

GLOBAL INFORMATION AND EARLY WARNING SYSTEM ON FOOD AND AGRICULTURE (GIEWS)

SPECIAL ALERT

No. 332

COUNTRY: IRAQ

DATE: 25 June 2014

Serious food security concerns following escalation of conflict

Highlights

- The escalation of conflict and civil insecurity that resulted in death, displacement and destruction, is also having serious impact on the food security of a large number of people.
- The harvesting of major cereal crops, currently underway, is in jeopardy despite earlier favourable weather conditions that raised hopes for increased crop and livestock production.
- Ninevah and Salah-Aldeen governorates, at the centre of the current conflict, normally produce nearly one-third and about 38 percent of total annual national wheat and barley production, respectively.
- Transboundary animal diseases and zoonoses are already a threat to the livestock population in Iraq and thus the danger to public health, especially the refugees and IDPs, is of great concern.
- Loss of assets and income opportunities together with disruptions of marketing activities, transport networks and farming have exposed large number of people to severe food insecurity; the increasing number of IDPs is also putting huge pressure on host communities.
- Immediate humanitarian and livelihood support including to crop and livestock production and health is urgently required to mitigate the impact of the crisis and avert further deterioration.

Background

Iraq is plunged into a renewed and precarious humanitarian situation with the current escalation of armed conflict. Already the long years of instability have led to protracted humanitarian crises and significant deterioration of both accessibility and the quality of essential services. Although some gains were registered in the last several years in containing food deprivation, civil insecurity, disruptions of markets, limited income and lack of access to sufficient food continue to be the main causes of food insecurity in Iraq. The Public Distribution System (PDS) remains the main source of food for the poorest Iraqis although the rate of dependency was reported to have decreased from 67 percent in 2007 to 57 percent in 2011.

With the current escalation of the large-scale armed conflict, there are now nearly 2 million people displaced within Iraq, nearly 1 million of whom have been displaced since January 2014, including an estimated 500 000 people displaced from Mosul City and

surrounding areas and a further 480 000 who have fled fighting in Anbar governorate since the beginning of the year. Many of these people have been repeatedly displaced. Recent studies show that Internally-Displaced People (IDPs) access to food has drastically decreased as a result of irregular PDS distributions. In 2012, the influx of Syrian refugees into northern Iraq due to the ongoing conflict was an added burden. The Regional Government in Kurdistan, UN agencies and NGOs are providing assistance to Syrian refugees.

With the fast deterioration of the security situation as the conflict spreads to more areas, additional increases in the numbers of internally-displaced are expected over the coming weeks. Overall, food security conditions are expected to deteriorate with the large number of IDPs putting strain on hosting communities, in particular as large shares of IDPs have fled toward cities in the northern Kurdish region of Iraq.



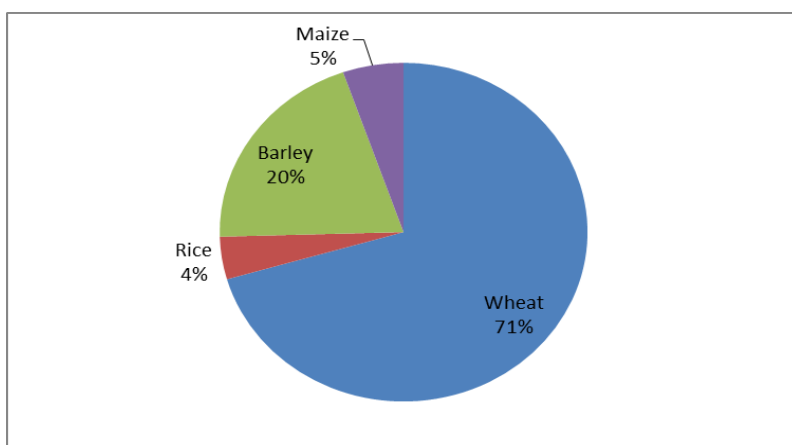
Food and Agriculture
Organization of the
United Nations

Furthermore, the current escalation of conflict and the resultant large displacements of people have coincided with the peak of the summer heat, the month of Ramadan (when the household food expenditure is normally high) as well as the harvesting of the main season crops. As a result of the conflict, prices of staple commodities are expected to increase in some of the affected governorates leading to further difficulties in accessing food, mainly by poor population groups that are highly dependent on the Public Distribution System.

Agricultural production in Iraq

About 27 percent (11.1 million hectares) of the total land area in Iraq (43.3 million hectares) is considered suitable for cultivation to a varying degree: 4.4 million hectares are highly suitable, 4.7 million hectares moderately suitable and 2 million hectares less than suitable. About 50 percent of the land suitable for cultivation is irrigable, and the rest is rainfed, of which around half may be farmed every year depending on rainfall and fallowing patterns. The Tigris and Euphrates rivers supply the major share of irrigation water for agricultural production in the country, at 77 billion m³ in good years and 44 billion m³ in drought years.

Figure 1: Iraq - Average composition of cereal production

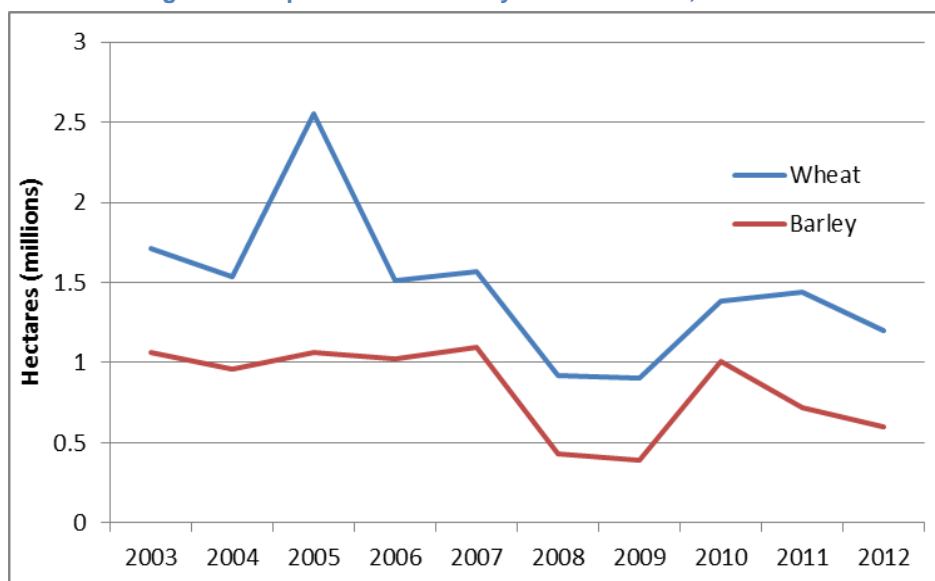


The main cereals grown in Iraq (Figure 1) are wheat (around 70 percent of the total) and barley (around 20 percent). To a smaller extent, maize and rice are also grown (less than 5 percent of the overall production, respectively).

Cereals are grown in both rainfed and irrigated conditions. Annual production is highly variable depending mainly on water and moisture conditions but also factors such as input availability, access to the markets, security situation, etc.

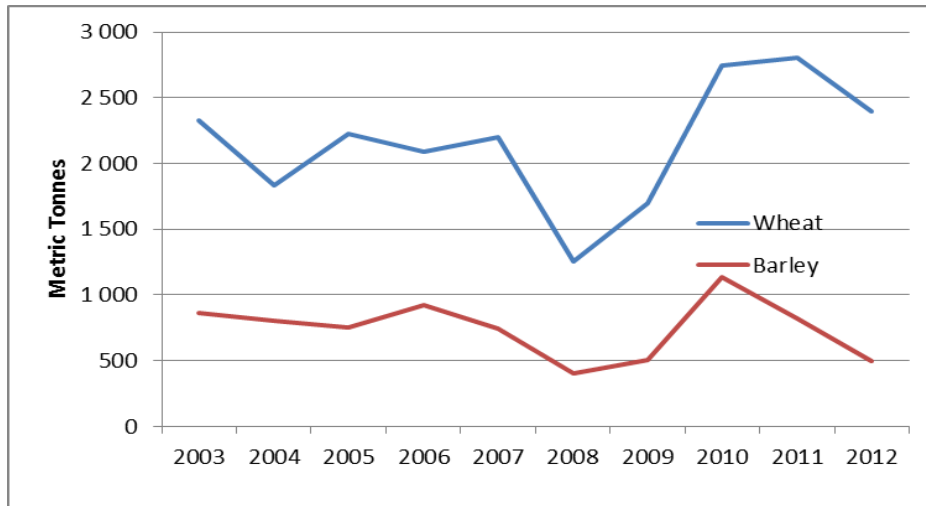
From 2003 to 2012, area planted under wheat ranged from about 1 million to over 2.5 million hectares, while that of barley from about 0.5 to over 1 million hectares (Figure 2). Total combined wheat production (Figure 3) in the same time period ranged from 1.3 million tonnes in 2008 to 2.8 million tonnes in 2012, but increased since then. Total barley production from 404 000 tonnes in 2008 to 1.1 million tonnes in 2010.

Figure 2: Iraq - Wheat and barley area harvested, 2003-2012



Source: FAOSTAT.

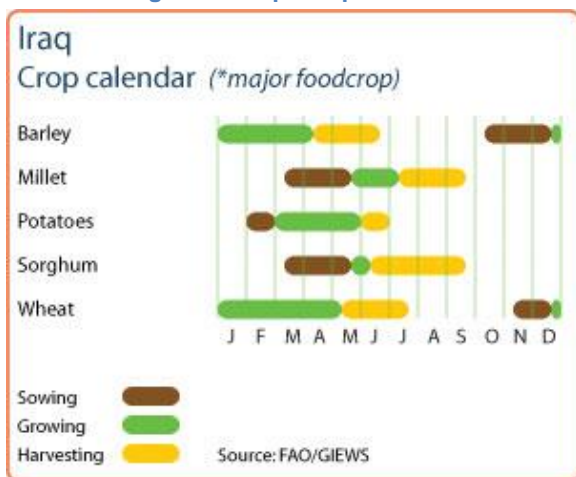
Figure 3: Iraq - Wheat and barley production, 2003-2012



Source: FAO/GIEWS.

The rainfed sub-sector, located in the three governorates of the autonomous northern region, Dahuk, Erbil and Sulaymaniyah (40 percent), and in the governorates of Ninevah, Kirkuk and Salah-Aldeen in the central region (60 percent), consists of a rain-dependent winter growing season extending from September/October to April/May (Figure 4) with an average precipitation from 350 mm to 1 100 mm increasing from south to north and varying from year to year in both quantity and distribution.

Figure 4: Iraq - Crop calendar



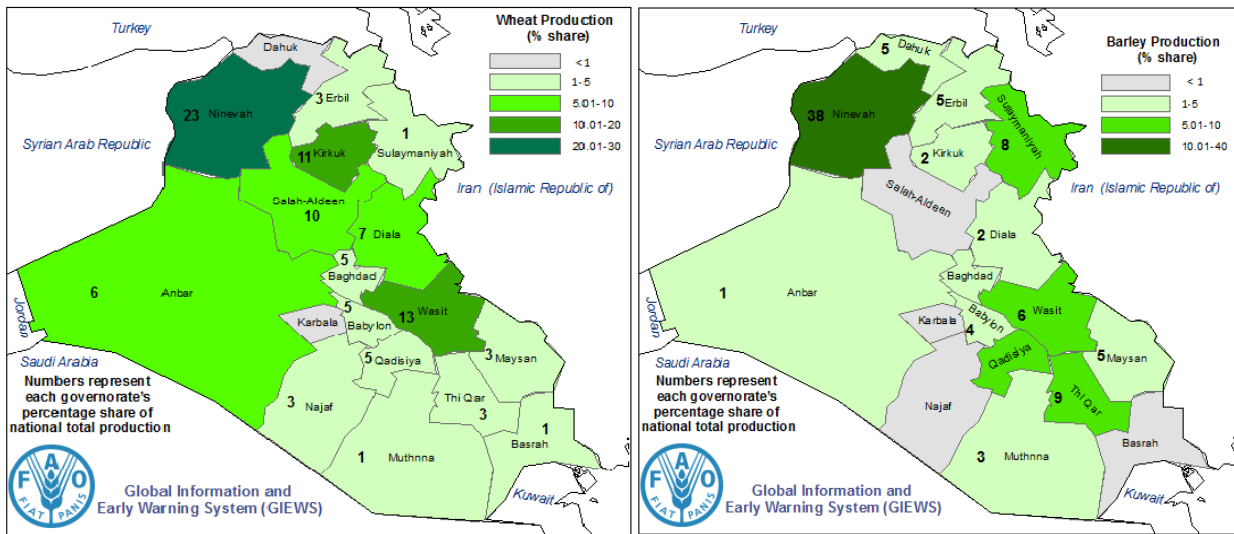
Consequently, rainfed cereal production varies greatly from year to year, ranging from 500 000 tonnes to 2.0 million tonnes, mainly due to the performance of seasonal rains. In the northern governorates, the annual contribution of some 800 000 tonnes, in a reasonably good year, comprises around 50 percent wheat, 30 percent barley and 20 percent chickpeas. The rainfed farming

systems throughout all zones are essentially similar: continuous wheat with fertilizer applications juxtaposed with a barley/fallow rotation which usually does not include fertilizer use, but may incorporate chickpeas one year in three or four.

Mostly irrigated crops are produced between the Tigris and the Euphrates rivers from Baghdad to Basra, which represents some 40 percent of arable land in the country. Projects along each of the two rivers north of Baghdad contribute most of the remaining crops; no more than 4–5 percent is irrigated using groundwater reserves or aquifers. The main irrigated crops are wheat and barley, sown in October/November and harvested in May/June (Figure 4). These two crops are planted on roughly 2.5 million of the 3-3.4 million hectares presently irrigated, with annual cereal grain production estimates for the sub-sector fluctuating from 700 000 tonnes (2000) to 3 million tonnes (1991). Perennial crops, notably dates, alfalfa, citrus, top fruits, stone fruits and nuts account for some 340 000 hectares and summer season maize, rice, vegetables, cotton and sunflowers make up the remaining 20 percent, depending on availability of water in the summer.

In combined rainfed and irrigated production, Figure 5 shows the share of wheat and barley production by provinces. The Ninevah Province, noted for producing more than 1 million tonnes of wheat and barley in a good year, contributes on average to over 20 percent and 38 percent of the national wheat and barley production, respectively. Current and previous conflicts are repeatedly impacting production potential of agricultural production systems.

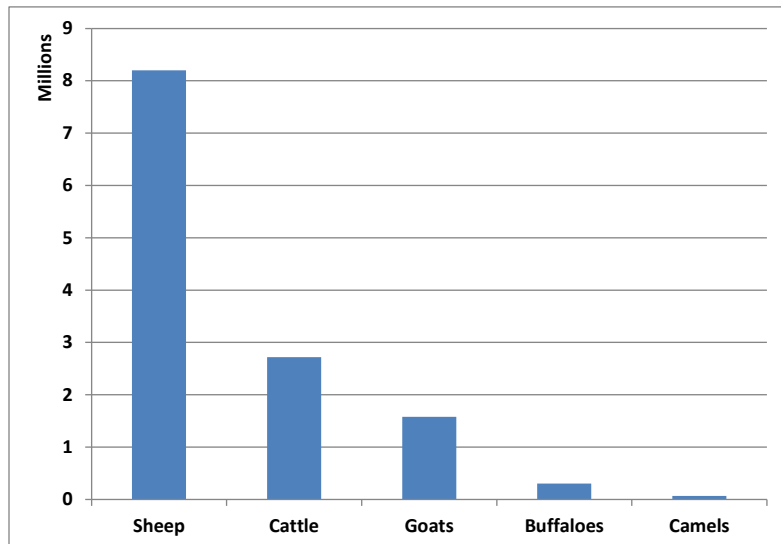
Figure 5: Iraq - Regional wheat and barley production, share by provinces



Livestock and poultry

Livestock (incorporating both pastoral and settled ruminant systems) and poultry production are located in both rainfed and irrigated areas. Ruminant husbandry is distributed equally between north and south, while poultry is based mostly in the centre and south. All livestock systems in Iraq rely on supplementary feeding with cereals and/or cereal by-products to a greater or lesser extent. Figure 6 shows the livestock population (heads) in 2012.

Figure 6: Iraq - Livestock population in 2012



Source: FAOSTAT.

Livestock production consists of:

- A sheep sector of approximately 8 million heads which is sustained by cereal by-products, extensive grazing and barley grain supplements, with grazing access depending on proximity to the upland ranges and seasonal rainfall. In the rainfed sub-sector, grazing of early yielding cereals also provides preliminary feed access before the flocks move to the ranges.
- The livelihood impact of conflict and drought is revealed by the terms of trade between slaughter sheep (5-month-old males) and the corresponding prices of cereal grains.
- A goat sector (approximately 1.5 million heads), which again depends on cereal by-products and extensive pastures for feeding which is linked closely to the grazing patterns of other ruminants.
- A seasonal, small-holder dairy industry characterized by indigenous breeds and crosses, stall-fed irrigated forage, particularly alfalfa and annual clovers grown in rotations with cereals and vegetables. Animals are supplemented by rations comprising barley and wheat grains, dates, soaked date-pits and straw.
- A riverine, small-holder buffalo sector based on stall-fed, irrigated forage and cereal by-products.

A modern poultry sector, producing around 38 million chickens, is supplied by a well-organized breeding system for broilers and laying hens plus production units capable of producing eggs and poultry meat. High mortality rates, ranging from 35 to 70 percent, combine with high feed costs to constrain sector development. Difficulties in procuring high quality feed imports will likely pressure up poultry prices, while prices of all meats, despite adequate rainfall for grazing, are likely to escalate due to conflict-related challenges in animal movements and access to markets.

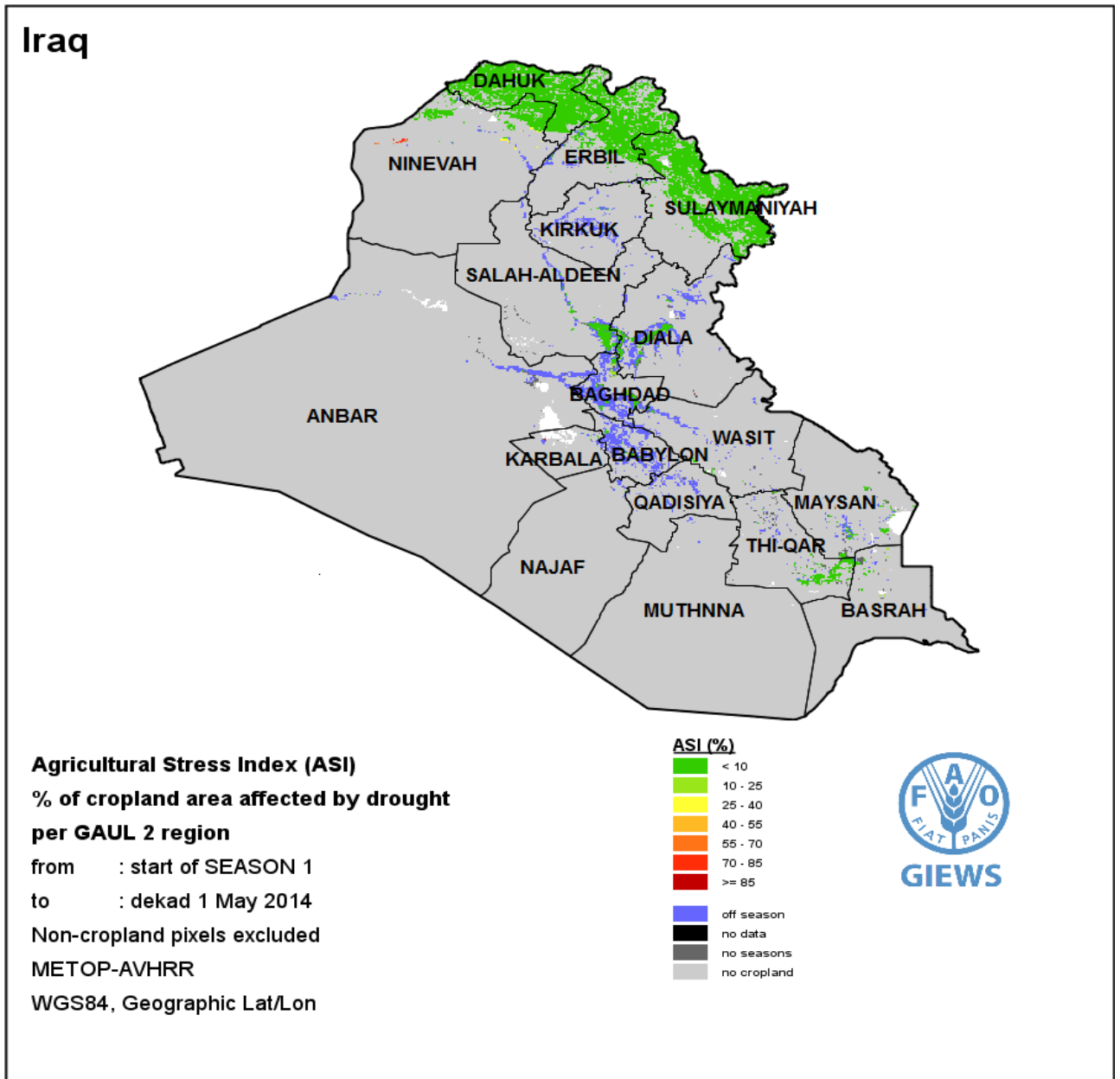
Rainfall situation in 2014

Most of the cereal production in northern Iraq is rainfed. Rainfall in Iraq provides some 50 percent of the water supply flowing into the Tigris and contributes 10 percent of the flow into the Euphrates; thus to a very great extent cereal crop performance depends on the rains in the north of the country and beyond the borders of Iraq.

This year, timely seasonal rains and irrigation reserves recharged from mountain snow moisture maintained favourable crop prospects. FAO's Agricultural Stress Index (ASI) indicates that, in 2014, less than 10 percent of the crop land in Iraq has been affected by moisture deficit (Figure 7).

All other areas received adequate moisture thus supporting agricultural production. In addition, analysis of rainfall amounts (Figure 8) indicate that cumulated seasonal precipitation in Salah-Aldeen and Wasit provinces were at or above the long-term average, while in the main producing areas of Ninevah, Dahuk, Erbil and Sulaymaniyah precipitation was slightly below the long-term average. Overall, crop prospects were generally satisfactory during the crucial periods of crop germination and establishment stages.

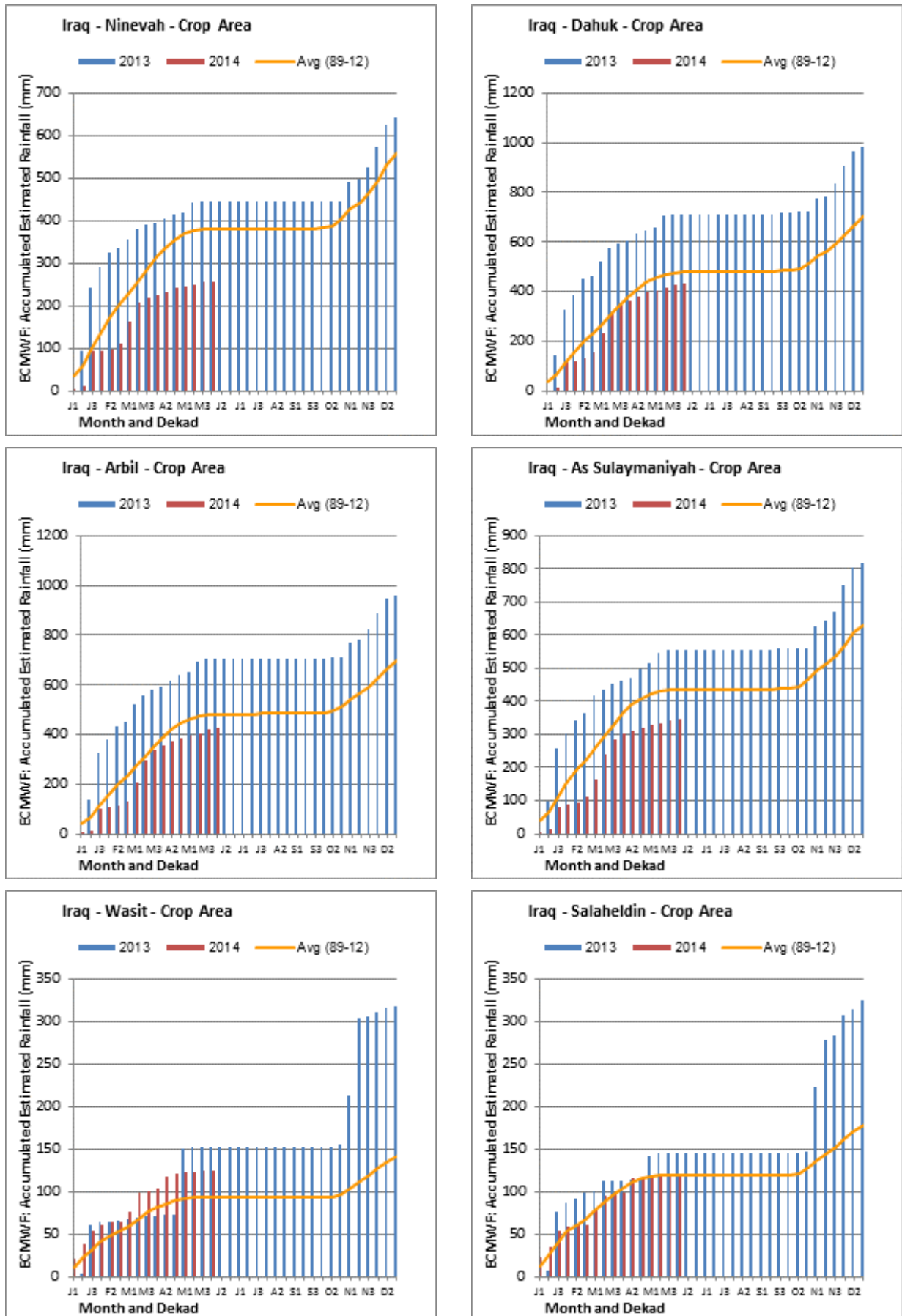
Figure 7: Iraq - Agricultural Stress Index for the current 2014 crop season



Note: The **Agriculture Stress Index (ASI)** is an FAO indicator that highlights anomalous vegetation growth and potential drought in arable land during a given cropping season. ASI integrates the Vegetation Health Index (VHI) in two dimensions that are critical to assess a drought event in agriculture: temporal and spatial. ASI assesses the temporal intensity and duration of dry periods and calculates the percentage of arable land affected by drought (pixels with a VHI value below 35 percent – identified as a critical level in previous studies to assess the extent of the drought). The whole administrative area is classified according to the percentage of arable area affected by drought conditions.

Disclaimer: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Figure 8: Iraq - Cumulative rainfall estimate (2014) in main grain-producing provinces compared to last year and to the long-term mean



Favourable crop forecast in 2014 now in jeopardy

Harvesting of winter grains in Iraq is well underway and about to conclude, while the harvesting of the minor millet and sorghum crops is expected to continue until August/September 2014 (Figure 4). However, the ongoing and spreading conflict will likely have serious implications especially in key growing provinces.

Prior to the current escalation of conflict, an above-average wheat harvest of 3 million tonnes, some 16 percent above the five-year average, was forecast by FAO. The barley crop, at 900 000 tonnes, was similar to the previous year but 15 percent above the five-year average (Table 1).

The most affected governorates, so far, by the current conflict of Ninevah and Salah-Aldeen which on average contribute together over 30 percent of wheat production and about 38 percent of barley.

Accordingly, the current crisis is expected to negatively impact on the ongoing harvesting and post-harvesting activities. In addition, the large displacements of people would result in labour shortages at the critical harvesting period. Problems of logistics, storage facilities and larger post-harvest losses are also expected to add to the decline in domestic production and supply.

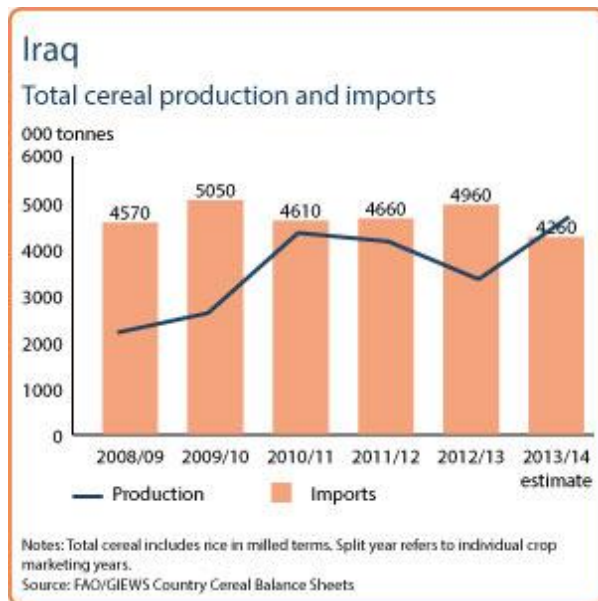
Table 1: Iraq - Cereal production compared to last year and five-year average

Iraq Cereal production				
	2009-2013 average	2013	2014 forecast*	change 2014/2013
	000 tonnes			percent
Wheat	2 592	3 300	3 000	-9
Barley	780	940	900	-4
Maize	268	250	260	4
Others	195	199	194	-3
Total	3 835	4 689	4 354	-7

Note: percentage change calculated from unrounded data.
Source: FAO/GIEWS Country Cereal Balance Sheets

*2014 FAO/GIEWS forecast before the current escalation of conflict.

Figure 9: Iraq - Total cereal production and imports (2008/09-2013/14)



Cereal import requirements expected to increase in 2014/15 despite earlier average forecasts

Given the concern over current harvests of crops due to recent events, cereal import requirements in the just starting 2014/15 marketing year (July/June) are expected to increase. More in-depth field assessment would be required to determine the levels of this increase. In the just ending 2013/14 marketing year, cereal import levels were estimated at 4.26 million tonnes, including 2.7 million tonnes of wheat and 1.3 million tonnes of rice (Figure9).

The Iraqi Government normally maintains three to six months' supply of wheat in its food stocks and is committed to supply each Iraqi citizen with a monthly 9 kg of subsidized flour. Iraqi traders often seek higher quality wheat with more protein and gluten for blending rather than the cheapest origins.

Food prices were generally stable but disruptions of markets, cross border trade and in the movement of food commodities are expected to reverse the situation

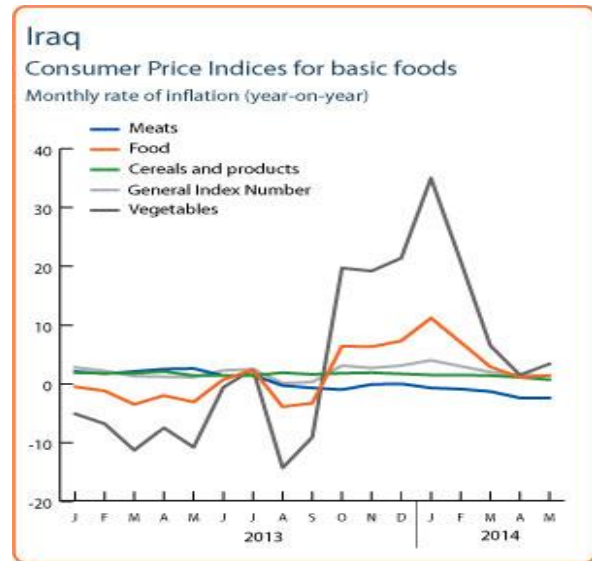
Iraq's Ministry of Trade, through the Public Food Distribution System, continues to subsidize basic staple food commodities (rice, wheat flour, vegetable oil, sugar and baby milk formula). Data collected prior to the current crisis reveal overall stable food prices. In May 2014, the General Consumer Price Index stood at 144.2 points (Figure 10), about 1.4 percent lower than the previous month but 1.4 percent up on May 2013. The food inflation rate decreased by 4.5 percent on a monthly basis and increased by 1.4 percent on a yearly basis. Cereal prices remain generally stable compared to a month earlier, while the vegetable price index that peaked at 35 percent last January dropped to 3.4 percent in May 2014.

Food security conditions are expected to deteriorate sharply

There are now nearly 2 million people displaced within Iraq, nearly 1 million of whom have been displaced since January 2014, including an estimated 500 000 people displaced from Mosul City and surrounding areas and a further 480 000 who have fled fighting in Anbar governorate since the beginning of the year. Many of these people have been repeatedly displaced. At the moment there are reports of deteriorating access to drinking water as well as basic food items and other essential non-food items. Food security conditions are likely to deteriorate with large number of IDPs putting strain on hosting communities, in particular as large share of IDPs have fled toward cities in the Kurdish region of Iraq.

Reports indicate that in the most affected governorates of Ninevah and Salah-Aldeen levels of food available in the Public Distribution System are quickly depleting and might not be available to the most vulnerable. Given the month of Ramadan approaching, poor households with no stable income will have difficulties in accessing food in particular the Internally-displaced people who left their homes rapidly with only few belongings. Lack of resources limit the coping capacities available to households and limit access to food. Should the situation continue, prices of basic food and essential non-food items are expected to rise despite the subsidies and Government policies, particularly if cross-border movement of goods is hampered by security conditions.

Figure 10: Iraq - Monthly rate of inflation (year-on-year)



A rapid food security assessment together with a continuous monitoring system is urgently required to ensure that timely information and analysis is available for humanitarian response and for contingency planning.

Large number of Syrian refugees registered in Iraq

As of May 2014, almost 225 000 Syrian refugees were registered in Iraq. Most of the Syrian refugees have settled in the northern governorates of Iraq's Kurdistan Region. The operation in Iraq should reach about 186 000 beneficiaries with voucher assistance, food packages and school feeding. The World Food Programme (WFP) continues to provide food assistance to vulnerable Syrian refugees in Jordan, Lebanon, Iraq and Turkey.

Threats and risks of transboundary animal diseases and zoonoses have increased further

Since mid-2012, the threat of Transboundary Animal Diseases (TAD) and zoonoses has increased in the Region following the collapse of veterinary services in the Syrian Arab Republic. Unvaccinated livestock, mainly sheep and goats have been crossing into neighbouring countries, including Iraq. Peste des Petits Ruminants (PPR), Foot and Mouth Disease (FMD) and Lumpy Skin Disease (LSD) are of utmost concern in the region. Lumpy Skin Disease (LSD) is reported recently in almost all countries of the Region affecting cattle and buffaloes.

Cases of Brucellosis, another zoonoses endemic in Iraq and neighbouring countries, have increased in the refugee camps in Iraq following the crisis in the Syrian Arab Republic in addition to other zoonoses. Reduced sanitation measures and deteriorating hygienic conditions in the refugee and internally displaced camps due to the limited access to sanitation products and energy source are exacerbating the problem. Public awareness as well as provision of equipment and sanitation supplies combined with improved veterinary services, including vaccination is urgently required. Capacity building and strengthening of veterinary services and supplies are of paramount importance.

Safeguarding livelihoods

FAO's assistance focuses mainly on safeguarding and supporting livelihoods by protecting, restoring and improving food and agricultural production systems of vulnerable affected households. To this effect, within the framework of the revised Strategic Response Plan for Iraq (June 2014), FAO has requested USD 12.7 million to support the following priority areas of intervention:

- Provision of seeds and fertilizer for the October/November cereal planting season, targeting vulnerable crisis-affected farmers where open field cultivation is possible (funding needed by July/August).
- Quick impact food production and income generation activities for vulnerable host and IDP families, including backyard vegetable and poultry production, micro-industry support focused on women, and cash-for-work activities implemented in partnership with WFP.
- Safeguarding animal health and productivity through support to provision of animal feeds, veterinary supplies and services, including improved animal health services (e.g. surveillance), vaccination campaigns, tracking and monitoring of animal movements, strengthening veterinary quarantine systems, and animal disease early warning systems.

Disclaimer

This Special Alert has been prepared under the responsibility of FAO's Global Information and Early Warning System, with information from official and unofficial sources. None of the information in this Alert should be regarded as statements of governmental views. Furthermore, the designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the FAO concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Since conditions may change rapidly, please contact the undersigned for further information if required.

Shukri Ahmed
Senior Economist, EST-GIEWS
Trade and Markets Division, FAO
Fax: 0039-06-5705-4495
E-mail: giews1@fao.org

Please note that this Special Alert is also available on the Internet as part of the FAO World Wide Web www.fao.org at the following URL address: <http://www.fao.org/giews/>

The Special Alerts/Reports can also be received automatically by e-mail as soon as they are published, by subscribing to the GIEWS/Alerts report ListServ. To do so, please send an e-mail to the FAO-Mail-Server at the following address: listserv@listserv.fao.org, leaving the subject blank, with the following message:

subscribe GIEWSAlertsWorld-L

To be deleted from the list, send the message:

unsubscribe GIEWSAlertsWorld-L

Please note that it is now possible to subscribe to regional lists to only receive Special Reports/Alerts by region: Africa, Asia, Europe or Latin America (GIEWSAlertsAfrica-L, GIEWSAlertsAsia-L, GIEWSAlertsEurope-L and GIEWSAlertsLA-L). These lists can be subscribed to in the same way as the worldwide list.

© **FAO 2014**

FAO encourages the use, reproduction and dissemination of material in this information product. Except where otherwise indicated, material may be copied, downloaded and printed for private study, research and teaching purposes, or for use in non-commercial products or services, provided that appropriate acknowledgement of FAO as the source and copyright holder is given and that FAO's endorsement of users' views, products or services is not implied in any way.

All requests for translation and adaptation rights and for resale and other commercial use rights should be made via www.fao.org/contact-us/licence-request or addressed to copyright@fao.org.

FAO information products are available on the FAO website (www.fao.org/publications) and can be purchased through publications-sales@fao.org.