OPERATOR: SINGLE RESPONSE] 1)Other **2)No second income source** 3)DON'T KNOW 4)REFUSED
35	IncomeChangeP30D	Has your total income in the past three months changed compared to the same period last year? Would you say it has... [OPERATOR: SINGLE RESPONSE] 1)Not changed 2)Significantly increased [>20%] 3)Marginally increased [5-20%] 4)No change 5)Marginally decreased [5-20%] 6)Significantly decreased [20-50%] 7)Drastically decreased [> 50%] 8)DON'T KNOW 9)REFUSED

36	ShockP1M	Have you faced any particular shock over the past three months? [OPERATOR: MULTIPLE RESPONSE] 1)Sickness of household member[s] 2)Death of household member[s] 3)Lost employment 4)Income losses 5)Restriction measures 6)Increased prices 7)Reduction in own production 8)Delay in production 9)Higher production costs 10)Sudden reduction in access to credit 11)Natural hazard 12)Insecurity / conflict 13)Other [specify] 14)No particular shock 15)DON'T KNOW 16)REFUSED

37	MainCrop	What is the main crop you grow? [OPERATOR: SINGLE RESPONSE] 1)Rice 2)Cassava 3)Maize 4)Millet 5)Plantain 6)Tubers [potatoes/yam] 7)Ground nut 8)Pepper 9)Bitter ball/okra 10)Other vegetables [tomatoes/squash/cucumbers/cabbage/carrots/leafy vegetables] 11)Beans 12)Rubber 13)Cocoa 14)Coffee 15)Oil palm 16)Cashew 17)Other [specify] 18)DON'T KNOW 19)REFUSED
38	CropStage	What is the stage of this crop now? [OPERATOR: SINGLE RESPONSE] 1)Not in season 2)Land preparation 3)Planting 4)Early growing 5)Growing 6)Maturing 7)Harvesting 8)DON'T KNOW 9)REFUSED

39	AreaPlanted	What is the area planted or you are planning to plant with this crop compared to last year? [OPERATOR: SINGLE RESPONSE] 1)Larger 2)Same 3)Between half and the same 4)Less than half 5)Has not been able to plant this season 6)DON'T KNOW 7)REFUSED
40	CropProductionDifficulty	Have you faced any unusual difficulty with your crop production in the past three months? [OPERATOR: SINGLE RESPONSE] 1)Yes significant difficulty 2)Yes minor difficulty 3)No unusual difficulty 4)Not applicable - no crop production in past three months 5)DON'T KNOW 6)REFUSED

41	CropProductionDifficulty1	**Which of these unusual difficulties have you faced THE MOST in the past three months with your crop production?** [OPERATOR: SINGLE RESPONSE] 1)Dryspell / drought 2)Heavy rains / floods 3)Hail / storms / strong winds 4)Outbreak of pests or diseases 5)Difficulty to access seeds 6)Difficulty to access fertilizers or pesticides 7)Difficulty to access tools/machinery 8)Difficulty to access finance/credit 9)Labour not available 10)Labour too expensive or income insufficient to hire labour 11)Access to land restricted by containment measures 12)Lower irrigation than usual 13)Household members sick 14)Lack of perspective on possibility to sell products or on prices 15)Other 16)DON'T KNOW 17)REFUSED
42	CropProductionDifficulty2	Which of these unusual difficulties have you faced THE 2ND MOST in the past three months with your crop production? [OPERATOR: SINGLE RESPONSE] 1)Other 2)No other difficulty faced 3)DON'T KNOW 4)REFUSED
43	Pests/Diseases	Which pests or diseases affected your crop production in the past three months? [OPERATOR: RECORD THE PESTS OR DISEASES GIVEN. ENTER 88 FOR DON'T KNOW & 99 FOR REFUSED]

44	SeedsAccessDifficulty	Have you been facing any particular difficulty accessing seeds over the past three months? [OPERATOR: SINGLE RESPONSE] 1)No - not in planting season so no need for seeds 2)No - currently accessing seeds without difficulty 3)Yes - facing difficulties 4)DON'T KNOW 5)REFUSED
45	SeedAccess1	What has been the main difficulty in accessing seeds over the past three months? [OPERATOR: SINGLE RESPONSE] 1)Seeds are not available from vendors 2)Seeds are not available from local market 3)Seed varieties usually used are not available 4)Seeds usually provided by aid or subsidies are not provided anymore 5)Prices of seeds are higher than usual 6)Household’s income is insufficient to buy seeds 7)Not able or not allowed to go to the market to buy seeds 8)Seed lenders don't have seeds to credit 9)Other 10)DON'T KNOW 11)REFUSED
46	SeedAccess2	What has been the 2ND main difficulty in accessing seeds [over the past three months? [OPERATOR: SINGLE RESPONSE] 1)Other 2)No second difficulty 3)DON'T KNOW 4)REFUSED

47	ProductionComparison	What is or what do you expect your production to be compared to a normal year? **Do you think it will be...** [OPERATOR: SINGLE RESPONSE] 1)Higher 2)The same 3)Lower [Up to 25% lower] 4)Much lower [25 to 50% lower] 5)Very much lower [50 to 75% lower] 6)No production or almost [over 75% lower] 7)DON'T KNOW 8)REFUSED
48	AnimalsRaised	What is the main animal you raise for income generation? [OPERATOR: SINGLE RESPONSE] 1)Cattle 2)Small ruminants [goat/sheep] 3)Poultry [chicken/duck] 4)Pigs 5)Rabbits 6)Other 7)DON'T KNOW 8)REFUSED
49	AnimalsRaised_Num	How many #AnimalsRaised# do you have now? [OPERATOR: RECORD THE NUMBER OF ANIMALS RAISED. ENTER 8888 FOR DON'T KNOW & 9999 FOR REFUSED]
50	AnimalsUnusualDifficulty	Have you faced any UNUSUAL difficulty with these animals in the past three months? [OPERATOR: SINGLE RESPONSE] 1)Yes significant difficulty 2)Yes minor difficulty 3)No unusual difficulty 4)DON'T KNOW 5)REFUSED

51	DifficultyRaisingAnimals1	Which of these unusual difficulties (if any) have you faced THE MOST in the past three months to raise your animals? [OPERATOR: INSIST ON THE UNUSUAL CHARACTER OF THESE DIFFICULTIES. STRUCTURAL DIFFICULTIES SHOULD NOT BE INCLUDED. SINGLE RESPONSE] 1)Difficulty to access feed 2)Constrained access to pasture 3)Constrained access to water 4)Difficulty to access veterinary services 5)Difficulty to access veterinary inputs 6)Other 7)DON'T KNOW 8)REFUSED
52	DifficultyRaisingAnimals2	Which of these unusual difficulties (if any) have you faced THE 2nd MOST in the past three months to raise your animals? [OPERATOR: INSIST ON THE UNUSUAL CHARACTER OF THESE DIFFICULTIES. STRUCTURAL DIFFICULTIES SHOULD NOT BE INCLUDED. SINGLE RESPONSE] 1)No second difficulty 2)DON'T KNOW 3)REFUSED
53	DifficultyAccessFeed	Why have you been facing difficulties to access feed for your animals over the past three months? [OPERATOR: MULTIPLE RESPONSE] 1)Prices higher than usual 2)Not available from usual vendor 3)Not able to access market to purchase 4)Income insufficient / unable to get credit to purchase 5)Other 6)DON'T KNOW 7)REFUSED

54	DifficultyAccessVet	Why have you been facing difficulties to access veterinary services for your animals over the past three months? [OPERATOR: MULTIPLE RESPONSE] 1)Prices higher than usual 2)Not available from usual service provider 3)Not able to access service provider 4)Income insufficient to access service 5)Other 6)DON'T KNOW 7)REFUSED
55	DifficultyAccessVetInput	Why have you been facing difficulties to access veterinary inputs for your animals over the past three months? [OPERATOR: MULTIPLE RESPONSE] 1)Prices higher than usual 2)Not available from usual vendor 3)Not able to access market/shop to purchase 4)Income insufficient to purchase 5)Other 6)DON'T KNOW 7)REFUSED
56	AnimalNumComparison	Compared to the same month last year, do you have more or less animals? [OPERATOR: SINGLE RESPONSE] 1)Much more 2)A bit more 3)The same 4)A bit less 5)Much less 6)DON'T KNOW 7)REFUSED

57	ReasonAnimalLess	Why do you have fewer animals now compared to the same month last year? [OPERATOR: MULTIPLE RESPONSE] 1)Higher mortality due to lack of veterinary services 2)Better sales than usual 3)Distress sales for urgent cash needed 4)Sold animals because unable to feed them 5)Culled animals for household consumption 6)Other [specify] 7)DON'T KNOW 8)REFUSED
58	Fishing/Aquaculture	What type of fishing activity do you practice? 1)Coastal Fishing 2)Open sea fishing 3)Fishing in lakes, ponds and rivers 4)Aquaculture 5)DON'T KNOW 6)REFUSED
59	FishChange	Has there been an increase/decrease in the amount of fish caught during the last three months? [OPERATOR: SINGLE RESPONSE] 1)Increase over 50% 2)Increase between 25-50% 3)Increase up to 25% 4)No change 5)Decrease up to 25% 6)Decrease between 25-50% 7)Decrease over 50% 8)DON'T KNOW 9)REFUSED

60	FishingUnusualDifficulty	Have you been facing UNUSUAL difficulties in your fishing activities over the past three months? [OPERATOR: SINGLE RESPONSE] 1)Yes - major difficulties 2)Yes - minor difficulties 3)No unusual difficulties 4)DON'T KNOW 5)REFUSED
61	FishingDifficulty1	What is the HIGHEST difficulty you have faced over the past three months? [OPERATOR: SINGLE RESPONSE] 1)Difficulties to market fish 2)Difficulties to store or process fish 3)Decreased prices of fish 4)Decreased demand 5)Fish are more difficult to find 6)Concerns and restrictions related to COVID-19 7)Lack or high prices of fuel 8)Lack of fishing material or inputs 9)Lack of labour or difficulties to pay for labour 10)Suspended extension services 11)Other [specify] 12)DON'T KNOW 13)REFUSED
62	FishingDifficulty2	What is the 2ND HIGHEST difficulty you have faced over the past three months? [OPERATOR: SINGLE RESPONSE] 1)No second difficulty 2)Other 3)DON'T KNOW 4)REFUSED

63	FishingInputsDifficulty	Have you beeen facing UNUSUAL difficulties to access fishing material or inputs in the past three months? [OPERATOR: SINGLE RESPONSE] 1)Yes - major difficulties 2)Yes - minor difficulties 3)No unusual difficulties 4)I haven't been needing any material or input in the past two months 5)DON'T KNOW 6)REFUSED
64	WhichInput	If yes, which material or input have you been having difficulties to access? [OPERATOR: MULTIPLE RESPONSE] 1)Bait 2)Gear 3)Ice 4)Fuel 5)Boat repairs 6)Other 7)DON'T KNOW 8)REFUSED
65	AgricSales	How much of your [crop/livestock/fish] production do you usually sell? [OPERATOR: SINGLE RESPONSE] 1)No sale 2)Up to 25% 3)**26** to 50% 4)**51** to 75% 5)Over 75% 6)DON'T KNOW 7)REFUSED

66	SalesLevelComparison	How would you compare the level of your sales over the past three months with the same period last year? [OPERATOR: SINGLE RESPONSE] 1)Significantly higher [over 25%] 2)Slightly higher [up to 25%] 3)The same 4)Slightly lower [up to 25%] 5)Significantly lower [25 to 50%] 6)Drastically lower [over 50%] 7)DON'T KNOW 8)REFUSED
67	AgricSalesDifficulty	Have you faced unusual difficulties to sell your **#MainAgricActivity#** production in the last three months? [OPERATOR: SINGLE RESPONSE] 1)Yes - significant difficulties 2)Yes - minor difficulties 3)No unusual difficulty 4)Not applicable [no production to sell at this time of the year] 5)DON'T KNOW 6)REFUSED
68	MainAgricDifficulty	What is the HIGHEST unusual difficulty you faced to sell your #MainAgricActivity# production in the last three months? [OPERATOR: SINGLE RESPONSE] 1)Constrained access to market [movement restrictions or closed market] 2)Demand is lower than usual 3)Usual traders are not coming to buy the production anymore 4)Cost of transportation is higher than usual 5)Prices are too low 6)Other 7)DON'T KNOW 8)REFUSED

69	2NDMainAgricDifficulty	What is the 2ND HIGHEST unusual difficulty you faced to sell your #MainAgricActivity# production in the last three months? [OPERATOR: SINGLE RESPONSE] 1)Other 2)No second difficulty 3)DON'T KNOW 4)REFUSED
	AgricSalesDifficulty_2	Have you faced unusual difficulties to sell your **crop** production in the last three months? [OPERATOR: SINGLE RESPONSE] 1)Yes - significant difficulties 2)Yes - minor difficulties 3)No unusual difficulty 4)Not applicable [no production to sell at this time of the year] 5)DON'T KNOW 6)REFUSED
	MainAgricDifficulty_2	What is the HIGHEST unusual difficulty you faced to sell your **crop** production in the last three months? [OPERATOR: SINGLE RESPONSE] 1)Constrained access to market [movement restrictions or closed market] 2)Demand is lower than usual 3)Usual traders are not coming to buy the production anymore 4)Cost of transportation is higher than usual 5)Prices are too low 6)Other 7)DON'T KNOW 8)REFUSED
	2NDMainAgricDifficulty_2	What is the 2ND HIGHEST unusual difficulty you faced to sell your **crop** production in the last three months? [OPERATOR: SINGLE RESPONSE] 1)Other 2)No second difficulty 3)DON'T KNOW 4)REFUSED

	AgricSalesDifficulty_3	**Have you faced unusual difficulties to sell your Livestock production in the last three months?** **[OPERATOR: SINGLE RESPONSE]** **1)Yes - significant difficulties** **2)Yes - minor difficulties** **3)No unusual difficulty** **4)Not applicable [no production to sell at this time of the year]** **5)DON'T KNOW** **6)REFUSED**
	MainAgricDifficulty_3	**What is the HIGHEST unusual difficulty you faced to sell your Livestock production in the last three months?** **[OPERATOR: SINGLE RESPONSE]** **1)Constrained access to market [movement restrictions or closed market]** **2)Demand is lower than usual** **3)Usual traders are not coming to buy the production anymore** **4)Cost of transportation is higher than usual** **5)Prices are too low** **6)Other** **7)DON'T KNOW** **8)REFUSED**
	2NDMainAgricDifficulty_3	**What is the 2ND HIGHEST unusual difficulty you faced to sell your Livestock production in the last three months?** **[OPERATOR: SINGLE RESPONSE]** **1)Other** **2)No second difficulty** **3)DON'T KNOW** **4)REFUSED**
	AgricSalesDifficulty_4	**Have you faced unusual difficulties to sell your Fisheries/Aquaculture production in the last three months?** **[OPERATOR: SINGLE RESPONSE]** **1)Yes - significant difficulties** **2)Yes - minor difficulties** **3)No unusual difficulty** **4)Not applicable [no production to sell at this time of the year]** **5)DON'T KNOW** **6)REFUSED**

	MainAgricDifficulty_4	**What is the HIGHEST unusual difficulty you faced to sell your Fisheries/Aquaculture production in the last three months?** **[OPERATOR: SINGLE RESPONSE]** **1)Constrained access to market [movement restrictions or closed market]** **2)Demand is lower than usual** **3)Usual traders are not coming to buy the production anymore** **4)Cost of transportation is higher than usual** **5)Prices are too low** **6)Other** **7)DON'T KNOW** **8)REFUSED**
	2NDMainAgricDifficulty_4	**What is the 2ND HIGHEST unusual difficulty you faced to sell your Fisheries/Aquaculture production in the last three months?** **[OPERATOR: SINGLE RESPONSE]** **1)Other** **2)No second difficulty** **3)DON'T KNOW** **4)REFUSED**
70	DestroyProduction	Have you had to give away or destroy part of your production due to lack of marketing and storage capacity in the last threee months? [OPERATOR: SINGLE RESPONSE] 1)Yes - a large part 2)Yes - a minor part 3)No 4)DON'T KNOW 5)REFUSED
71	ProductPriceComparison	At what price are you selling your products compared to last year at the same period? **Would you say it is...** [OPERATOR: SINGLE RESPONSE] 1)Much higher than usual [over 20% higher] 2)Higher than usual [up to 20% higher] 3)Same or around the same 4)Lower than usual [up to 20% lower] 5)Much lower than usual [over 20% lower] 6)DON'T KNOW 7)REFUSED

72	FIES	Now I would like to ask you some questions about food. [OPERATOR: SINGLE RESPONSE] 1)NEXT
73	FIESInadequateFood	During the last 30 days, was there a time when you or others in your household were worried about not having enough food to eat because of lack of money or other resources? [OPERATOR: SINGLE RESPONSE] 1)NO 2)YES 3)DON'T KNOW 4)REFUSED
74	FIESNoHealthyFood	During the last 30 days, was there a time when you or others in your household were unable to eat healthy and nutritious food because of lack of money or other resources? [OPERATOR: SINGLE RESPONSE] 1)NO 2)YES 3)DON'T KNOW 4)REFUSED
75	FIESLimitFoodKinds	During the last 30 days, was there a time when you or others in your household ate only a few kinds of foods because of lack of money or other resources? [OPERATOR: SINGLE RESPONSE] 1)NO 2)YES 3)DON'T KNOW 4)REFUSED

76	FIESSkipMeal	During the last 30 days, was there a time when you or others in your household had to skip a meal because of lack of money or other resources to get food? [OPERATOR: SINGLE RESPONSE] 1)NO 2)YES 3)DON'T KNOW 4)REFUSED
77	FIESEatLess	During the last 30 days, was there a time when you or others in your household ate less than you thought you should because of lack of money or other resources? [OPERATOR: SINGLE RESPONSE] 1)NO 2)YES 3)DON'T KNOW 4)REFUSED
78	FIESExhaustFood	During the last 30 days, was there a time when you or others in your household ran out of food because of lack of money or other resources? [OPERATOR: SINGLE RESPONSE] 1)NO 2)YES 3)DON'T KNOW 4)REFUSED
79	FIESExhaustFoodFrequency	How often did this happen in the past 30 days? [OPERATOR: SINGLE RESPONSE] 1)Rarely [1 or 2 times] 2)Sometimes [3-10 times] 3)Often [more than 10 times] 4)DON'T KNOW 5)REFUSED

80	FIESHungryNoFood	During the last 30 days, was there a time when you or others in your household were hungry but did not eat because there was not enough money or other resources for food? [OPERATOR: SINGLE RESPONSE] 1)NO 2)YES 3)DON'T KNOW 4)REFUSED
81	FIESHungryNoFoodFrequency	How often did this happen in the past 30 days? [OPERATOR: SINGLE RESPONSE] 1)Rarely [1 or 2 times] 2)Sometimes [3-10 times] 3)Often [more than 10 times] 4)DON'T KNOW 5)REFUSED
82	FIESStayHungry	During the last 30 days, was there a time when you or others in your household went without eating for a whole day because of lack of money or other resources? [OPERATOR: SINGLE RESPONSE] 1)NO 2)YES 3)DON'T KNOW 4)REFUSED
83	FIESStayHungryFrequency	How often did this happen in the past 30 days? [OPERATOR: SINGLE RESPONSE] 1)Rarely [1 or 2 times] 2)Sometimes [3-10 times] 3)Often [more than 10 times] 4)DON'T KNOW 5)REFUSED

84	FoodLessConsumed	Which food items have you consumed in lesser quantity over the past three months compared to usual for the same period? 1)Cereals such as bread/rice/pasta/maize/etc 2)Roots & tubers [any potatoes or any other foods made from roots or tubers] 3)Vegetables [any type - Okra/Eggplant/Cauliflower/Squash/spinach/green beans/etc] 4)Fruits [Apple/apricot/banana/peach/mango etc] 5)Meat/Poultry [Any beef/lamb/goat/rabbit/chicken/duck/or other birds/liver/kidney/heart/or other organ meats] 6)Eggs 7)Fish & Seafood [Any fresh or dried fish] 8)Pulses/nuts [Any foods made from beans/peas/lentils/or nuts] 9)Milk & milk products [Any cheese/yogurt/milk or other milk products] 10)Oil/fats [Any foods made with oil/fat/or butter] 11)Sugar/honey [Any sugar or honey] 12)Condiments [salt/garlic/spices/yeast/baking powder/tomato/sauce/meat or fish as condiment/coffee/tea] 13)DON'T KNOW 14)REFUSED
85	CopingStrategies	Over the past 30 days, were you ever in a situation when you had to resort to strategies that you would otherwise avoid because you had not enough food or money to feed the household members? [OPERATOR: SINGLE RESPONSE] 1)YES 2)NO 3)DON'T KNOW 4)REFUSED
86	SpentSavings	Over the past 30 days, did anyone in your household have to **spend savings** because of lack of food or money? [OPERATOR: SINGLE RESPONSE] 1)YES 2)NO 3)DON'T KNOW 4)REFUSED

87	SoldMoreAnimals	Over the past 30 days, did anyone in your household have to sell more animals than desirable because of lack of food or money? [OPERATOR: SINGLE RESPONSE] 1)YES 2)NO 3)DON'T KNOW 4)REFUSED
88	SoldProdAssets	Over the past 30 days, did anyone in your household have to sell productive assets (tools, land, equipment, reproductive animals) because of lack of food or money? [OPERATOR: SINGLE RESPONSE] 1)YES 2)NO 3)DON'T KNOW 4)REFUSED
89	EatPlantingSeeds	Over the past 30 days, did anyone in your household have to eat seeds that would otherwise have been kept for planting because of lack of food or money? [OPERATOR: SINGLE RESPONSE] 1)YES 2)NO 3)DON'T KNOW 4)REFUSED
90	HighRiskJob	Over the past 30 days, did anyone in your household have to accept high risk, socially degrading or exploitative temporary jobs because of lack of food or money? [OPERATOR: SINGLE RESPONSE] 1)YES 2)NO 3)DON'T KNOW 4)REFUSED

91	AdultsBegging	Over the past 30 days, did anyone in your household have to send adult household members to beg because of lack of food or money? [OPERATOR: SINGLE RESPONSE] 1)YES 2)NO 3)DON'T KNOW 4)REFUSED
92	NeedAssistance	Do you need assistance for your [crop/livestock/fisheries] production over the next 3 months? [OPERATOR: SINGLE RESPONSE] 1)YES 2)NO 3)DON'T KNOW 4)REFUSED

93	Need1	What is your HIGHEST need for assistance? [OPERATOR: SINGLE RESPONSE] 1)Seeds 2)Fertilizers 3)Pesticides 4)Tools/machinery 5)Irrigation 6)Animal feed 7)Access to water for animals 8)Veterinary services 9)Veterinary inputs 10)Livestock destocking 11)Fishing or aquaculture equipment 12)Fishing or aquaculture inputs 13)Marketing support 14)Storage 15)Advisory and Extension services 16)Cash assistance 17)Food assistance 18)Loans 19)Information on safety measures to carry agricultural work in context of Covid epidemic 20)Other [specify] 21)DON'T KNOW 22)REFUSED
94	Need2	What is your SECOND HIGHEST need for assistance? [OPERATOR: SINGLE RESPONSE] 1)Other [specify] 2)No second need 3)DON'T KNOW 4)REFUSED

95	Need3	What is your THIRD need for assistance? [OPERATOR: SINGLE RESPONSE] 1)Other [specify] 2)No third need 3)DON'T KNOW 4)REFUSED
96	ActivePhones	How many active phones numbers are currently being used by your household? [OPERATOR: RECORD THE NUMBER OF ACTIVE PHONES NUMBERS BEING USED BY YOUR HOUSEHOLD. ENTER 88 FOR DON'T KNOW or 99 FOR REFUSED]
97	CallBack	Your answers will help us to understand and respond to your community needs. May we call you back again in the near future? [OPERATOR: DO NOT READ OPTIONS. CHOOSE ONLY ONE OPTION] 1)YES 2)NO
NA	Close-Out	**Thank you for your time. The interview has come to an end. You will receive #TOPUP# airtime incentive on this phone within the next 2 days.**

This report is made possible by the support of the American People through the United States Agency for International Development (USAID). The contents of this report are the sole responsibility of Food and Agriculture Organization of the United Nations and do not necessarily reflect the views of USAID or the United States Government.

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Food and Agriculture Organization of the United Nations

ISBN 978-92-5-134288-6

9 789251 342886

CB4396EN/1/05.21