Nigeria

DIEM – Data in Emergencies Monitoring brief, round 2

Results and recommendations
August 2022

Data collection 26 June to 8 July 2022
Methodology

The Food and Agriculture Organization of the United Nations (FAO) launched a household survey in Nigeria through the Data in Emergencies Monitoring (DIEM-Monitoring) System to monitor agricultural livelihoods and food security. This second-round survey was conducted through face-to-face interviews from 26 June to 8 July 2022 and reached 1,703 households. Data collection took place at the beginning of the planting season across five states: Adamawa, Borno, Katsina, Yobe and Zamfara. Some Enumeration Areas (EAs), mostly in Borno, were replaced following the original sampling design due to insecurity. The EAs were replaced by randomly selecting other areas that were considered accessible in consultation with local government authorities.

The aim of the assessment was to monitor the impact of a range of shocks on agricultural livelihoods and food security. All of the data were weighted at the analytical stage to ensure that the regional population distribution was adequately represented.¹

Figure 1. Countries with established DIEM-Monitoring Systems

¹ In this survey, the percentage of the agricultural population across the five states was an average of 95 percent (ranging from 91 percent to 99 percent). Although the criteria of randomness were respected in the sampling process, percentages close to 100 percent appear to indicate that the sample may have been skewed toward rural households. However, official statistics about the proportion of the agricultural population at state level in Nigeria are currently lacking and it is not possible to confirm.
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 Nigeria and other countries.

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

Income and shocks

Results from the second-round survey indicate that about 79 percent of the households have faced some sort of shock over the three months preceding the survey. The main shocks include the following: much higher than normal food prices experienced by 44 percent of the households, especially those in Yobe (70 percent), Borno (58 percent) and Katsina (42 percent); much higher than normal fuel and transportation prices (30 percent); and sickness, accident or death of a household member (34 percent).

The increase in prices follows a macro-economic trend seen globally and in the region. The main driver of inflation is the depreciation of the local currency combined with the country’s large dependency on food imports.

Plant diseases were reported as the main shock experienced by 13 percent of the households, especially those in Yobe (23 percent), while pest outbreak was experienced by 5 percent of households. However, there has been no official report of a major crop pest or disease outbreak across the surveyed states.

Violence and conflict were reported by 10 percent of the households, and affected 30 percent of the households surveyed in Zamfara. The conflict is relatively new in Zamfara, and it is spreading fast. Some of the areas could not be surveyed due to insecurity associated with armed insurgency, banditry and farmer-herder conflicts. It is, therefore, likely that the percentage of households affected by this shock is higher.

Environmental shocks such as floods and riverbank erosion affected 7 percent of the households interviewed, especially those in Zamfara (24 percent). Zamfara was affected by floods during data collection, which happened at the beginning of the rain season.

The main source of income has decreased in the last three months compared to the same period in a typical year for 39 percent of the households, affecting, above all, off-farm activities (Figure 2). Cash crop income sources have benefited from an increase over the last three months, similarly to livestock, fisheries and agricultural trade.
Figure 2. Income change by main income source


Crops

About 87 percent of the households surveyed were crop producers. Difficulties with crop production were largely experienced across all surveyed states, by more than three-quarters of the households interviewed (82 percent) (Figure 3). For most of the crop growers, access to agricultural inputs, especially fertilizer, was the main challenge (85 percent) with Zamfara experiencing the most challenges (93 percent). It is likely that this result was found in Zamfara because of access challenges driven by high levels of insecurity. Fertilizer scarcity has resulted in the high price of fertilizer, which is further worsened by inflation and the high cost of transportation associated with high fuel prices.

Low seed quality affected 31 percent of the households and 20 percent of surveyed households struggled with lack of access to enough seeds. Low seed quality was reported, in particular, in Adamawa (43 percent). Low access to quality seeds in Adamawa could be due to operational challenges at the state level since the states follow the same decentralized agro-inputs policy.

Plant diseases have affected 30 percent of the households, the majority of whom are located in Yobe (59 percent), followed by Katsina (33 percent), Borno (32 percent) and Adamawa (27 percent).

The growth of the cultivated crops was undermined during the growing season, and 27 percent of the crop damage was attributed to other factors such as pests, animals or bandits. Yobe was particularly affected (41 percent).

Difficulties accessing labour or manpower affected 21 percent of the households, particularly in Borno (28 percent) and Katsina (28 percent), together with access to machinery, tools or animals for ploughing (18 percent).
Crop production difficulties were coupled with crop sales difficulties, experienced by 51 percent of the surveyed households. This was due to high transport costs (85 percent), a reduction of selling prices (31 percent) and the number of usual buyers (18 percent). Access to market was also a barrier reported by 20 percent of households.

Figure 3. Difficulties faced by crop producers (percentage of households)

<table>
<thead>
<tr>
<th>Difficulty</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No access to fertilizer</td>
<td>85%</td>
</tr>
<tr>
<td>No access to pesticides</td>
<td>55%</td>
</tr>
<tr>
<td>No access to fuel/electricity</td>
<td>36%</td>
</tr>
<tr>
<td>No access to extra labour</td>
<td>34%</td>
</tr>
<tr>
<td>Not enough seeds</td>
<td>27%</td>
</tr>
<tr>
<td>Plant disease</td>
<td>21%</td>
</tr>
<tr>
<td>No access to machinery</td>
<td>19%</td>
</tr>
<tr>
<td>Crop lost/damaged crop</td>
<td>14%</td>
</tr>
<tr>
<td>Low quality of seeds</td>
<td>12%</td>
</tr>
<tr>
<td>No access to plot</td>
<td>8%</td>
</tr>
<tr>
<td>Not enough irrigation water</td>
<td>5%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
</tr>
</tbody>
</table>


Livestock

About 57 percent of the households surveyed were livestock producers. The main livestock species were goats (39 percent) and sheep (35 percent).

About 74 percent of livestock producers faced difficulties (Figure 4). Feeding livestock was a challenge due to purchasing feed, a difficulty that affected most of the livestock producers (64 percent) across all states surveyed. The majority of the households affected by the inability to purchase feed were localized in Borno (87 percent). Another reported difficulty was access to pasture (47 percent), especially in Yobe (72 percent).

At the time of data collection, the rainy season had just begun, and pastures were yet to regenerate. Livestock keepers do not usually search for pasture far from their households, mainly for security concerns, further limiting the availability of feed. Farmers also experienced difficulties sourcing alternative feed for livestock through markets. In fact, purchasing feed competes with the purchase of food and the affordability of feed remains a challenge.

Limited access to veterinary services was experienced by 35 percent of the livestock producers, especially those in Adamawa (49 percent), together with access to veterinary inputs (20 percent). In the three months preceding the survey and beyond, some of the veterinary offices closed down or relocated, worsening the situation.
Livestock diseases or death affected 33 percent of livestock producers, especially those in Adamawa (62 percent) and Yobe (48 percent). This high proportion is likely due to the current high incidence of peste des petits ruminants (PPR)\(^2\) disease in Adamawa.

Livestock theft is widespread (35 percent), but the most affected states are Zamfara (54 percent), Adamawa (38 percent), and Katsina (38 percent). Conflict between farmers and animal herders (especially in Yobe and Adamawa) is on the rise. Recently, an estimated 5 000 people in Adamawa were displaced because of farmer-herder conflicts. Some of the survey findings are related to the movement patterns of the livestock in the season when data was collected.

**Figure 4. Difficulties faced by livestock producers (percentage of households)**

Sales difficulties were experienced by 46 percent of livestock producers, and were mainly due to high transportation costs (87 percent), followed by low selling price (32 percent) and traders or local customers not buying as much as usual/payment delays (21 percent).

**Food security**

According to the Food Insecurity Experience Scale (FIES),\(^3\) about 54 percent of the households experienced moderate or severe recent food insecurity (RFI), and 9 percent severe RFI.

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\(^2\) PPR, also known as sheep and goat plague, is a highly contagious animal disease affecting domestic and wild small ruminants.

\(^3\) 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.
Moderate or severe RFI seems more pronounced in Yobe (75 percent) and Zamfara (64 percent). The recent crisis in Zamfara is likely reflected in the food security situation.

Analysis of the FIES indicator according to income source indicates that food crop farmers are relatively better off than farmers with other types of agricultural income sources (Figure 5).

Figure 5. Moderate or severe food insecurity by income source as assessed by the FIES indicator (lower and upper bounds are represented by the segment at the end of each bar).

The Household Dietary Diversity Score (HDDS) indicator shows that about 22 percent of the surveyed households have a high level of dietary diversity, followed by 40 percent of households with a medium level of dietary diversity and 38 percent present with a low level of dietary diversity.

The household hunger scale shows that about 70 percent of the households experienced little to no hunger during the three months preceding the survey, 29 percent experienced moderate hunger and 1 percent experienced severe hunger.

Based on the Livelihood Coping Strategy Index (LCSI), the coping strategies put in place revolve around stress strategies for 31 percent of the households interviewed who spent their savings, borrowed money, and sold their assets/goods (Figure 6). Emergency coping strategies were put in place by 23 percent of the surveyed households, and included begging, or selling land or a house. Crisis strategies were put in place by 21 percent of the surveyed households and included withdrawing children from school and selling productive assets or means of transport.

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4 Results for the categories “fisheries” and “farm wage or natural resources”, should be interpreted with caution since they are based on few observations.
The comparison between the different states indicates that the emergency coping strategies were mainly applied across Yobe and Zamfara states.

Figure 6. Livelihood coping strategies (percentage of respondents)

![Livelihood coping strategies chart]


Needs

The quasi totality of the interviewed households declared the need for assistance (94 percent), however, only 15 percent of the surveyed households received assistance in the three months preceding the survey (Figure 7). The assistance received was mainly food (7 percent) and seeds (3 percent). Households reported that their needs were mainly for economic support in terms of cash or food assistance (75 percent) and loans (23 percent), but they were also keen to receive agricultural inputs such as fertilizer (82 percent), seeds (45 percent), and pesticides (42 percent) in the next three to six months. These results indicate that a striking majority of farmers prefer livelihood-based assistance.
Figure 7. Reported needs (percentage of households)

Fertilizer: 82%
Cash or food assistance: 75%
Seeds: 45%
Pesticides: 42%
Loans: 23%
Tools: 19%
Animal Feeds: 17%
Marketing support: 17%
Veterinary services: 15%
Access to tractors: 12%
Veterinary inputs: 10%
Restocking animals: 9%
Access to land: 8%
Support for processing products: 6%
Storage equipment or facility: 6%
Access to irrigation water: 5%
Technical support or extension services: 5%
Sales of animals with minimum market price: 2%

Recommendations

Short-term recommendations (1–6 months)

> Emergency livelihood assistance should be provided to households experiencing moderate and severe RFI to enable them to produce food and rebuild their livelihoods. This applies to households in Yobe and Zamfara states in particular. Overall, livelihood-based assistance should be prioritized but food assistance, cash transfers and supplementary feeding are urgently needed to save lives, across all surveyed states.

> Emergency livelihood assistance must be scaled up for the households severely affected by conflict and insecurity especially the displaced and host communities. Households in Zamfara and Yobe should be prioritized.

Long-term recommendations (6 months and beyond)

> Fertilizer scarcity and high fertilizer prices represent a challenge for several farmers across the surveyed states, especially Zamfara. The government should look into subsidy measures and interventions to control the price of fertilizer and other agro-inputs. Fertilizer brands and blends that are recommended for use across the conflict areas should be disseminated. Targeting should be improved by creating a dataset/distribution list that is adhered to during distribution. Finally, a parastatal office should be involved in the input distribution at state level\(^5\) with joint collaboration.

> Access to quality seeds needs to be guaranteed, especially in Adamawa, through accredited seed companies and distributors. Enforcement of regulations and regular inspections along the distribution chain are necessary to ensure that only quality certified seeds reach targeted farmers. In addition, seed availability could be improved through the development of local seed systems by means of community-based multiplication schemes in collaboration with the National Agricultural Seed Council.

> Regular intra-seasonal pest and disease surveillance should be conducted as a means of early identification. Pests and diseases are widely affecting the sampled states. Priority should be given to Yobe, followed by Borno, Katsina and Adamawa.

\(^{5}\) Input distribution at the state level could be implemented by a mandated parastatal office such as the Agricultural Development Programme (ADP) in collaboration with the National Programme for Food Security (NPFS), and the farm input support services department under the Federal Ministry of Agriculture and Rural development (FMARD).
Awareness creation and production capacity should be boosted. Agricultural extension services should be scaled up and could include seasonal agricultural shows at state and community levels to increase knowledge of climate smart agriculture and market information systems. In-kind farming financing through the provision of inputs (certified seeds, fertilizer, agricultural machinery, etc) is a complementary measure that would boost household food production.

Conduct continuous monitoring of agricultural livelihoods throughout the cropping season for regular early warning and anticipatory action. In addition, conduct continuous assessments and food and nutrition security analyses among the most vulnerable populations and communities. This monitoring should be conducted regularly across all surveyed states.

Further studies are recommended to support pastoralists and their access to grazing areas. This challenge is currently affecting farmers in Yobe in particular.

Options should be explored for peace building initiatives between crop farmers and livestock producers built around sharing natural resources. This is especially recommended in Adamawa and Yobe.

Livestock services should be improved, especially for farmers in Adamawa. Vaccines are currently lacking across all surveyed states. Priority should be given to Yobe, followed by Adamawa and Katsina.
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