



Food and Agriculture
Organization of the
United Nations



World Food
Programme

Myanmar

DIEM – Data in Emergencies Monitoring brief, round 4

Results and recommendations
January 2023

Data collection 7 August to 15 September 2022

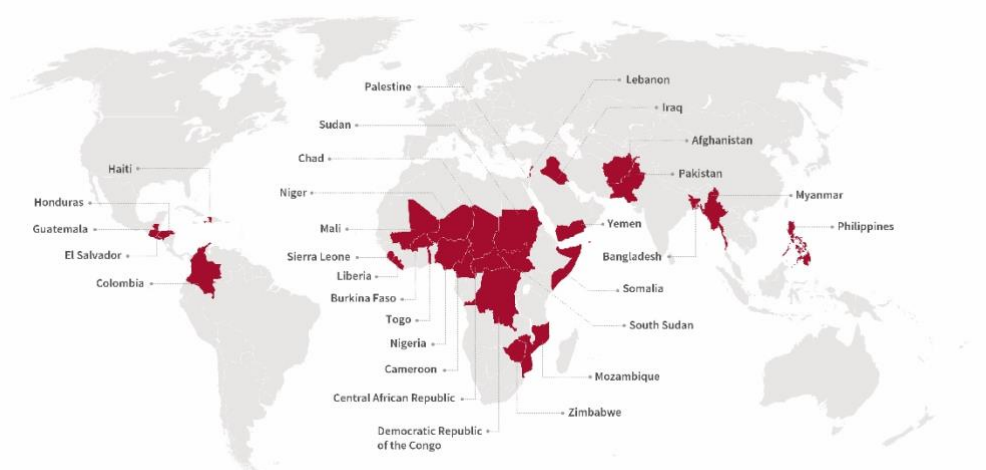
Key highlights

- > Based on the remote Consolidated Approach for Reporting Indicators of Food Security (rCARI), 27 percent of households are considered food insecure and, according to the Food Insecurity Experience Scale (FIES), 29 percent are recently moderately or severely food insecure.
- > The states and regions of Chin, Kayah, Kayin, Rakhine and Sagaing had the worst food security outcomes across all indicators.
- > The reliance on food-related coping strategies has increased, particularly the consumption of less preferred or less expensive food, employed by four out of ten households.
- > One in two households had to rely on *crisis* and *emergency* coping mechanisms that are more difficult to reverse and likely to reduce future income streams and production levels. Asset-depletion among farmers could be a contributing factor to poor production. Poor production is associated with food insecurity at a household level, but there are also concerns for future agricultural production.
- > Sustained retrenchment of the area planted compared to previous rounds was reported.
- > The 2022 main rainfed paddy crop, which accounts for more than 80 percent of the annual production, was expected to be below-average as harvest was approaching at the time of the survey. The share of farmers that reported a drop in production has grown from 45 percent in the second round, to 49 percent in the third round and 54 percent in the current round.
- > Farmers in Rakhine State expect particularly poor production. In Chin, Magway, Sagaing, Tanintharyi and Yangon, a high share of households also expect harvest to be below normal.
- > Forty-seven percent of livestock producers experienced a decrease in herd/flock size, particularly among swine and poultry producers. The incidence of livestock diseases decreased, and market access improved, but the share of reported difficulties accessing feed and pastures has increased.
- > Households in conflict-affected areas, rural households, female-headed households, households with debt, and those vulnerable to economic shocks had the worst food security outcomes.
- > These findings suggest a need for food assistance to the most vulnerable households and agricultural assistance to support production in the upcoming season.

Methodology

The Food and Agriculture Organization of the United Nations (FAO) and the World Food Programme (WFP), conducted a household survey in Myanmar from 7 August to 15 September 2022. The survey monitored agricultural livelihoods and food security through the Data in Emergencies Monitoring (DIEM-Monitoring) System. In this fourth round of data collection, a total of 3 725 households were interviewed through computer-assisted telephone interviews in Ayeyarwady, Bago, Chin, Kachin, Kayah, Kayin, Magway, Mandalay, Mon, Rakhine, Sagaing, Shan, Tanintharyi and Yangon states/regions representing all states/regions in Myanmar, except for Naypyidaw. The sample was representative at the state/regional level. Results were weighted by demographics, engagement in agriculture and a wealth proxy (education). This fourth-round survey followed the third-round survey conducted from 17 March to 5 May 2022, and the second-round survey conducted from 9 August to 9 September 2021. Both the second and third rounds have been drawn from to make comparisons throughout this brief.

Figure 1. Countries with established DIEM-Monitoring Systems



Source of data: FAO. 2022. DIEM-Monitoring. In: *FAO Data in Emergencies Hub*. Rome. Cited 2 October 2022. data-in-emergencies.fao.org

Source of map: United Nations. 2022. *Map of the World*. Cited 2 October 2022. 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 Myanmar and other countries.

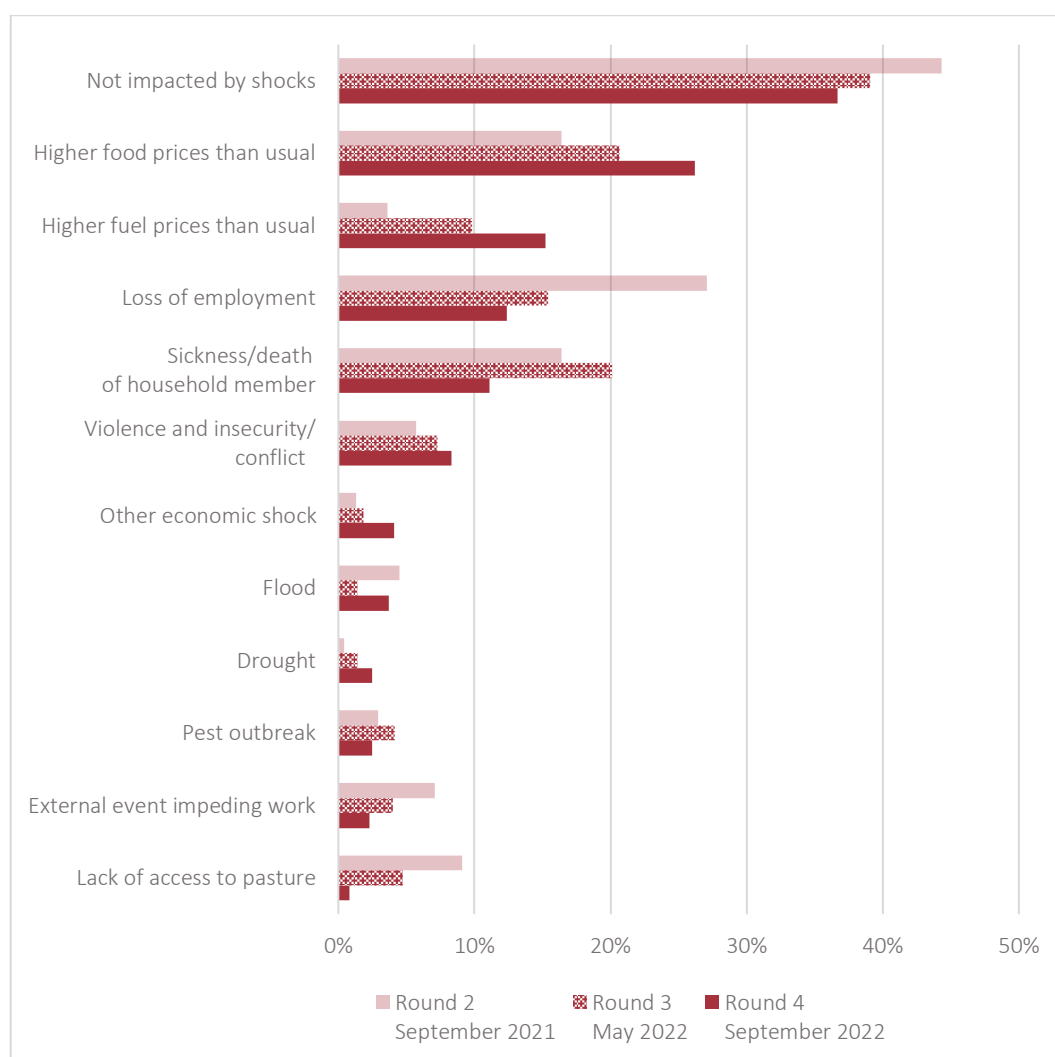
> Learn more at <https://data-in-emergencies.fao.org/pages/monitoring>

Income and shocks

Over half of the respondent households have consistently reported earning less from their main income source compared to the same period in previous years. Of the households experiencing reduced income, 48 percent lost at least half their income (50 percent reduction or greater) during this last round. Amid shrinking incomes and rising food prices, households were spending most of their money on food – over 68 percent of households used more than half of their income to buy food.

Compared to previous rounds, there was a decrease in incidence for shocks related to COVID-19 restrictions, such as the loss of employment and the difficulty conducting work or business. Food and fuel prices were reported as a shock most frequently during this round, as well as conflict/violence (Figure 2). The frequency of households reporting conflict and violence as a shock increased slightly overall, but significantly increased in Kayah (42 percent), Chin (39 percent), Sagaing (24 percent) and Rakhine (17 percent). Sickness or death in the household, loss of employment, high food prices, drought, and violence were associated with food insecurity and incomes continued to decrease (except for public officials).

Figure 2. Main shocks experienced (percentage of households)

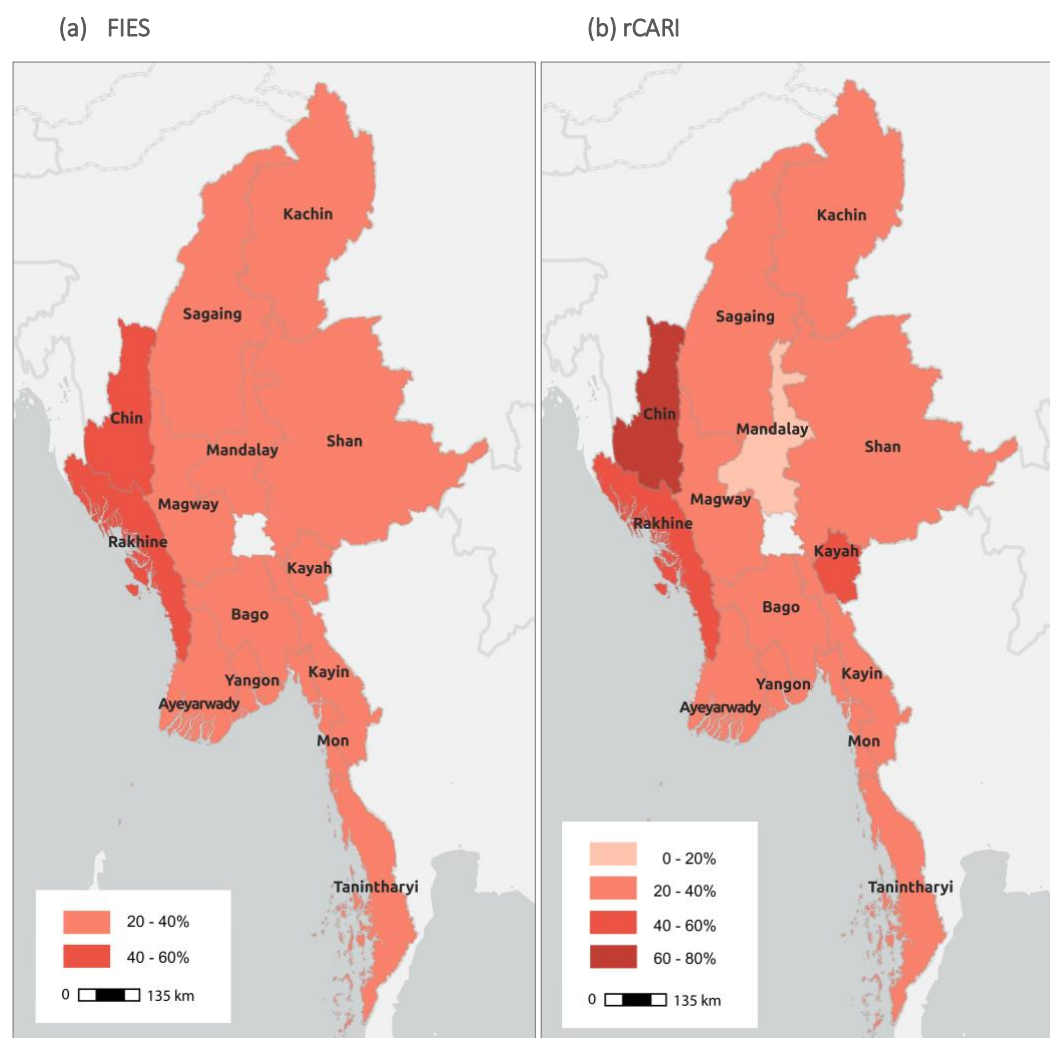


Source of data: FAO & WFP. 2023. Myanmar: DIEM-Monitoring assessments results (September 2021, May 2022 and September 2022). In: *FAO Data in Emergencies Hub*. Rome. Cited 3 November 2022. <https://data-in-emergencies.fao.org>

Food security

Both the rCARI and the FIES¹ findings indicated that food consumption gaps were widening after the post-harvest period recorded in the previous round. Twenty-seven percent of households were considered food insecure based on rCARI (increasing from 21 percent last round) and 29 percent were in recent moderate or severe food insecurity according to FIES (increasing from 22 percent) (Figure 3).

Figure 3. Percentage of households that are food insecure (moderately and severely) in each state/region, as assessed by:



Source of data: FAO and WFP. 2023. Myanmar: DIEM-Monitoring assessment results (September 2022). In: *FAO Data in Emergencies Hub*. Rome. Cited 3 November 2022. <https://data-in-emergencies.fao.org>

Source of map: Esri, HERE, Garmin, FAO, NOAA, USGS. 2018. *Map of Myanmar*. Cited 3 November 2022. <https://data-in-emergencies.fao.org/pages/explore>

Results indicated widening food consumption gaps from the previous rounds: the proportion of households with insufficient food consumption (poor and borderline food consumption) initially decreased from 19 percent in the second round to 16 percent in the third round following the harvest season. By the current round, the proportion of households with insufficient food consumption increased to 24 percent. This widening gap was also observed when comparing

¹ 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.

the gender of the head of household – 32 percent of female-headed households had insufficient (poor or borderline) food consumption during this round, 9 percentage points higher than male-headed households. This indicates an increase from the second round where the gap was 2 percentage points (21 percent for female-headed households and 19 percent for male-headed households). Following female-headed households, households with debt, and households with persons with disabilities were among the groups with the highest prevalence of insufficient food consumption, at 28 and 29 percent respectively.

The utilisation of all food-related coping strategies, such as reducing the number of meals, reducing portions, or restricting adult consumption to provide for children increased in frequency since the last round. The most frequently used strategy was purchasing less preferred or less expensive food, experienced by four out of ten households over the last two rounds. Twenty-two percent of households had adults giving up food for their children – an increase of 6 percentage points, from 16 percent in the third round. Households with persons with disabilities relied on these strategies for more days per week than households without persons with disabilities.

All this should be considered within the context of open conflict in many areas, worsening market access (both financially and physically) and rising food and fuel prices. For example, the cost of a basic food basket increased by 52 percent and fuel increased by 110 percent since August 2021.

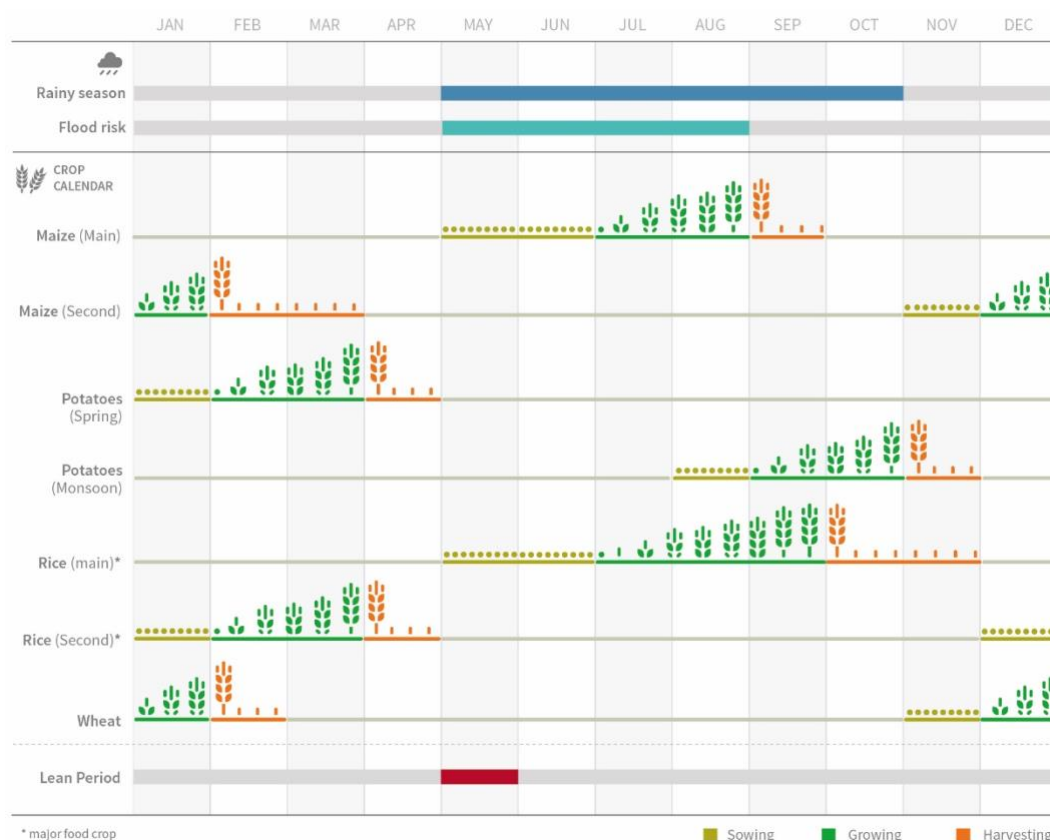
The livelihood coping strategy index (LCSI) indicated that the share of households relying on *crisis* and *emergency* level coping mechanisms fluctuated from 55 percent in the second round, to 40 percent in the third round, and 53 percent in this round. An important increase was found in the *emergency* category (from 17 percent in the third round to 21 percent in the current round). Households with debt were even more vulnerable with 64 percent in *crisis* and *emergency*, compared to 41 percent of households without debt. *Crisis* and *emergency* strategies are not only difficult to reverse, but likely to reduce future income streams and production levels, as experienced by farmers having to decrease their harvest.

Fifty-two percent of households dipped into their savings in order to buy food and another 47 percent purchased food on credit. Many households sold off various assets in order to afford food – 38 percent sold household assets; 15 percent sold productive assets (such as sewing machines and transportation vehicles); and 6 percent sold off residential assets such as their home or land. With no remaining assets for households to bounce back to sustainable livelihoods or even for food consumption, the situation is likely to worsen despite the main production being harvested in October and November 2022.

Households in conflict-affected areas, rural households, female-headed households, households with debt, and those with vulnerability to economic shocks had the worst food security outcomes. Geographically, the states and regions of Chin, Kayah, Kayin, Rakhine and Sagaing had the worst food security outcomes across all indicators. In addition, Bago and Magway showed market decapitalisation, and Mon, Shan, Tanintharyi and Yangon showed poor food consumption (above average poor and borderline food consumption score and recent food insecurity).

Crops

Figure 4. Myanmar agricultural calendar

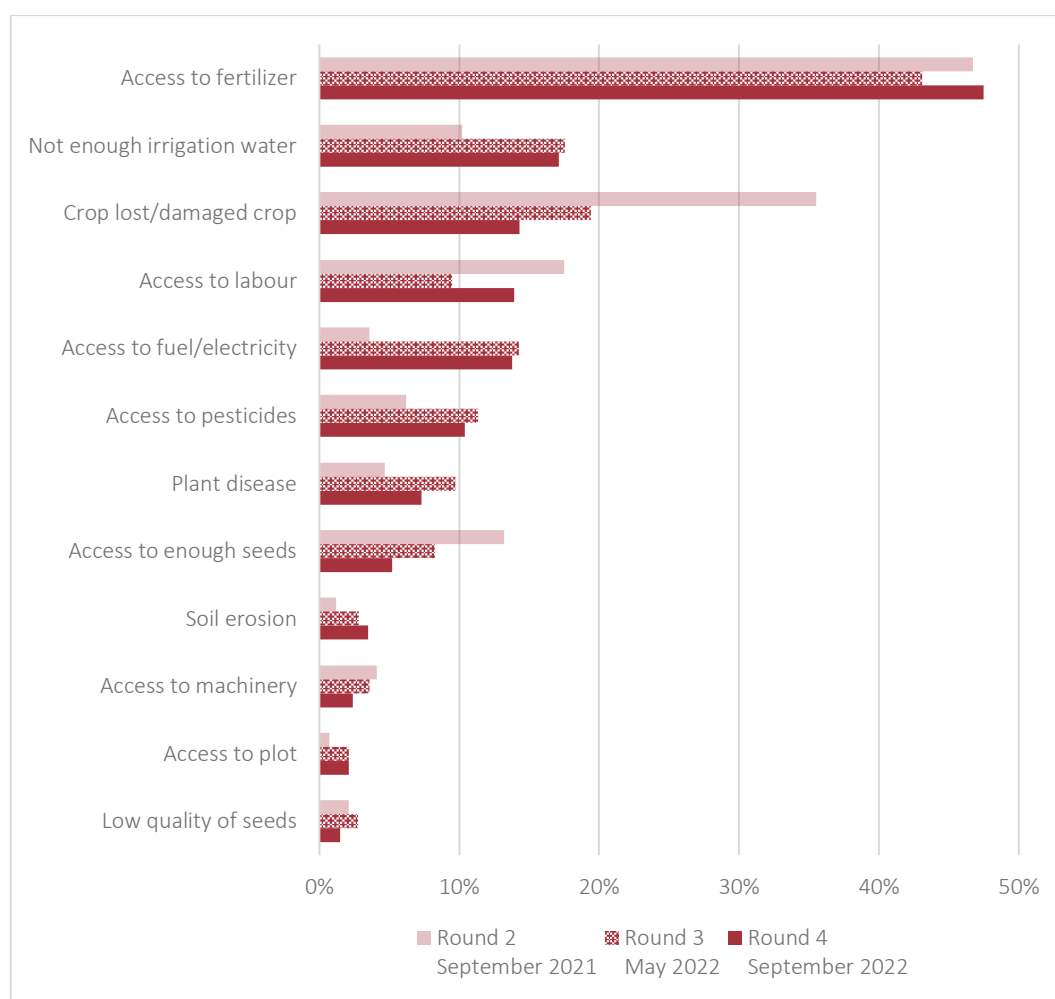


Source of data: FAO. 2023. GIEWS – Global Information and Early Warning System: Country briefs – Myanmar. In: *Food and Agriculture Organization of the United Nations*. Rome. Cited 9 November 2022. www.fao.org/giews/countrybrief/country.jsp?code=MMR

A retrenchment of the area planted continued to be reported by 23 percent of farmers, similar to the third round – but it was 15 percent in the second round. This was more pronounced among rice and cash crop producers, and was associated with violence/conflict.

Constraints to crop production were similar to previous rounds: access to fertilizer was still a frequent problem, as were below-average rainfalls and lack of fuel (Figure 5). Some difficulties were more specific to the crops being produced. Access to fertilizer was more challenging for cereal producers, and access to labour was more challenging for vegetable and fruit producers. The harvest is expected to be below normal, and the share of farmers that reported a drop in production has grown from 45 percent in the second round, to 49 percent in the third round to 54 percent in the current round, particularly among smallholders who have disproportionately been affected by atypical difficulties – such as plant diseases – and a reduction in harvest. For example, 55 percent of rice producers cultivating more than 2 ha declared a drop in harvest. This share increases to 56 percent among those cultivating between one and two hectares, and 60 percent among those farming less than one hectare.

Figure 5. Crop production difficulties (percentage of crop producers)



Source of data: FAO & WFP. 2023. Myanmar: DIEM-Monitoring assessments results (September 2021, May 2022 and September 2022). In: *FAO Data in Emergencies Hub*. Rome. Cited 3 November 2022. <https://data-in-emergencies.fao.org>

The results indicated that asset depletion among farmers could be a contributing factor to poor production. One of the livelihood coping strategies adopted, for example, was the sale of the last draught animal or motor tiller. The mobilization of these assets to face basic needs had an impact on production. Seventy percent of the farmers who adopted this strategy reported a reduction in harvest, compared to 51 percent who did not. A reduction in harvest was positively associated with the worst food security outcomes, as assessed by all the indicators. However, crop marketing conditions improved (except for cash crops), despite the increase in fuel prices.

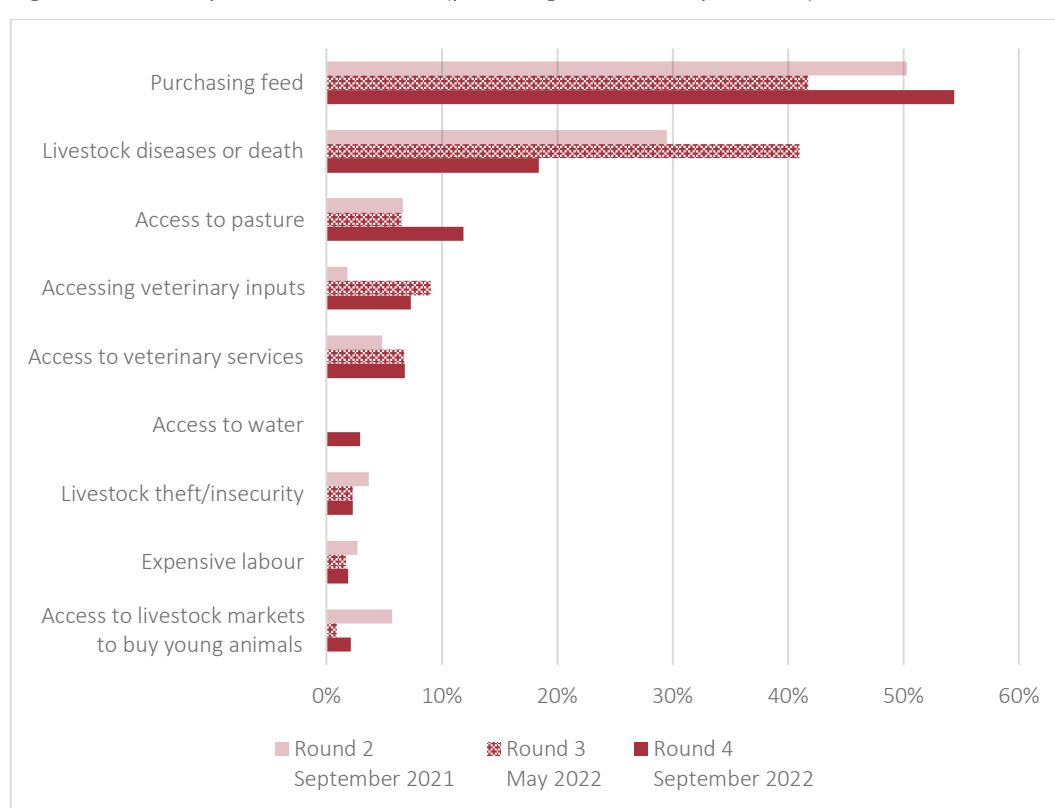
Livestock

Forty-seven percent of livestock producers experienced a decrease in herd/flock size increasing from 42 percent in the third round. These decreases were more frequent for swine (55 percent) and poultry (50 percent). Animal deaths have decreased and there were generally good breeding conditions for cattle, but the frequency of sales for good prices decreased and distress sales increased.

Overall, 46 percent of livestock producers reported difficulties, up from 42 percent in round 3 (Figure 6). The incidence of livestock diseases decreased, and market access improved,

but the share of reported difficulties accessing feed increased, as well as issues accessing pasture. Purchasing feed was more frequently cited by swine producers, but during this round, 34 percent of cattle producers, 60 percent of swine producers and 29 percent of poultry producers had difficulty purchasing feed representing a more generalised trend. Diseases concerned mostly poultry in the third round (57 percent), but its frequency decreased for all species during this round. Access to good pasture deteriorated particularly for cattle (from 13 percent in the third round). Marketing conditions for livestock have not improved, in particular due to higher transportation costs (cited by 13 percent in this round, but with an increasing trend), and low prices were cited by 68 percent (77 percent by cattle producers). In fact, as in the previous rounds, a high share of cattle producers reported atypically low prices. In addition, 27 percent of poultry farmers cited losses/damages.

Figure 6. Livestock production difficulties (percentage of livestock producers)



Source of data: FAO & WFP. 2023. Myanmar: DIEM-Monitoring assessments results (September 2021, May 2022 and September 2022). In: *FAO Data in Emergencies Hub*. Rome. Cited 3 November 2022. <https://data-in-emergencies.fao.org>

Needs

Cash assistance was the most frequently expressed need (59 percent). Specific profiles indicated the need for fertilizer (9 percent of crop producers), and veterinary inputs and feed (livestock producers).

Recommendations

Short-term recommendations

- > Provide food assistance to the most vulnerable households – female-headed households, households with debt and households with persons with disabilities. Food assistance should be prioritised in Chin, Kayah, Magway and Rakhine States/Regions (especially for internally displaced persons and recent migrants) to address high food consumption gaps. These areas have been affected by conflict, worsening market access, and high food and fuel prices.
- > Support home-based food production through an emergency supply of vegetable production input packages to improve immediate access to food. It might already be too late for this recommendation as the sowing period for most of the crops has already passed.
- > Implement cash transfer programmes in areas where local markets are still functioning to encourage crop production and local distribution to maintain the local balance of supply and demand.
- > Provide cash assistance to the poorest households with children under five years of age and/or female-headed households to prevent severe malnutrition in children and women.

Medium/long-term recommendations

- > Provide emergency agricultural inputs to the most affected households with suitable land size for small-scale to protect, rebuild and improve their productive assets with the objective of: increasing food production access and promoting local market distribution; and preventing negative (and potentially irreversible) coping mechanisms.
- > Support livestock production through an emergency supply of animal feed to improve animal health and productivity.
- > Implement cash transfer programmes to support farming and food production, thereby assisting smallholders in the upfront costs of labour, machinery and land rental.
- > Develop online networks for local markets to support small scale crop production, promote market accessibility and reduce the food consumption gap.
- > Implement village based rural income diversification programmes by rebuilding or creating income generation activities with training in, for example, agro processing.



USAID
FROM THE AMERICAN PEOPLE

This brief 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 FAO and do not necessarily reflect the views of USAID or the United States of America Government.

Contact

FAO Representation in Myanmar

FAO-MM@fao.org | fao.org/myanmar
Nay Pyi Taw, Myanmar

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

The boundaries and names shown and the designations used on the map(s) in this information product do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries. Dashed lines on the map represent approximate border lines for which there may not yet be full agreement.

FAO and WFP. 2023. *Myanmar: DIEM – Data in Emergencies Monitoring brief, round 4 – Results and recommendations, January 2023*.
Rome, FAO. <https://doi.org/10.4060/cc4015en>



Some rights reserved. This work is available
under a CC BY-NC-SA 3.0 IGO licence