



Food and Agriculture  
Organization of the  
United Nations

Sierra Leone

# DIEM – Data in Emergencies Monitoring brief, round 9

Results and recommendations  
April 2023

**Data collection** 10 February to 2 March 2023

## Key highlights

- > When compared to the previous four rounds, higher than usual fuel and food prices remain the main shocks affecting respondents.
- > Access to fertilizer and access to pasture were the main production difficulties reported by crop producers (49 percent) and livestock producers (66 percent) respectively. However, access to veterinary inputs (40 percent) and animal feed (37 percent) are becoming more and more of a production challenge.
- > The household hunger score (HHS) and Household Dietary Diversity Score (HDDS) both show an increase when compared to the last two rounds because data were collected during the post-harvest period instead of the lean season and early harvest. However, compared to round 6, which also took place during the post-harvest period, a slight increase in the number of respondents presenting moderate hunger and low levels of dietary diversity.
- > The number of households employing emergency coping strategies has increased (35 percent) in the current round compared to the same period last year (12 percent).
- > Analysis of the Food Insecurity Experience Scale (FIES) indicates that the percentage of respondents experiencing the prevalence of severe recent food insecurity has doubled compared to the same period last year (10 percent vs 5 percent).
- > Alternatives to chemical fertilizer, such as use the use of manure, and organic fertilizer must be promoted. Support to scale-up feed production, together with training in feed preparation must be expanded. Social protection programmes, with conditional and unconditional cash transfers, should be implemented.

## 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 ninth-round survey was conducted through face-to-face interviews from 10 February to 2 March 2023 and reached 2 682 households. Data were collected during the post-harvest period across five provinces, and the following sixteen districts: Eastern (Kailahun, Kenema and Kono districts), Northern (Bombali, Falaba, Koinadugu and Tonkolili districts), North West (Kambia, Kerene and Port Loko districts), Southern (Bo, Bonthe, Moyamba, Kono and Pujehun districts) and Western (Western Area Rural and Western Area Urban). Regional weights were applied to correct disproportionate sampling at the regional level and based on information gathered through the 2015 census.

The eighth-round survey, which has been drawn from to make comparisons throughout this brief, was conducted from 25 October to 15 December 2022. The seventh-round survey was conducted from 12 June to 25 July 2022, and the sixth round was conducted from 1 to 25 February 2022.

Figure 1. Countries with established DIEM-Monitoring Systems



**Source of data:** FAO. 2023. DIEM-Monitoring. In: *FAO Data in Emergencies Hub*. Rome. Cited 3 November 2022. [data-in-emergencies.fao.org](https://data-in-emergencies.fao.org)

**Source of map:** United Nations. 2023. *Map of the World*. Cited 3 November 2022. [un.org/geospatial/content/map-world](https://un.org/geospatial/content/map-world)

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 [data-in-emergencies.fao.org/pages/monitoring](https://data-in-emergencies.fao.org/pages/monitoring)

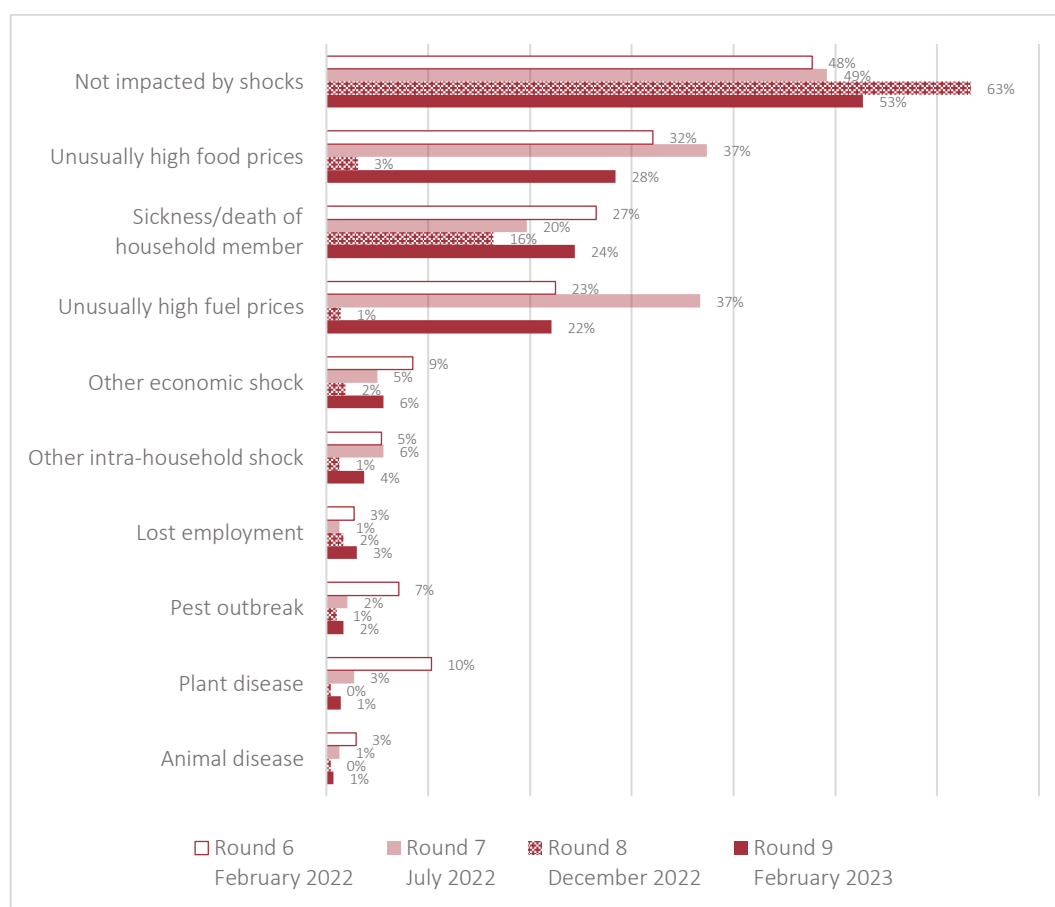
## Income and shocks

Approximately 47 percent of the surveyed households reported to have faced at least one shock over the three months preceding the survey. The primary reported shocks were much higher than usual food prices (28 percent), particularly in Tonkolili (76 percent) and Kono (72 percent); higher fuel or transport prices (22 percent), particularly in Kono (51 percent), Tonkolili (63 percent), Falaba (60 percent) and Kambia (50 percent); and sickness, accident or death of the breadwinner (24 percent), in particular in Kono (51 percent), Koinadugu (55 percent) and Tonkolili (58 percent). Higher than usual fuel and food prices were the shocks most reported across the last four rounds of data collection.

Twenty-three percent of respondents experienced a reduction in their main source of income during the three months preceding the survey compared to the same period in a typical year, particularly in Pujehun (43 percent) and in Western Area Rural (50 percent).

Over recent months, Sierra Leone experienced an increase in inflation that has impacted several aspects, including food and prices, explaining why these shocks were experienced.

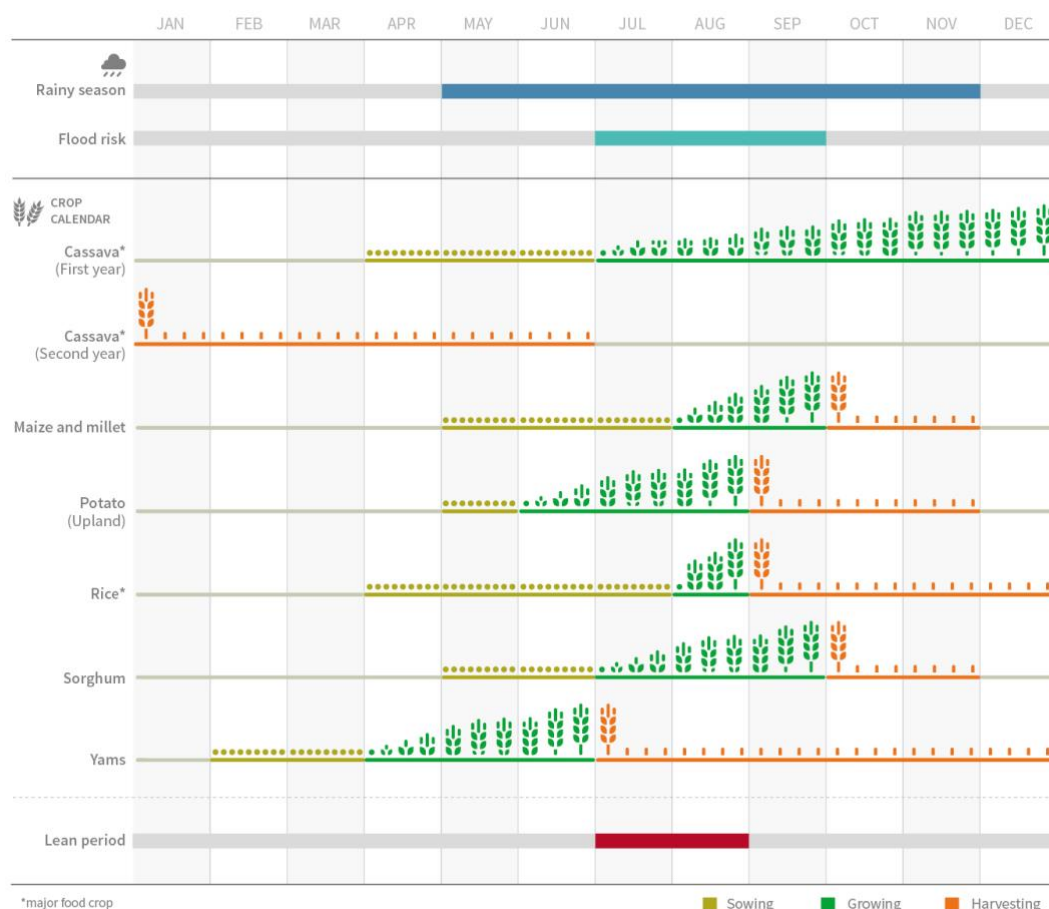
**Figure 2. Main shocks (percentage of households)**



**Source of data:** FAO. 2023. Sierra Leone: DIEM-Monitoring assessments results (February, July and December 2022, and February 2023). In: *FAO Data in Emergencies Hub*. Rome. Cited 29 March 2023. [data-in-emergencies.fao.org](https://data-in-emergencies.fao.org)

## Crops

Figure 3. Sierra Leone agricultural calendar



**Source of data:** FAO. 2023. GIEWS – Global Information and Early Warning System: Country briefs – Nigeria. In: *Food and Agriculture Organization of the United Nations*. Rome. Cited 10 March 2023. [fao.org/giews/countrybrief/country.jsp?code=NGA&lang=en](https://fao.org/giews/countrybrief/country.jsp?code=NGA&lang=en)

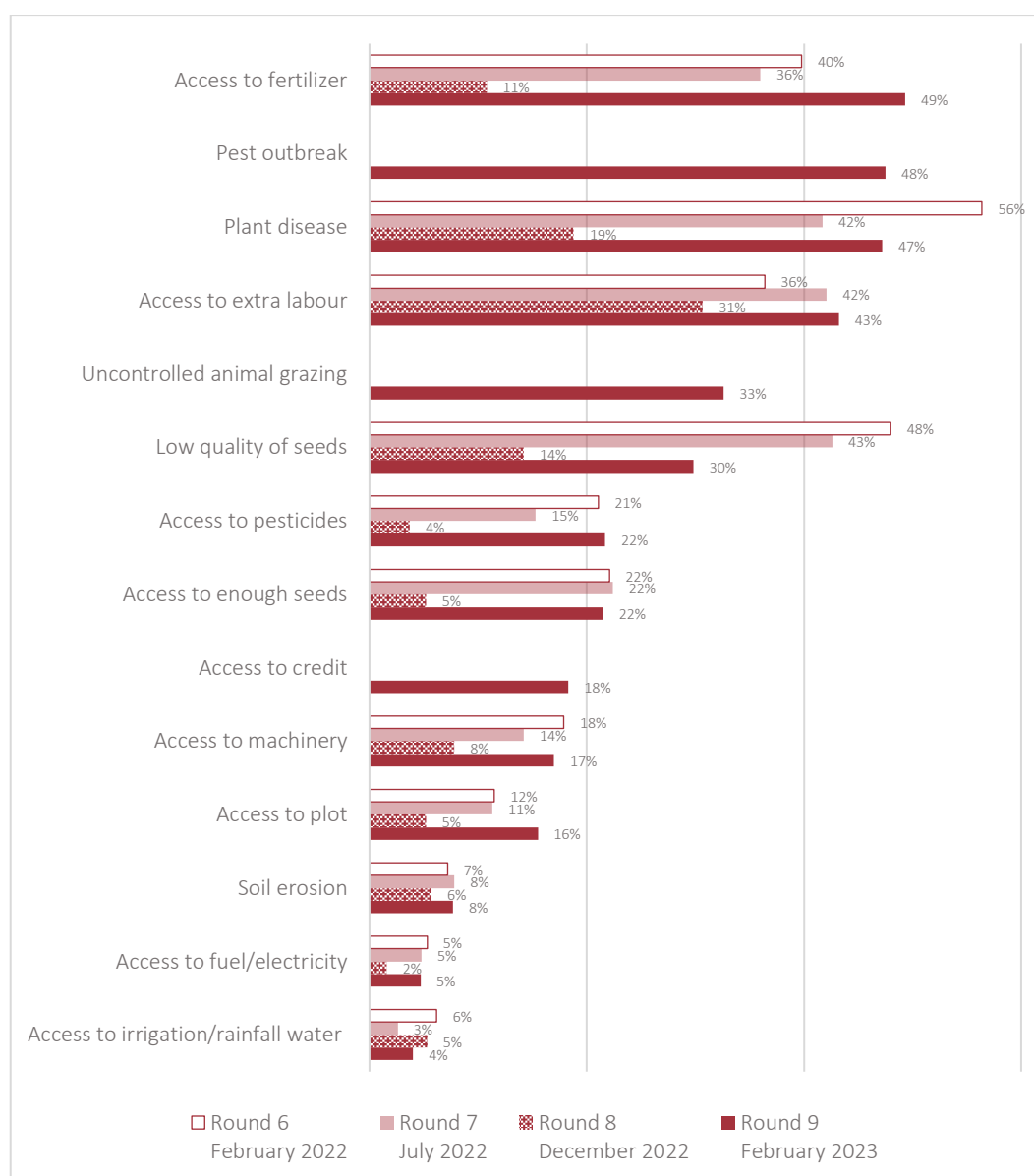
Approximately 72 percent of the households surveyed were crop producers. Difficulties with crop production were reported by more than half of the households interviewed (78 percent). The most frequently reported crop production difficulty was access to fertilizer (49 percent). Other reported difficulties included pest presence (48 percent), particularly in Port Loko (72 percent); pest disease (47 percent); and difficulty accessing manpower (43 percent). In addition, crop producers experienced difficulties accessing other agricultural inputs, such as quality seeds (30 percent), pesticides (22 percent), seeds (22 percent), and machinery, tools or animals for ploughing (17 percent). Uncontrolled animal grazing was experienced by 33 percent of crop producers.

Crop sales difficulties were reported by 58 percent of crop producers and consisted of high transportation or other marketing costs (79 percent), difficulties accessing markets (56 percent), low selling prices (22 percent), the number of usual traders or local customers buying less than usual (23 percent) and difficulties processing products (21 percent).

The cost of agricultural inputs is currently very high and affordability issues have been experienced by crop producers. Transaction costs have increased which may have led to usual

traders or local customers buying less than usual. In addition, customers are experiencing low purchasing power.

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



Source of data: FAO. 2023. Sierra Leone: DIEM-Monitoring assessments results (February, July and December 2022, and February 2023). In: *FAO Data in Emergencies Hub*. Rome. Cited 29 March 2023. [data-in-emergencies.fao.org](https://data-in-emergencies.fao.org)

Note: Changes to the response options in the round 6 questionnaire make it impossible to compare some data with previous cycles.

## Livestock

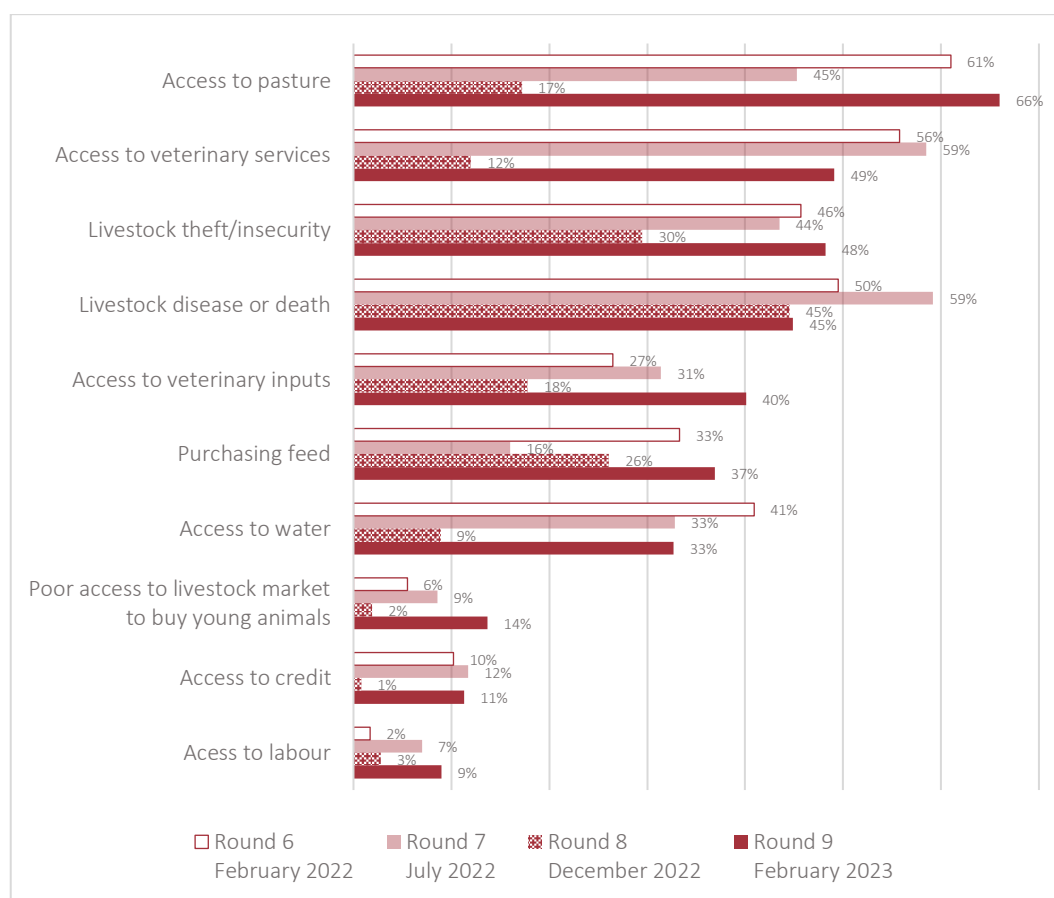
Fourteen percent of the respondents are involved in livestock production. Among them, 83 percent reportedly experienced production difficulties in the three months preceding the survey. The primary difficulty experienced was access to pasture (66 percent) – data were collected during the dry season when there is competition for pasture or grazing land. Other difficulties reported included access to veterinary services (49 percent) and veterinary inputs (40 percent); livestock theft (48 percent); livestock disease or injury (45 percent); difficulties

purchasing feed (37 percent); and access to water (33 percent). The number of livestock extension officers is limited at district level translating to less personnel available to each livestock producer. In addition, there is limited availability of storage facilities and veterinary inputs are expensive for most livestock producers.

A decrease in the number of livestock was experienced by 42 percent of the livestock producers. Livestock sales difficulties were reported by 66 percent of the livestock producers and were mainly due to high transportation or marketing costs (61 percent), damage and losses during transportation or difficulties accessing the market (39 percent), payment delays from traders or buyers, and lack of demand from usual buyers or traders (21 percent).

Limited access to pasture is mostly linked to the season during data collection, which was the dry season, resulting in fewer pastures available.

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



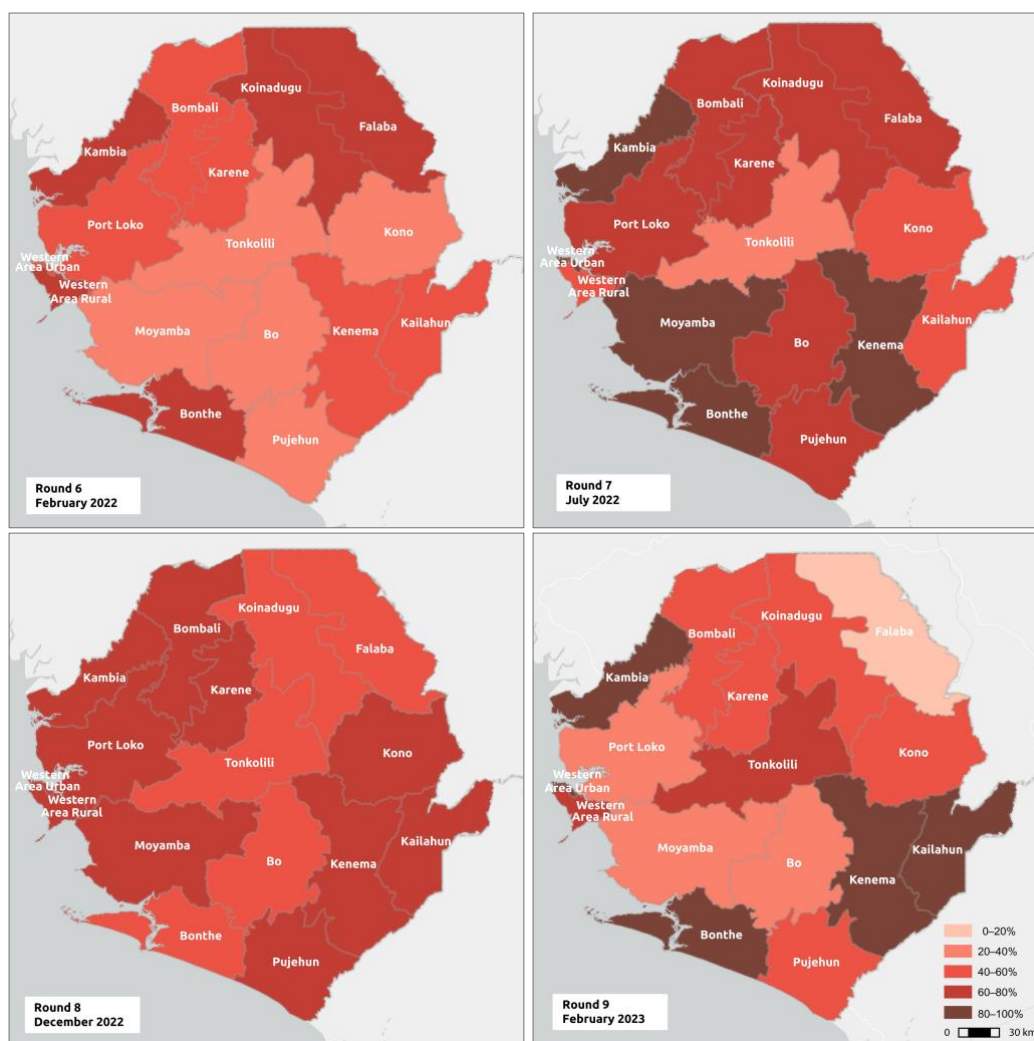
Source of data: FAO. 2023. Sierra Leone: DIEM-Monitoring assessments results (February, July and December 2022, and February 2023). In: *FAO Data in Emergencies Hub*. Rome. Cited 29 March 2023. [data-in-emergencies.fao.org](https://data-in-emergencies.fao.org)



## Food security

According to the FIES,<sup>1</sup> 64 percent of respondents experienced moderate or severe recent food insecurity (RFI), and 10 percent of the households experienced the prevalence of severe recent food insecurity.

Figure 6. RFI compared across rounds 6–9



**Source of data:** FAO. 2023. Sierra Leone: DIEM-Monitoring assessments results (February, July and December 2022, and February 2023). In: *FAO Data in Emergencies Hub*. Rome. Cited 29 March 2023. [data-in-emergencies.fao.org](https://data-in-emergencies.fao.org)

The HDDS indicates that approximately 51 percent of the interviewed households have a high level of dietary diversity, 23 percent have a medium level and 26 percent have a low level of dietary diversity.

According to the HHS, 80 percent of the households experienced little to no hunger and 20 percent experienced moderate hunger.

The livelihood coping strategy index (LCSI) indicates that 30 percent of respondents put in place crisis strategies – households mostly spent savings (63 percent), borrowed money (53 percent),

<sup>1</sup> FIES results are subject to change. The country scale will continue to evolve over additional rounds of data collection allowing for more consistent comparability across rounds.

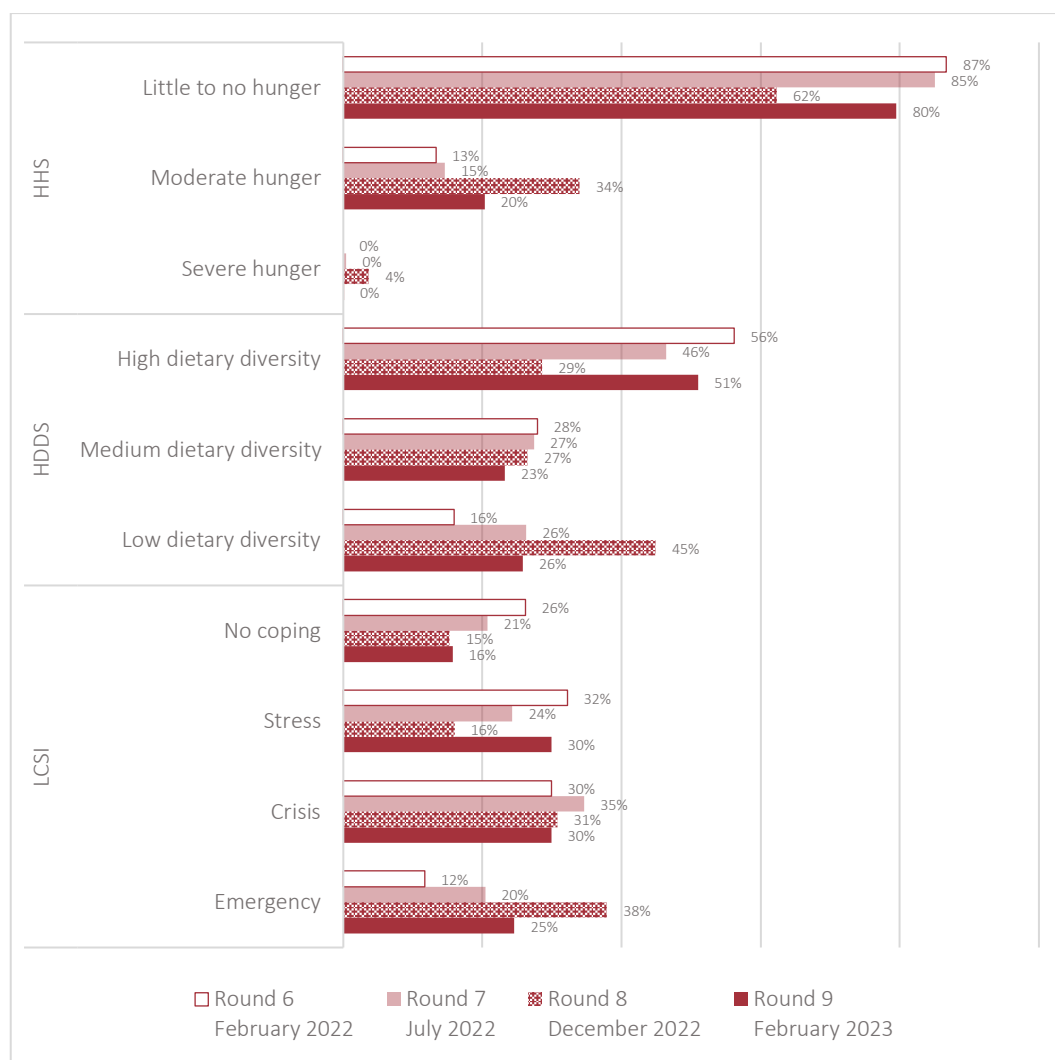


or purchased food on credit or borrowed food (42 percent) – and stress strategies (30 percent) – decreased expenditures on agricultural inputs (23 percent), harvested immature crops to eat (20 percent) or reduced health expenses (27 percent). Emergency coping strategies were put in place by 25 percent of the respondents, mainly in the form of begging, (17 percent). Sixteen percent did not employ any coping strategy.

HDDS and HHS indicate an increase when compared to the last two rounds because data were collected during the post-harvest period as opposed to the lean season (round 7) and the early harvest period (round 8). Compared to round 6, that also took place during the post-harvest period, there was a slight increase in the number of respondents that presented moderate hunger and low levels of dietary diversity. The number of households employing emergency coping strategies has also increased compared to the same period of the previous year.

FIES analysis indicates that the percentage of respondents experiencing the prevalence of severe RFI has doubled when compared to the same period last year.

Figure 7. Food security measures

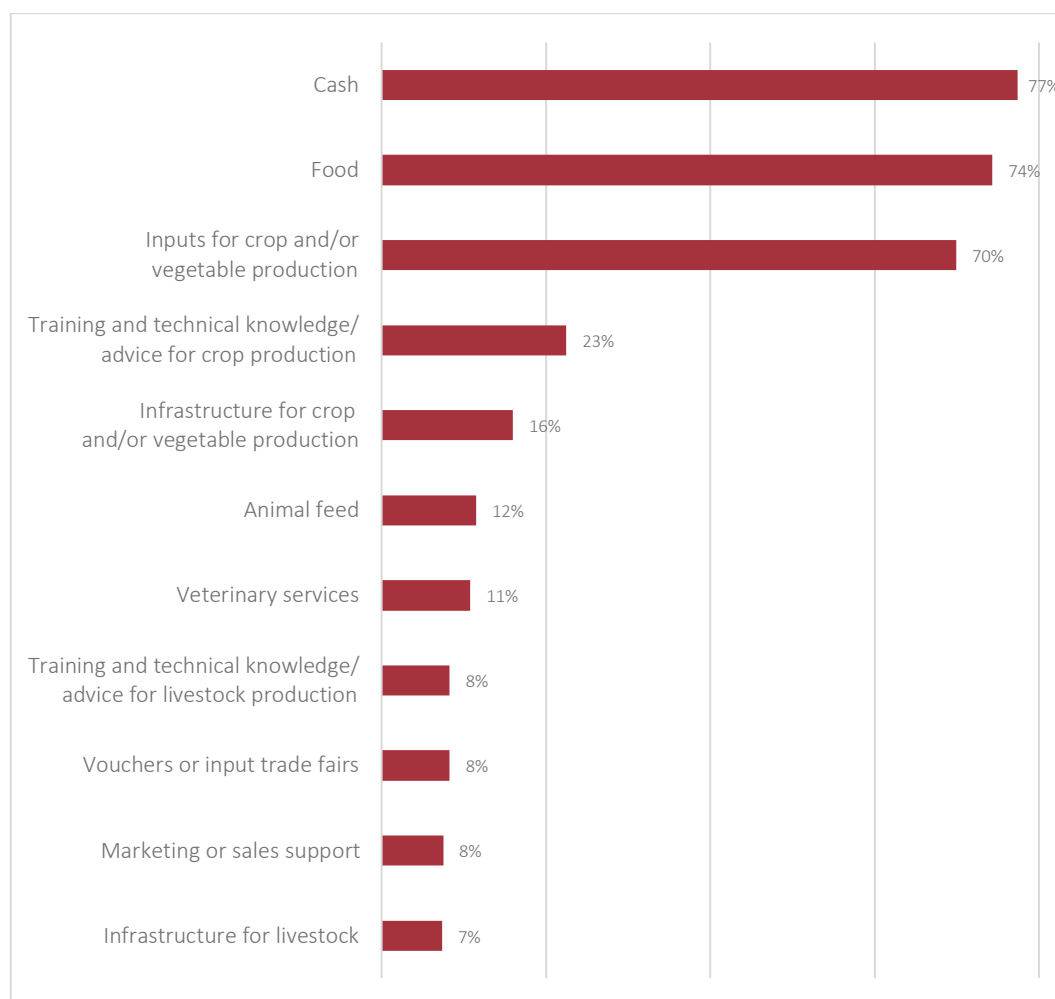


Source of data: FAO. 2023. Sierra Leone: DIEM-Monitoring assessments results (February, July and December 2022, and February 2023). In: *FAO Data in Emergencies Hub*. Rome. Cited 29 March 2023. [data-in-emergencies.fao.org](https://data-in-emergencies.fao.org)

## Needs

An expected need for assistance within the three to six months following the survey was reported by 99 percent of the respondents, however, only 5 percent of the respondents has received assistance, mainly in terms of food and cash vouchers. The respondents indicated the need for cash (77 percent), food (74 percent) and inputs for crop production (70 percent).

Figure 8. Main needs (percentage of households)



**Source of data:** FAO. 2023. Sierra Leone: DIEM-Monitoring assessment results (February 2023). In: *FAO Data in Emergencies Hub*. Rome. Cited 29 March 2023. [data-in-emergencies.fao.org](https://data-in-emergencies.fao.org)

## Recommendations

### Short-term recommendations

- > Provide access to credit – in the form of unconditional cash transfers or vouchers to redeem inputs – to enable crop producers with limited resources access to agricultural inputs.

### Long-term recommendations

- > Further explore the causes of seed insecurity and seed security options (seed aid, seed networks, seed banks, etc.).
- > Promote alternatives to chemical fertilizer, such as use the use of manure and organic fertilizer.
- > Avail affordable processing machinery and increase the capacity for small crop producers to use machinery, and promote local processing innovations.
- > Strengthen district level veterinary services by increasing their awareness and providing them with information about livestock production challenges experienced by livestock producers. The rate of veterinary extension officers to livestock producers should also be improved to meet the needs of the sector.
- > There are not enough feed producers in the country – support scale-up production together with training for feed preparation to make more feed available to livestock producers.
- > Social protection programmes, with conditional and unconditional cash transfers, should be implemented.



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## Contact

### FAO Representation in Sierra Leone

FAO-SL@fao.org  
@FAOSierraLeone  
Freetown, Sierra Leone

### Office of Emergencies and Resilience

Data-in-emergencies@fao.org  
data-in-emergencies.fao.org | @FAOEmergencies  
Rome, Italy

### Food and Agriculture Organization of the United Nations

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