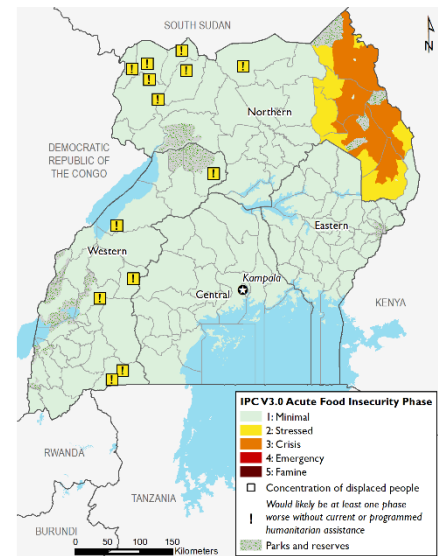


Crisis (IPC Phase 3) outcomes in Karamoja expected to intensify until mid-2019

KEY MESSAGES

- Anticipated above-average March to May rainfall in bimodal areas is expected to result in average crop and livestock production and related labor opportunities, though areas prone to flooding and landslides would see localized production shortfalls. Consecutive seasons of near-average bimodal production is expected to maintain Minimal (IPC Phase 1) outcomes through September.
- In Karamoja, household food gaps are expected to widen, particularly in Kotido and Kaabong. Declining wage rates and rising food prices are limiting purchasing power, thereby constraining household food access and increasing the use of negative coping strategies. 2019 production is anticipated to be slightly below-average, driven by reduced area planted as most farmers were unable to save seeds from failed 2018 harvests. Crisis (IPC Phase 3) outcomes are likely to intensify until July, when availability of the harvests will support recovery to Stressed (IPC Phase 2).
- In bimodal Uganda, low staple food prices driven by surplus market supply are enhancing food access. Retail prices of maize, sorghum, and cassava in January were below both the five-year and previous year averages by two to 38 percent, and prices are expected to remain low to near-average throughout the scenario period. However, sorghum prices in northern Karamoja are highly dynamic due to increased household demand and poorer market supply flows. Although prices stabilized in January compared to the five-year average, prices are currently 11 and 50 percent above the five-year average in Nakapiripirit and Kotido markets.
- In refugee settlements, Stressed! (IPC Phase 2!) outcomes are expected to be maintained, driven by humanitarian food assistance and own production. Assistance is planned through September and at least partially funded through May. However, food security outcomes would deteriorate to Crisis! (IPC Phase 3!) in the event of significant ration cuts.

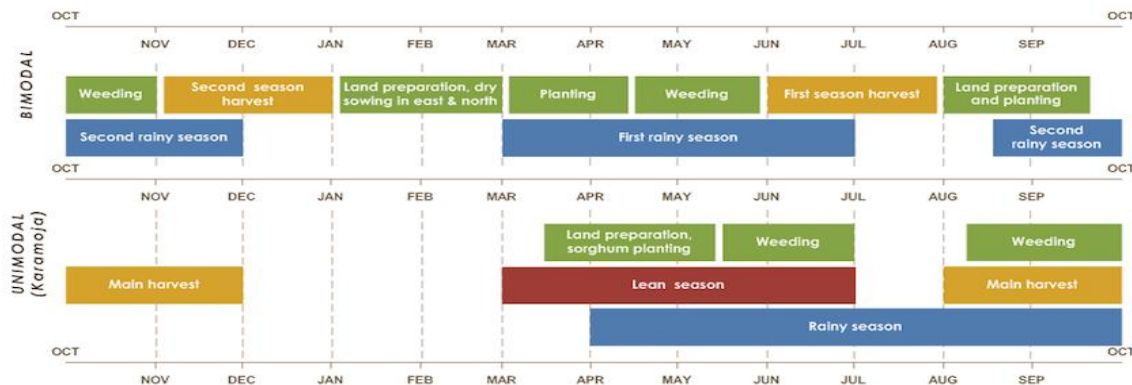
Current food security outcomes, February 2019



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.

SEASONAL CALENDAR FOR A TYPICAL YEAR



Source: FEWS NET

NATIONAL OVERVIEW

Current Situation

The dry season is currently underway across Uganda following erratic second season (October-December) rainfall that concluded with mixed cumulative performance. In bi-modal Uganda, rainfall had poor temporal and spatial distribution and cumulative totals ranged from 70 to 130 percent of average, according to CHIRPS satellite-derived estimates. Areas most affected by below-average cumulative rainfall include the entire northern half of Eastern region, far northern and southern parts of Central region, and south-western Uganda, where the start of season was 15 to 30 days late and dry spells were frequent. In January, unseasonal rains supported some improvement in pasture and water sources in the south and southwest. In Karamoja, the dry season began in October and has been drier than normal, with less than 85 percent of normal cumulative rainfall in most districts.

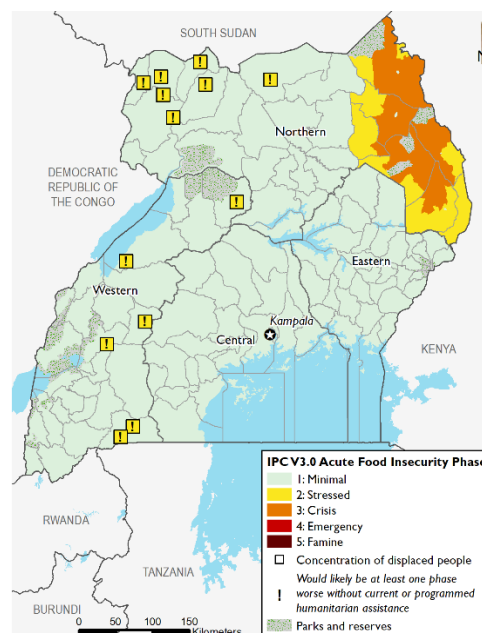
Commensurate with rainfall performance, second season bimodal crop production was slightly below average nationally, with varying local production levels. In areas where planting was delayed and staggered, such as in Kigezi district in the southwest, the harvest was delayed by up to almost one month. In parts of Teso sub-region where below-average cumulative rainfall was observed, Katakwi, Bukedea, Amuria, and Kumi districts harvested below-average staples, such as cassava, sweet potatoes, and groundnuts. According to field observations and key informant reports, Fall Army Worm incidence was significantly lower than in the same period last year, leading to negligible maize crop losses.

In bimodal cattle corridor districts, vegetation conditions measured by the Normalized Difference Vegetation Index (NDVI) anomaly and confirmed by field reports remain indicative of near-average pasture and water resource levels (Figure 1). Some areas, such as Isingiro, have more vegetation due to enhanced December-January rainfall. As a result, milk production and livestock body conditions remain within normal levels. However, in southern cattle corridor areas, the existing livestock quarantine aimed at controlling the spread of zoonotic diseases continues to limit the ability of some households to afford non-food essentials such as education and health services.

Despite below-average cumulative rainfall since October, Karamoja received 25-50mm of rainfall in December, equivalent to more than 120 percent of the December long-term average. As a result, vegetation conditions improved to 80 to 130 percent of average (Figure 1) the following month. In January, however, Land Surface Temperatures increased to an average of 4.5 °C above the long-term average. The atypically hot temperatures have once again accelerated seasonal deterioration of pasture and water resources, leading to earlier-than-normal declines in livestock productivity. In addition, livestock migration to traditional dry season grazing areas bordering Teso and Lango sub-regions began in October, one month earlier than normal. This has limited milk availability and consumption for transhumant household members remaining at the homestead.

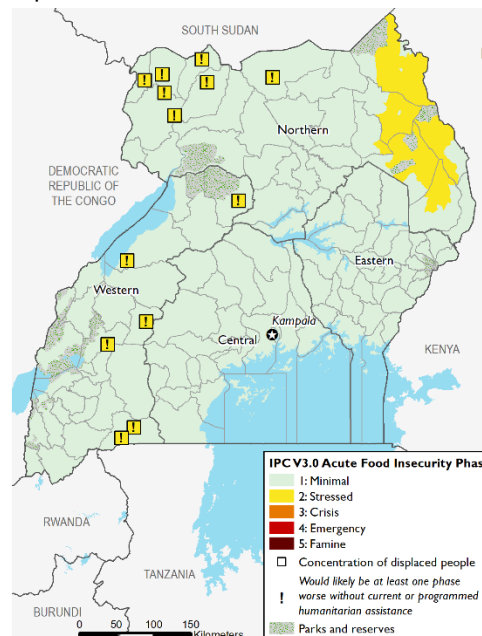
Food availability and access in most bimodal areas is at typical levels, as households have staple stocks from the second

Projected food security outcomes, February to May 2019



Source: FEWS NET

Projected food security outcomes, June to September 2019



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.

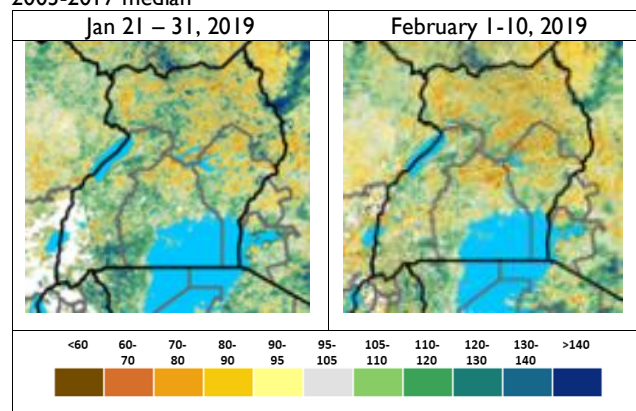
season harvests. However, due to localized production shortfalls, some poor households depleted their staple food stocks in January, which is three months earlier than normal. Seasonal income from crop sales is also below-average. This is most prevalent in some districts of Teso. Nevertheless, seasonal agricultural labor opportunities such as second-season harvesting and post-harvest handling, land preparation for first season planting, and herding are at average levels and average wage rates, allowing households to purchase their minimum food needs. Other income-generating activities available at typical levels include petty trading, brewing, and running small businesses.

In January, staple food retail prices in the main bi-modal markets were generally seasonally low and stable to below average, due both to the availability of the second season harvest and the release of carryover first season stocks by traders. Below-average food commodity exports – except for beans – in the 3rd and 4th quarters are also a contributing factor. In comparison to the five-year and 2018 averages, sorghum and cassava traded at significantly below-average volumes, maize traded slightly below average, and beans traded near or slightly above average levels in key reference markets due to increased export demand in the 3rd and 4th quarters of 2018 and domestic demand for consumption and for seed. Low prices have improved household purchasing power, to the benefit of poor households dependent on food purchases. However, income from crop sales has fallen among middle and better-off households due to low prices.

In Karamoja, households continue to rely on market food purchases as a primary source of food, given early exhaustion in November of below-average household stocks. With the availability of bimodal harvests nearby, markets are well supplied in the Karamoja regional trade hub of Moroto, as well as Napak and other southern markets. In Kotido, Kaabong, and Nakapiripirit, prices are rising given tighter supply and increased demand. In December, sorghum traded 83 percent above the 2017 average in Kotido (Figure 3). In Kaabong and Nakapiripirit, prices climbed to 38 and 19 percent, respectively, above the 2017 average. However, prices remained near or below 2017 prices in Moroto and other markets. Compared to the December five-year average, prices in most markets were stable to favorable. In Kotido, sorghum prices were on par with the average, while prices were highest in Kaabong at 22 percent above average. In Moroto and Napak, prices were 35 percent below the five-year average. Most Karamoja households are financing market purchases through typical income-earning activities, including casual daily labor and firewood, charcoal, and goat sales. However, wages are declining in some reference markets. Driven by high food prices and declining wages, the terms of trade for sorghum have declined in Kotido relative to last year.

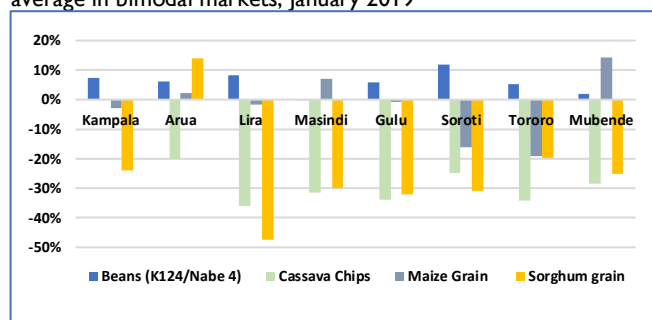
After low regional exports in the third quarter of 2018, Uganda's export volumes returned to normal levels in the fourth

Figure 1. eMODIS percent of normal NDVI compared to the 2003-2017 median



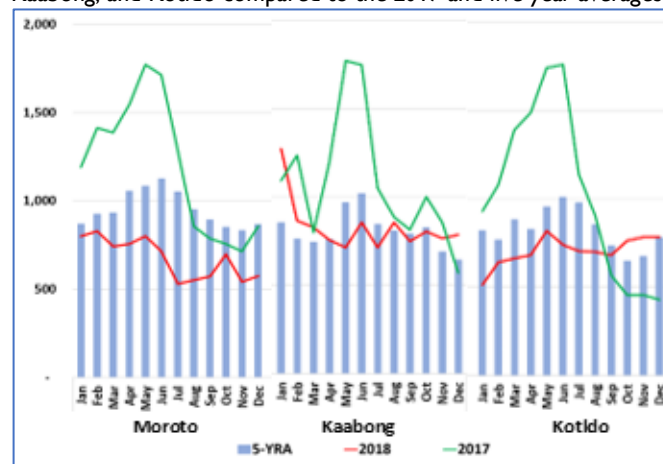
Source: USGS/FEWS NET

Figure 2. Staple food prices as a percent of the 2014 – 2018 average in bimodal markets, January 2019



Source: Farmgain and WFP data

Figure 3. Jan. – Dec. 2018 sorghum prices in UGX in Moroto, Kaabong, and Kotido compared to the 2017 and five-year averages



Source: Farmgain and WFP data

quarter. Uganda's share of regional exports in East Africa for maize and sorghum grain rose from 44 and 65 percent in the third quarter to 57 and 88 percent, respectively, of total regional trade in the fourth quarter of 2018. In comparison with the five-year average, fourth-quarter maize exports to Kenya and South Sudan were 26 percent below and 167 percent above average, respectively, while sorghum exports to Kenya, South Sudan, and Rwanda were 44 below, 110 above, and 33 percent above average, respectively. Current decreased demand from Kenya is driven in part by national production and high imports of cheap maize from Tanzania and Uganda earlier in 2018. On the other hand, increased exports to South Sudan are due to the gradual expansion of staple food businesses in Juba in anticipation of implementation of the 2018 Peace Agreement and a significant reduction in conflict that has encouraged traders to operate. Although total export trade has returned to normal, Uganda still has surplus carryover stock of staples at the national level, which is sustaining below-average market prices and supporting increased food access for the poor.

As a result of the above factors, Minimal (IPC Phase 1) outcomes are being sustained in bi-modal areas. Most poor households have two to three months of stocks remaining from the second season's December harvests and are earning average levels of income. Further, retail food prices continue to remain atypically low and favorable, enhancing food access. However, in Teso's Katakwi, Bukedea, Amuria, and Kumi districts, an estimated five percent of poor households are experiencing Stressed (IPC Phase 2) outcomes. Depleted stocks, coupled with depressed income levels as a result of reduced crop sales, are moderately constraining food availability and access, though households are accessing wage labor during first season cultivation. Seasonal availability of wild and own-produced fruits in Teso are also available to some households. Consequently, these households are likely smoothing consumption by engaging in stressed consumption and livelihoods coping strategies, such as restricting the portion size of adults to increase intake for children and reducing essential non-food expenditures.

In Karamoja, most households are facing low food availability and reduced food access. As a result, they are only able to meet their minimum food needs by relying on consumption and livelihoods coping strategies. Poor households in Kotido and Kaabong are the worst off, where strategies such as buying and/or borrowing food on credit and/or from friends and relatives, reducing food portion size, and restricting the number of meals for adults to preserve enough food for children are widespread. In addition to inadequate food purchases, households are consuming wild vegetables, fruits, and herbs, wild game and rodents, and local brew dregs, though the availability of wild foods has declined significantly earlier than usual given increased competition for these resources and the impact of high temperatures. An estimated 20 percent of the population, primarily concentrated in Kotido and Kaabong, are currently in Crisis (IPC Phase 3), while 45 percent of the population is Stressed (IPC Phase 2). In response, the Office of the Prime Minister is working to distribute emergency food relief. 300 MT of food has arrived in Moroto and efforts are underway to dispatch it to the districts; information on the planned number of beneficiaries is currently unavailable.

According to UNHCR, Uganda hosted a total of 1,205,913 refugees and asylum seekers at the end of January, of whom 27 percent are from the DRC and 66 percent are from South Sudan. Since September, the rate of arrival of new refugees has been declining, driven primarily by a decrease in political violence since the signing of South Sudan's peace deal in September. The signs of stability have also encouraged some refugees to voluntarily return to South Sudan. On the other hand, armed conflict and its impact on socio-economic conditions in eastern DRC continues to drive displacement to Uganda. For all refugees, the key sources of food and income remain humanitarian food assistance, minimal levels of own-produced food, petty trade, and remittances. In December 2018, WFP distributed food assistance to 82 percent of the population, of which 215,185 refugees received unconditional cash transfers and 764,688 refugees received in-kind food assistance. In January, food assistance continued at planned levels, maintaining Stressed! (IPC Phase 2!) outcomes.

Assumptions

Between February and September 2019, the projected food security outcomes are based on the following key national-level assumptions:

- The CPC/IRI probabilistic forecast indicates the presence of weak El Niño conditions and a neutral Indian Ocean Dipole through May. However, impacts are likely to be weaker compared to other El Niño events. Therefore, the March to June 2019 first rainy season in bimodal Uganda is forecast to be above average in terms of cumulative rainfall. The start of the August to November 2019 second rainy season is forecast to be average; however, there remains a wide range of possible outcomes due to the long-term nature of this forecast.
- Based on the rainfall forecast, first season bimodal production is most likely to be average, though excess rainfall could lead to shortfalls in bean production. Green harvests are expected in May and main harvests in July. Cultivation and

harvest agricultural labor opportunities at usual wage rates are expected to seasonally increase from March to May and from June to July.

- According to the NOAA/CPC and ICPAC forecasts, the April to September 2019 main rainy season in unimodal Karamoja is most likely to be average. However, changing El Niño to ENSO neutral conditions could result in localized above-average or below-average amounts. Based on an average rainfall forecast, unimodal production and associated labor demand is likely to be slightly below-average, given poor availability of seeds and access to inputs after failed 2018 production.
- Fall Army Worm incidence during the 2019 first season is expected at levels comparable to the 2018 first season. However, the limited tendency of FAW to spread amidst above-average rainfall, coupled with some prevention efforts by the local government and farmers, could result in a significant decrease in levels of infestation and damage.
- Based on current vegetation conditions and the rainfall forecast, pasture and water resources in western and southern cattle corridor districts are expected to remain average to above average through September. In Karamoja and areas surrounding Lake Kyoga, rangeland resources are likely to deteriorate until the start of the unimodal rainy season in April. As a result, livestock body conditions and milk productivity are expected to remain near-average in most bimodal areas through September, but will deteriorate in Karamoja and Lake Kyoga's surrounding areas (Luwero, Nakasongola, Lango and Teso sub-regions) until seasonal improvements occur in April.
- Based on FEWS NET's integrated price projections in Mubende and Soroti key reference markets, maize and sorghum retail prices in bimodal Uganda will likely follow seasonal trends but remain below both the 2017 and five-year averages through September. In other retail markets, seasonal price increases from March to May are likely to be near-average.
- Domestic trade from surplus to deficit producing areas is likely to be normal. Due to slightly above-average 2018 long-rains production in the north-rift maize belt of Kenya, cereal exports to Kenya are anticipated to continue but at a declining rate. Maize exports to South Sudan are expected to remain below pre-crisis levels but at slightly higher export volumes than 2018, driven by improved market and trade conditions after the peace agreement; however, sorghum exports are likely to decline due to increasing domestic demand for alcohol production.
- According to the 2019/2020 Uganda Refugee Response Plan (RRP), more than 155,000 new refugee and asylees are expected to arrive in Uganda in 2019, including an estimated 50,000 South Sudanese, 100,000 Congolese, and 5,000 Burundians. However, the implementation of the South Sudanese peace agreement could encourage some refugees to voluntarily return home from Uganda.

Most Likely Food Security Outcomes

In most bimodal areas, household stocks are likely to be sufficient through April or May. As stocks become depleted, poor households will turn to market food purchases, utilizing income earned from crop sales, casual labor, and agricultural labor during the February to May first season cultivation period and benefitting from favorable terms of trade. However, poor households in cattle corridor districts will have less livestock milk available for sale and consumption until the end of the dry season in March, while continued quarantine enforcement will reduce livestock sales, which may constrain their access to food. Expected near-average maize and sorghum prices in most bimodal markets will maintain normal purchasing power as household food stocks get depleted and market dependence significantly increases until May. Beginning May/June, household stocks are expected to be replenished by average first season harvests and to last through August. Residual Fall Army Worm prevalence in localized areas is expected to cause some maize losses, but not significantly enough to impact total production. Minimal (IPC Phase 1) outcomes are likely to be sustained through September, as most poor households are expected to have sufficient food and income sources to meet their minimum food needs.

In parts of Teso and of southwestern Uganda, which experienced moderate second season harvest shortfalls of cereals, roots, tubers and pulses, poor households that still have food stocks are likely to smooth consumption with market purchases and wild foods. Most will deplete their stocks by March, except for some households who have already depleted their stocks. Crop sales are expected to be below-average, with the bulk of own production reserved for consumption and seed for first season planting. However, agricultural labor opportunities will be available beginning in February and households will also earn income from the sale of poultry and small ruminants. In Soroti, a basin market for Teso, below-average sorghum grain retail prices are expected to enhance purchasing power, and poor households will benefit from favorable labor-to-cereals terms of trade. Minimal (IPC Phase 1) outcomes are expected to be maintained through May, though about five percent of households in parts of Teso and Kigezi will likely be unable to afford non-food expenditures and will be Stressed (IPC Phase 2). From June to September, Minimal (IPC Phase 1) will be sustained with the availability of average first season harvests, but some households in flood- and landslide-prone areas may be Stressed (IPC Phase 2).

In Karamoja, food security is expected to continue to deteriorate through June. An increasing number of poor households will not be able to earn sufficient income from normal livelihood options such as firewood/charcoal collection and brewing to meet their minimum food needs. Agricultural labor opportunities are expected to seasonally increase in February/March, but income from this source will only partly meet households' food needs due to rising food prices as the current lean season progresses. Further, labor demand is likely to be below average as households will have limited ability to purchase seeds, impacting area planted and therefore expected 2019 production. A steady decline in food security is expected through March, and food gaps will widen as more households become unable to meet their minimum food requirements through the peak of the lean season in June. Crisis (IPC Phase 3) outcomes are likely to be sustained through June, with households experiencing food gaps primarily concentrated in Kotido and Kaabong. However, food availability and access will begin to improve with expected green consumption starting in July and dry harvests in August. Consequently, households are anticipated to recover to Stressed (IPC Phase 2) in Moroto, Kotido, Kaabong and Napak and to Minimal (IPC Phase 1) in Abim and Amudat.

According to WFP, humanitarian food assistance for refugees is planned through September, with full funding guaranteed through March and partial funding expected through May. Consequently, rations are likely to remain sufficient to sustain Stressed! (IPC Phase 2!) outcomes through May. At this time, WFP does not anticipate ration cuts in the June to September period, but there is uncertainty given the risk of funding shortfalls. Refugees who are allocated a small plot of arable land by March are expected to harvest first season production in July to supplement humanitarian food assistance, but this would not be sufficient to compensate for a significant reduction in rations. Continued food assistance coupled with July harvests is expected to continue to sustain Stressed! (IPC Phase 2!) outcomes through September.

AREAS OF CONCERN

Central Karamoja Sorghum and Livestock livelihood zone

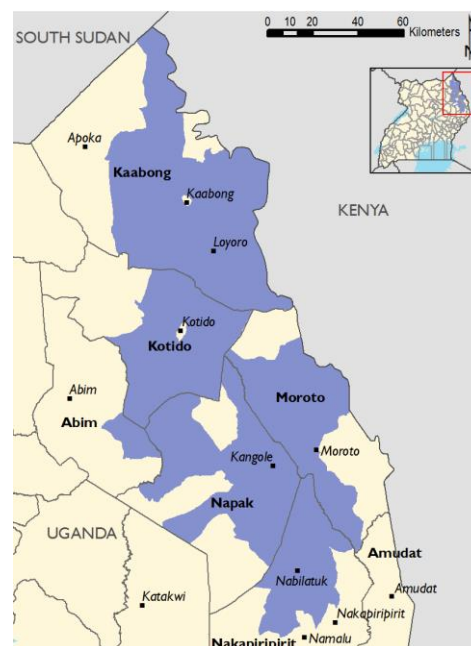
Current Situation

At the peak of the dry season (September-March), Karamoja has continued to experience atypically dry and hot conditions. Although rainfall in January and February is normally minimal (<15-20 mm per month), total September to December 2018 rainfall was 20 to 50 percent below average, leading to current cumulative rainfall deficits of approximately 100 mm. In addition, the sub-region has sustained 4.5 C° above-average Land Surface Temperatures since September. Although a brief period of enhanced December rainfall brought temporary relief, pasture and water resources are again declining to below-average levels.

As a result, seasonal declines in livestock productivity have been more pronounced than usual. Milk production is lower than normal, reducing access to milk for consumption that poor households receive in-kind in exchange for labor. Further, livestock movement to traditional dry-season grazing areas in western Karamoja began earlier than normal, which has limited milk availability for household members remaining behind at the homestead. However, early livestock migration has not affected labor opportunities for hired herders, as they move with migrating livestock.

In a typical year, maize and sorghum consumption from the annual harvest would last through February and the lean season would commence in March. As previously reported, however, poor households have already depleted their household stocks due to significantly below-average 2018 production, and rising market prices in northern Karamoja signaled an early start to the lean season in January. Most households are relying on market purchases and wild fruits, wild game, and local brew residue or dregs (a food substitute with caloric value) as sources of food, though the availability of wild foods has significantly declined given resource competition. Surplus bimodal production has continued to keep markets in Moroto and Napak well supplied with sorghum and other staple foods, as Moroto is a regional trade hub with well-functioning and accessible markets. Sorghum prices in Moroto and Napak key reference markets in December were not only below the five-year average, but among the lowest

Figure 4. Area of concern reference map, Central Karamoja Sorghum and Livestock livelihood zone



Source: FEWS NET

sorghum prices observed across all key reference markets nationally. However, due to the impact of poor infrastructure on market access and supply combined with increased market demand, sorghum prices in Kotido, Kaabong, and Nakapiripirit have been more dynamic. In January, prices were 11 and 50 percent above the 2018 average in Nakapiripirit and Kotido. In Kaabong, prices swung from 38 percent above the 2018 average in December to 24 percent below in January. Compared to the five-year average, prices in these three markets have remained generally stable.

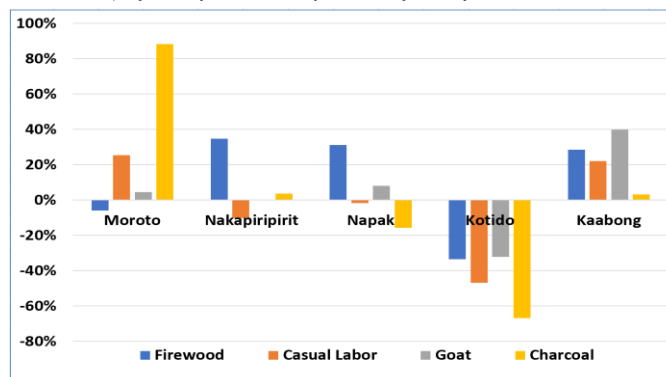
Crop sales income during the post-harvest November to December marketing period was significantly below average. Agricultural casual labor opportunities are still seasonally low as is typical in the dry season, but some households are able to access other casual labor opportunities such as herding, sand mining, brewing, and stone quarrying. Although brewing usually offers a source of income in the dry season in Kotido and Kaabong, providing poor households with the opportunity to sell firewood for the brewing process and to earn cash or in-kind payment through retailing, current brewing activities are constrained by low local sorghum supply. Most poor households are relying on charcoal, firewood, thatching grass, and brick sales and petty trading. Environmental degradation and regulations against charcoal burning and firewood collection limit the expandability of this income source. For those with small ruminants and poultry, livestock sales and product sales are also an important source of income.

Compared to January 2018, January daily labor wages declined in Kaabong and Kotido by 20 percent and in Napak by 11 percent. It should be noted, however, that wages are above the five-year average in Kaabong (+8 percent) and Kotido (+43 percent), driven upward by increased demand for casual labor in brewing, sand mining, and stone crushing, though the number of days available for this type of work remains limited. The daily wage rate has remained near average to above average in Moroto and Nakapiripirit.

Given the above factors, the terms of trade for sorghum against other key commodities declined by up to 56 percent in Kotido in December and January compared to the previous year (Figure 5). However, the availability of the bimodal harvest has temporarily stabilized the terms of trade in January compared to both the previous and five-year averages in other markets, despite declining terms of trade in December. The terms of trade in Moroto have been most favorable, remaining near to above average. Since July, Napak and Moroto have maintained high firewood-to-sorghum terms of trade ranging from 49 to 146 percent above average, driven by low sorghum retail prices and high firewood prices (Figure 6).

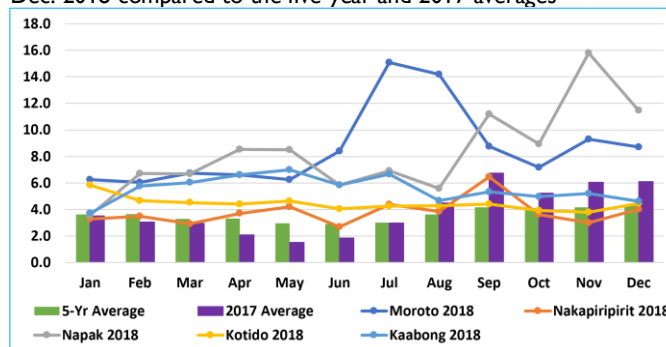
Driven by below-average levels of income and rising sorghum prices, many poor households in Karamoja are unable to purchase adequate food and essential non-food needs without engaging in stressed and crisis consumption and livelihoods coping strategies. In Kotido and Kaabong, reliance on loans and store credit for food is driving significantly high debt levels compared to the same period in 2017. The frequency of reduced or skipped meals is also high and widespread. The most recent WFP Mobile Vulnerability Analysis and Mapping bulletin (mVAM) for Karamoja observed that 37 percent of households across the region have sold productive assets to meet their food needs, though most poor households have too few assets to utilize this strategy. During a January rapid assessment, FEWS NET also observed higher sales of productive livestock than usual, but it should be noted that poor households typically have negligible to low holdings. FEWS NET also identified that a few very poor households have migrated to distant towns in or outside Karamoja region to beg or work for food. At the same time, atypically high numbers of women and young girls – primarily from Kotido – are traveling to neighboring districts in Acholi sub-region in search of labor opportunities. They are either paid in-kind food or paid in cash, which is sent back home.

Figure 5. Percentage change in terms of trade for key commodities in Karamoja, January 2019 compared to January 2018



Source: Farmgain/WFP

Figure 6. 2018 Monthly firewood-to-sorghum terms of trade, Jan. – Dec. 2018 compared to the five-year and 2017 averages



Source: Farmgain/WFP

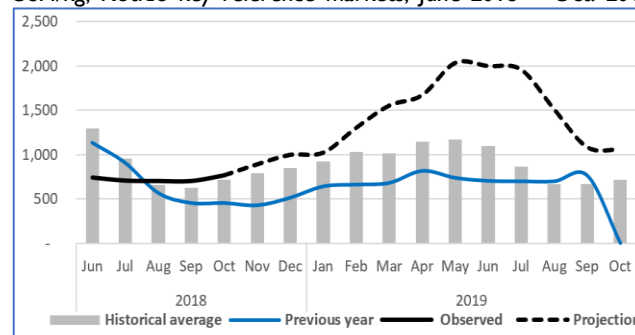
According to WFP mVAM, the typical number of district monthly admissions is 1,000, with rising admissions during the lean season. A comparison of 2017 and 2018 admission trends suggest that current monthly admission across much of Karamoja (Kaabong, Kotido, and Nakapiripirit districts) is more than 1,000 per month per district, signaling a deterioration in malnutrition levels. As previously reported, the joint WFP, UNICEF, and Government of Uganda August 2018 Food Security and Nutrition Assessment found that global acute malnutrition (GAM based on weight-for-height z-score) was indicative of Crisis (IPC Phase 3) across most districts. It is expected that GAM has since deteriorated within Serious (GAM WHZ 10-14.9 percent) levels. Due to the above factors, more than 20 percent of households are in Crisis (IPC Phase 3), primarily located in Kaabong and Kotido. Meanwhile, more than 45 percent of the remaining Karamoja population is Stressed (IPC Phase 2).

Assumptions

In addition to the national-level assumptions, the following assumptions have been made for Central Karamoja Sorghum and Livestock livelihood zone:

- The current forecast of average rainfall in Karamoja is generally expected to support average 2019 yields. However, uncertainty exists given the anticipation of changing El Niño to ENSO neutral conditions. Area planted is expected to be below average since many farmers could not save seeds from the failed harvest and they have a limited ability to buy seeds and other inputs. Production is therefore likely to be slightly below average.
- Given reduced area planted and anticipated below-average production, demand for agricultural labor is expected to be below normal through September. The wage rate is also expected to decline due to an oversupply of labor.
- In addition to seasonal declines in rangeland resources, access to traditional dry season and migratory grazing areas in central and northern Karamoja and neighboring districts are likely to be constrained until April due to livestock thefts and resource-based conflict between the Karamojong and the Turkana and Acholi. Livestock body conditions are expected to decline through April, but will begin to improve after the onset of rains and return of livestock to Turkana.
- Fall Army Worm incidence is expected among maize crops in Nakapiripirit, Kotido, Moroto, and Napak. Although control measures and FAW prevention by farmers is expected to be inadequate given limited income to purchase pesticides for prevention, the levels of crop damage are expected to be less severe compared to last year due to the rainfall forecast.
- Based on FEWS NET's price projections for Kotido market, the retail price of sorghum grain and other staple food commodities are expected to sharply increase until June and are likely to remain above the five-year and 2018 averages through September, given current low supply and anticipated below-average area planted (Figure 7). As a result, the terms of trade for sorghum against other commodities are expected to continue to decline.
- Charcoal/firewood prices are expected to decline in line with seasonal trends, but at depressed levels compared to the five-year average for the same period. Based on this and the above staple food price projections, charcoal/firewood-to-sorghum and labor-to-sorghum terms of trade are expected to be below average and lower compared to last year.
- Implementation of WFP's supplementary feeding and school feeding programs are anticipated to continue at baseline levels through September, but the mother-to-child feeding program supporting 55,000 children aged 6-59 months is likely to end in March with no additional funding. The work-for-cash NUSAF III program's is now expected to engage more than 20,000 people through September, which is less than previously anticipated. Participating households will receive UGX 5,500 per 54-day cycle of work.
- The Office of the Prime Minister (OPM) has delivered 300MT of food assistance to Moroto and efforts are underway to distribute it to all districts. Additional food assistance from OPM is likely to periodically occur until the end of the lean season in July.

Figure 7. Observed and projected retail sorghum price in US\$/kg, Kotido key reference markets, June 2018 – Oct. 2019



Source: Farmgain and FEWS NET

Most Likely Food Security Outcomes

Food security is expected to decline from February to June, leaving 20 to 30 percent of poor households in Crisis (IPC Phase 3). Kotido and Kaabong districts will be most severely affected. Market purchases are expected to remain the main source of food, leaving households vulnerable to rising food prices during the lean season, which began early. Poor households are expected to increasingly compete for labor opportunities in brewing, stone quarrying, sand mining and in sales of natural resources, and more households are likely to send family members to urban areas to work or beg. With the onset of the rains in March, wild food availability will begin to seasonally improve and agricultural labor opportunities in land preparation, planting, and weeding will become available. However, households are expected to have below-average income from this source given the likelihood of reduced area planted and declining wage rates in some districts. Normal livestock labor opportunities are expected to continue throughout the projection period, but also at lower wage rates in some districts. As these income sources will be insufficient to cover their minimum food needs, households are expected to intensify the use of consumption coping strategies, maximize debt and credit to purchase food, resort to sales of any available productive assets, and collect wild fruits/vegetables. Some will have access to periodic relief from OPM, and at least 12 percent of households are expected to benefit from NUSAF III cash-for-work income between March and June. Food consumption gaps are likely to widen, driven by rising food prices and declining terms of trade. The prevalence of acute malnutrition is expected to deteriorate within 'Serious' (GAM WHZ 10-14.9 percent) or to 'Critical' (GAM WHZ 15-30 percent) levels with increased morbidity at the peak of the lean season, with higher severity anticipated in northern Karamoja.

From June to September, food security will gradually improve with the availability of the harvest. Crisis (IPC Phase 3) outcomes are expected in Kaabong and Kotido districts in June, but will begin to ease in July. Households are likely to consume green harvests in July/August, beginning first in the south and progressing towards northern Karamoja. However, this is heavily dependent on the timeliness of the start of the seasonal rains in March, as well as rainfall distribution and the length of typical June/July dry spells. The main harvests are likely to begin in August/September, though production and food stocks at the household level are likely to be below average given the likelihood of reduced area planted. Improvements in food access and availability from July onward is anticipated to improve area-level outcomes to Stressed (IPC Phase 2) through September, though at least 10 percent of households are likely to remain in Crisis (IPC Phase 3) until the main harvests are underway.

DRC refugee settlements in southwestern Uganda

Current Situation

Since the completion of the refugee verification exercise in October, OPM/UNHCR has registered 35,196 new Congolese refugee arrivals. In November and December, civil unrest and insecurity surrounding the DRC presidential elections led to a surge of 28,434 new arrivals, equivalent to a rate of about 465 per day. Most fled North Kivu and Ituri provinces due to election-related and inter-communal violence and hostilities by armed groups. However, despite delays in the confirmation of election results, the arrival rate declined to about 220 refugees per day in January, amounting to 6,762 new arrivals. Refugees from North Kivu province primarily use the southern transit corridor, crossing into Uganda via Kanungu and Kisoro districts. Those from Ituri province tend to use the transit corridor south of Lake Albert, crossing through Ntoroko and Bundibugyo districts. Refugees received through at these border points are mainly relocated to Kyaka II settlement in Kyegegwa district, which has received 48 percent of new arrivals since October. Those that arrived from Ituri province via Nsonga and Sebagoro are relocated to Kyangwali settlement in Kikuube district (35 percent). Family reunification is the main driver of relocation of new arrivals to Rwamwanja settlement, while Oruchinga and Nakivale settlements also host a small proportion of new arrivals. Approximately 92 percent of DRC refugees have remained within the settlements, while 8 percent have relocated to Kampala.

Figure 10. Settlements in which refugees from DRC are residing



Source: FEWS NET

Since the Ebola virus outbreak began in the DRC last August, the government of Uganda and partner organizations have heightened infection prevention and control, surveillance, and screening of refugees across seven entry points in the high-risk districts of Kasese, Bundibugyo, Ntoroko, Bunyangabu, Kisoro, Kanungu and Kabarole. Kyaka II and Kyangwali settlement areas have been identified as high risk, as they host the largest proportions of new Congolese refugee arrivals. According to

the World Health Organization, 848 total cases have been reported in the DRC as of February 19, with an estimated case fatality ratio of 64 percent, pending verification. The trends in case incidence show an increase in the number of cases since early 2019 as the virus spreads within the DRC's Ituri and North Kivu provinces.

Due to constrained access to arable land, small plot sizes, and poor soil fertility, refugees rely on humanitarian food assistance as their primary source of food and own production as a secondary source. Similar to neighboring bimodal areas, average to above-average second season rainfall performance led to average to slightly below-average harvests in December/January. Based on a standard 900m² plot size, it is estimated that refugee households with access to land harvested 30-50kg of maize and 20-30kg of beans on average, which is expected to provide one to two months of food for an average household of six. As it is currently the dry season, no significant agricultural activities are taking place right now. WFP is now currently distributing a full ration to all new and old case refugees regardless of when they arrived in country. In December, WFP provided rations to 979,773 refugees, covering 82 percent of the population, of which 764,688 refugees received in-kind food assistance and 215,185 refugees received unconditional cash transfers equivalent to a full ration. Disaggregated data by country of origin for recipients of rations is currently unavailable. Rations continued at planned, similar levels in January.

Proxy markets supplying DRC refugees in and around Mubende are well supplied with maize stocks from second season surplus-producing regions of Bunyoro (Masindi, Kiryandongo, Kibale, Hoima), Tooro (Fort Portal, Kyenjojo, Kamwenge) and the Rwenzori's (Kasese). Staple prices in Mubende have generally been below or near the five-year average since August, modestly supporting food access for an estimated 66 percent refugee households with a small source of income. In January, cassava and sorghum traded 29 and 25 percent below the five-year average, while beans remained near average. Maize prices rose 14 percent above average, but this is likely due to a temporary increase in demand from boarding schools at the beginning of the term. Combined with humanitarian food assistance, most refugees are able to meet their basic food needs and are Stressed! (IPC Phase 2!), but are unable to afford all essential non-food needs.

Assumptions

In addition to the national-level assumptions, the following assumptions have been made for refugee settlements that primarily receive refugees from the DRC:

- Newly arrived refugees from the DRC via the southwest border and Lake Albert corridors are expected to primarily be settled in Kyangwali and Kyaka II settlements, while small numbers will be resettled in Nakivale and Oruchinga or in Rwamwanja for reunification. Most are likely to receive 900m² plots, but it is expected that availability and access to agricultural land for new arrivals will continue to diminish with anticipated refugee influxes.
- According to WFP, humanitarian food assistance at current levels is planned and likely through September, fully funded through March, and partially funded through May. Although ration cuts are not currently anticipated from June to September, WFP faces funding shortfalls for the period of April to September 2019.
- New arrivals that do not receive a plot of land by March/April will not be able to engage in crop production requiring a three-month cycle, and those who do not receive a plot of land by April not be able to produce mid-season short-cycle vegetables. Old and new arrivals that possess an arable plot are expected to cultivate first season crops to supplement their monthly food rations. Given the average rainfall forecast, average harvests of 20 to 50 kgs of cereal are expected in June/July, with green maize available in May.
- For refugees that receive humanitarian assistance as a cash voucher equivalent to a 30- or 60-day ration, FEWS NET's integrated price projections in Mubende market – which serves as a proxy market for the refugee settlements in Western Uganda – indicate that staple food prices are likely to remain near-average. Prices are likely to gradually rise through May, then decline with the anticipation of new harvests in June.
- It is expected that both in-kind and cash-based modalities will continue to be available to the refugees and that the proportion of refugees obtaining food assistance will be higher than those receiving assistance in cash within the scenario period. Regardless of modality, the functioning of staple markets in the refugee settlements are expected to be normal with typical levels of supplies and favorable prices to enable access by refugees.

Most Likely Food Security Outcomes

The rate of new refugee arrivals from DRC is expected to be sustained due to the on-going, complex humanitarian crisis. Refugees have already exhausted household food stocks from the second season harvests, leaving them heavily dependent on humanitarian food assistance until the first season harvest becomes available in June. Among the old case load of refugees,

some households are likely to access supplemental incomes sources from small businesses and petty trade, sales of humanitarian food assistance, and sales of small livestock. With a favorable average rainfall forecast for the March to May first season, most households will access food from own production by June, when approximately 20 to 50 kgs of cereal lasting about one to months will be harvested. Some households will also be able to participate in agricultural labor between February and April, though the opportunities are minimal among refugee and host communities. Others with larger plots may be likely to access crop sales incomes from green or dry harvests in May/June as well. However, new refugees arriving after the end of the first season planting period will not access food and income sources derived from first season production.

Humanitarian food assistance is expected to continue to serve as all refugees' primary food source. Full rations or their cash equivalent are expected to continue to be delivered to all refugees through May, sustaining Stressed! (IPC Phase 2!) outcomes. Planned levels of food assistance are not fully funded from June to September, but ration cuts are not currently anticipated. As a result, Stressed! (IPC Phase 2!) outcomes are likely to be maintained through September. Should funding shortfalls result in a moderate ration cut, the availability of one to two months of first season harvests in June and intensification of stressed coping strategies would likely delay deterioration to worse outcomes to beyond the scenario period. However, these sources would not be sufficient to compensate for a more significant reduction in rations.

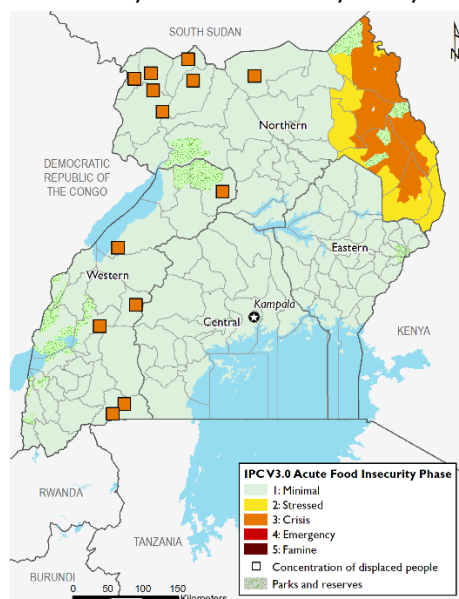
EVENTS THAT MIGHT CHANGE THE OUTLOOK

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

Area	Event	Impact on food security outcomes
National, bimodal areas	Poorly distributed rainfall with unexpected dry spells during the March to May rainy season	Shortfalls in first season production would be expected and would likely cause food prices to rise in. More households would be Stressed (IPC Phase 2), especially in Teso region.
Karamoja region	Excessive, above-average rainfall causing water logging and high pest incidence or Delayed, below-average and/or poorly distributed April-September rains	Given the uncertainty of the forecast transition from El Niño to ENSO neutral conditions, there is potential for rainfall to tend to above or below average as the season progress. Waterlogging conditions would likely delay planting and lead to crop losses. Below-average, delayed, or poorly distributed rain would also likely delay planting and lead to crop losses. Delayed planting would delay green harvests and prolong the lean season. In the event of crop loss, most households would not have the resources to replant and harvests would be below average. Crisis (IPC Phase 3) outcomes would be sustained beyond July.
DRC and South Sudanese refugee settlements	Shortfalls in food assistance funding resulting in significant ration cuts from June to September	Ration cuts of 50 percent or more would likely result in Crisis! (IPC Phase 3) outcomes by August or earlier. New refugee arrivals without access to own production or other established livelihood strategies would face food gaps and turn to crisis and emergency coping strategies. Refugees with access to own production would likely deplete first season food stocks by the end of July or earlier and turn to crisis coping strategies. In the unlikely scenario of a complete absence of food assistance, food security outcomes would likely be even worse as reflected in the maps in Annex 1. If a prolonged absence assistance from March to September occurred, it is expected that settlements with large proportions of new arrivals and/or refugees without access to arable land would likely deteriorate to Emergency (IPC Phase 4) in the June to September period. Food consumption gaps would likely become large, or refugees would only be able to mitigate large food gaps through asset liquidation.

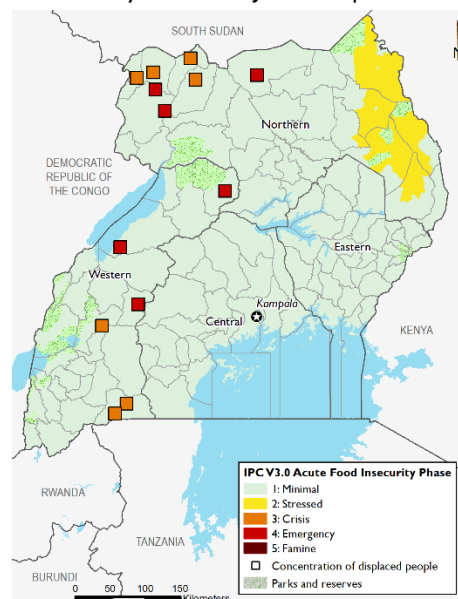
ANNEX 1. FOOD SECURITY OUTCOMES ASSUMING NO HUMANITARIAN FOOD ASSISTANCE IN THE PROJECTION PERIOD*

Projected food security outcomes, February to May 2019



Source: FEWS NET

Projected food security outcomes, June to September 2019



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.

*Current IPC v3.0 protocols require that a second set of projection maps be created to indicate the most likely food security outcomes in the absence of the anticipated effects of humanitarian food assistance. This protocol is under review and may change.

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.](#)