Food and Agriculture Organization of the United Nations

Iraq

DIEM – Data in Emergencies Monitoring brief, round 7

Results and recommendations
September 2022

Data collection 29 March to 1 May 2022

Methodology

The Food and Agriculture Organization of the United Nations (FAO) launched a household survey in Iraq through the Data in Emergencies Monitoring (DIEM-Monitoring) System to monitor agricultural livelihoods and food security. FAO has undertaken six rounds of surveys in Iraq at a much smaller scale. This seventh-round survey expanded the survey instrument and increased the random sample of households surveyed to 2 233 in 18 governorates (Anbar, Babylon, Baghdad, Basra, Diyala, Duhok, Erbil, Kerbela, Kirkuk, Maysan, Muthanna, Nainawa, Najaf, Qadisiya, Salah Al-Deen, Sulaimaniyah, Thi-Qar and Wasit). Going forward, the household survey is expected to be conducted three times per year.

Data collection was carried out using computer-assisted telephone interviews (CATI) in the 18 governorates of Iraq from 29 March to 1 May 2022. A total of 2 233 households were interviewed – 1 634 non-agricultural households and 599 agricultural households – using random digital dialing (RDD). The sample target of 136 households per governorate was achieved in six governorates (Anbar, Babylon, Baghdad, Kirkuk, Najaf and Thi-Qar). This seventh-round survey is the first round to be representative of the population at the Admin 1 level.[1] Data were weighted at the analytical stage to ensure that the regional population distribution was adequately represented.

Figure 1. Countries with established DIEM-Monitoring Systems

Source of data: FAO. 2022. *DIEM-Monitoring.* Rome. Cited 6 April 2022. https://data-in-emergencies.fao.org
Source of map: United Nations. 2020. *Map of the World.* Cited 6 April 2022. un.org/geospatial/content/map-world

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.

[1] Earlier rounds saw results representative at three broad agroecological zones (north-centre-south).

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.

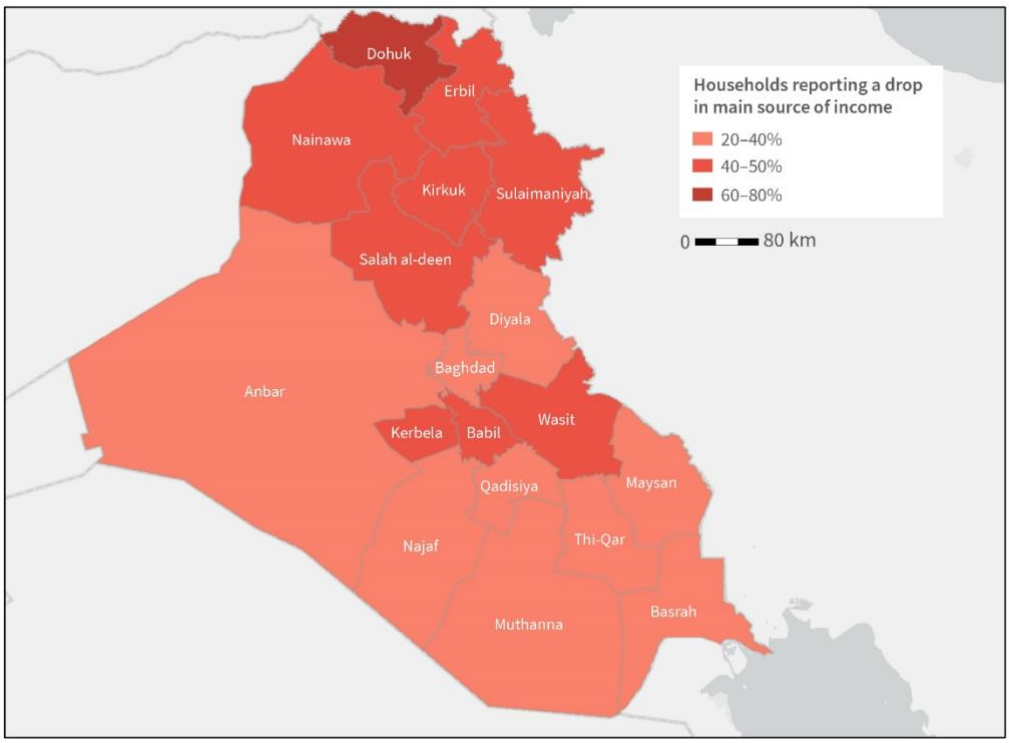
At the core of the DIEM-Monitoring System are country-level dashboards. Readers are encouraged to explore these dashboards to gain more insight into the context of Iraq and other countries.

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

Income and shocks

About 40 percent of the interviewed households reported a decrease in main income in the three months preceding the survey (Figure 2). The highest income decreases were reported in Erbil, Kerbala, Kirkuk, Ninawa, Salah Al-Din and Wasit. Agricultural households reported a significantly higher decrease in income compared to non-agricultural households. This may be attributed in part to drought conditions and the devaluation of the currency. Devaluation affected farmers more than non-farmers because of the increase in the price of agricultural inputs such as fertilizer and animal feed. Furthermore, the inflation effects on the global supply chain and rising prices of basic goods, food and energy impacted the households.

Figure 2. Households reporting a drop in main source of income (by location)

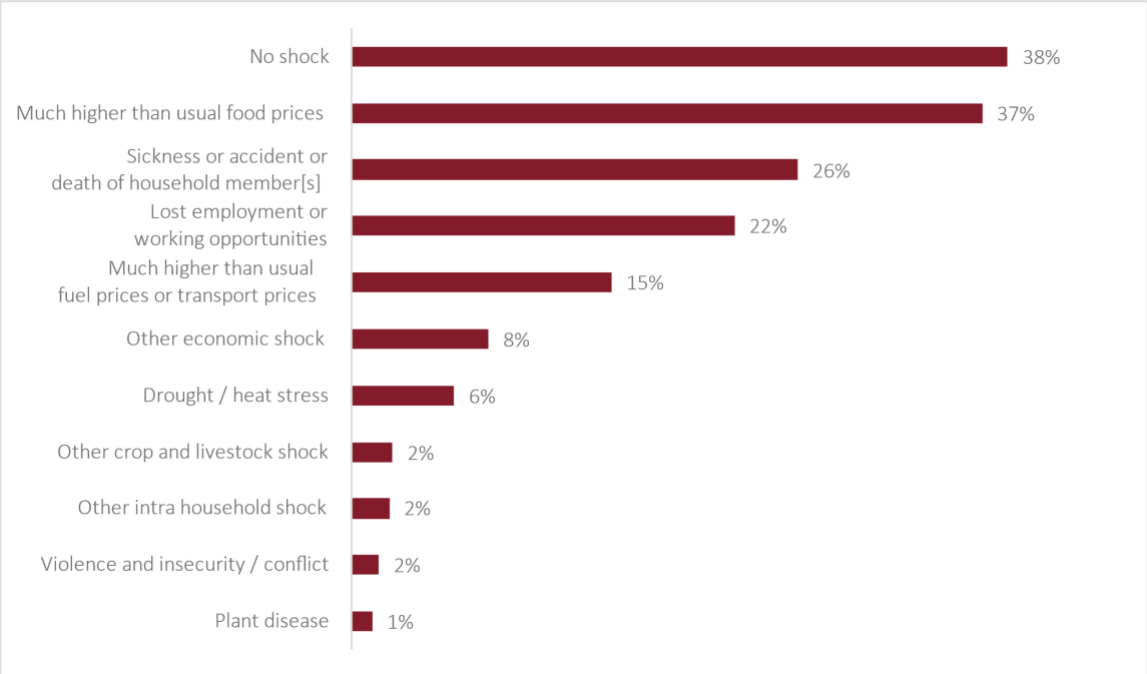


Source of data: FAO. 2022. *Iraq: DIEM-Monitoring assessment results (March–May 2022)*. Rome. Cited 13 July 2022. https://data-in-emergencies.fao.org
Source of map: Esri, HERE, Garmin, FAO, NOAA, USGS. 2018. *Map of Iraq*. Cited 18 July 2022. https://data-in-emergencies.fao.org/pages/explore

Sixty-two percent of surveyed households reported facing at least one shock in the three months preceding the survey (Figure 3). The most reported shock was high food prices (37 percent), followed by sickness or death of a household member (26 percent) and lost employment (22 percent). There was no significant difference between shocks faced by agricultural and non-agricultural households. However, high food prices were significantly more reported in Baghdad, Basra, Diyala, Duhok, Erbil, Maysan, Ninawa and Sulaimaniyah.

Almost 33 percent of households reported that they were still being affected by COVID-19 restrictions, although no restrictions were officially in place.

Figure 3. Main shocks affecting households (percentage of respondents)

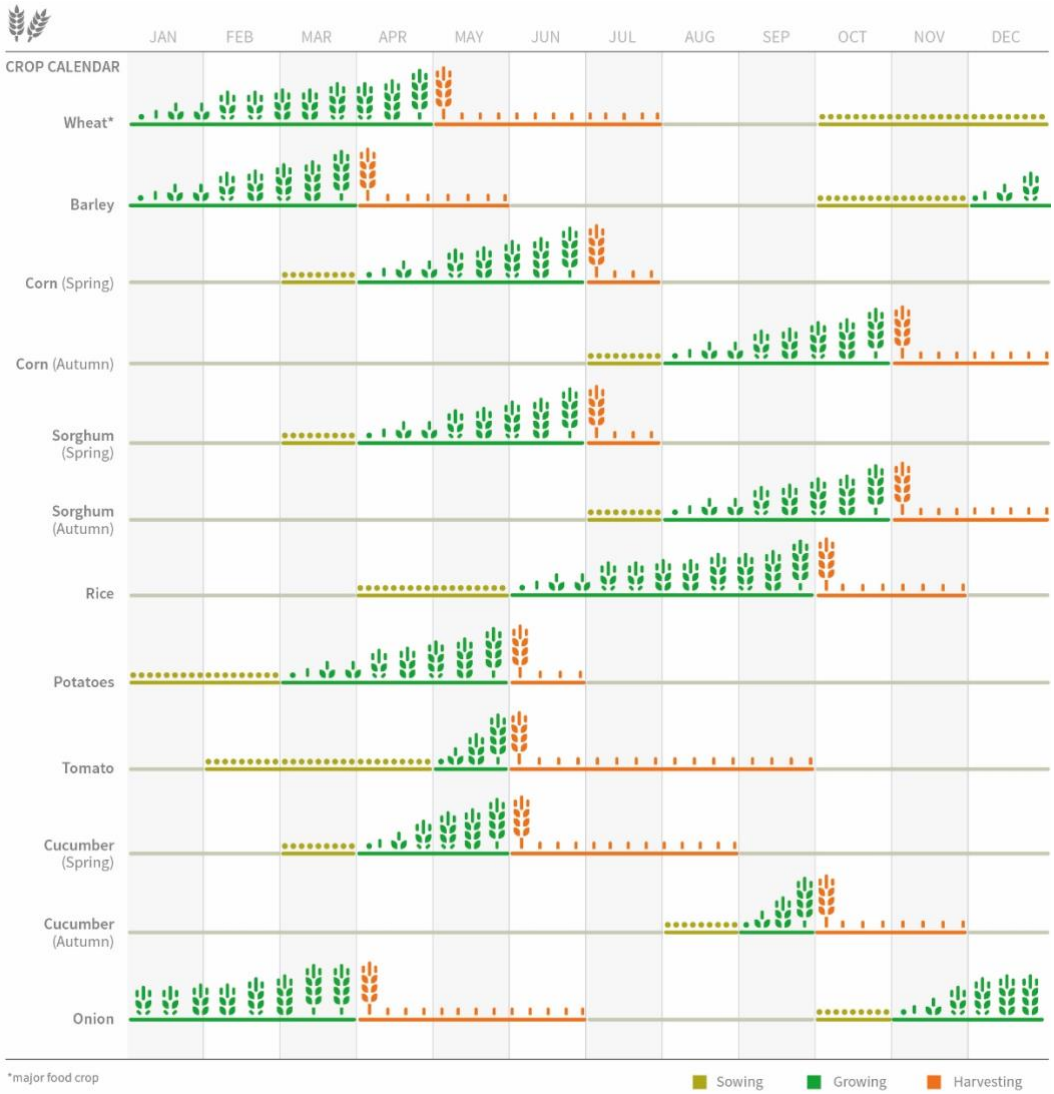


Source of data: FAO. 2022. *Iraq: DIEM-Monitoring assessment results (March–May 2022).* Rome. Cited 13 July 2022. https://data-in-emergencies.fao.org

Crops

Half of the crop producers expected a decrease in their harvest and 39 percent reported planting less area compared to a typical year, particularly in Basra, Diyala, Erbil, Muthanna and Nainawa. Last summer, the Ministry of Agriculture (MoA) and the Ministry of Water and Resources (MoWR) decided to reduce the annual irrigated area by 50 percent for the 2021-2022 cropping season as a result of water scarcity.

Figure 4. Crop calendar



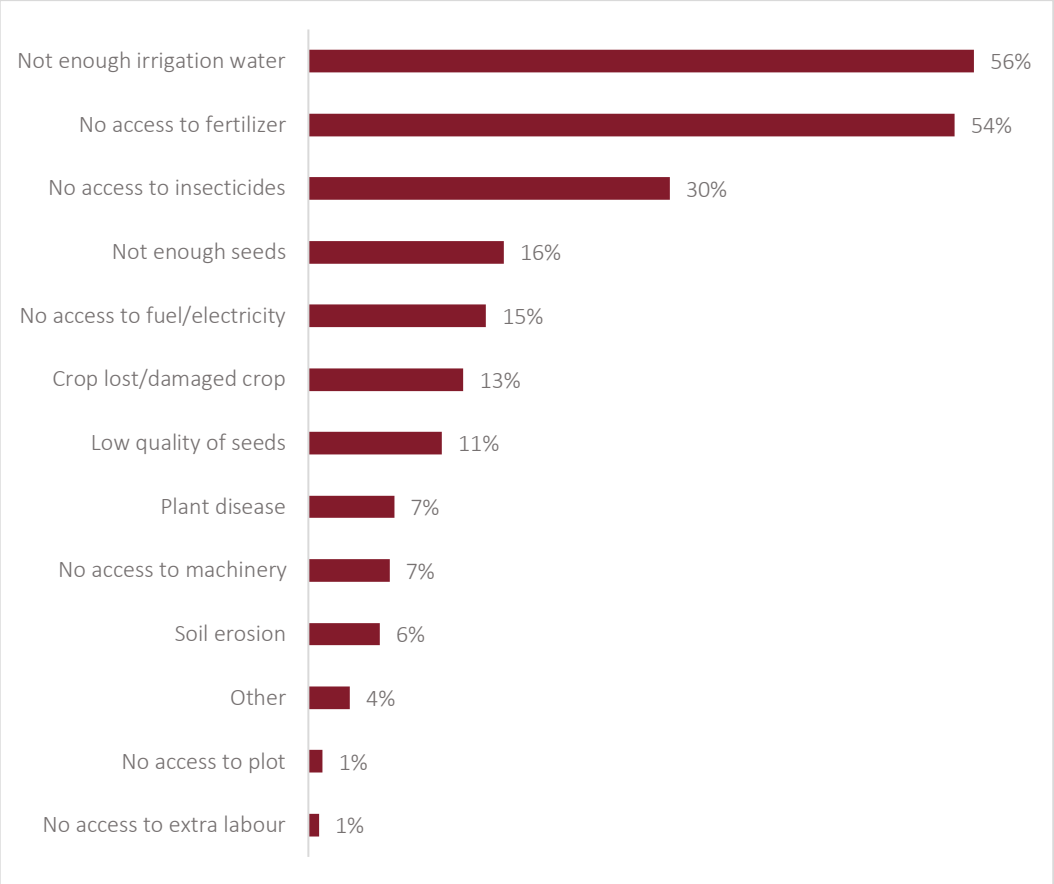
Source of data: FAO. 2022. GIEWS – Global Information and Early Warning System: Country briefs – Iraq. In: *Food and Agriculture Organization of the United Nations*. Rome. Cited 25 August 2022. www.fao.org/giews/countrybrief/country.jsp?lang=en&code=IRQ

About 85 percent reported production difficulties including not enough irrigation or rainfall water (56 percent), and difficulty accessing fertilizer (54 percent) due to high prices, insecticides (30 percent) and seeds (16 percent) (Figure 5). Farmers whose crops were rainfed expected their production to be lower than that of those who used other irrigation systems due to the consequences of drought conditions for a second consecutive year. Out of the shocks reported, only drought had a statistically significant impact on reduced crop production (mainly for wheat and barley). Water scarcity was driven not only by low rainfall but also by the construction of new dams in neighbouring countries that limit water supply to Iraq (according to the United States Department of Agriculture and the Global Agricultural Information Network).

In parallel, while disruptions in global supply chains had already caused prices to peak at the start of 2022, since February, the Ukraine-Russia war has further contributed to an increase in the prices of oil and agricultural inputs, particularly fertilizer. According to the United States Department of Agriculture and the Global Agricultural Information Network, due to high prices

and access difficulties the MoA decreased input subsidies for farmers[2] on items like fertilizer, seeds and aerial pesticides, from 70 percent to 30 percent. Low prices, and high transportation and marketing costs were the main sales difficulties reported.

Figure 5. Crop production difficulties



Source of data: FAO. 2022. *Iraq: DIEM-Monitoring assessment results (March–May 2022).* Rome. Cited 13 July 2022. https://data-in-emergencies.fao.org

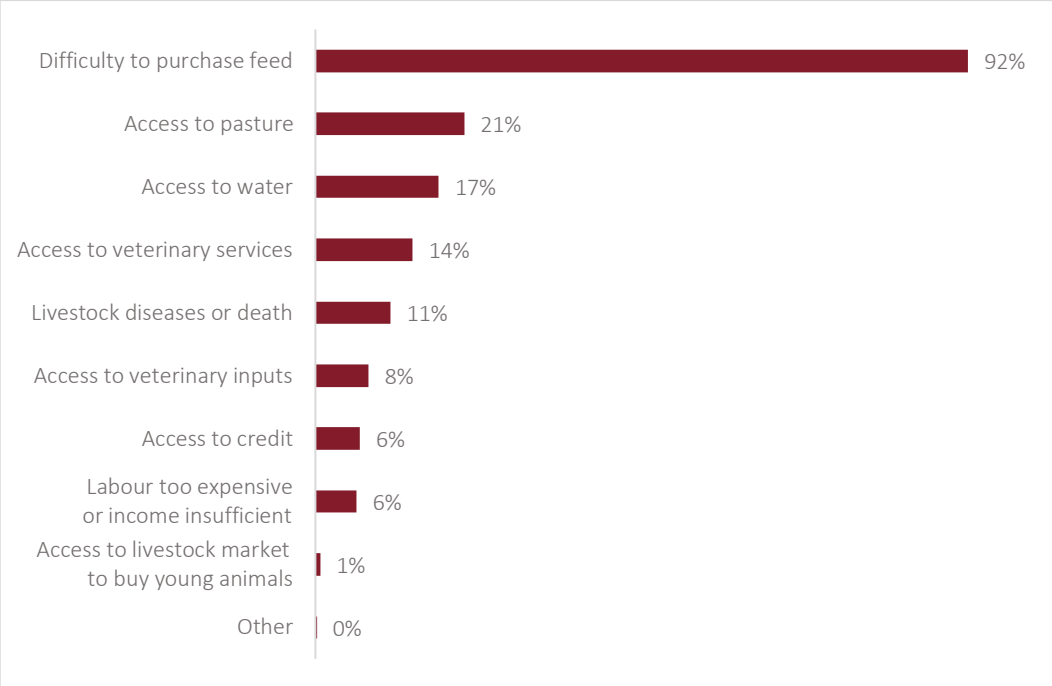
Livestock

Around 59 percent of surveyed livestock producers reported a decrease in the number of animals compared to last year as a result of distress sales and animals dying of poor health, malnutrition or injury. Difficulty purchasing feed due to high prices was the main reported production difficulty (92 percent) and, in general, cattle and sheep producers reported facing more difficulties than other types of livestock producers (Figure 6). A statistically significant association was observed between access difficulties to water downstream from the main rivers in the centre and south of the country, including Baghdad, Basra, Diyala, Maysan, Qadisiya, Thi-Qar and Wasit. This was verified by reports from the field that indicated much higher than usual mortality rates among cattle that were also caused by higher concentrations of salt in the water and lack of access to drinking water for all.

[2] The reduction applies to farmers that are the main beneficiaries of government subsidies as they are included in the "Annual Agricultural Plan" that the MoA manages. Farmers outside this plan do not receive free or subsidized inputs (such as seeds, fertilizer, etc.) and cannot sell at subsidized high prices. Due to the current global food price crisis, the government has decided that all farmers can now sell to the government at subsidized prices.

Around half of the livestock producers reported difficulties selling animal products, citing low selling prices (89 percent) and high transportation/marketing costs (28 percent). Half of the livestock producers reported a decrease in the price of animals.

Figure 6. Livestock production difficulties

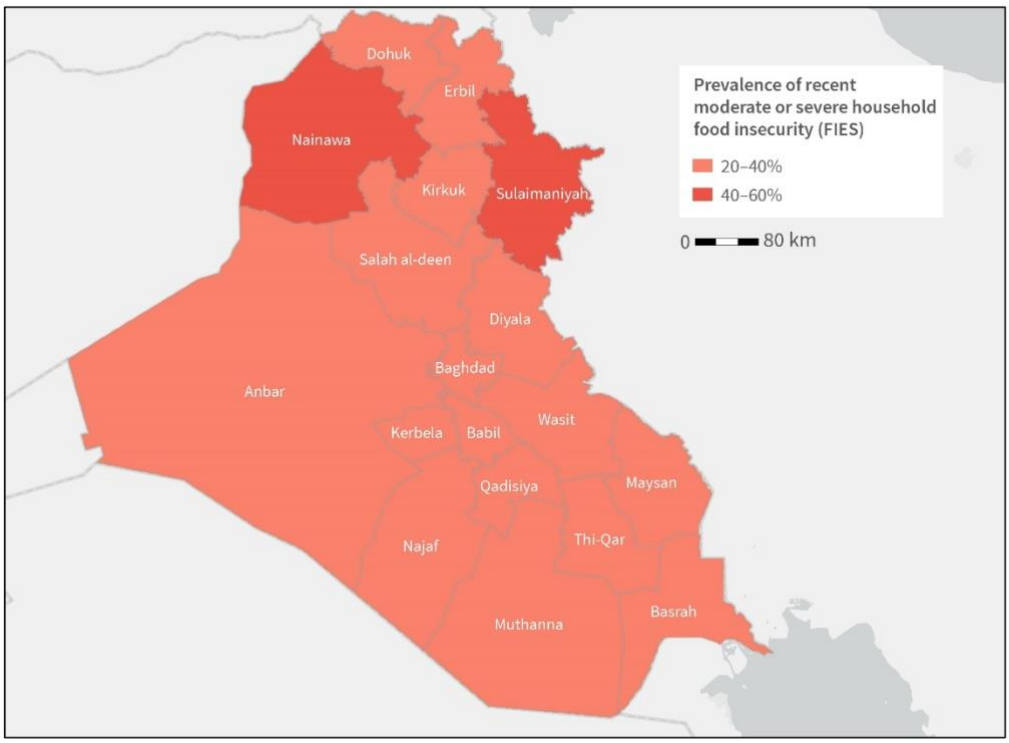


Source of data: FAO. 2022. *Iraq: DIEM-Monitoring assessment results (March–May 2022).* Rome. Cited 13 July 2022. https://data-in-emergencies.fao.org

Food security

The prevalence of recent moderate or severe food insecurity assessed with the Food Insecurity Experience Scale (FIES) was around 37 percent, and was highest in Anbar, Ninawa and Sulaimaniyah (note that Sulaimaniyah was not a representative sample) (Figure 7).

Figure 7. Prevalence of recent moderate or severe household food insecurity (FIES)



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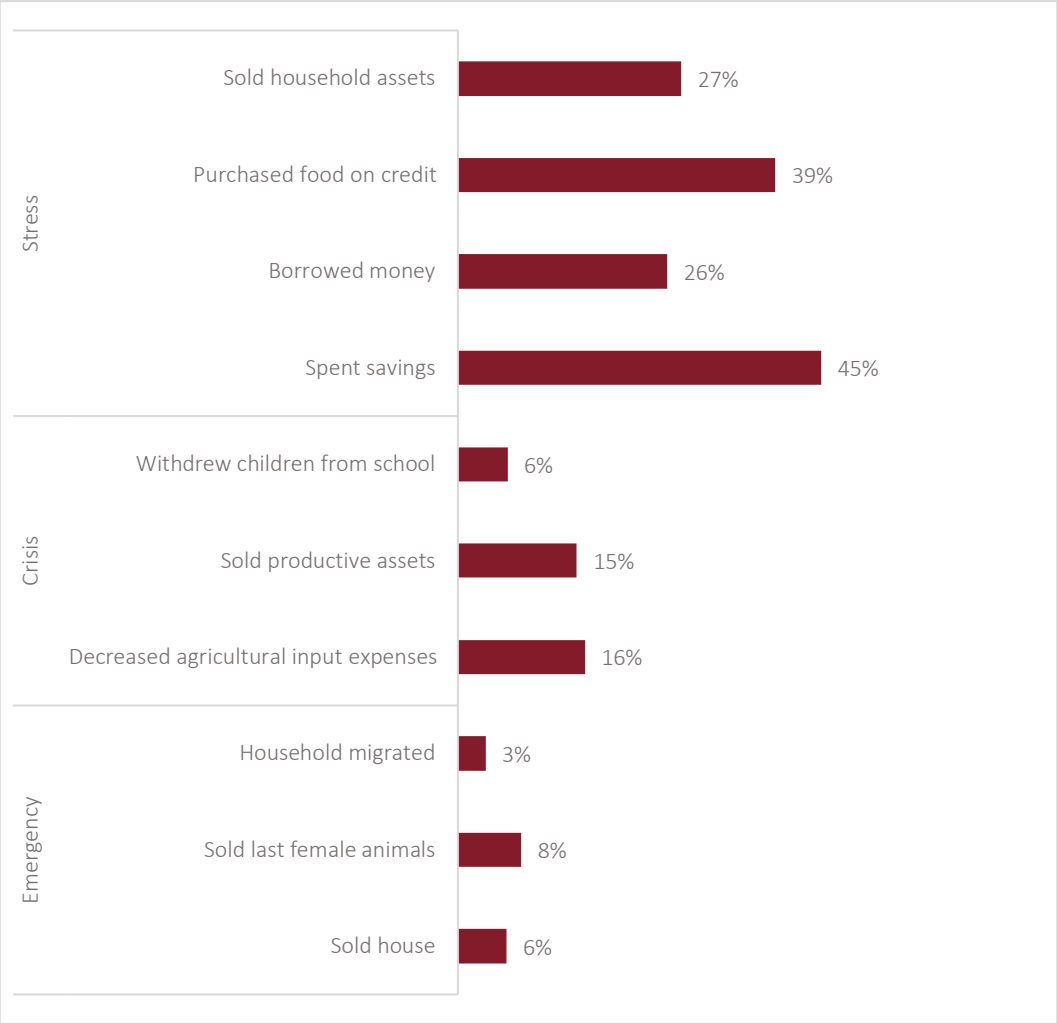
Source of map: Esri, HERE, Garmin, FAO, NOAA, USGS. 2018. *Map of Iraq.* Cited 18 July 2022. https://data-in-emergencies.fao.org/pages/explore

The Livelihood Coping Strategies Index (LCSI) measures livelihood changes as a means to understand the extent to which households restore unsustainable changes in their typical livelihoods in order to fill food (or essential needs) gaps. A third of the surveyed households resorted to crisis (19 percent) or emergency (15 percent) coping strategies. The most common strategies were spending savings (45 percent), purchasing food on credit or borrowing food (39 percent), and selling household assets/goods (27 percent) (Figure 8). These were significantly associated with drought, high food prices, high fuel prices and lost employment.

Based on the household dietary diversity score (HDDS), a qualitative measure of food consumption that reflects a household's economic ability to access a variety of foods, used for the first time during this round of data collection, the majority of households had high dietary diversity (68 percent), although data were collected during Ramadan when more food is consumed compared to a typical period. Households that did not experience shocks had significantly better outcomes.[3]

[3] Results between rounds will be comparable going forward now that FAO Iraq has implemented the new survey instrument.

Figure 8. Livelihood coping strategies



Source of data: FAO. 2022. *Iraq: DIEM-Monitoring assessment results (March–May 2022).* Rome. Cited 13 July 2022. https://data-in-emergencies.fao.org

Needs

Nearly 60 percent of the surveyed households expressed a need for assistance in the coming three to six months. Fertilizer (24 percent), seeds (16 percent) and access to irrigation water (16 percent) were the most common needs indicated by crop producers, while animal feed was the most common need indicated by livestock producers. Moreover, 72 percent of the respondents reported a need for cash support. Only 7 percent of respondents had received assistance in the three months preceding the survey, and the most frequent types of assistance received were cash vouchers (2 percent) and food (6 percent).

Recommendations

Short-term recommendations

Crop production

- Assist vulnerable farmers with agricultural inputs for the 2022/2023 crop season via vouchers, with an emphasis on more drought tolerant varieties and on diversifying agricultural commodities.

Animal Production

- Assist livestock owners with inputs for feed via vouchers and in-kind.
- Mitigate the impact of high feed prices by encouraging summer forages and distributing feed supplements in areas with poor pasture conditions, starting in the Mesopotamian marshes in southern governorates (Basra, Maysan and Thi-Qar).
- Utilize multi-nutritional feed blocks as a supplement to improve poor grazing and rangeland areas and include sugar molasses as a strategic feed drought supplement.
- Increase the storage capacity of natural ponds to extend their period of utilization, and create new surface water reservoirs to improve rangeland resources for grazing.

Long-term recommendations

Crop Production

- Invest in the introduction/adaptation of good agricultural practices and climate-smart agriculture.
- Provide technical and financial support to farmers to upgrade irrigation equipment and water storage systems/management practices.

Animal Production

- Introduce drought and salt tolerant, high yielding fodder varieties such as Sudanese sorghum grass.
- Equip livestock farmers with supplementary irrigation systems to improve efficient water use and introduce further on-farm water management practices.

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