Average national aggregate harvest likely, with pockets of well below-average harvests

KEY MESSAGES

- Harvests starting in October, seasonal improvements in livestock productivity, and increased seasonal labor income are improving food security outcomes to Minimal (IPC Phase 1) and Stressed (IPC Phase 2) in most areas. However, very poor seasonal progress in pastoral and agro-pastoral areas of Kassala, northern Gadaref, and parts of North Darfur, are leading to Crisis (IPC Phase 3) outcomes and humanitarian assistance needs between now and mid-2018.

- Food access is also improving among IDPs and poor households in Jebel Marra and SPLM-N-controlled areas of South Kordofan. However, restrictions on access to land, limited agricultural labor opportunities, and continued low asset holdings as a result of conflict continue to limit household productive capacity. Households in these areas will continue to require humanitarian assistance through May 2018.

- Overall, the main season rains performed very well over most parts of Sudan, and national harvest prospects are near average. However, severe mid-season dry spells and well below-average seasonal rainfall resulted in significantly reduced area planted in Kassala and northern Gadaref. Moreover, poor rainfall in these areas and in parts of North Darfur led to very poor regeneration of pasture and water sources for livestock.

SEASONAL CALENDAR FOR A TYPICAL YEAR
NATIONAL OVERVIEW

Current Situation

June to September 2017 seasonal rainfall was above-average over most parts of the Sudan, according to the CHIRPS satellite-derived rainfall estimates (Figure 1), although seasonal performance was very poor in some areas. Significant flooding occurred in some areas where seasonal rainfall was very heavy, particularly during August and September. In areas of White Nile, Gezeira, and Khartoum, localized flooding reportedly affected nearly 100,000 people and caused damage to crops and infrastructure. In addition, field reports suggest that seasonal rainfall was delayed, below-average, and characterized by significant dry spells during the months of June and July in parts of Kassala, northern Gadaref, and parts of North Darfur and North Kordofan. By mid to late September, the Normalized Difference Vegetation Index (NDVI) showed very poor vegetation conditions in these areas, while vegetation levels have been much better in other areas of the country (Figure 2).

Preliminary findings of the inter-agency mid-season assessment carried out in mid-September 2017 indicated the successful establishment of crops in the rainfed and irrigated sectors, with most crops between the late vegetative and flowering stages. It is estimated that 85 – 90 percent of the normal sorghum crop area of about 23 million fedan was planted by mid-September. Nevertheless, field observations confirmed planting was late and well below average in Kassala, northern parts of Gadaref, some parts of North Darfur and north Kordofan states. A shortage of irrigation water was also reported due to poor irrigation maintenance in some parts of Gezeira, Rahad and New Halfa irrigated schemes that has caused wilting of crops.

Outbreak of Fall Armyworm (FAW) has been reported by farmers in Gadaref, Blue Nile, White Nile, and Sennar states. So far, FAW has caused severe damage to maize and sorghum crops in localized areas and has the potential to expand damage to other crops, including the surplus-producing areas of Sudan.

September sorghum and millet prices were, in general, 20 to 45 percent higher than in September 2015, and 50 to 65 percent higher than the recent five-year average. Between August and September, sorghum and millet prices remained stable or increased slightly in most markets in Sudan. For example, wholesale sorghum prices in Gadaref, a major supply market, increased by approximately eight percent (Figure 3). These increases are slightly higher than typical seasonal trends, likely due in part to poor seasonal performance in nearby areas. Market sources indicated the carryover stocks of sorghum held by the strategic grain reserve, commercial farmers, and traders are above average, thanks to the above-average 2016/17 harvest. Prices of locally produced wheat increased seasonally by 10 and 20 percent between August and September across most consumption markets. Prices for local wheat remained stable in the main production markets of Dongola, Kosti and Madani. Current wheat price levels are, in general, 23 percent higher than in September 2016 and 58 percent higher than the recent five-year average.
September levels of goat and sheep prices remained on average 35 - 50 percent higher than in September 2016 and 50 to 65 percent higher than recent five-year average. Livestock prices remained seasonably stable or slightly decreased between August and September in most markets, but goat and sheep prices increased slightly (by five to eight percent) in some of the main urban consumption markets.

Terms-of-trade between sorghum and daily wage labor and shoats have remained generally stable in recent months, as seasonal increases in prices for livestock and wage labor keep pace with the seasonal increase of staple food prices during the peak lean season. Nevertheless, current levels of terms of trade between daily agricultural wage labor and sorghum are generally above average. In Gadaref market, for example, terms-of-trade between labor and sorghum are 20 percent higher than in September 2016 and 10 percent higher than the recent four-year average. By contrast, terms-of-trade between goats and sorghum in Gadaref market in September 2017 were 20 percent lower than in September 2016 and 40 percent lower than the recent four-year average.

According to the Central Bureau of Statistics (CBS) of Sudan government, the monthly inflation rate has increased from 34.61 percent in August to 35.13 percent in September. Sudan’s inflation rate has been steadily increasing over the past, and increases in prices for non-staple foods and non-food items are reducing the purchasing power of the poor households. The Government of the United States of America recently lifted economic sanctions on Sudan, but the impact of this has not yet materialized.

Ceasefires by the Government of Sudan and most armed groups have continued to result in significantly less conflict and related displacement in Darfur, Blue Nile, and South Kordofan during the first nine months of 2017 than during the same period in previous years. A reduction in inter-communal tensions and related displacement in the area has also been reported. In Darfur, about 12,200 people (70 percent of them were verified by humanitarian agencies) were newly displaced across Darfur this year, which is only 10 percent of the number displaced in 2016 and less than 5 percent of the five-year (2012 to 2016) average of annual new displacement in Darfur. The relatively improved security conditions in some parts of Darfur have also encouraged the return of refugees and IDPs. An Inter-agency assessment conducted in August 2017 indicated that approximately 13,000 people have returned to their home villages in Sirba and Kulbus localities in West Darfur state over the past two years. The return areas include Kondobe, Bir Dagig and Ardamata.
IDPs camps and refugees from Chad. A similar pattern of returns was also reported in the Beida locality in West Darfur state, with the bulk of returnees composed of refugees from Chad.

For the first time in several years, aid agencies were able to conduct a rapid inter-agency assessment in East Jebel Marra locality in South Darfur state in September 2017. Field reports suggest more than 100,000 people living in 46 villages continue to be displaced, face significant difficulty accessing land for cultivation, and remain dispossessed of productive assets lost during displacement in 2016. This population includes approximately 62,000 people from the host community, 42,000 protracted IDPs and 1,000 returnees.

By mid-September 2017, approximately 461,250 refugees from South Sudan have arrived in Sudan since December 2013. About 40 percent of these arrived in 2017 due to insecurity and extreme acute food insecurity in South Sudan. Most new arrivals in 2017 have taken refuge in White Nile, East Darfur, South Darfur, South Kordofan, West Kordofan and North Darfur states.

The Food Security and Livelihoods component of the 2017 Sudan Humanitarian Response Plan remains only 6 percent funded. A total of 12.3 million USD has been committed out of estimated requirements of 209.2 million USD, according to UN OCHA's Financial Tracking Service. The overall HRP appeal of 804 million USD is approximately 38 percent funded.

**Assumptions**

The most likely food security scenario for October 2017 through May 2018 is based on the following assumptions:

- **2017/18 harvests.** National cereal and cash crop harvests for the 2017/18 season are likely to be average, with pockets of below-average production in Kassala and parts of northern Gadaref, North Kordofan, and North Darfur.

- **Pasture, water, and browse** are likely to last their seasonally normal amounts of time in most western areas of Sudan. In eastern and central Sudan, atypically high numbers of livestock are expected to migrate from Kassala and Gadaref starting in October, 2-3 months earlier than normal, in search of pasture in the southern cropping areas and to irrigated scheme in New Halfa, putting additional pressure on resources in those areas.

- **Agricultural labor demand.** Seasonal agricultural labor demand is likely to be near average in most areas, but below average in high-producing areas of northern Gadaref where seasonal progress was particularly poor.

- **Conflict.** Conflict between rival factions of the SPLM-N in Blue Nile and South Kordofan states is expected to increase following the end of the rainy season in October and will drive additional displacement through May 2018. Sporadic fighting between SPLM-N and Sudan Armed Forces (SAF) is likely to continue in Blue Nile and South Kordofan states, which is likely to drive additional displacement in October/November. Tribal conflict in Darfur is expected to be lower than in recent years, resulting in less displacement. However, competition over national resources could drive some conflict in North, South, and Central Darfur.

- **Displacement.** IDPs in conflict-affected areas of South Kordofan, Darfur, and Blue Nile states will remain displaced, leading to limited harvests and reduced access to agricultural labor opportunities.

- **Locally produced staple cereal prices.** Sorghum prices are likely to decrease by 15-25 percent between October and December, and start to increase seasonally between December 2017 and May 2018. Sorghum and millet prices are expected to remain 15-20 percent higher than the recent five-year average and 10-15 percent higher than during the same period last year, due in part to increased production costs.

- **Agricultural labor wage rates.** Daily labor wage rates will likely be 5 to 15 percent higher than the same period last year and significantly above the recent three-year average, and will follow seasonal trends.

- **Labor to cereals terms-of-trade.** Terms of trade between daily labor and sorghum during the first half of the scenario period are likely to remain similar to current levels, but will begin seasonal decline during the second half of the scenario period.

- **Livestock prices.** Prices for key livestock, such as goats and cattle, are expected to follow seasonal trends and be approximately 25-30 percent above average during the scenario period.

- **Livestock to cereals terms-of-trade.** Terms-of-trade between livestock and sorghum likely to remain similar to last year and near or slightly above the recent five-year average.

- **South Sudanese refugees.** Flows of South Sudanese refugees into Sudan are expected to continue between October 2017 and May 2018 and are expected to be similar to the same period last year.

- **Macroeconomic situation.** FEWS NET assumes macro-economic conditions related to the high inflation rate and local currency devaluation are likely to persist and will continue to push prices of basic food and services upward during the scenario period.
Most likely food security outcomes

Starting in October, food security for most households in relatively secure areas of Sudan will improve thanks to improved access via own harvests and/or through market purchase from income earned through agricultural labor and the sale of crops. Staple food prices are also likely to decline between October and January as harvests arrive on the markets, further easing household food access. As a result, most areas of Sudan will face Minimal (IPC Phase 1) or Stressed (IPC Phase 2) acute food insecurity between October 2017 and January 2018. However, in areas of Kassala, northern Gadaref, North Kordofan, and North Darfur where seasonal progress in 2017 was worst, reductions in household access to milk from livestock, significant reductions in income from seasonal agricultural labor, and reduced harvests are likely already leading to Stressed (IPC Phase 2) outcomes, and Crisis (IPC Phase 3) outcomes in smaller areas. In Jebel Marra and SPLM-N-controlled South Kordofan, continued restrictions on household cultivation are limiting improvements in household food access from own production and market purchases from agricultural labor income. Food access has improved from Emergency (IPC Phase 4) during the peak of the lean season, but many IDP households will remain in Crisis (IPC Phase 3) through January 2018.

Between February and May 2018, households in most areas will begin to exhaust their food stocks and households will shift to market purchases as their main source of food. During this time, staple food supply will increase seasonally. In addition, households will supplement their income with the collection and sale of firewood, increased sales of livestock, and non-agricultural labor. As a result, most of Sudan will continue to face Minimal (IPC Phase 1) or Stressed (IPC Phase 2) acute food insecurity. However, poor households in the areas of Kassala, North Kordofan, and North Darfur are the worst affected by the poor 2017 rainy season performance, and will continue to face large livelihood protection deficits and moderate food consumption gaps, and will be in Crisis (IPC Phase 3). Meanwhile, IDPs and poor households in areas of Jebel Marra and SPLM-N-controlled South Kordofan that are inaccessible to humanitarian agencies will likewise continue to face food consumption gaps and will be in Crisis (IPC Phase 3) between February and May 2018.

AREAS OF CONCERN

IDPs in Sudan People Liberation Movement – North (SPLM-N) controlled areas of South Kordofan State

Current Situation

The overall security situation across Sudan People Liberation Movement-North (SPLM-N)-controlled areas of South Kordofan remained calm in October 2017. No direct fighting has been reported between SPLM-N and SAF in the area since the declaration of the unilateral six-month ceasefire by both conflicting parties in January 2017. However, population movements between GoS and SPLM-N areas, households’ ability to access cultivatable land and labor opportunities in GoS-controlled areas, and trade flows into SPLM-N area remain constrained. In addition, there is no humanitarian access to IDPs or conflict-affected people in these areas.

The June to September 2017 rainy season performed well in most areas of South Kordofan, including SPLM-N-controlled areas. Rainfall began earlier than normal (end of May-mid-June), was above average in terms of cumulative amounts, and was well distributed over time. According to the Sudan Meteorological Agency (SMA), cumulative seasonal rainfall across South Kordofan was near to above normal, at more than 800 mm.

IDP access to cultivatable land remains highly constrained by displacement, and most IDPs are limited to near-farm production (jubraka). Nevertheless, IDPs households reportedly planted larger areas of land, particularly compared to last year, but much less than in pre-conflict years. Overall performance of cultivated crops is reported to be good as of late September 2017.
Cereal prices in SPLM-N areas, such as Heiban and Um Dorain, remained high (SDG 1965 and 1432 per 90 kg sack, respectively) in September 2017. These prices are almost three times those observed in nearby GoS areas. In Dallami and Western Kadugli, prices were relatively lower (SDG 870 and 570 per 90 Kg sack, respectively) compared to other SPLM-N areas, but are still nearly double those prices observed at the same time last year. During market day, household members from SPLM-N areas come to nearby markets in GoS areas and will be allowed to return with very limited quantities of different items, including staple cereals, for individual household use.

Terms of trade between daily wage labor and sorghum in GoS-controlled Kadugli market are approximately seven percent higher than in September 2016, and 17 percent higher than the recent four-year average (Figure 4). ToT increased approximately five percent between August and September 2017, increasing from 16.3 kg of sorghum/day labor to 17.14 kg of sorghum/day. This is mainly attributed to the increased demand for agricultural labor for weeding activities, while sorghum prices remained stable at the rate of 4.6 SDG per kg. This has encouraged more people from SPLM-N areas to continue seeking labor opportunities in GoS areas despite movement constraints.

Goat prices are above average in Kadugli market, but are much lower in nearby SPLM-N areas. In Kadugli market, goat prices are generally 25 to 35 percent higher than in September 2016 and 55 to 65 percent higher than the recent five-year average. In September, the average price of goats in Kadugli market was approximately 850 SDG/head. In SPLM-N areas, there are no official reports on livestock prices. However, interviews with key informants from the area indicated that households are selling livestock at very low prices (estimated at half the prices in GoS areas) to purchase cereals, as they are unable to take their animals to GoS areas where they can get better prices.

Despite the slight improvement in the food security situation, many IDP households in SPLM-N-controlled areas of South Kordofan are still engaging in extreme coping strategies. These include depending on women and children migrating in search of labor, sending young children to work or to live with relatives in the main towns in GoS areas which resulted in an increased number of homeless and street children in Kadugli town, reduce expenditure on other non-food essential services such as health, education and other household’s requirements, based on field reports from the recent joint mid-season assessment.

Assumptions

In addition to the national assumptions described earlier, the following assumptions have been made:

- **Agricultural production**: Based on seasonal performance to date, harvests are expected to be average tending to above average.
- **Sorghum prices**: In GoS-controlled areas, sorghum prices are expected to decline seasonally between October 2017 and March 2018, before gradually increasing seasonally between March and May (Figure 5). Sorghum prices during the scenario period are likely to remain similar to last year and 50 percent above the recent four-year average. In SPLM-N areas of South Kordofan state, sorghum prices in SPLM-N areas of South Kordofan are likely to remain similar to last year’s levels, and approximately three times higher than in nearby GoS areas.
- **Livestock prices**: Livestock prices in South Kordofan are expected to remain stable at their current levels during the entire scenario period, this mainly due to the good availability of pasture and water this year and the continued high demand for local consumption. In SPLM-N areas, prices likely to remain far below their respective in GoS area due to restricted access to main markets.
- **Terms of trade**: Labor to sorghum ToT is likely to remain 20 to 25 percent above last year and the five-year average during the scenario period.
• **Conflict/insecurity:** Tension between the GoS and SPLM-N and among conflicting SPLM-N conflicting factions is likely to continue, which is likely to result in some conflict incidents, displacement, and disruption to livelihood activities during the scenario period.

• **South Sudanese refugees:** Influxes of South Sudanese refugees to some SPLM-N’s areas are likely to continue to increase as the rainy season ends and road access improves.

• **Humanitarian assistance:** No humanitarian assistance is planned, funded, or likely to be delivered to SPLM-N controlled areas of South Kordofan during the scenario period.

**Most likely food security outcomes**

Food access for IDP households in SPLM-N-controlled areas of South Kordofan has improved since the peak of the 2017 lean season. These households are currently able to access agricultural labor opportunities at higher levels than in 2016 due to favorable performance of the 2017 rainy season. However, income from this source remains lower than in pre-conflict years, due to continue limitations on population movements. IDP households also continue to earn income from the collection and sale of wild food and forest products. Market purchases using this income remains a source of food for IDPs, who are also seeking to supplement their food access through early consumption of *jubraka* crops, consumption of wild foods, and in-kind support from relatives. **Even still, IDP households will likely face large livelihoods protection deficits in line with Crisis (IPC Phase 3) acute food insecurity between October 2017 and January 2018.**

Between February and May 2018, IDP households are likely to exhaust their stocks of own-produced foods, and will begin to rely more heavily on non-agricultural labor income once harvests are complete. Collection and sale of wild foods and forest products will continue, although wild foods will likewise start to become less available as the dry season continues. Market purchases, gifts, and community support will continue to be an important source of food for IDPs. **During this time, households will continue to face significant livelihoods protection deficits and food consumption gaps maps will begin to grow, and IDPs will likely remain in Crisis (IPC Phase 3).**

**Eastern Pastoral Livelihood Zone (SD-03), Hamashkoraib and Telkok localities, Kassala state**

**Current Situation**

Seasonal performance was very poor across much of Kassala State, despite satellite-derived rainfall estimates indicating above average rainfall. Throughout much of the June to September 2017 season, satellite-derived rainfall estimates seemed to suggest rainfall over Kassala State was average or above average. However, satellite-derived vegetation estimates, such as the Normalized Difference Vegetation Index, showed persistently well below-average levels of vegetation across much of the state, including Hamashkoraib and Telkok localities. Additional evidence corroborates poor seasonal performance in these areas. For example, the Sudan Meteorological Agency estimates June to September rainfall averages approximately 150 in these two areas. However, rain gauge estimates from the Food Security Technical Secretariat (FSTS) of the state Ministry of Agriculture, estimate total seasonal rainfall at only 25 mm and 73 mm, respectively in Hamashkoraib and Telkok localities.

During the inter-agency mid-season assessment in September 2017, field observations confirmed planting of crops was delayed and well below average, as were regeneration of water and pasture resources. Preliminary findings of the inter-agency mid-season assessment in September 2017 indicated area planted for sorghum, was 50 to 60 percent below average in Kassala state due to shortage of rainfall. Pasture and water conditions are better than during the dry season, but below normal at this time of the year, when pasture and water is normally abundant. Pastoralists from the area started seasonal movement for grazing in the southern cropping areas of Gadarif and Kahsm Al Griba areas and the irrigated scheme of New Halfa 2-3 months earlier than normal in September 2017. Better-off households tend to move longer distances in order to search for pasture and water, but whereas mobility for poor households is more limited.

**Body conditions of goats, sheep, and some camels, the most important species of livestock kept in this zone, are below average in Hamashkoraib and Talkok due to poor pasture conditions.** Sheep and goats are most severely affected due to a lack of mobility.
Poor livestock body condition and anticipated pasture and water shortages are leading households to sell more livestock than usual on the market, driving down the price. According to the FSTS bulleting of Kassala state, goat, sheep and cow prices in September 2017 were down 56%, 23% and 10%, respectively, September compared to August 2017. Livestock prices in Kassala likely to remain similar to average during the first half of the scenario period but likely to decline below average levels during the second half of the scenario period. Currently prices were slightly above average.

Sorghum prices in Kassala are 12-30 percent higher than in September 2016 and similar to the five-year average. Prices of sorghum have increased since July 2017 in all markets of Kassala state. Fatarita and Akalamoy varieties of sorghum have increased by 9% and 21% respectively between July and August 2017 in part due to the poor prospects of the ongoing season, which has encouraged traders to hold their stocks.

Seasonal progress has likewise been very poor in areas where household members migrate in search of agricultural labor opportunities, such as in agro-pastoral areas of Kassala and in high-producing areas of northern Gadaref. Qualitative impressions from rapid field assessments suggest the number of days of agricultural labor that poor households are currently able to access may only be two-thirds of what is typical for this time of year. As a result, income from agricultural labor is currently below average. Average daily agricultural labor wage rates in Kassala town for the month of September are SDG 70 per day.

Assumptions

In addition to the national assumptions described earlier, the following assumptions have been made:

- **Livestock migration**: Households are likely to migrate their livestock are away from the zone between October and December, rather than February-April, as is typical.
- **Milk access**: Household access to milk will be below average due to a combination of early migration of livestock away from the homestead and above-average sales of animals.
- **Sorghum prices**: Sorghum prices are expected to decrease in line with seasonal trends between October and December 2017 and then increase slightly more quickly than usual between January and May 2018. Overall, sorghum prices are expected to remain 10 to 20 percent above average (Figure 6).
- **Livestock sales and prices**: Households will sell more livestock than usual in anticipation of very poor pasture availability and high fodder prices, particularly between March and May 2018. As a result, livestock prices will be below average.
- **Terms of trade**: Terms of trade between daily wage labor and sorghum are likely to remain stable or slightly increase between October and December and then decrease during the second half of the scenario period. Terms of trade during the scenario period will be similar to last year and the recent five-year average.
- **Humanitarian assistance**: No humanitarian assistance is planned or likely to be delivered into the area during the scenario period.

Most likely food security outcomes (talk nutrition outcomes)

Sale of charcoal and wood, seasonal migration for agricultural labor and gold mining are currently representing the main sources of income for poor households in Hamashkoraib and Talkok. This is mainly because livestock and livestock product sales are very limited for the poor groups as a result of low prices of animals and poor animal conditions. These low levels of income are
leading to reduced purchasing power, even as market purchases are becoming an even more important source of food for poor households. In addition, access to milk from livestock is below average, as livestock have been migrated away from the zone 2-3 months earlier than normal. As a result, poor households are facing food consumption gaps that will likely between October 2017 and January 2018, during which time they will face Crisis (IPC Phase 3) outcomes.

Food consumption is likely to deteriorate between February and May 2018, as staple food prices increase seasonally and terms of trade begin to decline. FEWS NET expects increased numbers of households to sell more livestock than is usual, send extra household members in search of migrant labor, engage in gold mining, and to engage in negative coping strategies, such as withdrawing children from school. Between February and May 2018, poor households will remain in Crisis (IPC Phase 3).

**EVENTS THAT COULD CHANGE THE OUTLOOK**

Table 1. Possible events in the next six months that could change the outlook.

<table>
<thead>
<tr>
<th>Area</th>
<th>Event</th>
<th>Impact on food security conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPLM-N-controlled areas of South Kordofan and Blue Nile States</td>
<td>Peace agreement between government of Sudan and SPLM-N and food aid delivered into SPLM-N areas</td>
<td>Distribution of adequate food aid in SPLM-N-controlled areas will lead to improved food security outcomes of IDPs from Crisis (IPC Phase 3) to Stressed (IPC Phase 2).</td>
</tr>
<tr>
<td>IDPs form Jebel Marra conflict affected areas in Darfur</td>
<td>Peace agreement between government of Sudan and Darfur rebel groups reached and food aid delivered to all affected people and access to livelihood options improved</td>
<td>Distribution of adequate food aid in areas hosting IDPs and improved access to livelihood options will lead to improved food security outcomes of IDPs in these areas from Crisis (IPC Phase 3) to Stressed (IPC Phase 2).</td>
</tr>
<tr>
<td>Drought-affected households in Kassala</td>
<td>Adequate funding and resources to distribute food aid to poor households in these areas.</td>
<td>Distribution of food 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).</td>
</tr>
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**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 eight months. Learn more here.