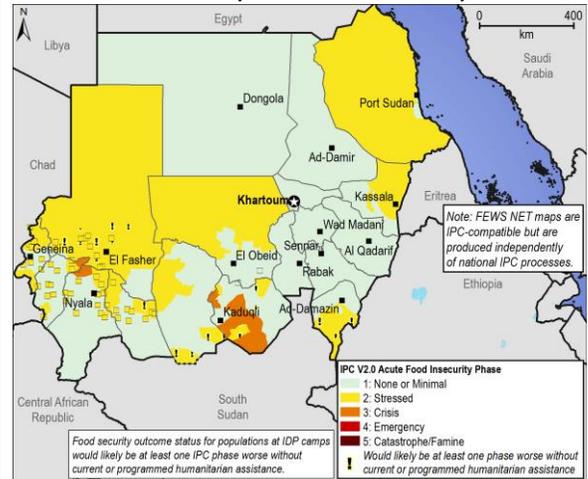


*Conflict and high staple food prices likely to drive Crisis and Emergency outcomes in 2016*

**KEY MESSAGES**

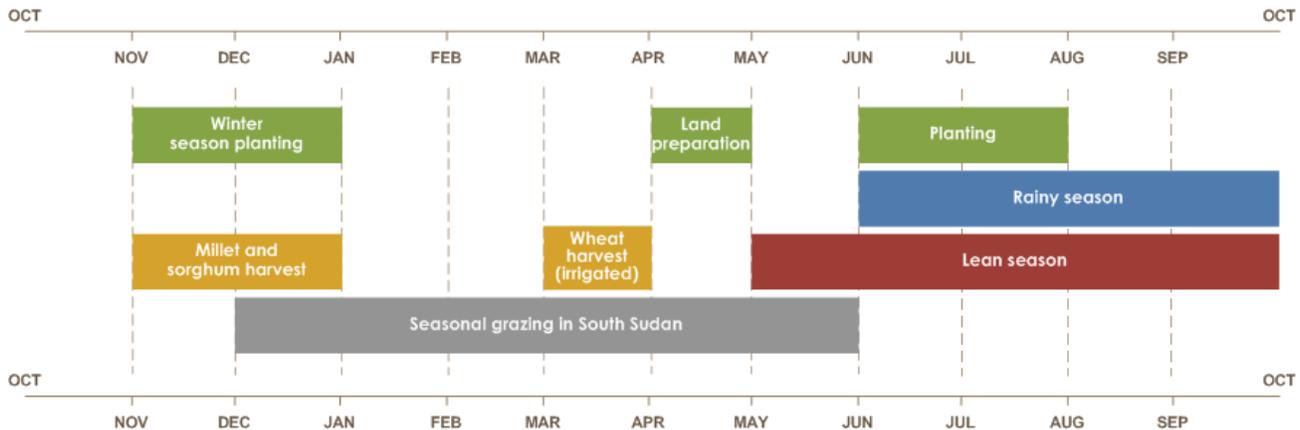
- Below-average agricultural production in 2015, expected high staple food prices, very poor pasture conditions, and continued conflict in the Darfurs, South Kordofan, and Blue Nile States are leading to much higher assistance needs in 2016. Between March and September 2016, more than 4 million people will be in Crisis (IPC Phase 3) or worse. The number of rural, resident households expected to be in Crisis is about twice as high as in a typical year.
- National 2015/16 cereal production is about 25 percent below the recent five-year average, in part due to El Niño-related dryness in eastern surplus-producing areas. Imports and above-average carryover stocks from 2014/15 are substantially reinforcing cereal availability at the national level. However, in western Sudan, below-average production and poor market integration with eastern and central Sudan are likely to lead to significant staple food price increases.
- Below-average production is of particular concern in parts of North Kordofan, West Kordofan, Kassala, Red Sea, White Nile, and the Darfur States. Moreover, pasture availability is estimated to be 40 to 60 percent below-average nationally, leading to large sales of livestock at below-average prices, which is expected to continue through June. Very poor households in these areas are likely to exhaust their food stocks by the end of February, and by March will be in Crisis (IPC Phase 3).
- Armed conflict since mid-January between SAF and SLA-AW forces in the Jebel Marra area has displaced nearly 90,000 people to North Darfur and thousands more to West Darfur State and within the Jebel Marra area. IDPs not receiving food assistance and/or host community support are most likely in Emergency (IPC Phase 4). Conflict-related disruptions to agricultural production, livelihood activities, and markets will also drive IDPs and poor households in SPLM-N-controlled areas of South Kordofan State into Emergency (IPC Phase 4) with the early start of the lean season in March 2015.

Current food security outcomes, February 2016



This map represents acute food insecurity outcomes relevant for emergency decision-making. It does not necessarily reflect chronic food insecurity. To learn more about this scale, click [here](#).

**SEASONAL CALENDAR FOR A TYPICAL YEAR**



Source: FEWS NET

## NATIONAL OVERVIEW

### Current Situation

As of February 2016, more than 3.5 million people in Sudan face Stressed (IPC Phase 2) and Crisis (IPC Phase 3) acute food insecurity. Most of these populations are in conflict-affected areas of Darfur, South Kordofan, West Kordofan, and Blue Nile States, with additional pockets of Stressed (IPC Phase 2) populations in drought-affected areas of Kassala, North Kordofan, North Darfur, Red Sea and White Nile States. About 55 – 60 percent of the current food insecure population is in Darfur and 12 percent in South Kordofan. Crisis (IPC Phase 3) acute food insecurity is mainly among internally displaced persons (IDPs) in SPLM-N-controlled areas of South Kordofan and IDPs in Darfur displaced in the last six months due to conflict.

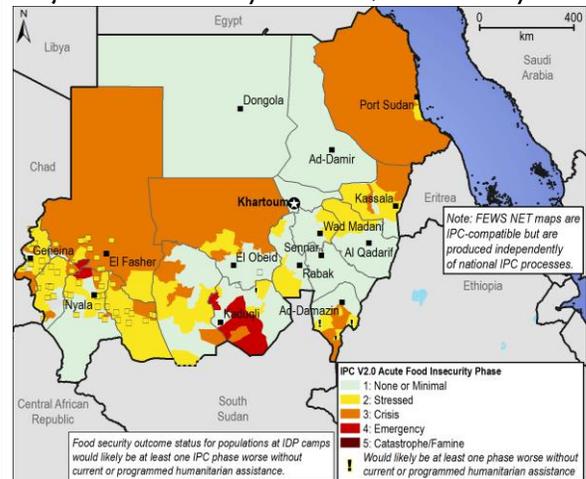
The June to October 2015 rainy season began 20 to 40 days late in many parts of Sudan, and was followed by below-average rainfall and significant dry spells during August/September, particularly in key surplus-production areas such as Gedaref, Kassala, Sennar, White Nile, West Darfur, and South Darfur States. According to the preliminary findings of the 2015/16 annual Crop and Food Supply Mission (CFSAM) report, staple food production in Sudan was about 25 percent below the recent five-year average, and about 55 percent below 2014/15 levels, when the production was almost double the five-year average.

Despite the below-average harvest, above-average carryover stocks of sorghum and millet and imports of wheat are maintaining adequate availability of staple foods. National aggregate availability of millet, sorghum, and wheat is expected to be near normal due to the availability of well above-average carryover stocks and imports (wheat in particular) is contributing to offset the aggregate supply effects of the below-average production this year.

Despite these aggregate/national level trends, the spatial distribution of supply is more uneven than in a normal year:

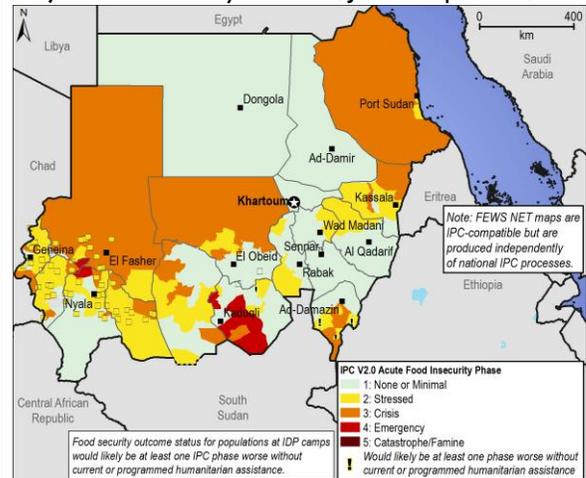
- **Aggregate supply (including both production and carryover stocks) is believed to be average to above average in the south-eastern sorghum producing areas of the country** because those are the areas where large-scale storage of grain is possible (and currently being utilized). Opening stocks are believed to be total 700-800,000 MT with the Strategic Reserve Corporation (SRC), around 300,000 with the private sector, and above-average stocks with households (including subterranean storage) concentrated in Gadaref State, but also in White Nile, Blue Nile, and Sennar States.
- **Production in the Darfur States was well below average and the states that are typically self-sufficient or produce a surplus (West Darfur) did not produce enough grain to meet local needs this year** (self-sufficiency is defined as the ratio of production to human consumption requirements, where human consumption is population times 146 kg, the consumption norm established by previous ACFSAM reports). Self-sufficiency in North Darfur and South Darfur (structurally deficit) are even lower than a normal year. This situation is compounded by a lack of local carryover stocks (due to limited commercial farming and a lack of storage capacity in these areas) and the very long distances from where national surpluses are located. Although there will likely be imports from Chad and some

### Projected food security outcomes, March to May 2016



Source: FEWS NET

### Projected food security outcomes, June to September, 2016



Source: FEWS NET

This map represents acute food insecurity outcomes relevant for emergency decision-making. It does not necessarily reflect chronic food insecurity. To learn more about this scale, click [here](#).

supplies available from central Sudan, **FEWS NET expects a substantial availability issue this year in the Western-most parts of the country until harvests in October.**

**The below-average harvest reduced demand for seasonal agricultural labor, and reduced wages and terms of trade.** The below-average harvest reduced demand for seasonal agricultural labor during the November to January harvest period. Consequently, wages in surplus-producing areas declined significantly during this period. In Gadaref, labor wages declined by 40 – 45 percent between December and January, from SDG 80 per day in December to SDG 50 in January (Figure 1). As a result, terms-of-trade (ToT) between daily wage labor and sorghum declined by 40 percent during the same period last year and less than half of the recent two-year average. In January, daily wage labor is equivalent to 16 kg of sorghum compared to 26 kg of sorghum in December.

**Below-average 2015/16 production also reduced income from the sale of cash crops.** Like staple food prices, cash crop production of 2015/16 was also affected by the poor rainfall performance. The preliminary findings of the 2015/16 CFSAM indicated cash crop production far below the bumper harvest of last year and the five-year average. The production of groundnut, the most important cash crop for subsistence farmers in Sudan, was estimated to be 45 percent and 25 percent lower than of last year and the 2008/09 – 2012/13 five-year average, respectively. Similar reductions were also reported for sesame, sunflower, and hibiscus. The below-average cash crop production of 2015/16 has reduced income from sale of cash crops for small household producers during the November to January harvest period.

**Figure 1.** Daily labor to sorghum (kg) terms-of-trade, Gadaref



Source: FAMIS/FEWS NET

**A large national pasture deficit is resulting in large-scale early migration of animals.** Poor rainfall performance has also resulted in unusually low pasture and less water availability for livestock over most parts of Sudan, particularly in Kassala, North Kordofan, North Darfur, White Nile, Red Sea, South Darfur, and Central Darfur States, as well as the Butana Plain in central Sudan. The total pasture deficit is estimated at 40 to 60 percent of national needs. Extreme poor pasture has triggered abnormal migration of livestock to other areas in search of pasture and water, including South Kordofan from North Kordofan, White Nile and West Kordofan and Blue Nile from Sennar, Gadaref, and Gazeira.

**Livestock keepers have increased sales of livestock to reduce their herd size to manageable proportions in expectation of worsening pasture and water conditions during the ongoing January-to-June dry season.** As a result, there has been oversupply of livestock into the local markets that have led to remarkable decline of livestock prices in remote rural markets (e.g. Sodari and Jabart El Shiekh in North Kordofan state) and areas of concentration for grazing (e.g. Lagawa market at the border between South and West Kordofan markets).

Current grain prices exhibited mixed trends among different markets in Sudan, which is a typical phenomenon during the harvest period between November and December. However, the mixed trends were reinforced by the expected much below average November-to-January 2015/16 harvest resulting in uncertainties, and increased tendency by traders to hold on to their grain stocks in anticipation of higher prices in the future.

- Retail sorghum (main staple food) prices followed mixed trends between December and January. While prices remained seasonably stable in some collection and consumption markets including Om Dorman and Damazin, the prices increased atypically by up to 12 percent in Al Gadarif, PortSudan, El Fasher, Madani and Geneina due to increased demand amidst relatively low market supplies. Prices decreased slightly but typically in main collection markets of El Obied, Nyala and Kadugli, but were mainly a result of food aid distribution. January levels of sorghum prices were on average 14 percent higher than respective 2014 prices but 60 percent above the recent five-year average prices.
- Retail millet prices also exhibited mixed trends between November and December. Prices remained stable in Ad-Damazin, Port Sudan and Dongola, and decreased slightly in Om Dorman, El Obied, El Fasher and Geneina. This was mainly due to reduced demand as more households shifted to consumption of the relatively cheaper sorghum and

subsidized wheat. Millet prices increased atypically but slightly in Al Gadarif, Kadugli, and Nyala due to reduced market supplies amidst relatively high demand in these markets. January levels of millet prices surpassed their respective 2015 levels by 5 to 15 percent in most markets, but remained on average 50 percent above recent five-year average.

- Despite reduced market supplies of locally produced wheat as result of reduced stock at the market and household level, retail prices of locally produced wheat were unseasonably stable instead of increasing between November and December. This was mainly linked to the regular release of subsidized wheat and wheat flour by SRC. Current levels of locally produced wheat prices are on average nine percent below their respective 2014 levels, but remained 73 percent above the recent five-year average.

**The Sudanese government's decision to opening its border with South Sudan for cross-border trade has encouraged trade and eased cross-border grazing in South Sudan since January 2016.** The decision stimulated demand for local products from Sudan and prices have started to increase in February. Consequently, sorghum prices in Gadaref market have increased by nearly 40 percent, from SDG 225 per sack in January to SDG 310 per sack in February. Meanwhile, onion prices in Kassala market more than doubled between January and February. Increased numbers of traders buying local products for export to South Sudan were reported in February from most markets along the border with South Sudan. Having the extreme pasture shortage in Sudan this year, the normalized relations enabled cattle herders to cross into South Sudan for grazing in Northern Bahr el Ghazal, Unity, and Upper Nile States.

**Despite a stable official exchange rate, the Sudanese Pound (SDG) continued to depreciate in the parallel market.** Depreciation of the Sudanese Pound (SDG) on the parallel market continues to be high, due to less oil revenue following the separation of South Sudan in 2011, and domestic conflict and a weakening economy that has reduced exports that bring foreign currency. By January, the exchange rate for one dollar to the SDG in parallel exchange rate, the benchmark for the business community, was 90 - 95 percent higher than the official exchange rate as the shortage of dollars continued amidst high demand. This is reflected in consumer prices that have been steadily increasing and high inflation rate in Sudan.

**Thousands of people displaced by heightened conflict between Sudan Armed Forces (SAF) and Sudan Liberation Army – Abdelwahid Nur faction (SLA-AW) in Jebel Marra area are in urgent need for humanitarian assistance.** Since mid-January, fighting between Sudan Armed Forces (SAF) and Sudan Liberation Army led by Abdelwahid Nur (SLA-AW) has increased in the Jebel Marra area that straddles North, South, and Central Darfur States. Between mid-January and the third week of February 2016, about 87,500 people were displaced from Jebel Marra to North Darfur State, including 63,223 people to Sortony village in Kebkabiya locality, and 22,261 IDPs to Rawanda and Agro IDP camps in Tawila locality. Additional displacements within and near Jebel Marra in West Darfur State have been reported, but these areas were not accessible for humanitarian agencies. New displaced people were reportedly in dire situation and they need urgent humanitarian assistance, including food, health and shelter. Thousands of people are also reportedly displaced to Guldo, Thur, Boori, Wadi Boori and Daya in Central Darfur State, but humanitarian agencies have not been able to access these areas to verify due to insecurity and restrictions.

**Despite the recently signed peace agreement between conflicting rivals in South Sudan, refugees continue to arrive in Sudan.** About 5,204 refugees from South Sudan arrived in January 2016, which is higher than the average of 3,514/month arrival rate over the past five months. About 59 percent arrived in White Nile, while the rest went to Khartoum, South Kordofan, West Kordofan, and Blue Nile. Over 65 percent of the refugees received humanitarian assistance, including food assistance. Other factors contributing to additional displacements include ongoing severe food insecurity and economic difficulties in South Sudan. New arrivals of South Sudanese refugees from Northern Bahr el Ghazal to Ed Da'ain since the first week of January have been reported. So far, about 1,000 households have arrived and the influx is still ongoing. Sharp increases of food prices, a lack of food, and eased movement across the border have been cited as the main reasons behind this movement.

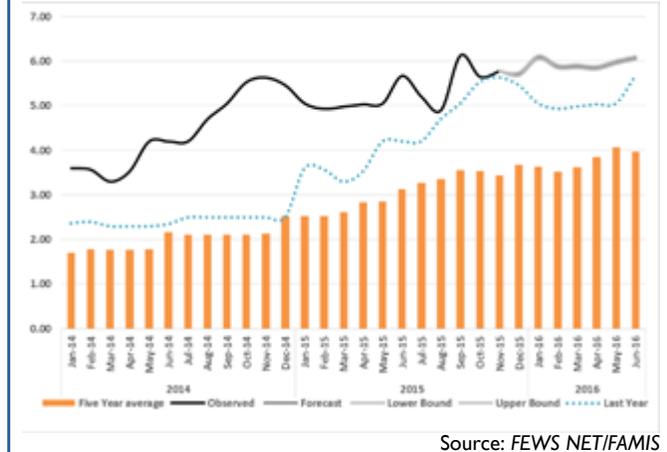
**In December 2015, WFP distributed food assistance to nearly 2.3 million people in Sudan, 2 million via in-kind and 0.3 million people via food vouchers.** The in-kind modalities of food assistance include General Food Distributions, Supplementary Feeding, Blanket Supplementary Feeding, Food for Education, and Food Assistance for Assets. In total, WFP distributed 14,642 ton of assorted food commodities, which was 10 percent higher than planned in December, and disbursed a total USD 262,277 in the form of food vouchers.

Assumptions

From February to October 2016, the projected food security outcomes are based on the following national assumptions:

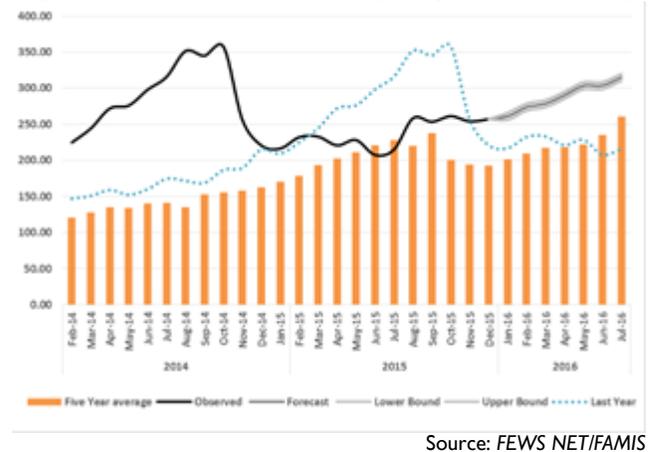
- **In the main cereal-producing eastern parts of the country, sorghum and millet prices are expected to increase seasonably between January and June 2016 (Figure 2),** but will be higher than in 2015 and the recent three-year average. This is attributed to up to 25 percent below-average production of sorghum and millet across the country and high costs of production amidst high demand which is expected to exert upward pressure on prices. The upward trend in prices will be somewhat accentuated by exports to Eritrea and the northern parts of South Sudan especially after the Sudan officially opened its borders with South Sudan in January 2016.
- **In Blue Nile and South Kordofan States,** prices are expected to remain stable instead of declining to their seasonal lows in February. **Prices are then expected to increase seasonably but earlier than normal, in February instead of March, when** many households will start to depend more on the market to access food. The January-to-June cereal prices are expected to be higher than 2015 and the two/three-year average prices due to reduced supply, and restricted access in conflict areas.
- **In deficit-producing areas of North Kordofan, North Darfur, South Darfur and East Darfur,** prices are expected to remain stable instead of bottoming out in February. **Prices are then expected to increase seasonably but earlier in February instead of March,** but the increase will likely be unusually rapid as in the lean season, will most likely start earlier than normal in March/April.
- **Due to falling crude oil prices on the international market in 2015, the governments of Sudan and South Sudan announced in February an agreement to reduce the fees charged for the transportation of oil through Sudanese territory.** Although specific details have not been announced yet, the loss in revenue from these fees will likely worsen the Government of Sudan’s shortage of foreign exchange.
- **Annual wheat imports are estimated at 1,800,000 MT,** which along with relatively large carryover stocks from the 2014/2015 harvest, are expected to moderate increase in prices across most markets.
- **In general, livestock prices are expected to remain average or decrease moderately in most markets, but could decrease significantly in many western areas.** Households in many eastern areas are using carryover stocks of sorghum from last year as livestock feed, and livestock have already migrated from poor pasture areas to moderate pasture areas in the southern parts of the country, South Sudan, and Ethiopia for grazing. The exception to that trend is Kadugli, where there is good pasture and where livestock are being moved to and in El Obeid (a transit point to southern parts of the country).

Figure 2. El Fasher retail millet grain prices, SDG/kg



Source: FEWS NET/FAMIS

Figure 3. Al Gadaref wholesale sorghum prices, SDG/100 kg



Source: FEWS NET/FAMIS

**Labor-to-cereal terms of trade (ToT) are expected to decrease during the first half of the scenario period.** Labor wages likely to decline during March to July due to likely increase in number of people seeking non-agricultural labor in the main urban

areas as a result of below-average harvest. The beginning of rains in July will trigger normal demand for seasonal agricultural labor and recovery of wages. Thus FEWS NET assumes rising staple food prices and/or declining labor wages will lower labor-to-cereal ToT from March to September.

**Seasonal forecasts suggest near average to above-average rainfall is likely between June and September across Sudan.**

With forecasts for the ongoing El Niño–Southern Oscillation (ENSO) to decay toward neutral conditions by mid-2016, it is likely that the June to September main rainy season in Sudan will be near average tending to above average towards the end of season in terms of cumulative rainfall.

**Heightened conflict between SAF and armed oppositions in South Kordofan, Blue Nile and Darfur likely to displace 200,000 – 250,000 people during the scenario period.**

Conflict between SAF and Sudan People Liberation Movement – North (SPLM-N) likely to heighten despite declared cessation of hostilities in South Kordofan and Blue Nile states by government of Sudan and SPLM-N in October 2015 and the formal and informal peace talks between Sudan government and SPLM-N in recent months under the mediation of African Union High Level Implementation Panel (AUHIP). While conflict between SAF and Darfur armed rebel groups have already heightened in Jebel Marra area in Darfur since the beginning of this year. FEWS NET assumes comprehensive peace agreement not likely to be reached in conflict affected areas during the scenario period. And thus, conflict likely to rise during the dry season (February to June) as a result of improved road access during the dry season. The projected heightened conflict is likely to result in 200,000 – 250,000 new displacements during the scenario period.

**Humanitarian food assistance not likely to reach drought affected people during the first half of the scenario period due to funding shortfalls.**

WFP's PRRO (July 2015 to June 2017) is valued at some \$700 million and currently has a shortfall of \$481 million (69 percent), as of February 2016. WFP is in urgent need of \$27 million to provide additional support to those impacted by the El Niño phenomena and as it stands, no funds have been committed to the response. Since no funding has been pledged to WFP for the El Niño response as of February, FEWS NET assumes there will be no scale up of food assistance at least during the first half of 2016. However, humanitarian food and voucher assistance will continue to approximately 3 million protracted IDPs in Darfur, South Kordofan, and Blue Nile states.

**Refugee arrivals from South Sudan to White Nile, South Kordofan, and West Kordofan States are likely to continue.** This is due to the slow implementation of the peace accord signed by conflicting parties in South Sudan, deteriorating economic conditions during the lean season, opening of the border between the two countries and very poor food security conditions in South Sudan. The total number arrivals from South Sudan to Sudan is likely to reach 250,000 to 270,000 by the end of the scenario period.

*Most Likely Food Security Outcomes*

**The below-average harvest is likely to trigger an early onset of the lean season in March 2016, two months earlier than normal.** Most households in areas of poor harvest exhaust their own-produced stocks by the end of February. As a result, more people than usual will rely on market purchase as the main source of food, at a time when seasonal agricultural labor income between November and January was below-average and income from sale of cash crops and livestock is also below-average. This reduced income, coupled with projected staple food price increases of 30 to 35 percent between now and September will reduce household food access during the lean season, particularly in conflict-affected areas. Populations of concern include IDPs and drought-affected poor households South Kordofan, Blue Nile, North Darfur, Kassala, North Kordofan and Red Sea States.

In order to cope, poor households in areas of concern are likely to increase livestock sales, increase collection of charcoal/firewood, consume more wild foods, and increase the number of male household members who migrate to urban areas for non-agricultural labor and send remittances as the main coping strategies during the first half of the scenario period. In June, the onset of seasonal rainfall will increase seasonal agricultural labor opportunities and milk availability in most of these areas. Nevertheless, very poor households (25 to 30 percent of the population) in drought-affected areas will not be able to meet their minimum food and non-food needs without external food assistance and/or engaging in non-reversible coping strategies (e.g. sale of productive livestock), and will therefore be in Crisis (IPC Phase 3) through September 2016. More than 4 million people are expected to be in Crisis (IPC Phase 3) by the start of lean season in March 2016.

IDPs who do not receive food assistance from WFP in conflict-affected areas of South Kordofan, Blue Nile, and Darfur will remain food insecure. They generally need to buy food from markets, but there are few income-earning opportunities and they face restrictions on movement limiting labor migration, reduced access to land to cultivate, and little to no access to humanitarian assistance. Many households with land access had below-average harvests, while others were unable to harvest or store their crops. However, a significant number of protracted IDPs in Darfur will be able to meet their minimum food needs and will remain Stressed (IPC Phase 2!), but only with the presence of in-kind humanitarian food assistance and food vouchers. An estimated 60,000 people that represents 20 to 25 percent of IDPs and poor households in SPLM-N-controlled areas of South Kordofan to have Emergency (IPC Phase 4) levels of food insecurity by the start of lean season in March 2016. Newly conflict-displaced people from Jebel Mara who do not receive food assistance are also expected to be in Emergency (IPC Phase 4) through September 2016.

## AREAS OF CONCERN

### SPLM-N-controlled areas of South Kordofan State

#### Current Situation

**Livelihoods for IDPs and poor residents in SPLM-N-controlled areas are fairly similar, following several years of conflict.** Most of these households have little access to land and agricultural inputs and few livestock. Average livestock ownership in SPLM-N controlled areas is estimated to be 1.3 – 1.5 tropical livestock unit (TLU), with 1 TLU representing the equivalent weight of a single unit of cattle). This represents less than half of average livestock ownership in Government of Sudan-controlled areas. Most income comes from agricultural labor and charcoal production.

#### **The late onset of seasonal rainfall in July 2015 and long dry spells resulted in below-average crop production in South Kordofan.**

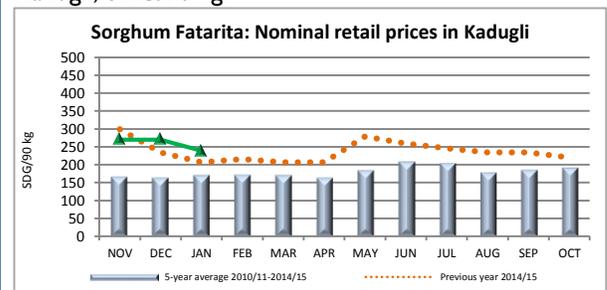
The start of the rainy season in July rather than late May/early June was three to six weeks later than usual in most parts of South Kordofan. Cumulative rainfall totals were mixed, with below-average seasonal rainfall reported in El Gouz locality, but above-average rainfall reported in Talodi locality. According to field reports, dry spells lasting between two and six weeks in August/September disrupted the crop growth in Hablia, Al Gouz, Abbassiya, Kadugli, and Abu Jebaiha localities. Heavy storms and excessive rain in late September/early October destroyed crops, mainly sesame, in Abu Jebaiha locality. In some areas (e.g. Al Gouz, Abbassiya and Habila localities) farmers re-planted crops following long dry spells during June/July.

**Cereal production from the 2015/16 main agricultural season is estimated to be 35 to 40 percent below the five-year average in South Kordofan.** About 1.1 million hectares of sorghum and 97,000 hectares of millet were planted in 2015, of which about 80 percent was harvested with a projected total production of about 127,000 tonnes of sorghum and 34,000 tonnes of millet. This represents about 60 to 65 percent of the five-year average. Production is likely to be lower in SPLM-N-controlled areas due to displacement, insecurity, lack of access to cultivation and lack of seeds and tools.

**Harvests were particularly poor in SPLM-N-controlled Dulami locality in South Kordofan,** where resident populations and about 15,000 internally displaced people and returnees with limited access to farmland also faced widespread failure of sorghum crops due to poor rainfall performance. Below-average harvests are also being reported in parts of Heiban, Um Durain and Thobo localities in SPLM-N-controlled areas of South Kordofan State, as well as parts of Dilling and Al Sunut localities.

**Pasture conditions are near normal, but large concentrations of livestock are putting pressure on pastoral resources.** In GoS-controlled areas, pasture conditions are near normal with 60 percent of households reporting good and 31 percent reporting medium pasture conditions during the rapid assessment of state Ministry of Agriculture in October 2015. However, the failure of animals to migrate northward during June – September due to lack of pasture in the north and earlier (in October) than normal (January/February) migration of animals from North Kordofan, West Kordofan, and White Nile States

**Figure 4.** Nominal price of sorghum, fatarita variety, Kadugli, SDG/90 kg



Source: FEWS NET /FAMIS

have led to overgrazing in South Kordofan State. Some farmers burned pasture around their farms to avoid having animals destroying their crops.

Insecurity related to direct confrontation between SPLM-N and Sudan Armed Forces (SAF) was lower than normal in South Kordofan over the past in mid to late 2015 as a result of formal and informal peace talks between GoS and SPLM-N under the umbrella of African Union High Implementation Panel (AUHIP). However, both **government and SPLM-N mobilized to resume fighting in South Kordofan State following the collapsed peace talks between conflicting rivals in late November 2015 and the onset of the dry season.**

**Staple food prices in SPLM-N-controlled areas are reportedly very high, due to below-average harvests within SPLM-N-controlled areas, restricted trade flows from Sudan government-controlled areas to these markets (particularly in the eastern Nuba mountains), and insecurity in South Sudan.** In government-controlled Kadugli, where sorghum prices are influenced by food aid distribution, sorghum prices in Kadugli market declined seasonally by 12 percent from December to January, but remained 15 percent higher than in January 2015 and 40 percent higher than the five-year average. Millet prices increased by 5 percent between December and January, and were 10 percent higher than in January 2015, and 62 percent above the five-year average.

In December, WFP distributed 1,378 tonnes of assorted food commodities to 128,273 beneficiaries via general food distribution, food for training, school feeding and nutrition modalities of food assistance in GoS-controlled areas of South Kordofan state, but access to SPLM-N-controlled areas is restricted for WFP and other humanitarian agencies.

### *Assumptions*

In addition to the national-level assumptions described above, the following assumptions have been used to develop the most-likely scenario for February through September 2015:

- **IDPs and poor households in SPLM-N-controlled areas of South Kordofan will have lower than normal access to food from own production and sale of crops as a source of income**, due to production losses related to poor seasonal performance and restricted access to cropped areas.
- Household access to agricultural labor income and wild foods are likely to be near average during the second half of the scenario period, due to forecasts for near-average rainfall.
- The recent failed peace talks between conflicting rivals in South Kordofan, as well as improved transportation conditions with the dry season, are likely to drive additional conflict between February and June, the dry season when road movements for ground troops are convenient.
- FEWS NET also assumes the likely rise in hostilities between SPLM-N and SAF during the scenario period will cause **new displacement of about 50,000 to 75,000 during the scenario period**. Most of the new displacement will be within SPLM-N-controlled areas and from SPLM-N-controlled areas to GoS-controlled areas.
- Staple food prices are likely to increase by as much as 35 percent between March and September in government-controlled areas due to well below-average market supply and higher than usual demand on markets. Prices in SPLM-N-controlled likely to be highest and projected to exceed the three times the prices in government-controlled areas.
- Due to protracted and associated decreases in livestock assets since 2011, IDPs and poor households are likely to have limited expandability and purchasing power to cope with the projected poor harvest in SPLM-N-controlled areas.
- Household income from typical sources, such as the sale of livestock and charcoal, are likely to be below average due to higher than usual supply on the market, conflict-related restrictions on trade, and below-average prices.
- **Terms of trade are likely to deteriorate between livestock and cereals and charcoal and cereals between March and September**, due to projected further increases in staple food prices and the expected decline of income from these sources as a result of oversupply and increased competition for income.

- Persistent conflict is likely to prevent humanitarian agencies from delivering emergency assistance to SPLM-N-controlled areas between March and September.
- **Large concentrations of livestock from North Kordofan, West Kordofan, and White Nile States are likely to cause an early exhaustion of pasture and drinking water for animal consumption starting in March 2016.** Animals will then begin seasonal migration to Bahr Al Arab at the border with South Sudan in January, which is one – two months earlier than normal. Other areas of good pasture in SPLM-N-controlled areas will not be accessible for grazing by cattle herders from GoS-controlled areas due to insecurity.

*Most Likely Food Security Outcomes*

The below-average harvest of 2015/16 main agricultural season, sharp increase of staple food prices, protracted displacement and lack of access to humanitarian assistance continue to drive Crisis (IPC Phase 3) outcomes in SPLM-N controlled areas of South Kordofan in February 2016. **Further increases of staple food prices, heightened conflict, the lack of access to humanitarian assistance, and limited coping strategies in SPLM-N-controlled areas will likely result in a deterioration to Emergency (IPC Phase 4) starting with the early onset of the lean season in March 2016.**

The start of the rainy season in June/July should improve household access to agricultural labor, livestock products, and should improve livestock body conditions. However, these improvements come at a time when staple food prices and market demand for staple foods will be at their highest and likely be well above average. As more households sell livestock to access staple foods during the peak of the lean season, livestock prices will continue to be low, reducing terms of trade. Moreover, the rainy season will likely increase the prevalence and cost of treating water borne diseases (e.g. Diarrhea, Malaria). IDPs and very poor households will likely remain in Emergency (IPC Phase 4) through the end of the scenario period in September. By September/October, green harvest, green leaves, and wild foods should improve food access, but will not substantially alleviate food consumption deficits until access to new harvest begins in November.

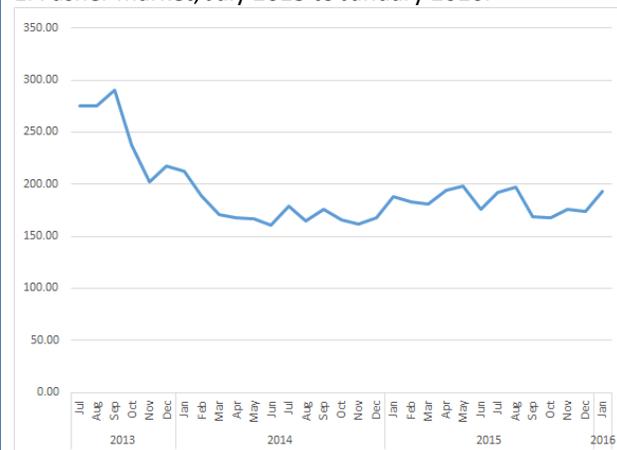
**Poor households in Um Keddada Locality in North Darfur State**

*Current Situation*

**Poor seasonal progress, including a three to four week delay in the start of rains and below-average rainfall, across Um Keddada locality resulted in substantially less crop production than usual.** Total area planted with millet and sorghum in 2015 season was almost 5 percent higher than area planted last year and similar to average of last five-years. However, only 10 – 15 percent of area planted was harvested as a result of significant below average rainfall precipitation. Most crops planted dried-up before ripening was complete.

**Despite significantly below-average harvest of 2015, adequate carryover stocks stabilized prices.** Millet prices (the main staple food) in the nearest market of EL Fasher town in January 2016 is 5 percent lower than last month, similar to the same month last year, however it was 40 percent and 78 percent higher than 2-years average and 5-years average respectively. The relatively stable/declining millet prices in December 2015 compared last month and to the same period last year was due to availability of above-average carryover stocks from the pumper harvest of 2014.

**Figure 5.** Sheep-to-millet terms of trade, kg per head, El Fasher market, July 2013 to January 2016.



Source: FEWS NET /FAMIS

**Um Keddada faces a much larger locality-level cereal deficit than normal.** Total production of cereal in Um Keddada locality in year 2015 is about 360 tonnes and carryover stock from 2014 season was 592 tonnes. Thus, total cereal available for 2015/16 season is 952 tonnes. In a normal year, Um Keddada usually produces about 50 - 60 percent of its annual cereal

requirement, whereas this year locality-level availability will only meet about 10 percent of needs, requiring higher than usual supply in 2016 from eastern and central-surplus producing areas via markets that are poorly integrated.

**In February 2016, livestock-to-millet terms-of-trade remained at levels similar to the recent two-year average (Figure 5).** Despite pasture shortages this year, livestock prices remain relatively stable compared to same period last year and the two-year average. This is most likely due to high domestic demand in central Sudan and for export to Saudi Arabia, as well as normal livestock supply on markets as most households still have stocks from last year and haven't yet started to sell more animals in order to buy food from the market.

**Very poor households, who represent 20 to 25 percent households, have little or no carryover stocks and limited livestock holdings.** Although most households in Um Keddada have above-average carryover stocks from the above-average harvest of 2014/15 season, very poor households have exhausted their own-produced food stocks and have shifted to market purchase as the main source of food as early as January/February 2016.

### *Assumptions*

In addition to the national-level assumptions described above, the following assumptions have been used to develop the most-likely scenario for February through September 2015:

- **Poor and very poor households will have reduced access to food earned through in-kind payment for harvest labor between November 2015 and January 2016, due to well below-average production.** FEWS NET assumes the contribution of payment in kind to the annual food requirement will reduce from 100 – 200 kg per poor household in normal years to 50 – 100 kg during the scenario period.
- **The poor rainfall performance will reduce access to grass type of wild foods (e.g. Koreib and Diffra) normally germinated during the rainy season,** but normal access to berries type of wild foods likely to be maintained during the scenario period, which is normally become available during April - June. Wild foods normally contribute 15 to 20 percent of poor household's annual food requirement in Um Keddada locality.
- **Very poor households will rely on market purchases more than usual in order to access staple foods, many of whom are already purchasing on the market.** Most other households are expected to access more food than usual via carryover stocks, including poor households who were able to carry over one to two sacks of millet from last year. However, below-average production will still result in an earlier than usual exhaustion of stocks for most households starting in March 2016.
- **Price projections for millet on El Fasher market suggest prices will increase by up to 40 percent between March and June to about SDG 620 per 100 sack compared to SDG 400 per 100 kg sack for last five-year average, and will likely increase further between July and September.** Given the very low harvest of 2015 season, cereal prices will start seasonal upward trend by the starting of lean season in March 2015 as supply on markets becomes more limited and households exhaust their stocks and start to rely more on market purchases.
- **Income from crop and livestock sales are likely to be below average between March and June.** FEWS NET assumes up to 25 - 30 percent decline of livestock prices during March to June, the critical pasture deficit period. This will reduce income from sale livestock that normally contribute 15 to 20 percent of annual income for poor households in Um Keddada locality. Poor households have the capacity to increase sale of livestock by selling additional two animals in order to maintain normal levels of income of livestock, which is considered sustainable in order to preserve herd sizes. However, very poor households will not likely have the ability to sell additional livestock without jeopardizing their medium to longer-term ability to maintain stable herd size. In addition, well below-average production in 2015/16 nearly eliminated poor households' ability to access income from the sale of millet, which normally contributes 10 to 15 percent of annual income of poor households in Um Keddada locality.
- **Forecasts for average to above-average rainfall during the May to September rainy season is expected to support near average levels of agricultural activities, including land preparation and planting.** As a result, poor and very poor households' access to seasonal agricultural labor is expected to be normal.

- **Between June and September, forecast average to above-average seasonal rainfall is expected to generate normal pasture availability in relatively secure areas of Sudan, including Um Keddada locality.** Good pasture for animals will improve body weight of animals and improve access to milk during the second half of the scenario period.
- **Food assistance are not likely to reach the drought affected people in Um Keddada locality at least during the first half of the scenario period,** as WFP has not received resources for people affected by the El Niño and/or drought in 2015.

### *Most Likely Food Security Outcomes*

**As February 2016, most of poor households (including the very poor) in Um Keddada locality were facing Stressed (IPC Phase 2) levels of food insecurity** due to loss of food from own production, in-kind payment, and wild foods, coupled with above-average dependency on market purchase with reduced purchasing power due to reduced income from seasonal agricultural labor and sale of crops. By March, very poor households will have already exhausted their food stocks from last year depend on market purchase as staple food increase between March and June, a time when income-earning opportunities are at seasonal lows. The onset of rains in June/July are likely to improve access to milk and income from seasonal agricultural labor, but households will likely still face food consumption deficits or resort to high risk coping strategies (e.g. excessive sale of productive livestock). In areas such as Um Keddada where the prevalence of global acute malnutrition (GAM) for children under five-years-old is persistently high during the lean season, food consumption gaps will likely lead to comparable or higher than usual GAM levels during the 2016 lean season. Food assistance is not likely to reach the drought affected people in Sudan during at least the first half of the scenario period, as WFP has not received resources to assist people affected by the El Niño/drought of 2015. Therefore, food security for very poor households is likely to deteriorate to **Crisis (IPC Phase 3) in Um Keddada from March to September 2016.**

### **Poor households in Hamashkoraib and Talkok localities, Kassala State, Eastern Sudan (Livelihood Zone 3: Eastern Pastoral)**

#### *Current Situation*

In Hamashkoraib and Talkok localities in Kassala State, annual rainfall is usually low and generally insufficient to support rainfed agriculture. **Seasonal performance was particularly poor in 2015, when rainfall started 30 to 40 days later than normal, was unevenly distributed with long dry spells, and was generally below average.** Hamashkoraib, Talkok and neighboring agricultural zones are among the worst affected areas by poor seasonal progress in Kassala State.

**Poor seasonal performance this year resulted in very poor pasture conditions, poor water availability, and increased costs for maintaining livestock herds in main grazing areas, particularly in Hamashkoraib and Talkok localities.** This forced pastoralists to return with their animals from wet season grazing areas in September instead of December, three months earlier than normal. Currently, households are feeding livestock with crop residue and sourcing fodder from neighboring farming livelihood zones. As of January 2016, fodder prices were five to 10 times higher than at the same time in 2015, and much higher than normal at this time of the year. Availability of water for animals is also considered to be very poor this year, as most of *Hafiers* (water reservoirs) in the area were not replenished to normal levels, and pastoralists have started trucking water earlier than usual at extremely high costs compared to normal (SDG 1,500 to 2,000 per month). As a result of these poor conditions and high costs, livestock body conditions are decreasing and households are selling more livestock on the market in order to limit costs associated with maintaining their herds.

**Due to the increased cost of maintaining livestock herds, pastoralists are selling more sheep and goats than usual, pushing down prices and income from the sale of livestock.** Between August 2015 and January 2016, sheep and goat prices continued to decline by five to seven percent per month. Income from livestock is currently 20 to 30 percent lower than normal. The monthly decreases is likely to continue during dry season through May/June 2016. May/June 2016 prices are likely to be 40 to 50 percent below their current levels.

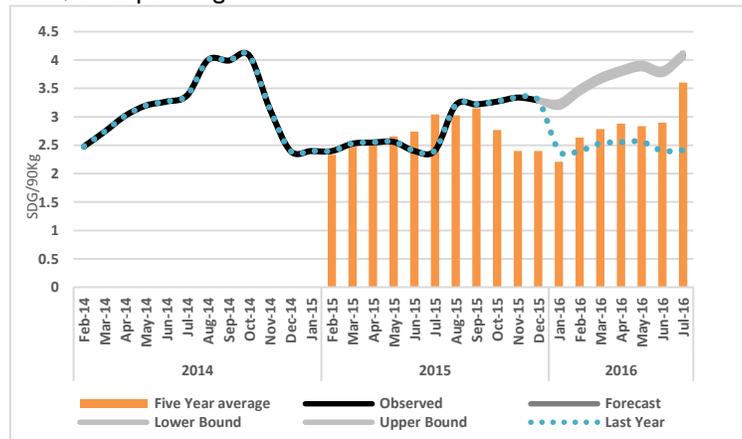
Household income from the sale of agricultural labor has also been below average, due to below-average crop production in the neighboring semi-mechanized and traditional rain-fed areas, where poor groups from the two areas normally seek market supplies and labor opportunities.

Due to decreased access to income from the sale of livestock and seasonal labor, poor households are increasing wood and charcoal production and the collection and sale of fodder as sources of income. However, income from these activities has also been constrained by high competition over limited natural resources and marketing opportunities.

During the post-harvest period in January 2016, staple food prices remained stable at atypically high levels, rather than decreasing as is normal following harvests. This was due to tightened market supplies following below-average 2015/16 production in areas that normally supplying cereal to Kassala. However, market supply shortfalls have been slightly moderated by the availability of above-average carryover stocks from 2014/15. Sorghum prices in Kassala in January were 34 percent higher than in January 2015 and 45 percent above the recent five-year average (Figure 6).

Currently, terms of trade (ToT) between sheep and sorghum continue to be in favor of sorghum traders. Between December 2015 and January 2016, ToT declined by more than 11 percent, this decline is attributed to 15 percent drop in sheep price compared to December 2015, while sorghum price remained relatively stable during the same period.

**Figure 6.** Nominal price of sorghum, fatarita variety, Kassala, Kassala State, SDG per 1 kg



Source: FEWS NET /FAMIS

### Assumptions

In addition to the national-level assumptions described above, the following assumptions have been used to develop the most-likely scenario for February through September 2015:

- **Sorghum demand for local consumption as well as for cross-border trade and animal feed is likely to be far above normal during entire of the scenario period.** Market purchase will be main source of food for majority of households in this area while demand for animal feed is likely to be above normal. This will exacerbate market supplies shortfall situation expected during lean season.
- **Sorghum prices are likely to remain stable between February and March, and then start to increase substantially in April as the lean season begins earlier than usual.** During this period, prices are likely to pursue up to 15 percent monthly increase. By June, prices likely to be between 15 to 50 percent above their current levels and will likely be up to 60 percent above their respective last year and up to 45 percent above the last five-year average. Further increases are likely between July and September.
- A significant fodder gap for livestock in Hamashkoraib and Talkok is expected between January to June 2016.
- **Poor households will have far below-average income from livestock through the scenario period.** Household's income from sales of animal is likely to be far below average, especially for poor households with limited number of animals, due to deteriorating animal's body condition and prices.
- Poor households are likely to heavily engage in self-employment (sale of charcoal and firewood) or gold mining and provide seasonal migratory labor to urban areas or neighboring agricultural zones.

### Most Likely Food Security Outcomes

Despite the expected limited purchasing power of poor households and relatively high cereal prices, most poor households in the area will likely meet their minimum food needs through February/beginning of March 2016, as availability of carry-over stock from last year is likely to moderate expected supplies shortfall and prices increase during this period. Thus, poor households will likely be Stressed (IPC Phase 2) through early March 2016. Household food consumption for poor households will start to deteriorate starting in March/April, mainly due to expected sharp increases of sorghum prices, further deterioration in term of trade between livestock and cereals, households' level of income from livestock as well as from other major sources will be very limited, particularly for poor households and the absence of humanitarian assistances in the area. **Most poor households are likely to face Crisis (IPC Phase 3) between March/April and September 2016.**

### EVENTS THAT MIGHT CHANGE THE OUTLOOK

**Table 1:** Possible events over the next six months that could change the most-likely scenario.

Area	Event	Impact on food security outcomes
All areas	Delay and/or poor rains during upcoming 2016/17 rainy season or outbreak of abnormal animal diseases, due to high concentration of livestock.	Poor seasonal performance during the May to September 2016 rainy season and/or outbreaks of livestock diseases could result in excess livestock mortality and further disrupt pastoralists' migration of livestock. This would likely result in deterioration of food security situation during the second half of the scenario period from Crisis (IPC Phase 3) to Emergency (IPC Phase 4).
Drought-affected households in the Darfurs, North Kordofan, Kassala, Red Sea, White Nile and West Kordofan States	WFP received adequate funding resources to distribute food aid in these areas.	Distribution of aid to people in these areas will result in improved access to food that will lead to improved food security conditions from Crisis (IPC Phase 3) to Stressed (IPC Phase 2!) and gradually to Minimal/None (IPC Phase 1!).
SPLM-N-controlled areas of South Kordofan and Blue Nile States	Peace agreement between government of Sudan and SPLM-N reached and food aid delivered in SPLM-N-controlled areas	Distribution of adequate food aid in SPLM-N-controlled areas will improved food security outcomes of IDPs and poor residents in these areas from Emergency (IPC Phase 4) to Crisis (IPC Phase 3!) and gradually to Stressed (IPC Phase 2!) during the scenario period.
Border states with South Sudan	Failure of the peace agreement between parties in South Sudan to take effect	This could increase the number refugees arriving from Upper Nile and Unity States in South Sudan to White Nile, South Kordofan, and West Kordofan States in Sudan. Increasing insecurity across the border with South Sudan would also likely disrupt access of pastoralists from Sudan who graze their livestock in South Sudan. Due to dry conditions in much of Sudan, these pastoralists would have fewer options to secure access to other areas to graze than usual, if forced to return from South Sudan.

### ABOUT SCENARIO DEVELOPMENT

To project food security outcomes, FEWS NET develops a set of assumptions about likely events, their effects, and the probable responses of various actors. FEWS NET analyzes these assumptions in the context of current conditions and local livelihoods to arrive at a most likely scenario for the coming six months. Learn more [here](#).