



Food and Agriculture
Organization of the
United Nations

Sierra Leone

DIEM – Data in Emergencies Monitoring brief, round 11

Results and recommendations
May 2024

Key highlights

- > The eleventh round of data collection in Sierra Leone was carried out during the post-harvest period. It depicts a situation where the overall number of households impacted by shocks is decreasing, but unusually high fuel and food prices remain among the most cited shocks.
- > Crop production difficulties are affecting a third of the crop producers, with plant pests and diseases cited the most. Other crop production difficulties have emerged, such as low quality of seeds and access to credit. It is important to monitor this trend over the upcoming rounds.
- > The comparison to the previous two rounds indicates that the overall number of livestock producers reporting livestock diseases or injuries has increased along with those reporting theft and access to credit. Other livestock production difficulties, such as access to veterinary services and inputs, access to feed and access to pasture, were experienced by less livestock producers this round compared to the same period in the previous year.
- > According to the Food Insecurity Experience Scale (FIES), there has been an improvement in some areas, such as the eastern region. However, it has worsened in some provinces in the south, like Moyamba.
- > It is recommended to promote integrated pest management, identify local producers of quality seeds, promote a demand and supply link, and map crop diseases through the monitoring system. Veterinary services and animal feed production should be reinforced. Provide immediate cash and food assistance to support livelihood assets.

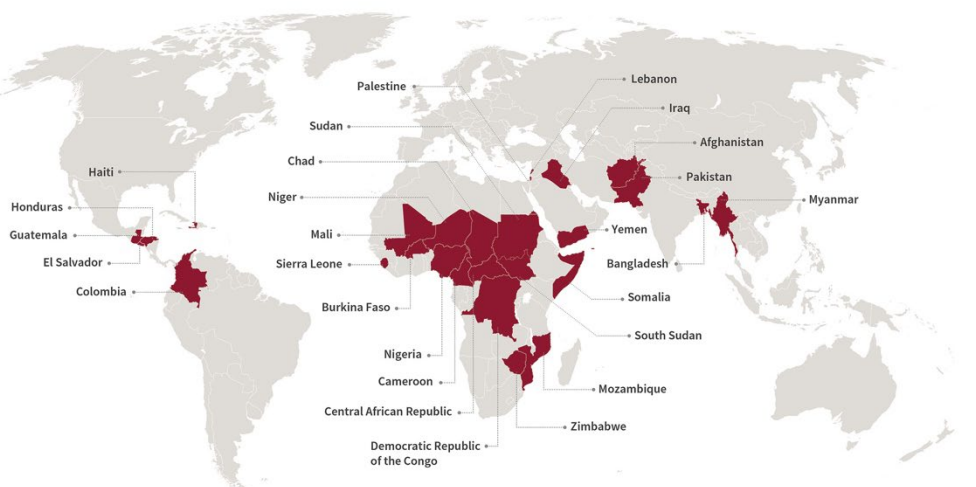
Methodology

The Food and Agriculture Organization of the United Nations (FAO) launched a household survey in Sierra Leone through the Data in Emergencies Monitoring (DIEM-Monitoring) System to monitor agricultural livelihoods and food security. This eleventh-round survey reached a sample of 2 813 households through face-to-face interviews in all 16 districts: Bo, Bombali, Bonthe, Falaba, Kailahun, Kambia, Karene, Kenema, Koinadugu, Kono, Moyamba, Port Loko, Pujehun, Tonkolili, Western Area Rural and Western Area Urban.

Data collection was carried out from 23 January to 26 February 2024, during the post-harvest period. The survey utilized a panel list of agricultural households and non-agricultural households that were interviewed during previous data collection rounds. Population weights were applied and the data are representative of the entire population.

The tenth-round survey was conducted from 30 August to 26 September 2023. The ninth-round survey was conducted from 11 February to 3 March 2023. Both rounds have been drawn from to make comparisons throughout this brief.

Figure 1. Countries with an established DIEM-Monitoring System



Source of data: FAO. 2023. DIEM-Monitoring. In: *FAO Data in Emergencies Hub*. Rome. [Cited 1 July 2023]. <https://data-in-emergencies.fao.org>

Source of map: United Nations Geospatial. 2023. Map of the World. In: *United Nations*. [Cited 12 January 2023]. <https://www.un.org/geospatial/content/map-world-1>

The final boundary between the Sudan and South Sudan has not yet been determined. Final status of the Abyei area is not yet determined. The dotted line represents, approximately, the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.

About DIEM-Monitoring

FAO established the DIEM-Monitoring System to collect, analyse and disseminate data on shocks and livelihoods in countries prone to multiple shocks. DIEM-Monitoring aims to inform decision making by providing regularly updated information on how different shocks are affecting the livelihoods and food security of agricultural populations.

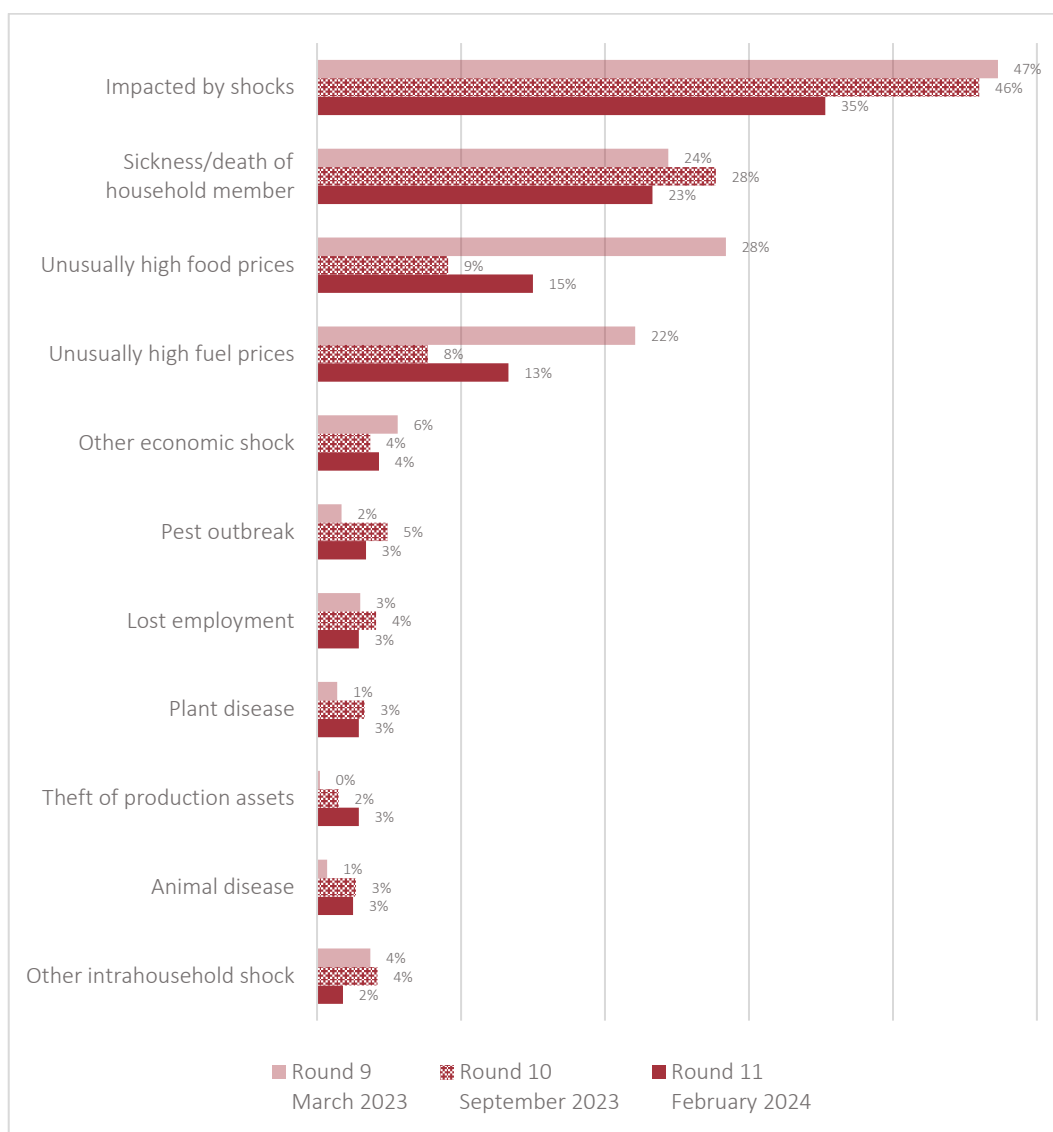
At the core of the DIEM-Monitoring System are country-level dashboards. Readers are encouraged to explore these dashboards to gain more insight into the context of Sierra Leone and other countries.

Learn more at <https://data-in-emergencies.fao.org/pages/monitoring>

Income and shocks

About 35 percent of the surveyed households reported having faced some sort of shock over the three months preceding the survey (Figure 2). The districts where the percentage of households affected was above average included Karene (89 percent), Pujehun (56 percent), Kenema (54 percent) and Kono (53 percent). The most frequently reported shocks were sickness, accident or death of a household member (23 percent), unusually high food prices (15 percent), and unusually high fuel or transport prices (13 percent). About 25 percent of the households experienced a reduction in their main income source in the three months preceding the survey compared to the same period in a typical year.

Figure 2. Main shocks reported (percentage of households)



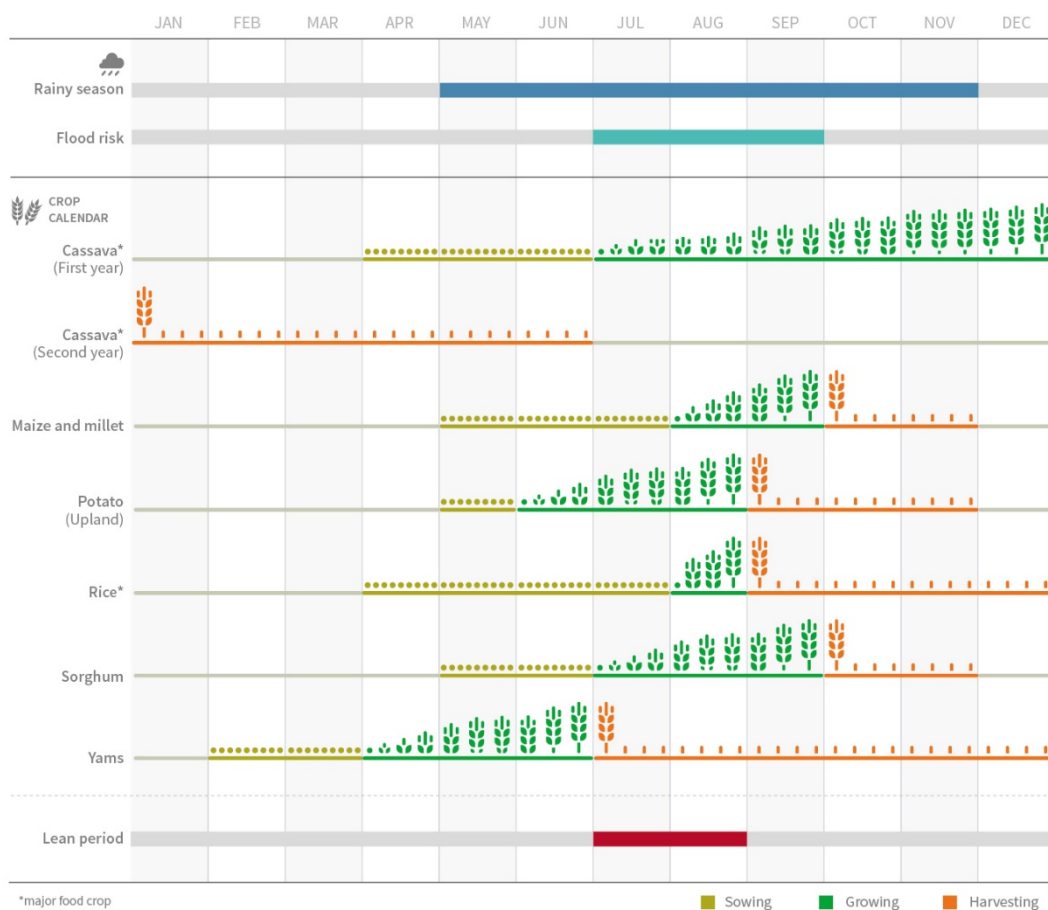
Source: FAO. 2024. Sierra Leone: DIEM-Monitoring assessments results (March and September 2023, and February 2024). In: *FAO Data in Emergencies Hub*. Rome. [Cited 26 March 2024]. <https://data-in-emergencies.fao.org>

Compared to the ninth round, conducted at about the same time the previous year during the post-harvest season, a reduction in the number of households impacted by shocks was observed. Unusually high fuel and food prices remained among the most cited shocks over the last three rounds. However, an overall reduction in the percentage of households that experienced unusually high fuel and food prices compared to the ninth round was noticed.

Usually, food commodity market prices are expected to remain relatively stable in the post-harvest period and increase seasonally during the lean season. The reverse trend witnessed here could be explained by unmet household expectations leaning towards reduced prices during the post-harvest period. At the same time, during the lean period, the reduction in the main source of income was more pronounced than during the post-harvest period.

Crops

Figure 3. Sierra Leone agricultural calendar



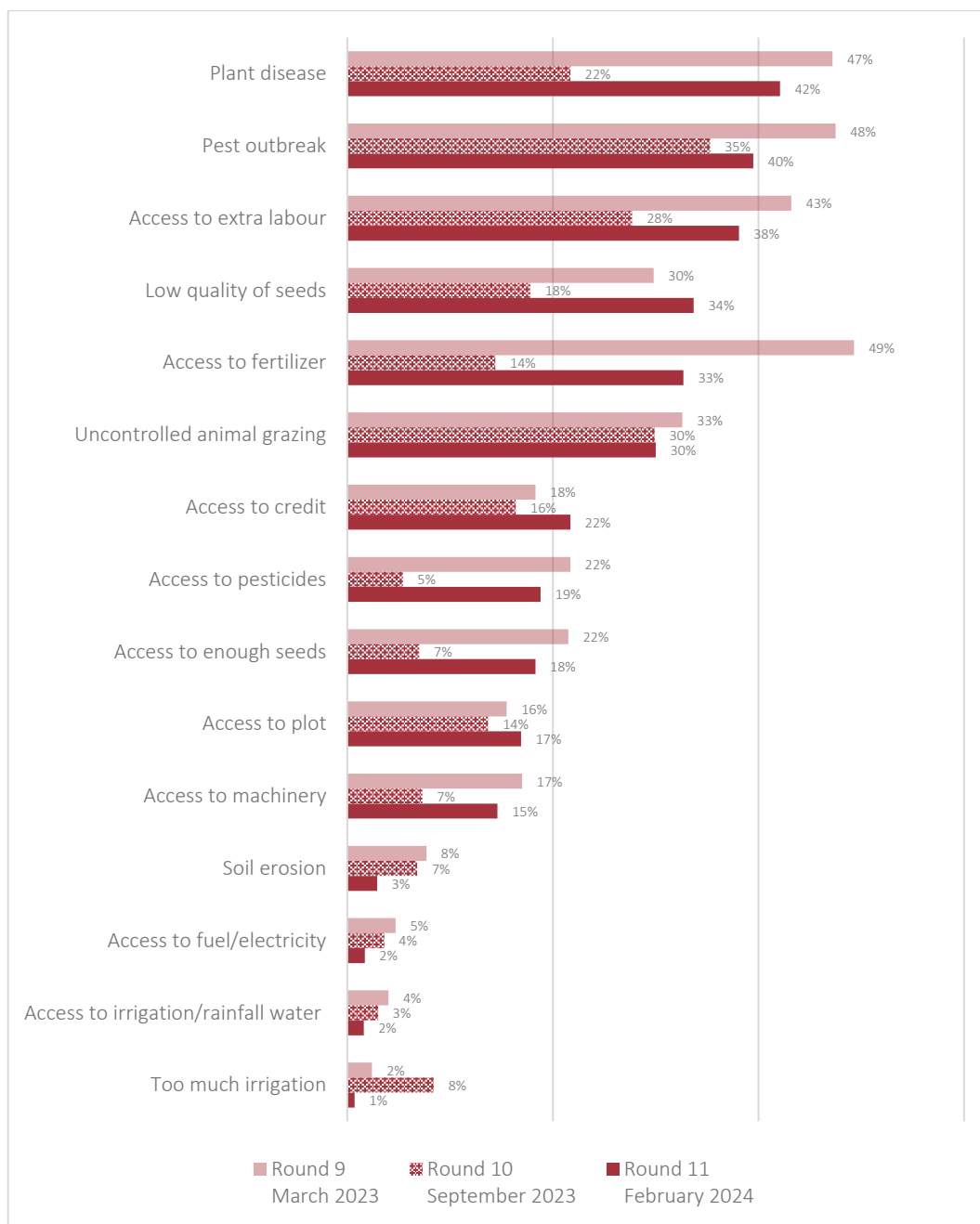
Source: FAO. 2023. GIEWS Country Briefs: Sierra Leone. In: FAO, 15 March 2024. Rome. [Cited 26 March 2024]. <https://www.fao.org/giews/countrybrief/country.jsp?code=SLE>

About 77 percent of the respondents were involved in crop production. Among them, 75 percent experienced crop production difficulties. The main crop production difficulties were: plant diseases (42 percent), in Kenema (79 percent), Bombali (78 percent), Kambia (70 percent), Bo (67 percent) and Moyamba (66 percent), in particular; pests (40 percent) – mainly grass hoppers – especially in Kambia and Bombali (74 percent each), and Tonkolili and Bo (66 percent each); access to labour (38 percent), access to extra labour (38 percent), especially in Pujeun (88 percent) and Karene (75 percent); quality seeds (34 percent), especially in Bonthe (59 percent) and Porto Loko (55 percent); access to fertilizer (33 percent), especially in Kambia (83 percent); uncontrolled animal grazing (30 percent), especially in Karene and Pujeun (53 percent each) and Tonkolili (45 percent); access to

credit (22 percent), especially in Moyamba and Kenema (41 percent); and access to pesticide (19 percent) (Figure 4).

The trend in crop production difficulties is linked to the crop cycle. The comparison between the most recent round with the ninth round conducted during the post-harvest period indicates that there is an overall improvement in terms of the reduction in the percentage of households experiencing crop production difficulties, especially access to fertilizer. However, this improvement is marginal and there were other crop production difficulties that have emerged such as low-quality seeds and access to credit. It is important to monitor these trends in the upcoming rounds.

Figure 4. Crop production difficulties (percentage of crop producers)



Source: FAO. 2024. Sierra Leone: DIEM-Monitoring assessments results (March and September 2023, and February 2024). In: *FAO Data in Emergencies Hub*. Rome. [Cited 26 March 2024]. <https://data-in-emergencies.fao.org>

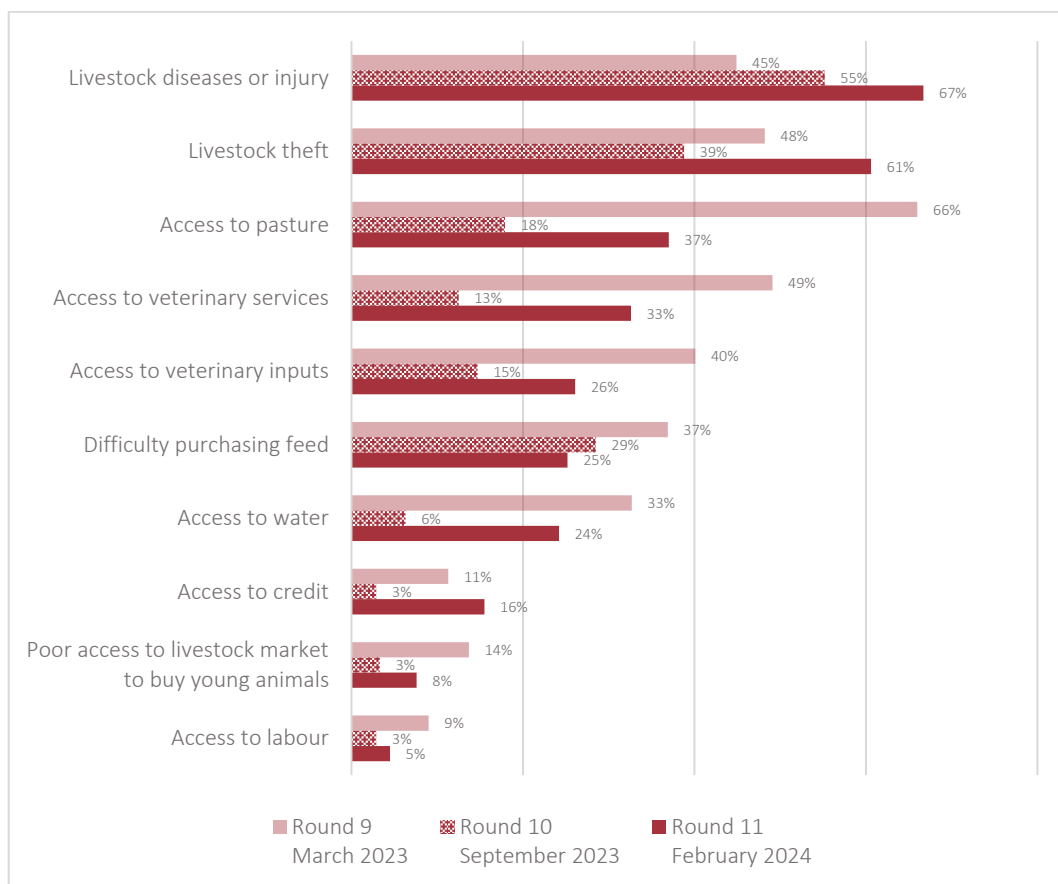
The crop area was reduced by 20 percent of households while 30 percent of the crop producers experienced a reduction in harvest compared to a normal year. The reduction in crop area follows a trend that has been observed over previous rounds of data collection, while the reduction in harvest has slightly improved from last year, but increased when compared to a normal year.

Crop sales difficulties were reported by 59 percent. This was due to high transport costs (91 percent), difficulty accessing market (37 percent), payment delays from traders and buyers (18 percent), usual traders and customers not buying (17 percent), and low selling prices (15 percent). About 69 percent of crop households reported a slight increase in crop prices compared to the previous three years.

Livestock

About 24 percent of the survey respondents were involved in livestock production, 70 percent of whom encountered production difficulties. The main livestock production difficulties encountered were: livestock diseases or injuries (67 percent), especially in Kailahun (88 percent), and mainly in the form of foot and mouth disease and peste des petits ruminants; theft (61 percent); access to pasture (37 percent); access to veterinary services (33 percent); access to veterinary inputs (26 percent); difficulty purchasing feed (25 percent); access to water (24 percent) and access to credit (16 percent) (Figure 5).

Figure 5. Livestock production difficulties (percentage of livestock producers)



Source: FAO. 2024. Sierra Leone: DIEM-Monitoring assessments results (March and September 2023, and February 2024). In: *FAO Data in Emergencies Hub*. Rome. [Cited 26 March 2024]. <https://data-in-emergencies.fao.org>

The comparison to the previous two rounds shows that the overall number of livestock producers experiencing livestock diseases or injuries has increased, along with those that reported theft and access to credit. Other livestock production difficulties, such as access to veterinary services and inputs, access to feed and access to pasture were experienced by less livestock producers this round compared to the same period in the previous year.

A reduction in the number of animals was reported by 40 percent of the livestock producers, mainly because they sold more animals than usual (18 percent), and because of animal death due to injuries, disease and parasites (16 percent).

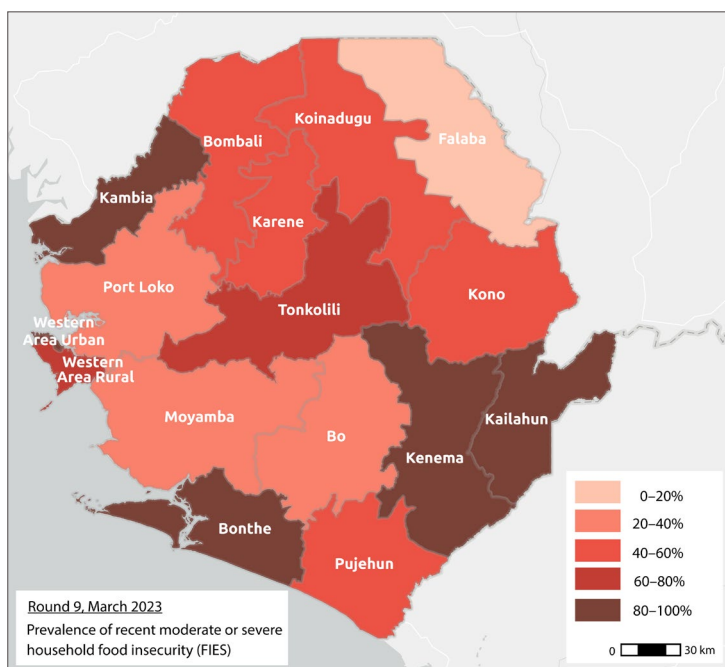
Sales difficulties were experienced by about 44 percent and were mainly due to high transportation and marketing costs (78 percent) and lack of demand by usual traders and buyers (35 percent). About 65 percent of livestock producers also reported a slight increase in price.

Food security

According to the FIES, about 44 percent of the households experienced moderate or severe recent food insecurity (RFI). About 4.5 percent of the households experienced the prevalence of severe RFI.

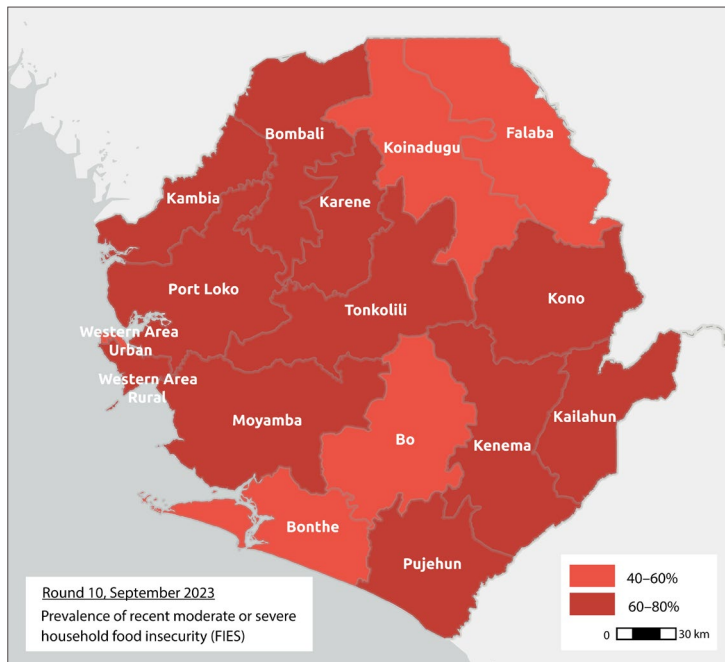
The food security situation, as measured with the FIES, shows an improvement in some areas, such as the eastern region (Figures 6, 7, and 8). However, it has worsened in some provinces in the south, like Moyamba. Moyamba remains one of the country's least well off and most vulnerable district, which relies more on crop production, and is prone to climatic and economic shocks.

Figure 6. Prevalence of recent moderate or severe household food insecurity (FIES), Round 9, March 2023



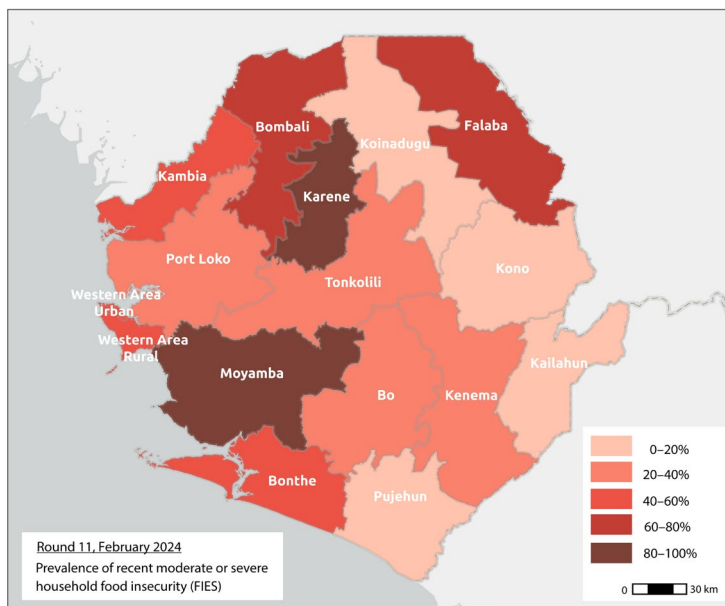
Source: FAO, 2023. Sierra Leone: DIEM-Monitoring assessment results (March 2023).
 In: FAO Data in Emergencies Hub. Rome. [Cited 26 March 2024]. <https://data-in-emergencies.fao.org>

Figure 7. Prevalence of recent moderate or severe household food insecurity (FIES), Round 10, September 2023



Source: FAO. 2023. Sierra Leone: DIEM-Monitoring assessment results (September 2023).
In: FAO Data in Emergencies Hub. Rome. [Cited 26 March 2024]. <https://data-in-emergencies.fao.org>

Figure 8. Prevalence of recent moderate or severe household food insecurity (FIES), Round 11, February 2024

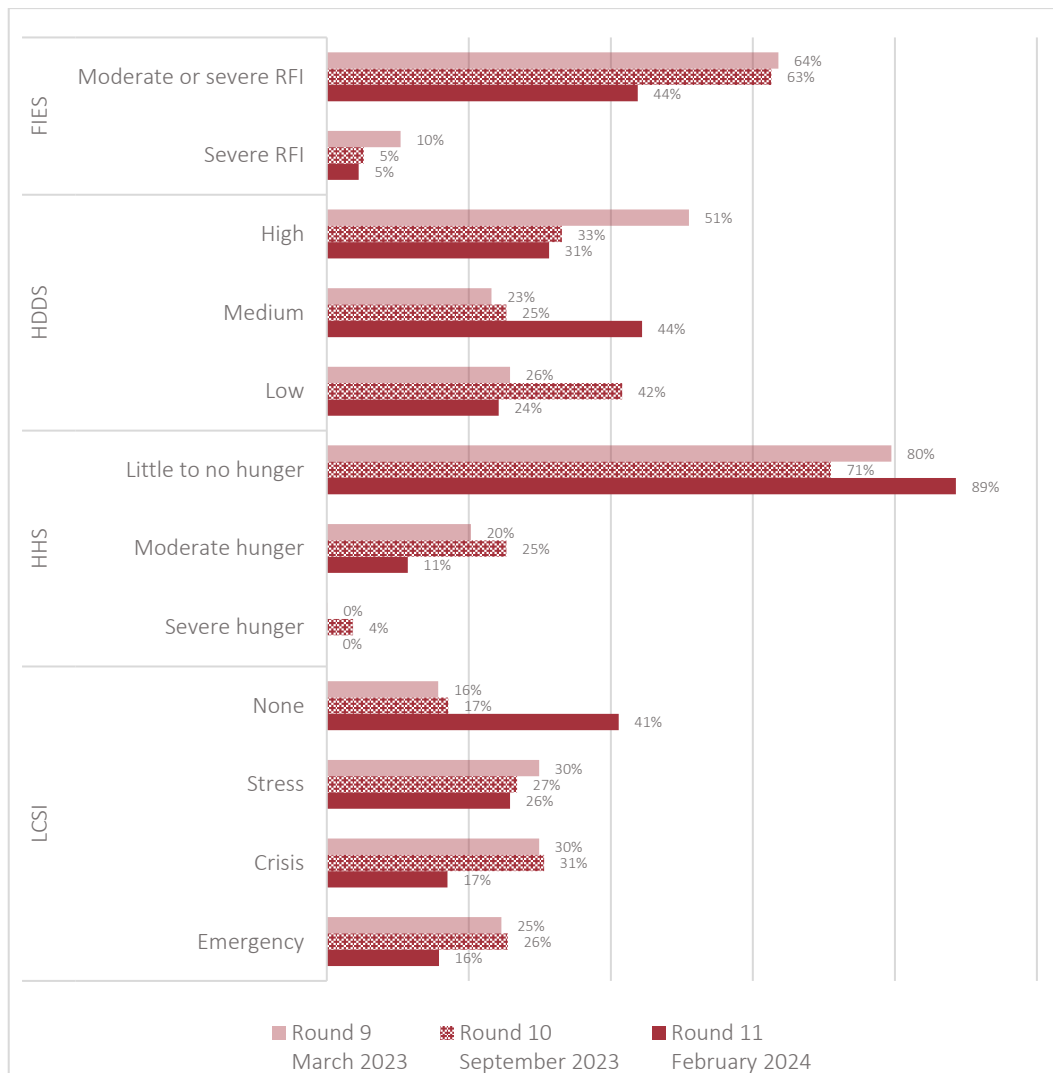


Source: FAO. 2024. Sierra Leone: DIEM-Monitoring assessment results (February 2024).
In: FAO Data in Emergencies Hub. Rome. [Cited 26 March 2024]. <https://data-in-emergencies.fao.org>

According to the household dietary diversity score (HDDS), about 31 percent of the surveyed households had a high level of dietary diversity, 44 percent a medium level and 24 percent had a low level. According to the household hunger scale (HHS), about 89 percent of the households experienced little to no hunger and 11 percent experienced moderate hunger (Figure 9).

Finally, according to the livelihood coping strategies index (LCSI), about 16 percent put in place emergency coping strategies, 26 percent employed stress coping strategies and 17 percent utilized crisis coping strategies. About 41 percent did put in place any coping strategies.

Figure 9. Food security indicators (FIES, HDDS, HHS and LCSI)



Source: FAO. 2024. Sierra Leone: DIEM-Monitoring assessments results (March and September 2023, and February 2024). In: *FAO Data in Emergencies Hub*. Rome. [Cited 26 March 2024]. <https://data-in-emergencies.fao.org>

Needs

The quasi totality of the interviewed households declared the need for assistance (94 percent), however, only 5 percent had received assistance, mainly in the form of food and cash. Livestock producers reported the need for cash (88 percent), food (60 percent), livestock feed (34 percent), veterinary services (30 percent), and training and technical advice (11 percent).

Crop producers reported the need for cash (92 percent), food (61 percent), inputs for crop or vegetable production (65 percent), training and technical knowledge (18 percent), and infrastructure for crop and vegetable production (17 percent).

Recommendations

Short-term recommendations

- > Provide immediate conditional or unconditional cash, and food assistance to support livelihoods.
- > Provide critical input support (e.g. seeds and tools) to areas of concern to improve agricultural production and productivity.
- > Provide veterinary input support to livestock farmers.
- > Strengthen extension services and education through trainings provided to crop and livestock farmers.
- > Improve farmer access to finance through the village saving and loan model.

Medium- and long-term recommendations

- > Identify local sellers of quality seeds, and promote a demand and supply link. Seed research should be strengthened to rely more on national production than seed imports. Seed generation and dissemination within the country should be promoted and improved where possible.
- > Promote integrated pest management, strengthen extension services by promoting access to trainings for crop producers and increase the ratio of extension officers to crop producers.
- > Strengthen monitoring systems across districts for better knowledge of the crop diseases and allow for targeted interventions.
- > Strengthen the extension of veterinary services in the livestock sector while prioritizing purchases of veterinary inputs.
- > Support the production of animal feed products, such as maize and cassava, and train livestock producers on how to produce animal feed. Identify local producers of starter kits (i.e. machines for grinding).



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