Mozambique

DIEM – Data in Emergencies
Monitoring brief, round 3
Results and recommendations
September 2022

Data collection 14 April to 30 May 2022
Methodology

The Food and Agriculture Organization of the United Nations (FAO) launched a household survey in Mozambique through the Data in Emergencies Monitoring (DIEM-Monitoring) System to monitor agricultural livelihoods and food security. This third-round survey was conducted from 14 April to 30 May 2022 and utilized panel data and random digital dialling (RDD) techniques reaching 1,769 households, whereby 141 to 231 households per province were reached except in Maputo City. Seventy-seven percent of surveyed households were also reached in the second-round survey conducted between 26 August 2021 and 6 October 2021. The second-round survey is drawn from to make comparisons throughout this brief; however, it should be considered during interpretation that these rounds were conducted over different seasons (round two during beginning of the lean season and round three during the beginning of the post-harvest season).

Of the total sampled households, 66 percent were dependent upon agriculture for their livelihoods with comparable shares among panel and RDD households (70 percent versus 67 percent). All the provinces of Mozambique were reached, however, the sample in Maputo City (a predominantly urban province) was not statistically representative at Admin 1 level because fewer than 90 households were interviewed. The surveys were conducted through computer-assisted telephone interviews (CATI). Data were weighted at the analytical stage to ensure that the regional population distribution was adequately represented. Weights that were applied to the survey included source of light as a wealth proxy and education of the household head.

Figure 1. Countries with established DIEM-Monitoring Systems


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. Final boundary between the Sudan and South Sudan has not yet been determined. Final status of the Abyei area is not yet determined.
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 Mozambique and other countries.

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

Income and shocks

The proportion of households that experienced at least one income related shock in the three months preceding the interview was 57 percent, remaining stable from the previous round (56 percent). Among households affected by shocks, the most reported shocks during this round included hurricanes, cyclones or tornadoes (22 percent of households) which was a marked increase from the previous round where only 1 percent reported this shock. The next frequently reported shocks were sickness, accident or death of household members (11 percent), flood or riverbank erosion (10 percent) and much higher than usual food prices (9 percent) (Figure 3). During this round, less than half of surveyed households (49 percent) experienced a decline in their income in the three months preceding the interviews compared to the same period in a typical year. This was a reduction from the previous round where 69 percent of surveyed households reported a decline in their income. Primary income sources during the current round included the production and sale of staple crops (20 percent of households), non-agricultural self-employment (20 percent) and non-agricultural daily wages (17 percent).
Figure 2. Households reporting a drop in main source of income (by location)


Figure 3. Main shocks reported (percentage of respondents)

Crops

During the third round, a substantial amount of crop producers experienced production difficulties (64 percent compared to 69 percent from the previous round). The primary crops produced included maize (43 percent in the third round, slightly down from 48 percent from the previous round), rice (14 percent up from 7 percent) and cassava (14 percent up from 8 percent). During this round, a vast majority of crop producers (81 percent) cultivated less than 5 hectares (ha), of which 32 percent cultivated less than 1 ha. Like in the previous round, approximately half of the crop producers expected a reduction in their harvest. Less than 20 percent of crop producers who faced production difficulties were affected by COVID-19 restrictions, compared to 45 percent in the previous round.

Primary crop production difficulties included not enough irrigation or rainfall water (53 percent up from 42 percent from the previous round), crop damage other than plant diseases (28 percent down from 41 percent) and plant disease (10 percent down from 18 percent) (Figure 4). The share of crop producers who faced sales difficulties reduced slightly between the second and third rounds (from 41 percent to 37 percent). The three main sales difficulties remained the same: lower selling prices (50 percent in both rounds), lower than usual purchases from buyers (40 percent in the third round versus 36 percent in the second round) and higher marketing costs (34 percent versus 21 percent).

Figure 4. Main difficulties affecting crop producers (percentage of respondents)

Livestock

Approximately 26 percent of surveyed households were livestock producers (down from 37 percent from the previous round), with the primary owned animals being poultry (59 percent in the third round versus 49 percent in the previous round). A considerable share of livestock producers (54 percent) experienced a reduction in herd size compared to the previous year, a trend similarly observed in the second round (60 percent). Almost half (45 percent) of livestock owners faced production difficulties during the third round, with no change from the second round. Livestock disease and death affected 65 percent of livestock producer households, up from 51 percent from the previous round and remains the primary difficulty to livestock production (Figure 5). Among livestock producers, 12 percent faced sales difficulties, a substantial decline from the 47 percent measured during the previous round. The two most frequently cited sales difficulties were lower than usual purchases by buyers (49 percent in the third round versus 62 percent in the second round) and lower selling prices (33 percent versus 44 percent).

Figure 5. Main difficulties affecting livestock producers (percentage of respondents)

Food security

Based on the Food Insecurity Experience Scale (FIES), 49 percent of households experienced moderate or severe recent food insecurity (RFI) – representing a sizable decline from 58 percent during the previous round. The proportion of households who experienced severe RFI considerably declined from 19 percent in the second round to 8 percent in the third round. In both the second and third rounds, the prevalence of moderate or severe RFI was higher among households with lower dietary diversity (71 percent in the third round versus 88 percent in the second round) compared to those with higher dietary diversity (41 percent versus 43 percent). The share of households who resorted to either emergency or crisis coping strategies dropped from 58 percent in the second round to 50 percent during the third round. The incidence of moderate or severe RFI was considerably greater among households with poor food consumption than those with acceptable food consumption (83 percent versus 37 percent) (Figure 6).

The third round was conducted during the post-harvest season, hence the declines in levels of food insecurity observed from the second round of data collection which were collected in the lean season period. The proportion of food insecurity, however, still requires urgent action. Sofala, Nampula and Cabo Delgado are the areas of highest concern.

Similar trends were observed based on the household hunger scale (HHS) (Figure 7). About 42 percent of the households ran out of food in the 30 days preceding the survey. The predominant household hunger score was 0 which indicated little to no hunger for about 50 percent of the households. The predominant score in Nampula was 2 which is indicative of moderate hunger and 1 in Sofala, indicative of slight hunger. About 66 percent of the households had high dietary diversity, as measured by the Household Dietary Diversity Score (HDDS), but the remaining 34 percent had medium (25 percent) and low (9 percent) dietary diversity. Based on the Livelihood Coping Strategy Index (LCSI), households in Cabo Delgado emerged as adopting mainly crisis/emergency coping strategies. Overall, 21 percent of the households adopted emergency coping strategies, while 30 percent adopted crisis and 25 percent adopted stress livelihood coping strategies.

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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.
Figure 6. Prevalence of recent moderate and severe food insecurity (FIES)


Needs

The proportion of households who require assistance in the three to six months following the survey declined from 82 percent in the second round to 70 percent in the third round (Figure 7). As in the second round, the most frequently cited needs in the current round included cash assistance (57 percent up from 30 percent), seeds (28 percent down from 54 percent), fertilizer (18 percent down from 30 percent) and tools (17 percent down from 33 percent). Unlike the second round in which no difference was observed, needs were greater among shock affected households (79 percent) compared to those not affected (59 percent). Most households had not received any assistance in the three months preceding the interview (93 percent in the third round versus 95 percent in the second round). Needs among households whose main income earners were females (70 percent) were comparable to those among households with male income earners (69 percent). Cabo Delgado, Sofala and Gaza were the provinces with the highest proportion of households reporting a need for assistance.

Figure 7. Percentage of agricultural households reporting a need for assistance (by location)


Recommendations

Short-term recommendations (1–6 months)

- Immediate humanitarian assistance is recommended to curb acute food insecurity and preserve livelihoods. The areas of priority are Cabo Delgado, Sofala, Nampula and Gaza. Severe food insecurity experienced during the post-harvest period is a cause for concern and these households require immediate humanitarian assistance to ensure they do not deteriorate further as the lean season approaches.

- The strengthening of early warning and anticipatory action is recommended across the board, as crop production continues to be affected by weather-related shocks across the country but mainly in Gaza, Manica, Tete, Zambezia, Nampula and Niassa provinces. This should be combined with an introduction of alternative methods of water storage and use during droughts while anticipating floods and implementing prevention methods for crop diseases.

- Livestock diseases and death are the primary challenge facing livestock producers mainly in Sofala, Gaza, Maputo City and Cabo Delgado provinces reducing the size of herds and detrimentally impacting income from livestock production. An increase in disease surveillance programmes and early action are recommended to avoid the spread of diseases moving forward.

- General input assistance is a priority for the country. Increased fertilizer prices related to the war in Ukraine along with a reduction in income from the last cropping season will likely affect the next agricultural season, requiring further assistance to impacted households.

Long-term recommendations (6 months and beyond)

- Income generating programmes are recommended to curb the decline of nearly half the population's incomes. An overdependence on agricultural livelihoods creates vulnerability to weather shocks. Resilience building programmes across the country, but mainly in Nampula, Zambezia, Sofala, Tete and Cabo Delgado are recommended to increase incomes in the face of hazards.
> Medium- to long-term programmes that are focused on improving livelihood activities are recommended across the country to help ensure livelihood assets do not depreciate further as these households try to cope. Provinces such as Cabo Delgado, Manica and Gaza may be a priority while areas such as Niassa, Nampula and Zambezia are also a cause for concern due to the livelihood coping strategies employed.

> Other resilience programmes surrounding livestock are also recommended such as those that provide feed during the dry season and vaccination programmes for the main diseases, especially in Maputo City and Manica provinces.
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