Colombia

DIEM – Data in Emergencies Monitoring brief, round 3

Results and recommendations
November 2022

Data collection 22 July to 22 August 2022
Methodology

The Food and Agriculture Organization of the United Nations (FAO) launched a household survey in Colombia through the Data in Emergencies Monitoring (DIEM-Monitoring) System to monitor agricultural livelihoods and food security. Data were conducted through face-to-face interviews in ten departments of Colombia: Antioquia, Arauca, Bolívar, Boyacá, Cesar, Chocó, Córdoba, La Guajira, Nariño and Putumayo. A total of 3,240 households were surveyed between 22 July and 22 August 2022, 324 rural households in each department.

Two-stage sampling was applied — cluster sampling based on the geostatistical sample frame provided by the government of Colombia, followed by simple random sampling to ensure that all households in the targeted cluster had an equal chance of being selected. Regional base weights were computed at administrative level 1 because this was a face-to-face survey. A quota was not applied to subgroups of interest at the regional level and no weights were needed for population subgroups by activity type. The surveyed agricultural households were not represented in the sample. Therefore, the crop and livestock sections of this brief should be considered descriptive, not representative.

Figure 1. Countries with established DIEM-Monitoring Systems
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 Colombia and other countries.


Income and shocks

A large proportion of rural households (47 percent) reported a decrease in the main source of income in the three months preceding the survey. The most affected departments were Boyacá (73 percent), Nariño (63 percent) and Chocó (57 percent) (Figure 2). Forty-two percent of respondent households reported an income of less than COP 454 263 – approximately USD 95 – representing less than half of the legal minimum wage in Colombia. Agricultural households (56 percent), internally displaced persons (52 percent), households that identified as indigenous (50 percent), female-headed households (47 percent), and households identifying as black/Afro-Colombian (44 percent) were the groups with the highest proportion of a decrease in the main source of income. The analysis of the data indicated a relationship between income, the head of household and ethnic identity, as well as between education level and income.

Figure 2. Drop in main source of income (by department)

Additional shocks reported by respondent households included the inflationary effect which has generated an increase in food prices and reduced purchasing power (33 percent). Loss of employment was reported by 17 percent, followed by illness or death of a household member (12 percent) and flooding (10 percent).

Colombia has experienced prolonged effects from La Niña over the course of 2022, with a considerable increase in precipitation in the ten surveyed departments. However, floods or disruptive impacts of climate change were not categorized as the most representative shocks by the surveyed households, despite the prevalence. The same situation happened with armed conflict and violence, which was active and constant in some departments – Chocó, Putumayo, Nariño – but less than 1 percent of respondent households were affected by it, while 36 percent of households were affected by violence in Arauca.

The data showed a greater impact from high food prices in Arauca (84 percent), Nariño (31 percent), Chocó (23 percent) and Putumayo (8 percent). Shocks due to restrictions or measures to control COVID-19 were reported by 20 percent of respondent households, with stay-at-home orders affecting 13 percent.

The reported shocks coincide with data presented by the National Department of Statistics (DANE), that indicated the general increase in the Price’s Consumer Index\(^2\) (an 11 percent increase in general prices in 2022 thus far) and DANE’s August 2022 survey\(^3\), which found that the financial situation of 45 percent of Colombian households, at national level, was worse compared to one year ago. Armed conflict and climate associated shocks correlated with the information presented by the United Nations Office for the Coordination of Humanitarian Affairs (OCHA)\(^4\) in different assessments by the Humanitarian Team.
The main crops produced by the surveyed households were maize (23 percent), plantains (17 percent) and cassava (16 percent). Seventy percent of households mentioned difficulties with crop production in the three months preceding the survey. The departments that experienced the most difficulties were La Guajira (85 percent) and Chocó (63 percent). Nariño (88 percent) and Arauca (76 percent) also reported difficulties with crop production, but these results are only descriptive as the surveyed sample in these departments was not representative.

More than half of the surveyed households reported plant diseases (51 percent) as a crop production difficulty (Figure 4), mainly in the departments of Nariño (80 percent), Putumayo (62 percent), La Guajira (65 percent) and Chocó (25 percent). Plant damage during the vegetative process was reported by 41 percent of respondent households, mainly in the
departments of Chocó (72 percent) and Córdoba (68 percent). Other reported difficulties were access to water for irrigation (28 percent), mostly in La Guajira (75 percent), and difficulty accessing fertilizer (22 percent), mainly in Nariño (79 percent) and Boyacá (46 percent). The high prices and access difficulties have been a prevailing situation at the national level, as mentioned by DANE and the rural planning for crop and livestock production unit (UPRA) in their price indices for agro-inputs.

Figure 4. Crop production difficulties (percentage of households)

<table>
<thead>
<tr>
<th>Issue</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant disease</td>
<td>51%</td>
</tr>
<tr>
<td>Crop lost/damaged crop</td>
<td>41%</td>
</tr>
<tr>
<td>Not enough irrigation water</td>
<td>28%</td>
</tr>
<tr>
<td>Access to fertilizer</td>
<td>22%</td>
</tr>
<tr>
<td>Low quality of seeds</td>
<td>11%</td>
</tr>
<tr>
<td>Access to extra labour</td>
<td>10%</td>
</tr>
<tr>
<td>Access to pesticides</td>
<td>8%</td>
</tr>
<tr>
<td>Access to machinery</td>
<td>6%</td>
</tr>
<tr>
<td>Soil erosion</td>
<td>5%</td>
</tr>
<tr>
<td>Not enough seeds</td>
<td>5%</td>
</tr>
<tr>
<td>Access to plot</td>
<td>4%</td>
</tr>
<tr>
<td>Access to fuel/electricity</td>
<td>1%</td>
</tr>
</tbody>
</table>


Forty-five percent of respondent households experienced difficulties marketing crops. The most affected departments were La Guajira (84 percent), Putumayo (62 percent) and Nariño (58 percent). The main marketing constraint was lower sales prices affecting 63 percent of producer households. The departments of La Guajira and Chocó (80 percent and 50 percent, respectively) were the most affected by the lower sales prices. In addition, 60 percent of producer households were affected by transport or marketing difficulties, with Nariño (95 percent), Boyacá (81 percent) and Córdoba (70 percent) the most affected.

Livestock

The main livestock species produced by the surveyed households were poultry (53 percent), cattle (22 percent) and pigs (14 percent). Two thirds (67 percent) of the livestock producers reported production difficulties in the three months preceding the survey, mostly in Putumayo (82 percent), Cordoba (75 percent) and La Guajira (71 percent).
The purchase of feed was the main difficulty reported by livestock producers (71 percent) (Figure 5). The departments most affected by this constraint were Arauca (84 percent), Putumayo (81 percent) and La Guajira (77 percent). This data is consistent with DANE’s price monitoring system for the agriculture and livestock sector (SIPSA). Difficulties related to livestock health were also reported as factors affecting household production and included livestock disease or death (47 percent), access to veterinary supplies (27 percent) and access to veterinary services (11 percent).

Figure 5. Livestock production difficulties

<table>
<thead>
<tr>
<th>Difficulty</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchasing feed</td>
<td>71%</td>
</tr>
<tr>
<td>Livestock diseases or death</td>
<td>47%</td>
</tr>
<tr>
<td>Access to veterinary inputs</td>
<td>27%</td>
</tr>
<tr>
<td>Access to veterinary services</td>
<td>11%</td>
</tr>
<tr>
<td>Livestock theft/insecurity</td>
<td>5%</td>
</tr>
<tr>
<td>Access to pasture</td>
<td>5%</td>
</tr>
<tr>
<td>Access to water</td>
<td>2%</td>
</tr>
<tr>
<td>Expensive labour</td>
<td>1%</td>
</tr>
</tbody>
</table>


The fall in livestock prices affected 71 percent of respondent households dedicated to livestock production and sales, with the highest incidence in the departments of Córdoba (66 percent), Putumayo (62 percent) and Antioquia (50 percent).

Food security

During this round of data collection, food insecurity was not measured using the Food Insecurity Experience Scale (FIES). DANE will, instead, measure this indicator through the National Survey on the Quality of Life in the last quarter of 2022. This indicator was excluded in order to avoid duplication of information.

The household hunger scale (HHS), reduced coping strategy index, food consumption score, and livelihood coping strategy index (LCSI) indicators showed a concerning situation in the rural areas of the surveyed departments. According to the HHS, 27 percent of the sample experienced moderate to severe hunger. La Guajira (47 percent), Boyacá (35 percent) and Chocó (32 percent) were the most affected departments (Figure 6). According to the LCSI, 33 percent have had to adopt crisis or emergency livelihood coping strategies.
A higher prevalence of food insecurity and the adoption of emergency/crisis livelihood coping strategies were identified in households that have suffered internal displacement, female-headed households, and indigenous and black/Afro-Colombian households compared to the rest of the sample.

**Figure 6. HHS group (by department)**


**Needs**

Forty-one percent of households reported the need for assistance in the coming three to six months. Cordoba (96 percent), La Guajira (60 percent) and Nariño (58 percent) were the departments with the highest demand for assistance.

Rural households expressed the need for agricultural inputs such as seeds, fertilizer, pesticides, tools and animal feed, and in some cases, required food or cash assistance to meet basic needs.
Recommendations

Short-term recommendations (1-6 months)

➢ Technical assistance for plant disease management in the departments with the most agricultural production difficulties and decreased income, such as Chocó and La Guajira.

➢ Adopt urgent actions to improve food access by increasing purchasing power, such as voucher programmes, cash distributions and subsidies, to protect livelihoods and reduce food shortages in vulnerable households. Arauca, Boyacá and La Guajira departments should be prioritized because low income and high increases in food prices have affected food access.

➢ Emergency and livelihood rehabilitation assistance should be prioritized in departments with the highest prevalence of food insecurity and depleted livelihoods.

➢ Promote price stability mechanisms and access to markets. Generate short supply circuits that lead to an increase in supply while limiting food loss and waste.

➢ Encourage safe supply chains for households with low income and greater food access limitations, especially female-headed households, black/Afro-Colombians and indigenous people.

➢ Design a temporary social protection programme aimed at the most vulnerable rural households whose food security and income have been affected. Implement anticipatory actions and mitigation measures that reduce the probability of suffering adverse impacts in the rainy and dry seasons.

➢ Increase crop technical assistance and support for the acquisition of products for pest and disease control.

➢ Generate access to livestock technical assistance and veterinary support, with a preventive approach, to limit the loss of livestock.

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

➢ Generate anticipatory actions that limit the impact of shocks on food security and livelihoods using a humanitarian development peace approach while connecting mitigation and response to disasters and crises with resilience building.
> Promote the use and research of bio-agro-inputs given the increase in the prices of conventional inputs.

> Promote alternative diets that reduce dependence on concentrates to limit food shortages.

> Encourage collective markets and marketing information systems in departments where prices have decreased in recent months.

> Generate actions to prevent rustling including community security control and promote identification systems.

> Promote associative schemes, home gardens and crop diversification that lead producers to access new markets that guarantee greater sustainability and better sales prices.

> Monitoring nutritional status is necessary to identify acute malnutrition cases amongst the most vulnerable populations in Colombia.

> Improve the availability of seeds through the development of collaborative community spaces.
Livestock producer households were representative in the department of Córdoba, but in the other departments (Antioquia, Arauca, Bolívar, Boyacá, Cesar, Chocó, La Guajira, Nariño and Putumayo), the information is only descriptive.
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Contact

FAO Representation in Colombia
FAO-CO@fao.org
fao.org/colombia | @FAOColombia
Bogotá, Colombia

Office of Emergencies and Resilience
OER-Director@fao.org
www.fao.org/emergencies | @FAOEmergencies
Rome, Italy

Food and Agriculture Organization of the United Nations

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