



Food and Agriculture  
Organization of the  
United Nations

Sierra Leone

# DIEM – Data in Emergencies Monitoring brief, round 8

Results and recommendations  
February 2023

**Data collection** 25 October to 15 December 2022

## Key highlights

- > Overall, fewer households were affected by shocks during this round of data collection compared to the previous three rounds.
- > Thirty-six percent of respondents experienced a reduction in their main source of income during the three months prior to the survey, compared to the same period in a typical year.
- > The lifting of restrictions linked to COVID-19 prevention has improved access to quality seeds and fertilizer over the last year, illustrated by the lower number of farmers affected by production difficulties in more recent rounds. However, challenges in accessing quality seeds and fertilizer still exist for 14 and 11 percent of respondents, respectively.
- > Challenges in accessing veterinary inputs and veterinary services still exist. Logistic issues are behind this trend, explaining why 21 percent of households reported having animals affected by diseases or death.
- > A comparison among the last four rounds of data collection shows a trend that mirrors the cropping seasons, however, a positive trend with an overall improvement of the food security situation can be seen across the country.
- > The main needs for assistance revolve around cash and food, followed by access to key agricultural inputs.

Recommendations include the following:

- > Provide targeted food assistance in combination with alternative livelihood support, especially in the following districts: Bombali, Kailahun, Kambia, Kono, Port Loko, Pujehun and Western Area Rural.
- > Enhance the understanding of the causes of seed insecurity and seed security options.
- > Develop strategies to improve management of grazing land during the rainy season to ensure feed access and pasture access – especially during the dry season.

## Methodology

The Food and Agriculture Organization of the United Nations (FAO) launched a household survey between 25 October and 15 December 2022 to monitor agricultural livelihoods and food security in Sierra Leone. The data was collected using a mobile survey across five provinces in the following 16 districts: Bo, Bombali, Bonthe, Falaba, Kailahun, Kambia, Kenema, Kerene, Koinadugu, Kono, Moyamba, Port Loko, Pujehun, Tonkolili, Western Area Rural and Western Area Urban. A total of 2 891 households were surveyed. Data collection took place during the early harvest period.

Figure 1. Countries with established DIEM-Monitoring Systems



**Source of data:** FAO. 2022. DIEM-Monitoring. In: *FAO Data in Emergencies Hub*. Rome. Cited 5 October 2022. [data-in-emergencies.fao.org](https://data-in-emergencies.fao.org)

**Source of map:** United Nations. 2022. *Map of the World*. Cited 5 October 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 <https://data-in-emergencies.fao.org/pages/monitoring>

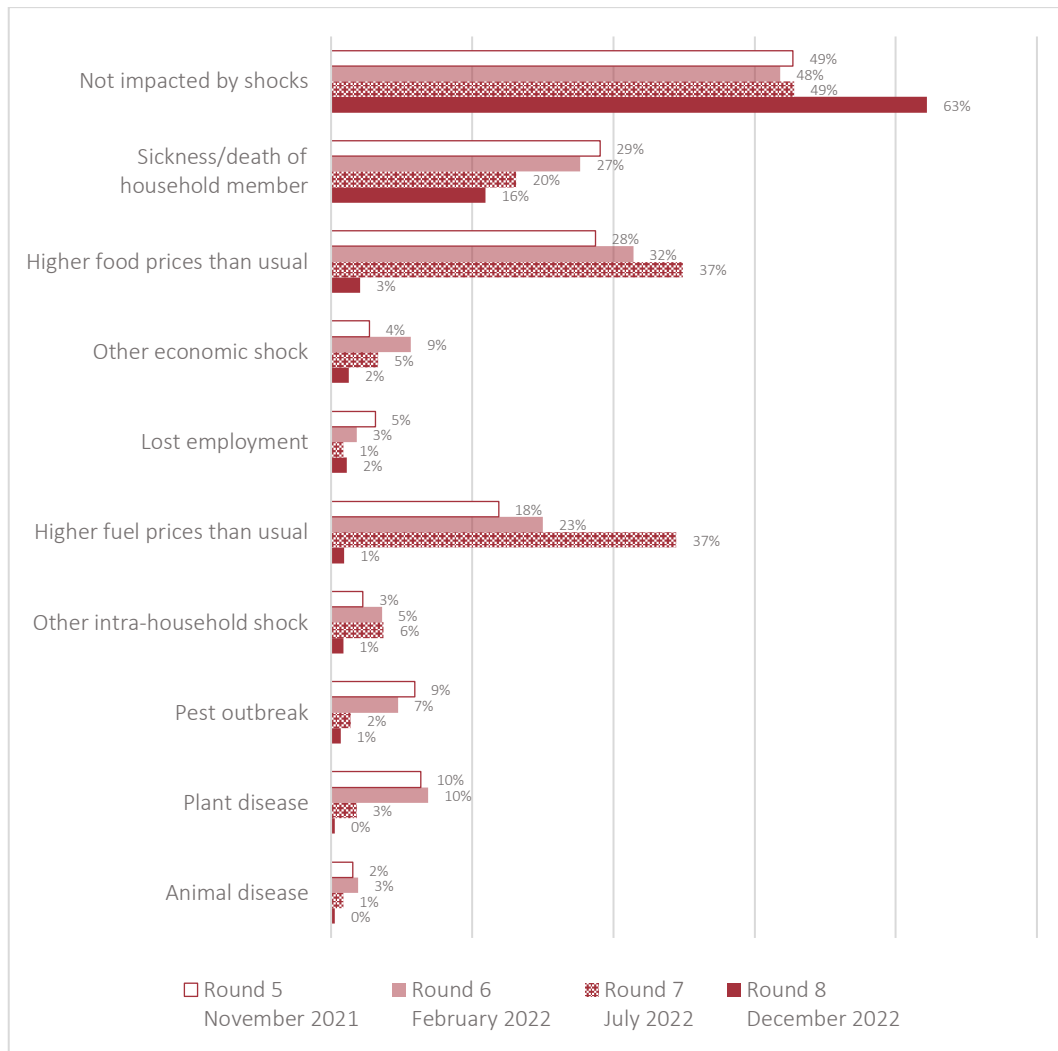
## Income and shocks

Approximately 37 percent of households surveyed faced a shock during the three months preceding the survey. The shock most frequently reported was sickness or death of a household member (16 percent). The most affected districts were Pujehun (23 percent), Kerene

(22 percent), Bo (27 percent) and Kono (22 percent). Other shocks experienced were much higher than usual food prices and flood bank erosion (both at 3 percent). Thirty-six percent of respondents experienced a reduction in their main source of income during the three months preceding the survey, as compared to the same period in a typical year.

Overall, fewer households were affected by shocks during this round of data collection compared to the previous three rounds.

Figure 2. Main shocks experienced



Source of data: FAO. 2023. Sierra Leone: DIEM-Monitoring assessments results (November 2021, February 2022, July 2022 and December 2022). In: *FAO Data in Emergencies Hub*. Rome. Cited 26 January 2023. [data-in-emergencies.fao.org](https://data-in-emergencies.fao.org)

## Crops

Of the households surveyed, approximately 55 percent were involved in crop production, with 10 percent of those practicing integrated crop-livestock farming. About 74 percent of households experienced difficulties in crop production. For most farmers, the growth of crops cultivated was undermined during the growing season by pests (33 percent – particularly in Koinadugu at 52 percent and Falaba at 43 percent, followed by Port Loko, Tonkolili and Western Area Rural at 36 percent) and plant diseases (19 percent), particularly affecting Kailahun (28 percent), Western Area Rural (27 percent) Tonkolili (23 percent) and

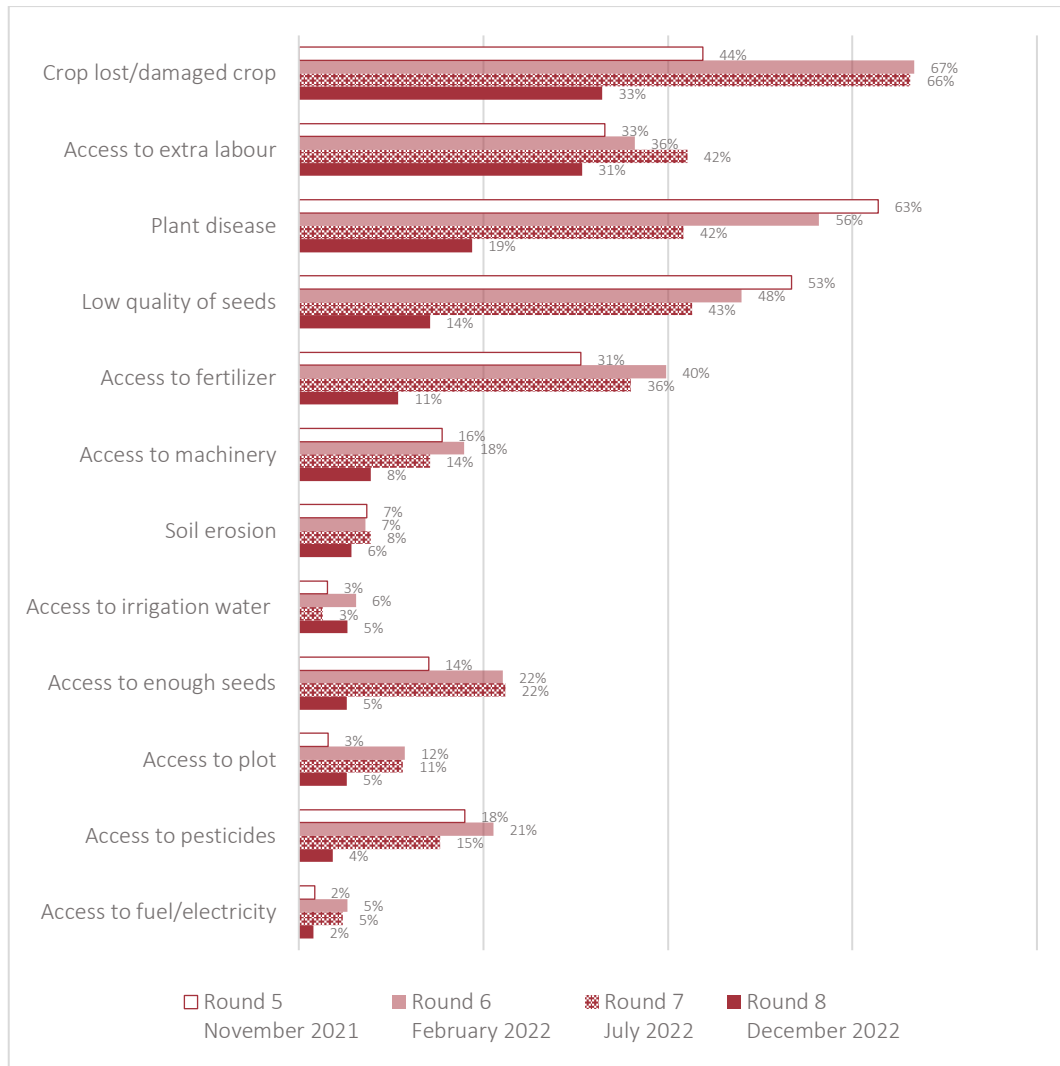
Western Area Urban (22 percent). The reduction in the number of farmers affected by pests is likely linked with the timing of the data collection. In fact, FAO found a similar trend across round 5, when data was also collected during the early harvest period. Data collection for round 6 and round 7 occurred during the growing stage, which explains the higher number of farmers affected by pests. The reduction in plant diseases experienced might be due to appropriate management either with support from development partners or the Ministry of Agriculture and Forestry. With the increase in food security crises, partners and the government are upscaling targeting and support to smallholder farmers to increase production.

Accessing labour or manpower was difficult for about 31 percent of the households, in addition to issues with access to agricultural inputs like fertilizer (11 percent), quality seeds (14 percent) and machinery and tools (8 percent) – the latter in particular in Falaba (29 percent).

The lifting of restrictions linked to COVID-19 prevention has improved access to quality seeds and fertilizer over the last year, illustrated by the lower number of farmers affected by production difficulties in more recent rounds. However, challenges in accessing quality seeds and fertilizer still exist for 14 and 11 percent of respondents, respectively.

Soil erosion was a challenge for 6 percent of farmers. About 29 percent of crop producers declared to have planted less compared to a typical year, and reportedly experienced a decrease in their harvest (38 percent). Crop sales difficulties were experienced by 53 percent of households, due reportedly to high transport costs (42 percent), difficulties accessing the market (17 percent), low selling prices (16 percent) and the number of usual traders or local customers buying less than usual (15 percent).

Figure 3. Crop production difficulties



Source of data: FAO. 2023. Sierra Leone: DIEM-Monitoring assessments results (November 2021, February 2022, July 2022 and December 2022). In: *FAO Data in Emergencies Hub*. Rome. Cited 26 January 2023. [data-in-emergencies.fao.org](https://data-in-emergencies.fao.org)

Figure 4. Agricultural Calendar of Sierra Leone



Source of data: FAO. 2022. GIEWS – Global Information and Early Warning System: Country briefs – Sierra Leone. In: *Food and Agriculture Organization of the United Nations*. Rome. Cited 26 January 2023. <https://www.fao.org/giews/countrybrief/country.jsp?lang=en&code=SLE>.

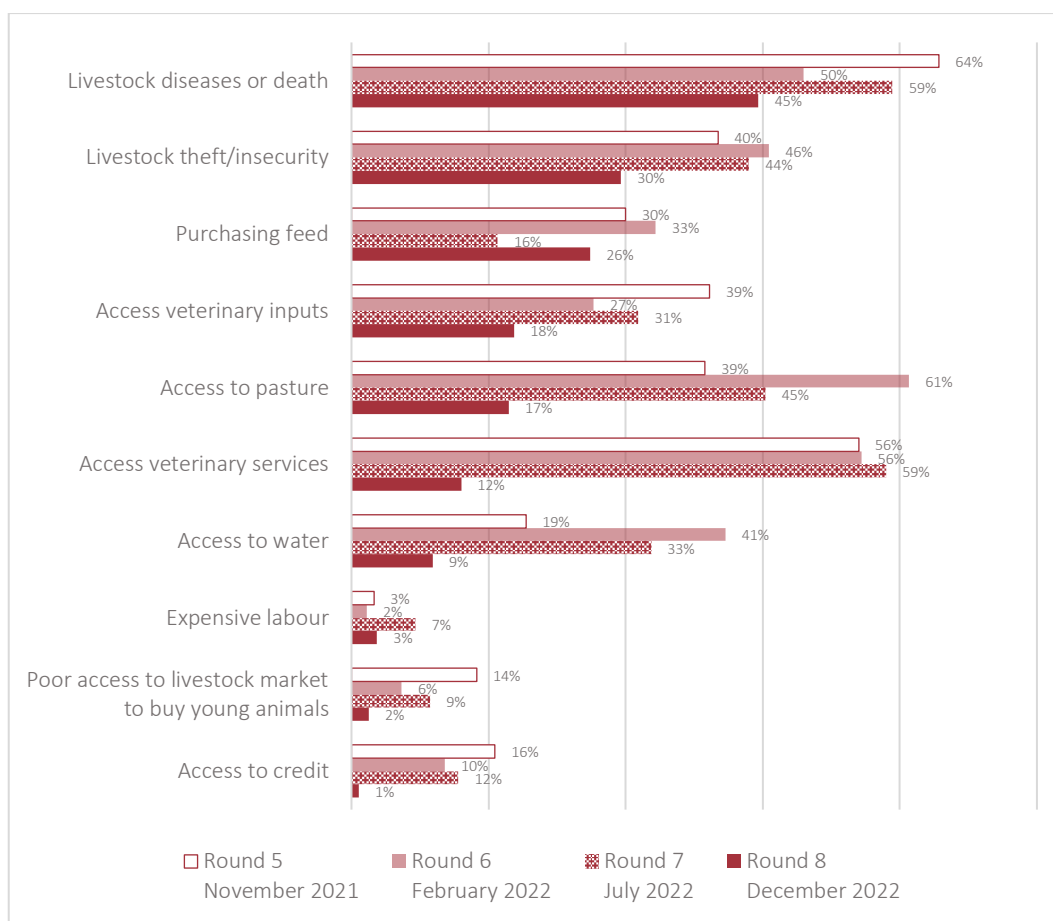
## Livestock

About 16 percent of respondents were involved in livestock production. During the three months preceding the survey, 61 percent of these experienced some production difficulties. Livestock disease or death affected 45 percent of livestock producers. This was followed by livestock theft (30 percent), difficulties in purchasing feed (26 percent), access to pasture (17 percent) and access to veterinary inputs (18 percent) and veterinary services (12 percent).

The country presents a capillary system of animal workers that provides support at the district level. Despite this, challenges in accessing veterinary inputs and services still exist. Logistic issues were mainly behind this trend, which explains why several animals were affected by diseases or died. Approximately 41 percent of livestock producers declared to have experienced a reduction in the number of animals, mainly due to the death of the animals from malnutrition, poor health or injury (21 percent).

Sales difficulties were experienced by about 38 percent of livestock producers and were mainly due to high transportation costs (46 percent), low selling prices (33 percent), usual traders and customers not buying as much as usual (18 percent) and difficulties accessing the market (17 percent).

Figure 5. Livestock production difficulties



Source of data: FAO. 2023. Sierra Leone: DIEM-Monitoring assessments results (November 2021, February 2022, July 2022 and December 2022). In: FAO Data in Emergencies Hub. Rome. Cited 26 January 2023. data-in-emergencies.fao.org

## Food security

About 62 percent of households experienced moderate or severe recent food insecurity. Moderate or severe levels of food insecurity with values above the average were found in Bombali (71 percent), Kailahun (67 percent), Kambia (69 percent), Port Loko (66 percent), Kono (65 percent), Western Area Rural (65 percent) and Pujehun (64 percent).<sup>1</sup>

A comparison of the last four rounds of data collection shows food security dynamics which are in line with the cropping season. However, a positive trend can be seen when comparing data collected during the same period of the year for round 5 and round 8.

According to the Household Dietary Diversity Score, approximately half of the households interviewed had a low level of dietary diversity (45 percent), about 27 percent had a medium level and 29 percent had a high level.

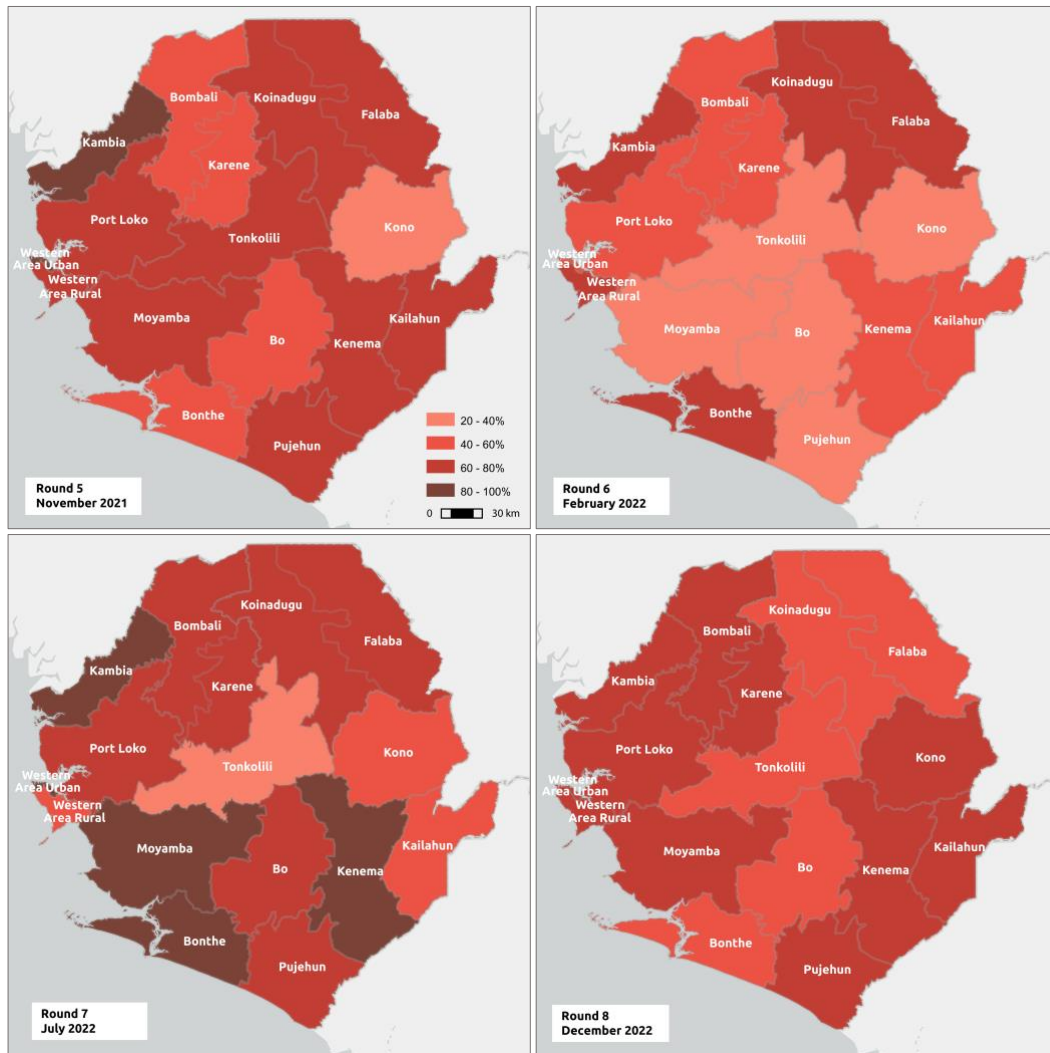
According to the household hunger score, 62 percent of households experienced little to no hunger, 34 percent experienced moderate hunger and 4 percent experienced severe hunger.

<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.



An analysis of the livelihood coping efforts put in place shows that they revolved mainly around crisis strategies (38 percent), including the consumption of seed stock (26 percent), the harvest of immature crops for consumption (27 percent) and reduced expenses on health (57 percent) and emergency strategies (31 percent) – including begging (28 percent). Approximately 16 percent of households used stress strategies, including spent savings (68 percent), borrowing money (56 percent) or purchasing food on credit or borrowed food (56 percent). Fifteen percent of households did not put any strategy in place.

Figure 6. Food Insecurity Experience Scale

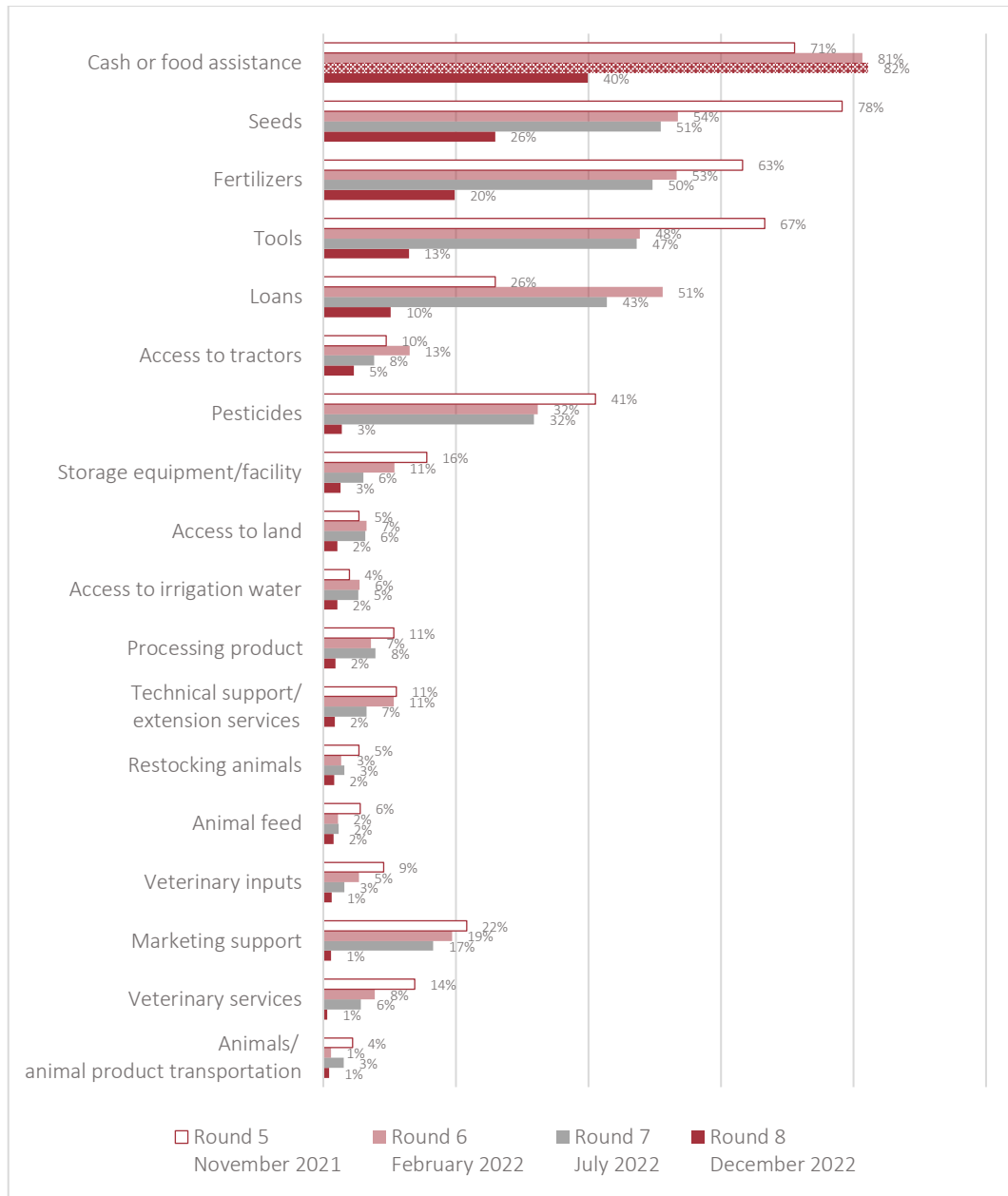


**Source of data:** FAO. 2023. Sierra Leone: DIEM-Monitoring assessments results (November 2021, February 2022, July 2022 and December 2022). In: *FAO Data in Emergencies Hub*. Rome. Cited 26 January 2023. [data-in-emergencies.fao.org](https://data-in-emergencies.fao.org)  
**Source of map:** Esri, HERE, Garmin, FAO, NOAA, USGS. 2018. *Map of Sierra Leone*. Cited 26 January 2023. [data-in-emergencies.fao.org](https://data-in-emergencies.fao.org)

## Needs

Almost all interviewed households declared the need for assistance (98 percent). However, only 9 percent have reportedly received assistance – primarily through food and cash vouchers. Households declared the need for support in terms of cash or food assistance (40 percent), seeds (26 percent), fertilizer (20 percent), tools (13 percent) and loans (10 percent).

Figure 7. Main needs



Source of data: FAO. 2023. Sierra Leone: DIEM-Monitoring assessments results (November 2021, February 2022, July 2022 and December 2022). In: FAO Data in Emergencies Hub. Rome. Cited 26 January 2023. data-in-emergencies.fao.org

## Recommendations

### Short-term recommendations (1–6 months)

- > Prioritize and establish targeted food assistance across districts such as Bombali, Kailahun, Kambia, Kono, Port Loko, Pujehun and Western Area Rural – especially during the rainy season. In addition, alternative livelihood support is key (e.g. the distribution of seeds and farming tools and the reinforcement of training activities).
- > Improve logistic conditions and invest in logistic support to enable the role of animal workers. Several previous initiatives have supported vaccination efforts but faced challenges in reaching beneficiaries in remote areas.
- > Promote alternatives to chemical fertilizer, such as the use of manure and organic fertilizer.

### Medium/long-term recommendations (6 months and beyond)

- > Explore the causes of seed insecurity and seed security options (seed aid, seed network, seed banks, etc.) further to identify targeted and effective solutions.
- > Promote access to and build capacity to use affordable processing machinery, the lack of which remains a production constraint felt by several respondents – particularly in Falaba.
- > Carefully elaborate strategies to improve the management of grazing land during the rainy season to ensure feed and pasture access, especially during the dry season.
- > Strengthen and scale up social protections.



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