

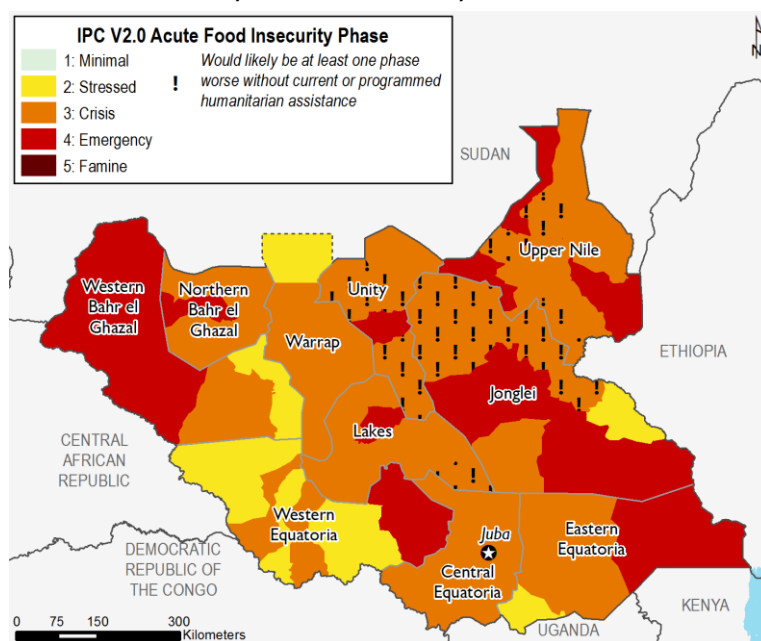
## *Famine (IPC Phase 5) remains likely in the absence of assistance*

FEWS NET produces forward-looking food security analysis and IPC compatible mapping several times a year for 30 countries, including South Sudan. FEWS NET is a member of South Sudan's multi-stakeholder IPC Technical Working Group and an active participant in national IPC analysis workshops in South Sudan. The map and classifications in this report use IPC standards and methods, but do not necessarily reflect a consensus view of the national IPC Technical Working Group, IPC partners, or the Government of the Republic of South Sudan. However, this report was reviewed by the South Sudan IPC Technical Working Group prior to publication. The most recent national IPC analysis was released in February 2018.

### KEY MESSAGES

- An estimated 5.3 million people, 48 percent of the population, are currently facing Crisis (IPC Phase 3) or worse acute food insecurity, despite the harvest and continued, large-scale assistance. Compared to past IPC analyses, this is the highest proportion of the population to be in need of emergency humanitarian assistance during the post-harvest period, and the first time no area is classified in Minimal (IPC Phase 1).
- In the most likely scenario, which assumes typical seasonal deterioration and the continuation of humanitarian assistance at planned levels, widespread Crisis (IPC Phase 3) and Emergency (IPC Phase 4) outcomes are still expected. Humanitarian assistance is likely to prevent more extreme outcomes in many areas. However, assistance is expected to meet less than 50 percent of the estimated need, and access to other food sources will be extremely low throughout the lean season. Based on this projection and the severity of acute food insecurity during the 2017 lean season, it is likely some households will be in Catastrophe (IPC Phase 5) during the upcoming lean season even in the presence of assistance.

### Current food security outcomes, February 2018



Source: FEWS NET

FEWS NET classification is IPC-compatible. IPC-compatible analysis follows key IPC protocols but does not necessarily reflect the consensus of national food security partners.

- In a worst-case scenario of a persistent absence of food assistance over a large area, Famine (IPC Phase 5) would be likely because this absence of assistance would remove a primary food source and would likely drive increased levels of conflict over remaining scarce resources. In turn, higher levels of conflict would increase movement restrictions, preventing households from accessing food from other sources. Given current food security outcomes and past conflict trends, areas of greatest concern include central and southern Unity, northwestern Jonglei, and Wau of Western Bahr el Ghazal. However, given the volatile nature of the current Emergency, and that food security can deteriorate rapidly among populations who face extreme movement restrictions, Famine (IPC Phase 5) remains possible in many areas of the country.
- Given the continued risk of Famine (IPC Phase 5) and projections of extreme levels of acute food insecurity throughout 2018, large-scale humanitarian assistance above levels currently planned is needed urgently to save lives. Further, assistance should be complemented with unhindered humanitarian access and action to end the conflict.

### ***Extreme acute food insecurity expected in 2018 and Famine (IPC Phase 5) likely in the absence of assistance***

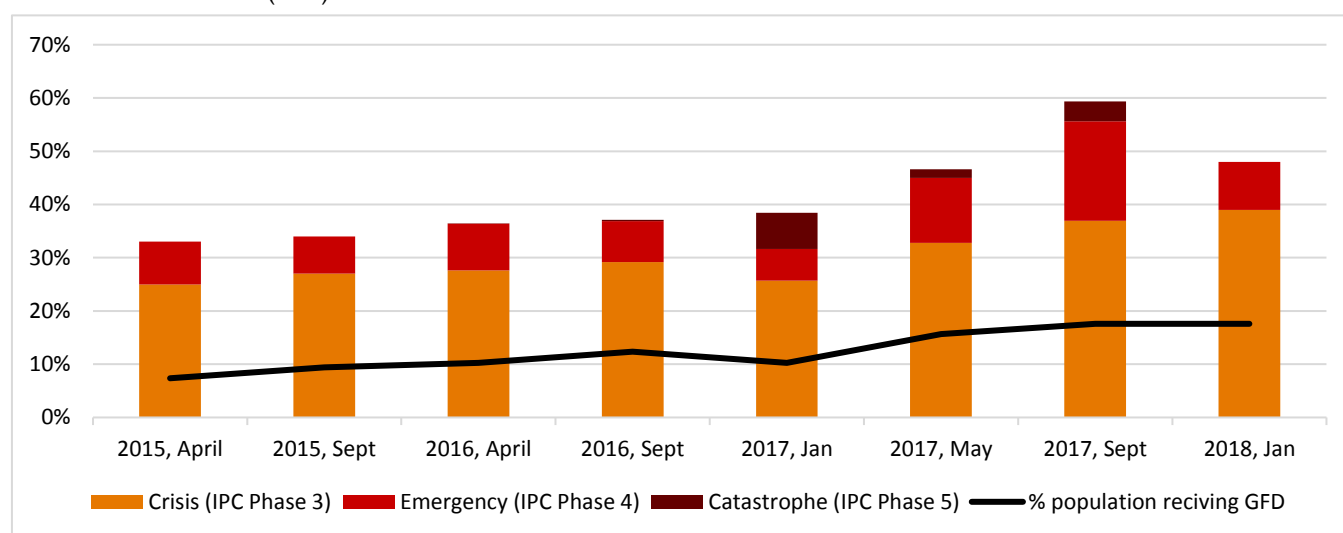
An estimated 5.3 million people are currently facing Crisis (IPC Phase 3) or worse outcomes, despite large-scale humanitarian assistance and availability of some harvests. This is a significantly higher percentage of the population than was estimated to be in need at the same time last year, during the 2017 post-harvest period (Figure 1). Counties that have experienced extreme food insecurity for several years, including those in Greater Upper Nile, continue to face Crisis (IPC Phase 3) and Emergency (IPC Phase 4) outcomes. However, food insecurity is increasingly severe across wide areas of Greater Bahr el Ghazal and Greater Equatoria.

Four years of wide-spread conflict across South Sudan is eroding the capacity of households to meet their basic food needs. Even in the most-likely scenario, which assumes the delivery of assistance to 2.5-3.3 million people a month, many households will still face extreme food consumption gaps. This is due to the fact that assistance at current levels meets less than half of the estimated population in need. Most households lack access to sufficient food through other sources, given that local production is well below pre-crisis levels and extremely high prices are preventing households from purchasing even minimal amounts of basic staple foods. Although Famine (IPC Phase 5) is not the most likely outcome due to the expected presence of humanitarian assistance, it is still likely households in many counties will be in Catastrophe (IPC Phase 5). This is based on the expectation that the 2018 lean season will be similar to, if not worse than, the 2017 lean season, and data from the 2017 lean season that indicates even with large-scale assistance across the country, [some households were in Catastrophe \(IPC Phase 5\) last year](#).

In a worst-case scenario of a persistent absence of food assistance over a large area, Famine (IPC Phase 5) would be likely because this absence of assistance would remove a primary food source and would likely drive increased levels of conflict over remaining scarce resources. In turn, higher levels of conflict would increase movement restrictions, preventing households from accessing food from other sources. Given current food security outcomes and past conflict trends, areas of greatest concern include central and southern Unity, northwestern Jonglei, and Wau of Western Bahr el Ghazal. However, given the volatile nature of the current Emergency, and that food security can deteriorate rapidly among populations who face extreme movement restrictions, Famine (IPC Phase 5) remains possible in many areas of South Sudan.

Assistance well above 2017 levels and unhindered humanitarian access is needed urgently to prevent the loss of lives. Further, given the drivers of extreme acute food insecurity are expected to persist, it is unlikely food security outcomes will improve significantly after the projection period. Households' ability to engage in typical livelihood activities is unlikely to improve with the continuation of conflict. As a result, extreme levels of food insecurity, and the need for large-scale humanitarian assistance, are expected to continue beyond 2018. For long-term improvements to food security in South Sudan and an end to the persistent risk of Famine (IPC Phase 5), urgent action to end the conflict is needed.

**Figure 1.** IPC-estimated percentage of South Sudan's population in Crisis (IPC Phase 3) or worse and estimated population receiving General Food Distribution (GFD)



Source: South Sudan IPC Technical Working Group

## NATIONAL OVERVIEW

### Current Situation

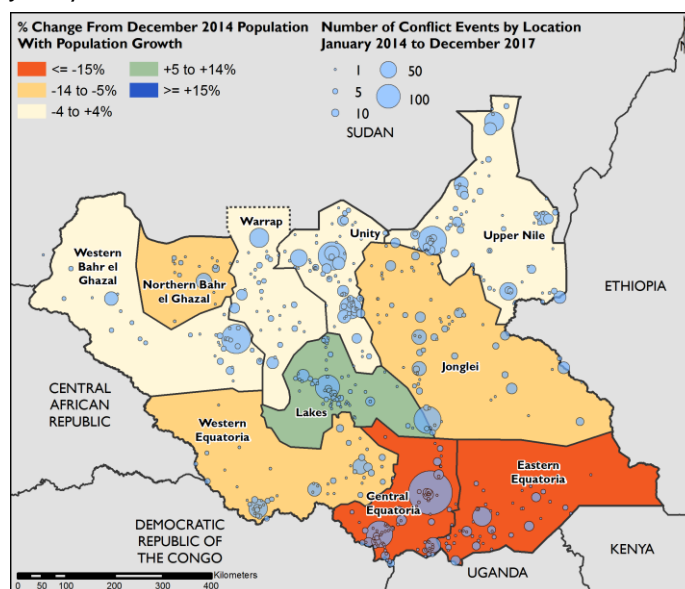
According to the recently-released [South Sudan IPC analysis](#), nearly half of the country's population is facing food consumption gaps or only meeting their basic food needs through unsustainable coping, despite the availability of some harvests and large-scale humanitarian assistance. Widespread conflict, which has persisted for over four years, continues to cause the loss of life, repeated displacement, disruption of key livelihood activities, and the deterioration of macroeconomic conditions. As a result, less than half of the population is able to produce, collect, or purchase sufficient food to meet their basic needs.

Despite the signing of the Cessation of Hostilities Agreement (COHA) in December 2017, armed conflict between Government forces and opposition groups persists across the country, most notably in parts of [Unity](#), [Western Bahr el Ghazal](#), [Upper Nile](#), [Jonglei](#), [Central Equatoria](#), and [Eastern Equatoria](#). Inter-communal conflict is also recurring in [parts of Warrap](#), [Lakes](#), and [Jonglei](#). An estimated 1.82 million people remain internally displaced, many of whom have been displaced more than once since December 2013. Conflict has also forced roughly 1.96 million people to flee the country. According to population estimates conducted by FEWS NET, in collaboration with partner organizations, the displacement of people out of South Sudan is outpacing the natural growth rate, resulting in a net loss of population since 2014 (Figure 2).

In addition to widespread displacement, conflict continues to limit household engagement in typical livelihood activities. The 2017/18 Crop and Food Security Assessment Mission (CFSAM) reports production was below last year and the five-year average due to conflict-related disruptions, crops losses from Fall Armyworm, and the continued outflow of people from South Sudan. CFSAM estimates 2017/18 cereal production at 764,100 tons, 7.5 percent lower than last year and 14 percent below the five-year average. When accounting for a lower population in 2017 than 2016, as the CFSAM report does, per capita production is still lower than last year. Per capita production declined ( $> -10\%$ ) in 24 counties, indicating harvests at the household level are lower than last year in many areas. Data from the Food Security and Nutrition Monitoring System (FSNMS), collected between December and January, indicate households harvested between one and five months of cereal. It is expected most households either depleted stocks from these harvests in January or will deplete stocks between February and March.

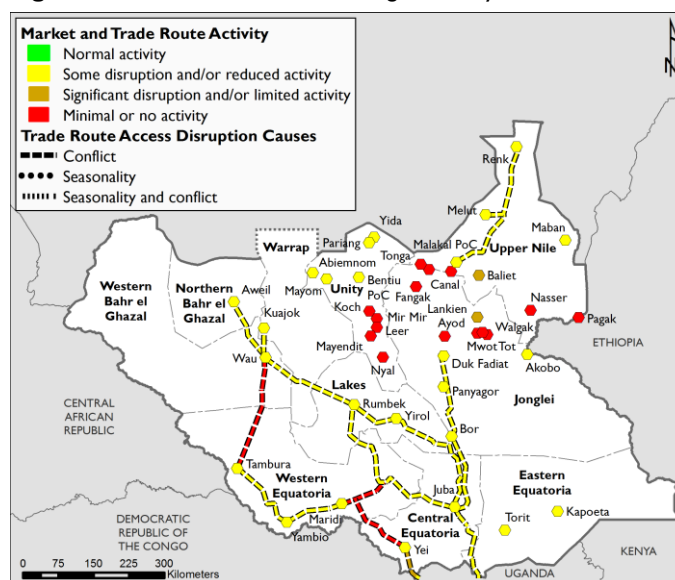
The ongoing conflict also continues to drive very poor macroeconomic conditions. The production of crude oil, South Sudan's key export and source of foreign currency earnings, remains at 130,000 barrels/day, 60 percent lower than pre-crisis production levels. Reduced production and low international oil prices have limited foreign currency earnings for several years, driving persistent depreciation of the local currency. The exchange rate of the South Sudanese Pound (SSP), which was roughly 5 SSP/USD prior to the outbreak of conflict, has depreciated to 260 SSP/USD as of mid-February.

**Figure 2.** Conflict incidents and estimated population change, January 2014 to December 2017



Source: FEWS NET; ACLED

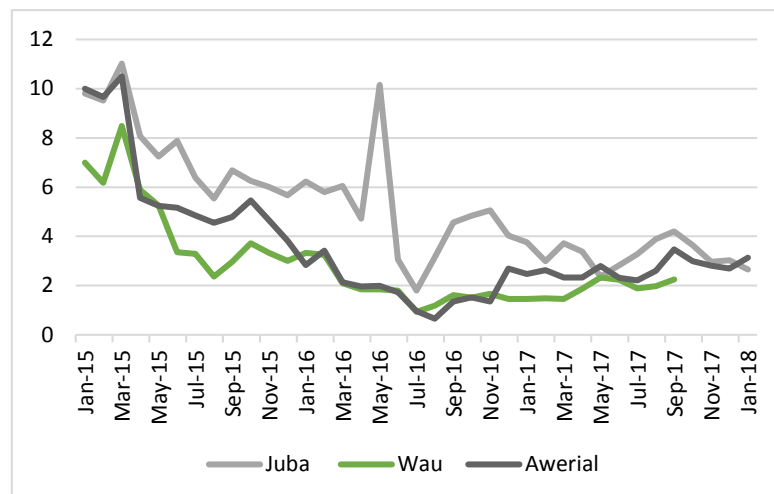
**Figure 3.** Market and trade functioning, February 2018



Source: FEWS NET

Trade flows and market functioning are below pre-crisis levels (Figure 3) due to insecurity along trade routes, low domestic production, and high transportation costs. In Greater Equatoria, the Nimule-Juba road remains the only functioning supply route from Uganda, although occasional incidents along this route make trade inconsistent and total volumes traded are low. Sorghum imports from Uganda in the fourth quarter of 2017 were 28 percent below volumes imported during the 2016 fourth quarter and 15 percent below the four-year fourth-quarter average. In Greater Bahr el Ghazal, key informants report that informal imports from Sudan are higher than last year. In Greater Upper Nile, due to seasonal improvements and improved security along the road from Renk, trade flows to interior counties are higher than recent months, though still below last year.

**Figure 4.** Labor-to-sorghum terms of trade in key markets, 2015-2018



Source: WFP data

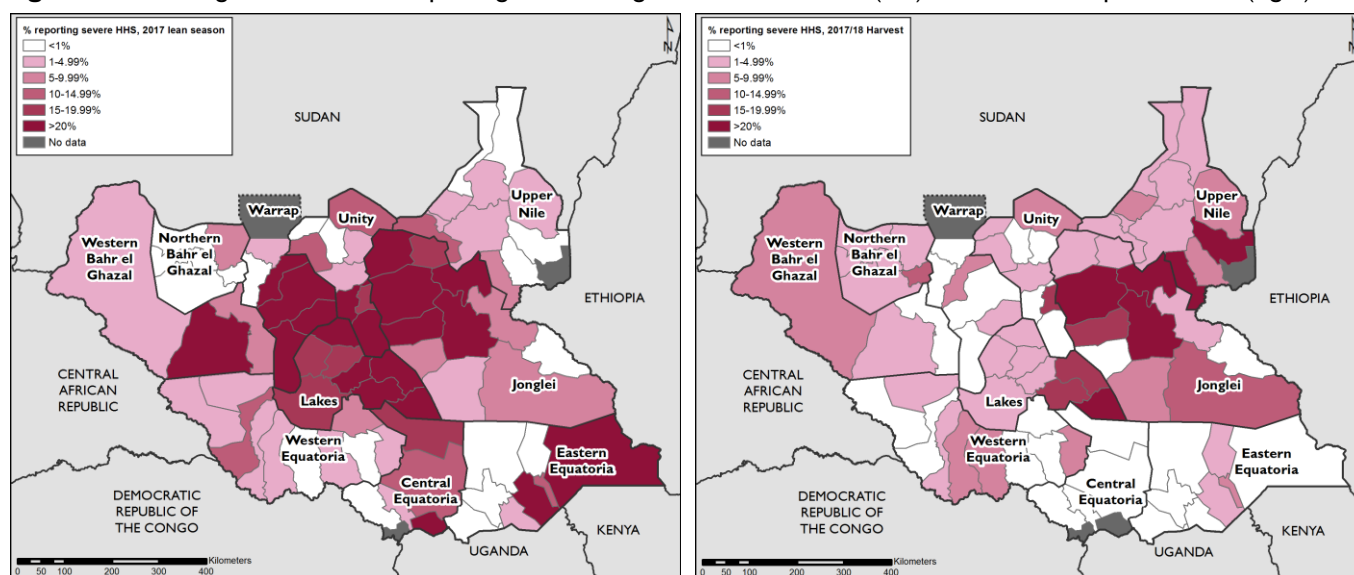
The rate at which staple food prices are increasing has slowed during the past year due to declining effective demand. Wage rates have not kept pace with staple food price increases and households have continuously decreased the amount of food they purchase from markets. Rapid assessments conducted by FEWS NET in January and February in Rumbek Centre, Cueibet, Rumbek North, Twic East, Duk, Kapoeta South, and Kapoeta North found that many households lack the capacity to purchase more than small quantities of food due to extremely high prices. Compared to the 2012-2017 five-year average, staple food prices in January were 300-500 percent above average. However, given that extremely high prices in 2016 and 2017 are pushing up the five-year average, this comparison doesn't fully reflect the scale of price increases: relative to the 2011-2015 average, cereal prices have increased 2,000-3,000 percent. Household purchasing power, as measured by labor-to-sorghum terms of trade, is stagnant at low levels of 2-4 kilograms of cereal for a day's labor (Figure 4).

According to FSNMS Round 21, approximately 50 percent of the population reported owning livestock, and approximately 48 percent of those owning livestock are currently milking at least one animal. This implies relatively low access to milk across the country, with only 25 percent of the population accessing milk from their livestock in December. Only 10 percent of surveyed households indicated livestock is their primary source of food or income.

Humanitarian assistance continues to be a key source of food for many households in South Sudan. Between 1.8 million and 2.5 million people were reached a month between October and January with food assistance between a half and full ration. The majority of assistance is being distributed in Greater Bahr el Ghazal and Greater Upper Nile.

Food security has improved slightly compared to the 2017 lean season. According to FSNMS data, the percentage of households reporting severe hunger on the Household Hunger Scale (HHS) has declined in many areas between the lean season and post-harvest period (Figure 5). Despite the seasonal decline, households across the country continue to report experiencing moderate or severe hunger. Furthermore, over 50 percent of the population reported a poor Food Consumption Score (FCS) in 56 counties, indicating both low consumption and a poor quality of diet.

Among SMART surveys conducted between September and December, the Global Acute Malnutrition (GAM), as defined by weight-for-height z-score (WHZ) was 'Critical' (GAM (WHZ)  $\geq 15\%$ ) in seven of the 13 surveys: Abyei, Akobo West, Pibor, Mayendit, Kapoeta East, Wau, and Akobo East. During the same months in 2016, GAM (WHZ) was 'Critical' in seven of 14 SMART surveys. However, Pibor is the only county where a SMART survey was conducted during these months in both years, and the GAM (WHZ) was 24.4 percent (21.6-31.8) in October 2016 and 26.8 percent (22.8-31.2) in October 2017, showing continued high levels of acute malnutrition indicative of Emergency (IPC Phase 4). The number of children under five who were severely malnourished was also very high in Abyei (SAM (WHZ) 5.9%), Akobo West (SAM (WHZ) 4.9%), and Pibor (SAM (WHZ) 8.0%). The non-trauma Crude Death Rate (CDR) was indicative of Crisis (IPC Phase 3) (CDR = 0.5-0.99) in Akobo West, Pibor, and Mayendit and indicative of Emergency (IPC Phase 4) (CDR = 1.0-1.99) in Panyijiar, Mvolo, Kapoeta East, and Ikotos.

**Figure 5.** Percentage of households reporting severe hunger, 2017 lean season (left) versus 2017/18 post-harvest (right)

Source: FSNMS Rounds 20 (2017 lean season) and 21 (2017/18 post-harvest) data

These results of available food security, nutrition, and mortality data all indicate persistent Crisis (IPC Phase 3) and Emergency (IPC Phase 4) outcomes during the post-harvest period, typically the most food secure time in South Sudan. 2017/18 is the first post-harvest period in which no counties are likely in Minimal (IPC Phase 1), indicating year after year deterioration of food security across South Sudan. In addition to the fact that post-harvest outcomes are severe, FSNMS data suggests that the proportion of households in Crisis (IPC Phase 3) or worse is higher in some areas than at the same time last year, prior to the very extreme 2017 lean season. The most extreme outcomes exist in Greater Upper Nile, where humanitarian assistance is preventing worse outcomes in many counties and Crisis (IPC Phase 3!) persists, though several other counties are in Emergency (IPC Phase 4).

### Assumptions

The February to September 2018 most likely scenario is based on the following national-level assumptions:

- Despite the signing of the [Cessation of Hostilities Agreement \(CHOA\)](#) and ongoing peace talks, intermittent clashes between Government forces and armed opposition groups are expected to [continue throughout the outlook period](#) in parts of Unity, Upper Nile, Jonglei, Central Equatoria, and Western Equatoria. In Northern Bahr el Ghazal, Warrap, Lakes, and parts of Jonglei, inter-communal conflict is also expected to persist.
- Further displacement is likely due to continued conflict, and some households are likely to be displaced repeatedly. Some households who fled to neighboring countries are expected to [return to their places of origin](#) in South Sudan during the outlook period, though the number of households returning will be low. Therefore, further net out-migration is expected.
- Macroeconomic conditions are expected to remain very poor and further deteriorate throughout the outlook period due to ongoing conflict-related disruptions to oil production, trade, and other economic activities. Oil exports are expected to remain at current levels of 130,000 barrels per day, and the current account balance is expected to [widen to 12.7 percent of GDP in 2018](#). As a result, the SSP is expected to further depreciate against the USD.
- Based on FEWS NET's integrated price projections, cereal prices will remain near or below last year, but well above the five-year average. For example, the retail price of a kilogram of sorghum in Juba is projected to cost between 60 and 80 SSP, 20-40 percent below last year, but 200-300 percent above the five-year average.
- Fish and wild foods are expected to be available at normal levels, though many households in conflict-affected areas will face periodic restrictions to accessing these natural sources food.
- Based on forecasts by NOAA and USGS, the March to May first rainy season in Greater Equatoria and June to September main rainy season in in Greater Bahr el Ghazal and Upper Nile are both forecast to be above average with timely onsets.



Higher than normal levels of flooding are expected in some areas.

- 2018 national-level production will be lower than last year and below pre-crisis levels due to expected further displacement out of the country, resulting in a lower number of people cultivating.
- Household-level production is also expected to be below pre-crisis levels, and similar to, or slightly below, last year. CFSAM reports 2017 per capita production was similar to 2016 in 47 percent of counties and lower than 2016 in 31 percent of counties; it is expected the trend in 2018 will be comparable. This is driven by the assumption that conflict in many areas in 2018 will have similar scale of impact on cultivation as in 2017. However, in some areas, harvests will be lower than in 2017 as households ability to engage in livelihood activities continues to erode, and the presence of FAW causes some crop losses.
- Food assistance is assumed to continue in 2018 according to WFP's Interim Country Strategic Plan (ICSP), reaching roughly 2.5-3.3 million people per month. Some conflict-related disruptions to delivery are expected, though the large majority of planned assistance is still likely to be delivered. This is based on past trends, which show assistance in conflict-affected areas is occasionally disrupted but deliveries are similar to planned levels over the long term.

### Most Likely Food Security Outcomes

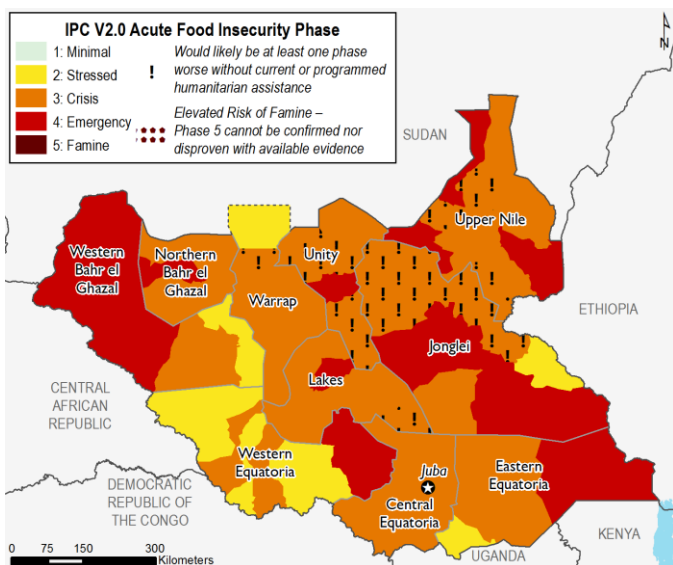
Food security is expected to deteriorate through the peak of the lean season in July, as most households have already depleted their food stocks and those who still have stocks are likely to deplete stocks by March. Many households will continue to lack physical access to markets to purchase food. For those who can access markets, most will only be able to purchase 40-60 kilograms of cereal a month, based on current terms of trade and the expectation that most households are not accessing work every day of the month.

This is well below the approximate 100 kilograms of cereal required monthly to meet the basic kilocalorie needs of a household of seven people. Consequently, most households will rely primarily on wild foods and fish, though the availability of these food sources will seasonally decline and access will also be volatile due to expected conflict. According to the recent IPC analysis, 'Critical' (GAM (WHZ) 15-30%) levels of acute malnutrition are expected in most counties throughout the lean season, and 'Very Critical' (GAM (WHZ) > 30%) acute malnutrition is likely in Leer, Mayendit, Renk, and Longochuck. Widespread Crisis (IPC Phase 3) and Emergency (IPC Phase 4) outcomes are likely through the peak of the lean season.

Food security is expected to improve somewhat in August and September in areas which harvest and with seasonally higher availability of fish and wild foods. However, Crisis (IPC Phase 3) and Emergency (IPC Phase 4) outcomes are still expected in many areas. The prevalence of malnutrition will likely improve to 'Serious' (GAM (WHZ) 10-15%) in some counties, though in many others it will remain 'Critical.'

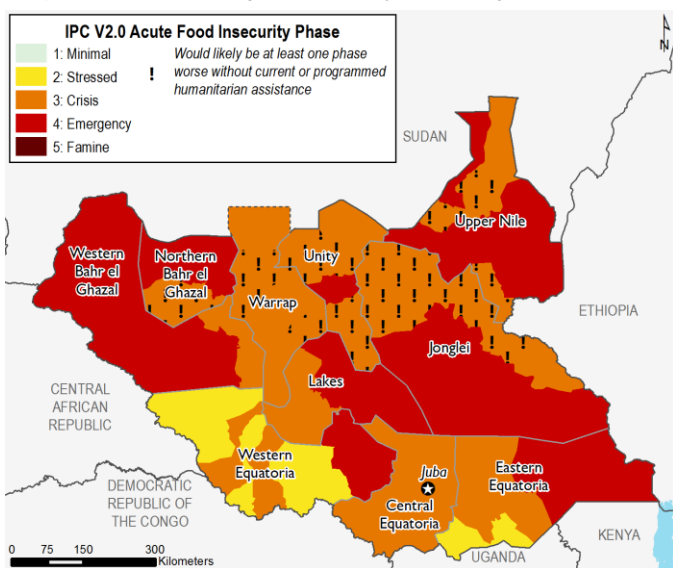
Throughout the projection period, humanitarian assistance is likely to prevent more extreme outcomes in many counties of Greater Upper Nile and Greater Bahr el Ghazal, and Crisis (IPC Phase 3!) is expected. Despite the continuation of assistance, most households will continue to face food consumption gaps or only minimally meet their food needs through unsustainable

### Projected food security outcomes, February to May 2018



Source: FEWS NET

### Projected food security outcomes, June to September 2018



Source: FEWS NET

coping, as humanitarian assistance is planned to reach less than half of the estimated need. It is also expected some households will be in Catastrophe (IPC Phase 5) even in the most-likely scenario of a continuation of assistance, and counties of highest concern include Leer, Mayendit, Koch, Panyijiar, Ayod, Uror, Nyirol, Fangak, Longochuck, and Wau. This is based on Round 20 FSNMS data and ground reports that indicated some households were in Catastrophe (IPC Phase 5) during the 2017 lean season, even with large-scale assistance across the state, and the expectation that the 2018 lean season will be similar to or worse than last year.

In a worst-case scenario of a persistent absence of food assistance over a large area, Famine (IPC Phase 5) would be likely. Areas of greatest concern include central and southern Unity, northwestern Jonglei, and Wau of Western Bahr el Ghazal. However, given the volatile nature of the current Emergency, and that food security can deteriorate rapidly among populations who face extreme movement restrictions, Famine (IPC Phase 5) remains possible in many areas of the country.

## AREAS OF CONCERN

### ***Jonglei: Ayod, Nyirol, Fangak, Canal/Pigi, Duk, Uror, and Pibor Counties (Figure 6)***

#### *Current Situation*

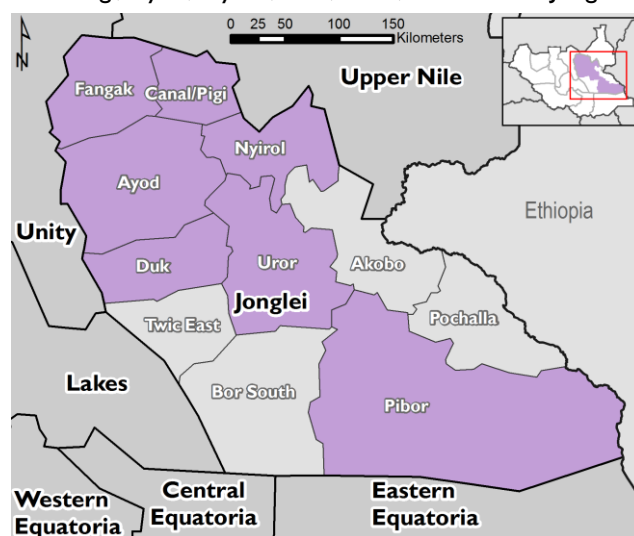
An interagency assessment conducted in December in Duk Payuel and Duk Poktap reported ongoing road ambushes, cattle raiding, and child abductions. Information from field-based partners and key informants in Ayod, Nyirol, and Uror indicate a similar trend of continued insecurity associated with cattle-raiding and revenge attacks, and seven cattle camps along the Ayod–Pathai road were recently raided. As of January, an estimated 254,450 people remain internally displaced in the counties of concern.

Available information from rapid assessments, 2017/18 CFSAM, and Round 21 FSNMS data indicate more households planted in 2017 than in recent years due to relative stability during the planting season. However, overall 2017/18 crop yields were still below average due to insecurity related restrictions during harvesting and erratic rainfall distribution. According to FSNMS Round 21 data, surveyed households reported their harvest would last one to three months, and it is therefore likely the majority of the households have already depleted their harvests as of February and are now relying heavily fish, milk, wild foods, game meat, and humanitarian assistance.

However, access to and availability of some food sources remains low. Most fishing areas in the highlands of Duk, Uror, Nyirol, Canal/Pigi, and Ayod are seasonally dry and fishing activities are only available along the Nile basin and Sudd wetlands. However, localized conflict limits consistent access to these areas. According to FSNMS data, only 10-40 percent of households in counties of concern are currently engaged in fishing activities.

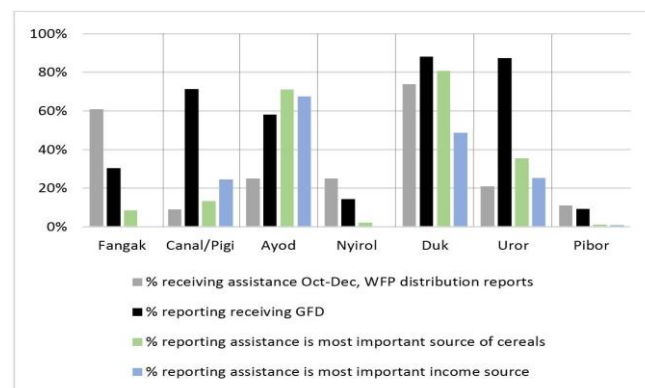
According to FSNMS data, only 40 percent of households across the counties of concern own livestock and are currently access milk from at least one animal. In addition to overall low access to livestock products across the population, a rapid assessment conducted by FEWS NET in early January found that milk consumption is low for household members who are unable to migrate with livestock. Given ongoing insecurity and cattle-camp attacks in these counties, pastoralists are pursuing abnormal migration patterns and some household members, most frequently women, children, and elderly, are not moving

**Figure 6.** Area of concern reference map, Fangak, Canal/Pigi, Ayod, Nyirol, Duk, Uror, and Pibor of Jonglei



Source: FEWS NET

**Figure 7.** Percentage of households receiving humanitarian assistance and reporting it as key food/income source



Source: FSNMS data; WFP distribution reports

with livestock. Consequently, these household members have low access to livestock products.

Markets in Duk have recovered slightly compared to the same time last year and are currently supplied with commodities from Uganda. Most households in this county have physical access to these markets, and sorghum, maize flour, lentils, cowpeas, beans and cooking oil are available. However, supplies are low and prices are extremely high, and few households are able to purchase more than small quantities of food. In Ayod, Fangak, Canal/Pigi, Uror, and Nyirol, market activities remain minimal or non-existent due to limited ability to transport goods via the Nile River or between Bor and Akobo.

Although food security has improved slightly from the 2017 lean season, many households continue to report poor food consumption and severe household hunger. In several counties of concern, though, humanitarian assistance is a key source of food and income (Figure 7) and is likely preventing more extreme outcomes. In Ayod, Fangak, Canal/Pigi, and Nyirol, Crisis (IPC Phase 3!) persists. Although the percent reporting receiving GFD in the FSNMS was relatively low, distribution reports and ground information indicate assistance is significant. Conversely, despite large-scale assistance delivered in Uror and Duk through December, conflict in January in these counties has forced humanitarian aid workers to relocate and assistance deliveries have declined. Conflict also forced some households to flee and it is expected many left behind previously delivered food assistance. As a result, assistance has been unable to make as significant of an impact in the current situation in Uror and Duk, and Emergency (IPC Phase 4) outcomes are likely. Assistance is relatively low in Pibor, and available outcomes indicate this county is also in Emergency (IPC Phase 4).

### *Assumptions*

In addition to the national-level assumptions above, projected food security outcomes for the counties of concern in Jonglei are based on the following assumptions:

- Abnormal livestock migration is expected to continue as pastoralists avoid areas prone to cattle raiding. This is expected to limit access to livestock products for household members who are unable to move with livestock. For household members who migrated with livestock, normal access to milk is expected.
- Based on FEWS NET's integrated price projection in Bor market, the retail price of sorghum will be between 80 and 120 SSP, roughly 200-300 percent above the five-year average due to high transportation costs, consistent depreciation of the SSP, and below-average harvests. However, prices are expected to be around 25 percent below last year due to expected further decline in effective demand.
- Market supplies and trade flows are expected to remain very low, similar to last year, due to the expectation of continued armed conflict and crime along trade routes.
- Emergency food assistance is planned to reach over 50 percent of the total population in Ayod, Canal/Pigi, Nyirol, Fangak, and Uror with roughly a 30 percent ration monthly. In Pigi/Canal, Fangak, Nyirol and Ayod, planned and funded assistance is assumed to be delivered based on past trends. In Uror, assistance delivery is not likely based on recent conflict. In Duk and Pibor, assistance is only planned to reach 10 percent of the population.

### *Most Likely Food Security Outcomes*

Many households will continue to face food consumption gaps throughout the projection period. Most have already depleted food stocks and access to markets, fish, and wild foods will remain volatile due to insecurity. With the exception of Duk, physical access to markets will remain limited. Even where physical market access exists, most households will only be able to purchase 2-4 kilograms of sorghum a day based on projected prices. Given expectations that humanitarian assistance will continue in Ayod, Fangak, Pigi/Canal, and Nyirol at planned levels, Crisis (IPC Phase 3!) outcomes are expected to persist in these counties. Emergency (IPC Phase 4) outcomes are expected in Duk, Pibor, and Uror where planned and funded assistance is either too low to reach the majority of the need or, based on past trends, is unlikely to be delivered regularly. Food security is expected to improve in all counties of concern in August and September with the harvest, though improvements will be short-lived given the expectation that production will only cover households' food needs for one to three months. Even in the most likely scenario with the presence of planned assistance, given that it is unlikely to meet all populations in need, it is possible some households will be in Catastrophe (IPC Phase 5) throughout the projection period, and Ayod and Nyirol are of greatest concern. In a worst-case scenario where households are unable to access assistance for an extended period of time, it is expected a significant proportion households would be in Catastrophe (IPC Phase 5) in several counties across Jonglei. Famine (IPC Phase 5) is also likely in this worst-case scenario and northwestern Jonglei is of greatest concern.



## Unity State: Leer, Mayendit, Koch, Panyijiar, Guit and Rubkona (Figure 8)

### Current Situation

Conflict persists in many areas of Unity State. Clashes were reported between Government forces and armed opposition between late November and early January in Leer, Mayendit, and parts of Koch. In other areas, tension and insecurity are high due to the resurgence of various armed groups and ongoing cattle raids. Following recent clashes, the number of IDPs increased from 412,993 people in August 2017 to 427,968 people by the end of the year. The majority of new displacements remained within their counties of origin, while others fled from Koch and Guit to Rubkona.

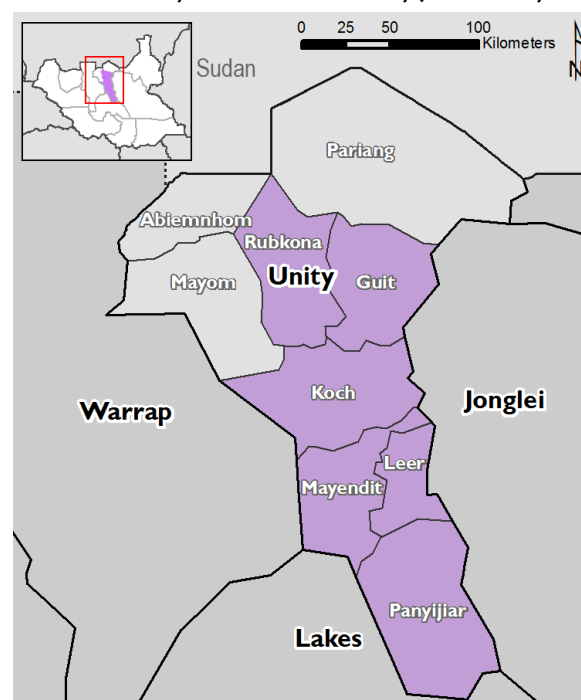
Conflict has also caused repeated disruption to agricultural activities by forcing households to abandon assets when fleeing and restricting movement towards fields. Cereal production has reduced considerably since 2013 as a result. According to FSNMS data, households in counties of concern estimated their 2017/18 harvests would last 1.5 to 3 months. This is significantly lower than the 6.5 months that harvests were estimated to last poor households in pre-crisis years, according to the 2013 livelihoods profile (Figure 9). Production is also 30 percent lower than last year in Rubkona, according to the 2017/18 CFSAM, but similar to last year in Koch, Mayendit, and Guit. Production in 2017 was higher than last year in Leer and Panyijiar, though the increase in absolute terms is relatively small. For example, CFSAM estimates production increased in Leer from 358 MT in 2016/17 to 421 MT in 2017/18.

Few markets have remained functioning in central and southern Unity since the start of the conflict. In Leer, small markets are functioning in Paap, Torchriak, and Meer and supplies are slightly higher than last year, though still low. Similarly in Mayendit, some markets are functioning in Mayendit town but with low supplies. Key informants also report the existence of mobile markets in northern areas of Mayendit, supplied from Paap. In Panyijiar, markets are functioning in Nyal and Ganyiel, but staple food supplies are similarly low. In Koch, there are no notable markets functioning. Markets supplies are low due to conflict-related restrictions to transporting goods, low local production, and low effective demand. In pre-crisis years, households would purchase goods with income from labor or livestock sales. Currently, few households have access to these sources of income.

With significantly below-average access to food from own production and markets, many households are heavily dependent on the consumption of fish and wild foods. According to focus group discussions that occurred during FSNMS data collection, households in Leer reported over 70 percent of households are engaged in fishing. Though it was also reported that access is occasionally disrupted by insecurity, most notably in Leer, Mayendit, and Koch.

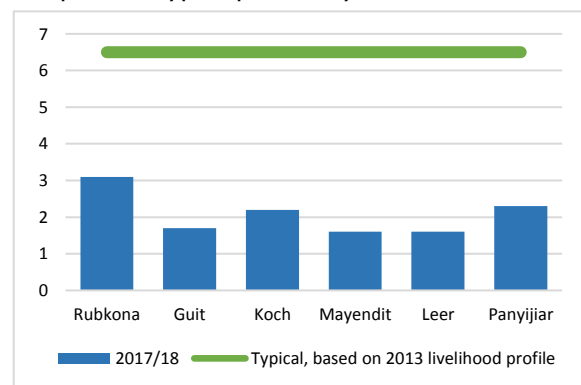
Livestock products remain a source of food for many households in these counties, and between 30 and 80 percent reported accessing milk from at least one animal in December. However, repeated displacement and cattle raids have left many households without animals. Between 45 and 80 percent of households in Mayendit, Leer, Koch, Guit, and Rubkona reported their livestock holdings have declined significantly from the same time last year. Remote imagery analysed by FEWS NET also shows significant livestock declines between 2015 and 2017 in Guit, Koch, Mayendit, and Panyijiar, indicating total livestock ownership across populations in these counties has decreased. It is therefore expected that although many households still have livestock and are accessing milk, the total quantity is well below normal, and some households have no access.

**Figure 8.** Area of concern reference map, Rubkona, Guit, Koch, Mayendit, Leer, and Panyijiar of Unity



Source: FEWS NET

**Figure 9.** Number of months on average households estimated 2017/18 harvests would last compared to typical/pre-crisis years



Source: FSNMS Round 2 I; Livelihood profile

A SMART survey conducted by UNIDO in Mayendit in November 2017 reported a GAM (WHZ) prevalence of 19.9 percent (14.1-22.4) and a non-trauma CDR of 0.82/10,000/day. The GAM prevalence is 'Critical', indicative of Emergency (IPC Phase 4), and the CDR is indicative of Crisis (IPC Phase 3). It is expected continued 'Critical' levels of acute malnutrition are driven by low food intake and limited access to health and nutrition services. No other SMART surveys were conducted in Unity State during the post-harvest period.

Large food consumption gaps persist even during the post-harvest period in all counties of concern due to minimal harvests, low access to milk, low food supplies on markets, and limited or no income to purchase food where supplies are available. According to FSNMS data, over 50 percent of surveyed households in all counties of concern reported a poor FCS, and over 95 percent of households reported a poor FCS in Leer and Koch.

The percentage of households reporting moderate or severe hunger declined from the lean season in all counties except Koch and Leer, though the majority of households in all counties continue to report moderate hunger (Figure 10). These results are in the presence of large-scale humanitarian assistance.

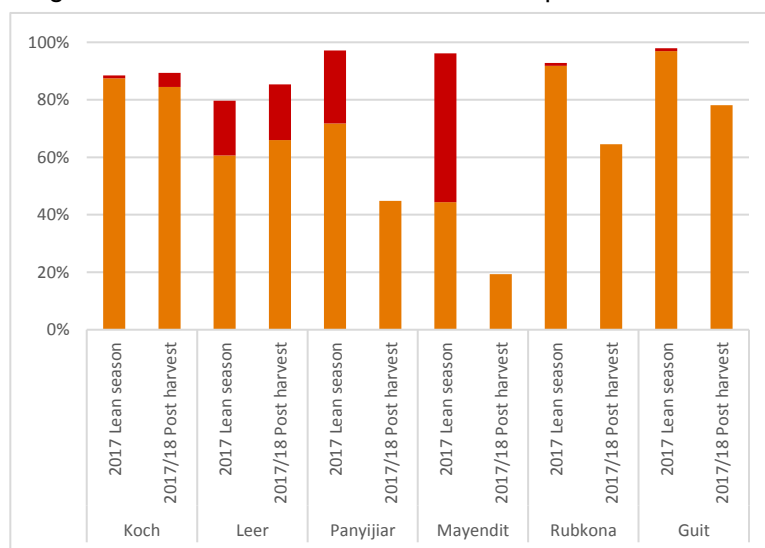
Humanitarian assistance continues to be a vital source of food in the counties of concern. Despite occasional disruptions, assistance is reaching the majority of the need with either a half or full ration and is preventing more extreme outcomes in Leer, Mayendit, Panyijiar, Guit, and Rubkona, where Crisis (IPC Phase 3!) outcomes exist. In Koch, armed clashes in December have prevented the delivery of assistance in recent months and Emergency (IPC Phase 4) outcomes are expected in this county.

#### Assumptions

In addition to the national-level assumptions above, projected food security outcomes for the counties of concern in Unity State are based on the following assumptions:

- It is expected milk will be available throughout the outlook period for the estimated 30-80 percent of households in each county who own livestock, and livestock will remain near homesteads due to fear of looting. The availability of milk will increase seasonally between June and September.
- Availability of water lilies, lalob, nabag, and other leafy vegetables are expected to decline seasonally through April, and increase seasonally between June and September.
- Armed clashes are likely throughout the outlook period in Leer, Mayendit, Koch, and Guit given past trends and the re-emergence of armed groups. Further displacement from these counties to Rubkona, Panyijiar, Ayod, and Fangak are likely.
- The number of functioning markets and market supplies are expected to remain minimal in Leer, Koch, and Mayendit, but slightly better in Panyijiar and Rubkona. Less data are available on staple food prices in these counties, though where markets are functioning, it is expected prices will remain nearly 700 percent above the five-year average due to high transportation costs associated with trade to these areas.
- Access to fishing grounds is expected to be occasionally restricted due to insecurity and most households will engage in fishing only in nearby water bodies. Total access to fish will remain volatile and lower than normal.
- Typical sources of income, including the sale of livestock, fish, and crops will remain significantly below pre-crisis levels, as they have in recent years. This is due to likely continued insecurity, which limits access to these sources of income.

**Figure 10.** Percentage of households reporting moderate or severe hunger, FSNMS 20 lean season versus FSNMS 21 post-harvest data



Source: FSNMS Round 21

- Emergency humanitarian assistance is planned to reach around 30 percent of the population in Guit and over 50 percent of the population in Koch, Leer, Mayendit, Panyijiar, and Rubkona. Between a third and half ration is planned monthly for these counties, though a full ration is planned for Rubkona. Based on trends in 2017 that assistance has been delivered regularly to Leer, Mayendit, Panyijiar, Guit, and Rubkona despite occasional disruptions, this assistance is expected to be delivered as planned during the projection period. In Koch, though, given recent disruptions and the expectation that disruptions will continue, the delivery of this assistance is expected to be inconsistent.

#### *Most Likely Food Security Outcomes*

Households in all counties of concern will continue to face food consumption gaps throughout the projection period. Most households have already depleted food stocks and will rely primarily on fish and wild foods, though the availability of fish near homesteads will seasonally decline during the lean season, and access to distant fishing grounds where availability is higher will occasionally be interrupted by conflict. As a result, households will be unable to meet their basic food needs through wild foods alone. It is likely assistance will be delivered as planned, though, in Leer, Mayendit, Panyijiar, Guit, and Rubkona, and this assistance will continue to prevent more extreme outcomes. Crisis (IPC Phase 3!) is likely to continue in these counties. In Koch, although assistance is planned to reach 50 percent of the need with a 30 percent ration monthly, ongoing conflict is expected to prevent its regular delivery. As a result, households will continue to rely heavily on livestock products and natural food sources and will face large food consumption gaps. Emergency (IPC Phase 4) outcomes are most likely. Between August and September, food security will improve slightly with the harvest, though given the expectation of another below-average year of production, outcomes will only improve minimally. Even in the most likely scenario with the presence of planned assistance, it is possible some households will be in Catastrophe (IPC Phase 5) throughout the projection period.

In a worst-case scenario where households are unable to access assistance for an extended period of time, Famine (IPC Phase 5) is likely in the protracted absence of assistance and southern and central Unity is of greatest concern.

### **Western Bahr el Ghazal State: Wau and Raga**

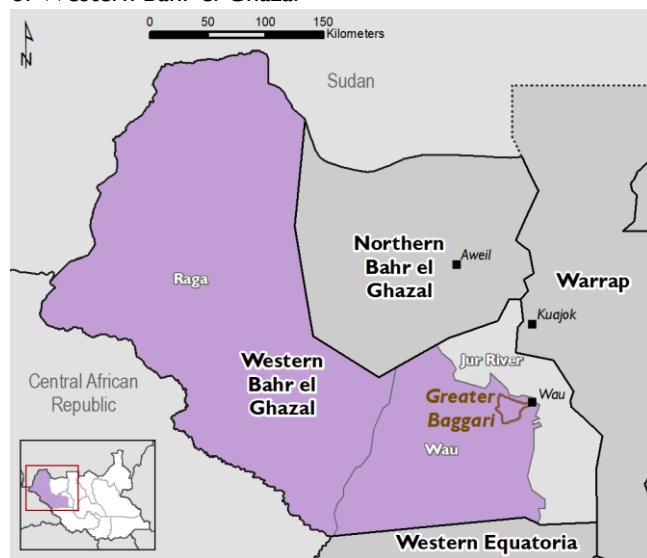
#### *Current Situation*

Protracted conflict in Western Bahr el Ghazal since June 2016 continues to limit access to typical livelihood activities in both Wau and Raga. In Raga, a multi-agency assessment conducted in late November 2017 reports that although security has improved in Timsaha Payam, armed clashes in Boro Medina and Dolo have forced many people to flee to Sudan or surrounding areas in recent months. In Wau, no major security incident has been reported since April 2017, though tensions remain high in rural areas where armed groups are active. As January, a total of 24,450 people in Raga and 72,225 people in Wau remain internally displaced. In Wau, the majority are living in PoCs and five sites in Wau town, though there is continuous movement into and out of these sites.

According to the FSNMS, 71 percent of households in Wau and 33 percent of households in Raga reported having access to land and cultivating crops, which is likely similar to past years in Wau, but a large reduction from normal in Raga. A multi-agency assessment in Wau in November 2017 reported households harvested groundnuts, sorghum, cassava, sweet potatoes, okra, and other vegetables, and households reported expecting their harvest to last three to four months. Among those who did harvest in Raga, production is also expected to last around three months.

In pre-crisis years, poor households in Wau would earn 20-30 percent of their annual income through agricultural labor. Currently, given that many households are displaced away from labor opportunities and engagement in agricultural production is lower than normal across households, many households no longer access income from this source. In addition to below-average income, households face extremely high market prices. Markets in Wau are functional and supplies of sorghum

**Figure 10.** Area of concern reference map, Wau and Raga of Western Bahr el Ghazal



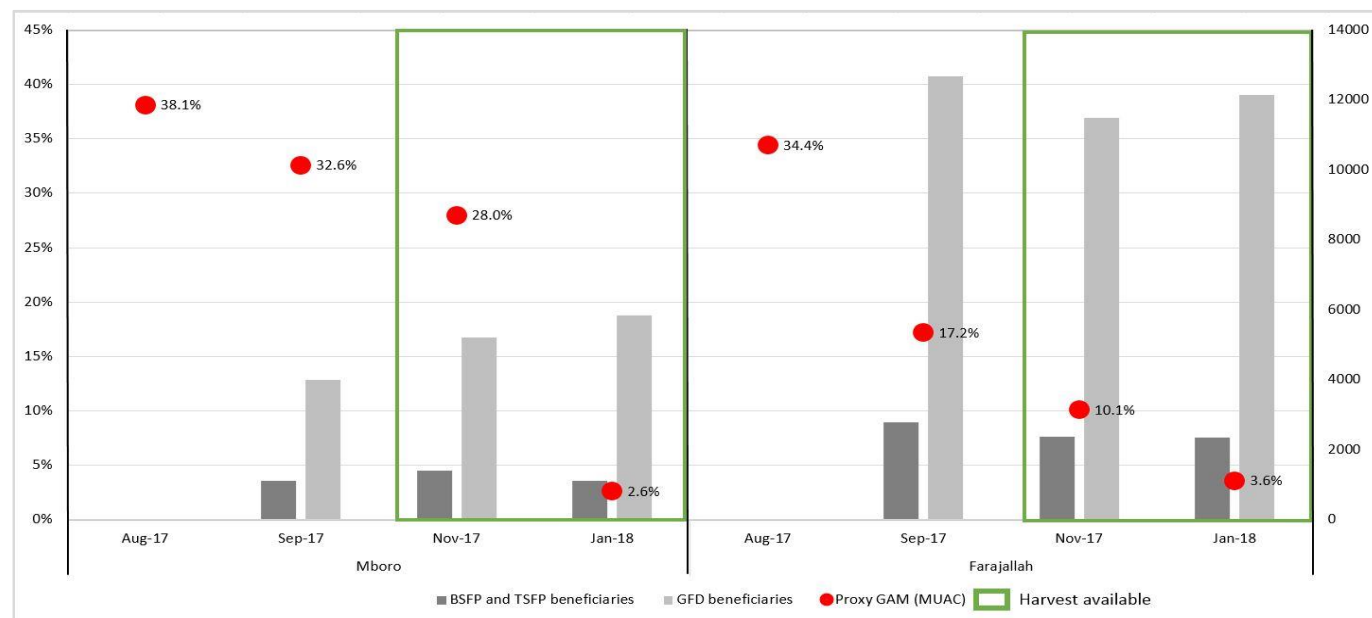
Source: FEWS NET

from Sudan have increased from the same time last year, though supplies from Western Equatoria and Juba are low. The retail price of a kilogram of sorghum is 300-500 percent above the five-year average.

According to FSNMS Round 21 data, the majority of households reported a poor FCS, and there was no significant improvement in FCS from the lean season. However, the percentage of households reporting severe hunger in Wau declined significantly between the lean season and post-harvest period. Despite this, most households in both Wau and Raja reported moderate hunger during the post-harvest period, indicative of Crisis (IPC Phase 3) outcomes. A SMART survey conducted in early September by MoH in Wau reported a GAM (WHZ) of 13.2 percent (10.4-16.7) and a non-trauma CDR of 0.77/10,000/day, both of which are also indicative of Crisis (IPC Phase 3). In Wau, humanitarian assistance is delivered regularly, reaching roughly 36 percent of the total population with a half ration monthly. However, the majority of assistance is being delivered to households in the PoC and Wau town, and it is expected little assistance is reaching households in rural areas. Food security outcomes indicate Crisis (IPC Phase 3) outcomes are likely. In Raja outcomes are expected to be worse given that a significantly lower percentage of the population harvested crops this year and ongoing conflict is displacing households from their fields and limiting the degree to which they can engage in typical livelihood activities. Assistance has not been delivered to this county in recent months, though a small percentage of household reported access to GFD to the FSNMS and may be accessing limited amounts from distribution points in Wau. However, most are relying primarily on wild foods and game meat and Emergency (IPC Phase 4) outcomes are likely.

In September 2017 in Greater Baggari, it was determined there was an elevated risk that Famine (IPC Phase 5) was occurring; however, recent evidence suggests this is no longer the case. Food security has improved with harvests and continued humanitarian assistance. Humanitarian access has remained largely stable since September 2017, allowing for continued intervention including the distribution of general food (GFD) and Blanketed and Targeted Supplementary Feeding Programs (BSFP/TSFP) in Mboro and Farajallah. The proxy GAM (MUAC) is also collected during GFD deliveries and the results show significant declines in the number of malnourished children since August 2017 (Figure 11). In addition to the decline in GAM prevalence, no cases of edema were reported in January, compared to 50 cases in August, 26 cases in September, and 10 cases in November. The number of children under five screened has consistently increased between months: 1,466 children were screened in August, 2,369 children were screened in September, 2,445 children were screened in November, and 3,980 children were screened in January, indicated households previously residing outside of Mboro and Farajallah may be moving towards these towns to access assistance. With limited other sources of food, though, it is still expected many households are still facing some food consumption gaps and Crisis (IPC Phase 3!) is likely.

**Figure 11.** Timeline of nutrition screening results and delivery of assistance, Greater Baggari of Wau, Aug. 2017 – Jan. 2018



Source: Rapid Response Missions



*Assumptions*

In addition to the national-level assumptions above, projected food security outcomes for the counties of concern in Western Bahr el Ghazal are based on the following assumptions:

- Households displaced to remote areas are likely to have access to some cassava, hunting, and wild foods throughout the scenario period. In Greater Baggari, though, households will have low access to these foods as field information indicates households still face some restrictions to movement and this is expected to continue throughout the projection period.
- Access to fishing will remain typical for most households residing in areas outside of main towns, as many are displaced to nearby fishing grounds. Those residing in towns or displacement sites are unlikely to have much access to fish.
- Armed clashes are expected in both Raga and Wau during the projection period, based on past trends, high tension, and the presence of armed groups. This is likely result in further displacement to towns, POCs, and Collective Centres.
- Total area cultivated for 2018 production, agricultural labor, and harvests are all expected to be below pre-crisis levels, as they were in 2016 and 2017, due to a combination of continued insecurity and further displacement away from fields.
- Based on FEWS NET's integrated price projection for sorghum in Wau market, the retail price of staple cereals are expected to follow seasonal trends and be near last year at between 70 and 115 SSP, but remain 300-500 percent above five-year averages.
- Supply routes from Sudan to Wau are expected to remain open and accessible until rains starts in May/June. Supply routes will then become seasonally impassable through September. Market supplies will decline seasonally during the 2018 lean season, but also remain lower than normal given expected high transportation costs and low effective demand.
- Humanitarian assistance is planned to reach around 35 percent of the total population with a half ration monthly; however, the majority of this assistance is planned for households in the PoC, Wau town, and Greater Baggari. Assistance at a half ration monthly is also planned for Raga, but is only estimated to reach around 10 percent of the population.

*Most Likely Food Security Outcomes*

Crisis (IPC Phase 3) outcomes are expected to persist in Wau through April/May, as most households harvested sufficient crops to last through these months. The majority of assistance is expected to continue to reach those in need in Greater Baggari and Crisis (IPC Phase 3!) outcomes are expected to continue in this area. Emergency (IPC Phase 4) is expected to persist in Raga throughout the projection period, and outcomes are expected to deteriorate to Emergency (IPC Phase 4) in Wau after May. Households will have few sources of food besides wild foods, fish, and game meat, though access to these food sources remains sporadic given conflict and it is therefore likely households will be unable to access sufficient quantities to meet all basic food needs. Households in urban centers of both counties will access some casual labor opportunities, though at current terms of trade, it is unlikely households will be able to purchase more than 20-40 kilograms of sorghum in a month, far below what is needed to meet the needs of a household of seven. Food security will improve slightly towards the end of the projection period with the harvest, but not all households will have access to a harvest and production will be below-average, resulting in continued food consumption gaps. Even in the most likely scenario with the presence of planned assistance, given that the majority of assistance is not going to rural households in need, it is possible some households will lack sufficient access to food for an extended period and be in Catastrophe (IPC Phase 5).

In a worst-case scenario where households are unable to access assistance for an extended period of time, Famine (IPC Phase 5) is likely and Greater Baggari is of greatest concern. In this scenario, households would lose a key source of food and likely higher levels of conflict would lead to movement restrictions. The results of this scenario were observed in Greater Baggari in 2017 when it was determined there was an elevated risk Famine (IPC Phase 5) was occurring. In a scenario of an extended absence of assistance, Famine (IPC Phase 5) is again likely.

## EVENTS THAT MIGHT CHANGE THE OUTLOOK

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

Area	Event	Impact on food security outcomes
National	Implementation of Peace Agreement	Efforts to implement the Peace Agreement that lead to a permanent ceasefire would improve the security and allow households to slowly regain their livelihoods and return to their places of origin. Trade flows and humanitarian assistance could better reach households in need, and households would be able to move in search of food and pursue income-earning opportunities. Food insecurity would be less severe throughout the outlook period and the risk of Famine (IPC Phase 5) would greatly decline.
National	Absence of humanitarian assistance	In the persistent absence of food assistance over a large area, Famine (IPC Phase 5) would be likely because this absence of assistance would remove a primary food source and would likely drive increased levels of conflict over remaining scarce resources. In turn, higher levels of conflict would increase movement restrictions, preventing households from accessing food from other sources. Given current food security outcomes and past conflict trends, areas of greatest concern include central and southern Unity, northwestern Jonglei, and Wau of Western Bahr el Ghazal. However, given the volatile nature of the current Emergency, and that food security can deteriorate rapidly among populations who face extreme movement restrictions, Famine (IPC Phase 5) remains possible in many areas of the country.
National	Extreme levels of flooding	Above-average rainfall is expected and atypical levels of flooding are expected in some areas. However, in the event flooding is even greater than currently expected, high crop losses are likely in isolated areas. This will lead to even lower production for many households, and increase the percentage of the population facing extreme food consumption gaps.

**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.](#)