Food security outcomes expected to improve through May 2018

KEY MESSAGES

- Following at least two consecutive poor rainy seasons, food security needs are expected to peak in October 2017 as food and income sources are below-average across the majority of pastoral and marginal agricultural areas. As a result, Crisis (IPC Phase 3) outcomes are expected through early December in areas of Turkana, Marsabit, Mandera, Wajir, Isiolo, Garissa, Tana River, Samburu, and Laikipia, requiring urgent humanitarian assistance. However, an improvement to Stressed (IPC Phase 2) outcomes is expected across all pastoral areas in early 2018; however, some of the most vulnerable households are still likely to be in Crisis (IPC Phase 3).

- Over the western half of the country, off-season rains since July have led to significant improvements in forage, water, and livestock body conditions, which has allowed for terms of trade to be above average in Turkana and West Pokot, facilitating greater food access. While there are some regional variations in the forecast, the short rains (October – December) and long rains (March – May) are expected to lead to better livestock productivity and crop production.

- Nearly complete harvesting of the long rains maize crop in the high and medium-producing areas is likely to be about 10 percent below average, but is still helping to improve food availability countrywide and moderate staple food price increases, especially since the Government of Kenya’s maize subsidy program stopped at the end of October. Regardless, staple food prices and maize imports are expected to remain above five-year averages through May 2018 due to atypically high demand.

- Based on the forecasted average to below-average rainfall for the area, the short rains harvest in the marginal agricultural areas may be slightly below normal. Regardless, short-cycle crops, available from December, are expected to restore depleted household stocks. With less market dependence and improved incomes through crop sales, food consumption and nutrition levels are expected to increase, facilitating improved food security outcomes.

SEASONAL CALENDAR FOR A TYPICAL YEAR
NATIONAL OVERVIEW

Current Situation

Current Food Security
Following late and below-average March – May 2017 long rains across most of the country, there has been a steady decline in household food security, especially in most of the pastoral and marginal agricultural areas. The marginal agricultural areas experienced below-average crop production, with crop failure in some areas of the southeast. As a result, the majority of households in these areas have depleted their food stocks early, leaving them dependent on high priced staple foods from the market. In most of the pastoral areas, like, Mandera, Wajir, Isiolo, Garissa, Tana River, and parts of Marsabit, forage and water resources steadily declined before the start of the October – December short rains, negatively affecting livestock body conditions and, consequently, meat and milk productivity. Below-average livestock prices have kept purchasing power low, amidst high staple food prices, reducing food access and consumption. Low food and milk consumption have resulted in atypically high malnutrition rates, especially among children under five years of age. The majority of the food insecure population resides in the arid and semi-arid counties that have experienced low livestock productivity, crop failure, high staple food prices, and low livestock terms of trade. Currently, FEWS NET expects acute food insecurity needs to peak in October before the short rains are expected to bring about much needed improvements across most areas, with more modest improvements in the northeast.

Seasonal Progress
Between July – October 2017, significant offseason rains across the western half of the country led to marked improvements in water and forage availability. The rains have been most consistent in the high and medium maize-producing areas and the agropastoral and pastoral counties of Narok, Baringo, West Pokot, and Turkana, receiving rainfall amounts equivalent to 150 – 400 percent of normal. Parts of northwestern Marsabit, Samburu, and Laikipia also received these offseason rains in similar amounts, which have provided a reprieve for dry season grazing areas that have been severely taxed due to atypical livestock migration inflows.

The short rains (October – December) have had an erratic and delayed onset across many eastern areas. As of the second dekad in October, there had been no rainfall in Garissa and parts of Wajir, Isiolo, Tana River, Kitui, and Lamu. However, western areas of Kenya have continued to experience moderate to heavy rainfall (see Figure 1).

Pasture, water, and livestock
Particularly in the east, as dry conditions persisted through mid-October, forage and water availability have decreased (see Figure 2). Both pasture and browse range between fair to poor across most of the pastoral areas. Trekking distances to water sources for both domestic and livestock uses continue to rise as sources dry up due to high temperatures and increased usage. Livestock body conditions remain below average, with cattle mostly exhibiting poor body conditions, goats and sheep fair to poor, and camels in fair condition. This has resulted in significantly low milk production, especially from cattle. Atypical livestock migration continues within counties and across both county and Kenya’s borders, as herders are forced to leave their homesteads in search of forage and water for their livestock.

Markets and Trade
Currently, even with normally functioning markets across the country, low food commodity volumes and high prices continue to hamper household food availability and access. Between August and September, wholesale maize prices remained above average in the urban reference markets due to low volumes. For example, prices were 46 – 48 percent higher in Kisumu and Eldoret due to the dependence on high priced imports and were relatively lower, at 12 and 23 above average in Nairobi and

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Projected food security outcomes, October 2017 to January 2018

Source: FEWS NET

Projected food security outcomes, February to May 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.

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Mombasa, respectively, due to access to limited cross-border imports from Tanzania, subsidized Government of Kenya imports, and limited harvests from the marginal areas. Dry bean prices remained above average across all markets, 34 – 44 percent above average in Nairobi and Eldoret, due to high priced imports from Uganda, while the prices were relatively lower, at about 12 – 19 percent above average, in Mombasa and Kisumu due to access to local harvests and cross-border imports from Tanzania and Uganda, respectively. Since May, the Government of Kenya’s maize subsidy program had facilitated the availability of subsidized maize flour at KES 47 and KES 90 for one and two-kilogram flour packets, respectively. The Government of Kenya stopped the program, as of the end of October, coinciding with the 2017 long rains harvest from the high and medium rainfall areas that is expected to temporarily lower maize prices across the country due to the increased supply into the market.

As a structurally maize deficit country, Kenya continues to import maize from its East African neighbors and international sources to meet its higher consumption demands, following consecutive below-average production seasons. In the last quarter, between July and September, Kenya imported 92 percent of the region’s imports, totaling approximately 144,329 metric tons (MT). Out of these maize imports, 22, 35, and 43 percent were from Tanzania, Uganda, and Ethiopia, respectively. Compared to the four-year averages, maize imports from Uganda were 34 percent below average due to low opening stocks, while maize imports from Tanzania were 63 percent below average due to its maize export ban. Imports from Ethiopia, however, were exceptionally high, 39 percent above average, due to the increased demand and attractive prices offered by Kenya. Despite this significant regional cross-border trade, from June through the end of October 2017, Kenya still imported duty-free white maize from Mexico and Zambia to cover demand and plans to import yellow maize for animal feed through August 2018.

Production
The 2017 long rains maize crop in the high and medium rainfall areas is likely to be below average. Harvesting is complete in all regions, except the North Rift that typically produces the majority of the production. Based on FEWS NET estimates, projected production is expected to drop by approximately 10 percent (which is not as low as Kenya’s State Department of Agriculture previously estimated) attributed to a number of factors, such as reduction in area planted, like in the North Rift where after a dry spell replanting had to be done; delayed onset of the rains, resulting in shorter growing periods; poor rainfall distribution; frost; hail storms; flash floods; Fall Armyworm (FAW) infestations; inadequate fertilizer application; and attacks by maize lethal necrosis disease (MLND), particularly in Bomet and Narok counties. Extension of the long rains into October are constraining drying of harvested maize and threatening the condition of maize crop in the fields, with already reported post-harvest losses in the North Rift region.

Health and Nutrition
The nationwide nurses’ strike that had been ongoing for over four months significantly affected service delivery in the health and nutrition sectors. (It recently ended on November 3, 2017, with nurses returning to work.) Approximately 45,000 nurses had been participating in strikes in almost all of Kenya’s counties, since June 6, demanding an increase in their salaries. According to a report by the Nutrition Information Technical Working Group (NITWG), the strike had significantly affected nutrition outreach activities that target the most vulnerable populations, and up to 40 – 50 percent of planned outreaches were not
occurring in West Pokot, Baringo, Garissa, and Isiolo counties, hindering identification and treatment of malnutrition cases and delivery of vaccines and supplementary foods. As a result of the reduced outreach activities and closure of health facilities, there had been an overall drop in admissions to severe and moderate acute malnutrition treatment programs across affected counties, further worsening the nutrition situation, especially for pregnant and lactating women and children under five years of age.

**Household Food Security Indicator Data**

The Kenya Food Security Steering Group (KFSSG) carried out a long rains assessment in July 2017 that projected food security outcomes through January 2018 and incorporated data on the prevalence of global acute malnutrition (GAM), collected by a number of SMART surveys conducted in June/early July, reflecting outcomes at the sub-county level. The surveys determined that the most severe projected nutrition outcomes were in Turkana and Marsabit. Also, household food security indicator data from the National Drought Management Authority (NDMA) early warning system sentinel sites was collected to reflect outcomes at the county level, including Food Consumption Score (FCS) and Reduced Coping Strategies Index (rCSI). In addition, levels of milk production and the proportion of children under five years of age at risk of malnutrition, measured by Middle Upper Arm Circumference (MUAC) <135mm, were collected as well.

**Humanitarian Assistance**

Humanitarian assistance, through both food and non-food interventions, is ongoing across the country. However, the assistance provided by national and county governments has encountered a slow-down with the transition of personnel as a result of the 2017 general elections. Even though emergency cash transfers, in addition to the regular Hunger Safety Net Program (HSNP), are increasingly being relied on to avoid logistical challenges of food distributions, in-kind food assistance is being provided to the most food insecure by national and county governments and non-government actors across pastoral and marginal agricultural areas to varying degrees and is likely to continue through at least December. While not considered emergency humanitarian assistance, Food for Assets’ and Cash for Assets’ development assistance is also facilitating poor household food availability and access by providing approximately 65 percent of the monthly food basket in the form of food or cash in the arid counties and about 50 percent in the semi-arid counties. Supplementary feeding programmes carried out by humanitarian agencies continue, and the World Food Programme (WFP) is implementing a blanket supplementary feeding (BSF) program for all children, ages 6 to 59 months, and pregnant and breastfeeding mothers in areas where acute malnutrition is over the emergency threshold of 15 percent. Twice a month distributions of BSF are aimed at curbing worsening acute malnutrition and to contribute to minimum basic food needs in all sub-counties in Baringo, Turkana, Mandera, and Isiolo, and Marsabit’s Laisamis and Moyale sub-counties. There are discussions that BSF will continue through at least April 2018 in these areas.

**Assumptions**

The following assumptions have been made at the national level:

**2017 Unimodal Long Rains Production**

- The **2017 long rains maize harvest**, available from October – December in the unimodal areas of western Kenya and the Rift Valley, is likely to be 10 percent below average, according to FEW NET estimates.

- The above-average and extended seasonal rainfall over western, unimodal Kenya continues to negatively impact **maize harvesting and drying**. The extent of losses is not likely to be known until after harvesting is complete in December.

**Seasonal Forecast**

- According to NOAA and USGS, with the expected La Niña conditions, FEWS NET assumes the **October – December short rains** in eastern Kenya and Marsabit will be average tending to below average and erratic in distribution over time. In other areas, including in Turkana, average tending to above average rainfall is expected for the remainder of the short rains season.

- According to the GHACOF consensus forecast, there is a 40 percent probability that **seasonal temperatures** for the October – December period are likely to be above average across the country, exacerbating dry conditions.

- Main season (February – August 2018) **rainfall in unimodal Kenya** is likely to be average tending to above average in cumulative amounts during the February – May period.
The long rains (March – May 2018) are expected to below average in the northeast and southern coastal areas, and average tending to below average across the rest of the country.

2017/18 Marginal Agricultural Production
- Given October 2017 rainfall deficits across some southeastern and coastal marginal agricultural areas, and the forecast for average to below-average rainfall for the rest of the short rains season, total overall production is likely to be slightly below normal.
- Fall Armyworm (FAW)
  - FAW has been reported in 40 out of the 47 counties, and according to FAO, there is a high probability that it could impact the short rains cropping season. A combination of various factors, including temperature, wind, and rainfall patterns influence the movement of FAW and affect the severity of an infestation. Depending on the extent of pest management strategies to control FAW, there is a possibility that the pest could also impact the 2018 long rains cropping season.

Markets and Trade
- Staple food prices are expected to remain higher than recent five-year averages through March 2018 in spite of the expected seasonal decline during the October-to-January harvest period. Based on an analysis of current prices and drivers, FEWS NET’s integrated price projections, using data from the Ministry of Agriculture, forecast that wholesale maize prices between October 2017 – May 2018 in the urban reference market of Nairobi are projected to remain 21 – 27 percent above average, ranging between KES 3,400 – 3,900 for a 90-kilogram sack.
  - Regional and international maize imports into Kenya are expected to be 75 percent above the recent five-year average to cover demand. Imports from Ethiopia are expected to continue to atypically rise, and there are expected imports from non-traditional overseas sources, such as South Africa, Zambia, Mexico, and Ukraine.

Nutrition
- The onset of the short rains is expected to contribute to increased milk access in areas where livestock productivity improves. Also, the cereal harvest from the short rains, beginning in February, is also likely to enhance food consumption and dietary diversity, thus improving the nutrition status. Nevertheless, typical Critical levels (GAM 15-30 percent) in most arid and semi-arid areas are likely to be sustained to May 2018.

Most Likely Food Security Outcomes

October 2017 to January 2018: From October, the long rains harvest from the high and medium-producing areas is expected to improve food availability and access, slightly easing staple food prices, generally improving food security outcomes. However, the atypical extension of rains into the harvesting period is likely to result in post-harvest losses, reducing the supply, and maintaining maize prices at 24 – 26 percent above average. The short rains are expected to improve forage and water availability, resulting in improved food and milk consumption across most of the country. Nurses’ return to work is expected to increase health and nutrition activities, leading to typical improvements usually observed in nutritional status from late November through January. At a macro level, regional and international maize imports are expected to increase by 50 percent from January onwards, following increased availability from harvests in Ethiopia and Uganda, increasing supply and moderating atypically early and rapid price increases. With the availability of the long rains harvest and regional and international imports facilitating good food access, the high and medium-producing areas are likely to experience Minimal (IPC Phase 1) outcomes. By mid to late December, across the pastoral areas, there are expected improvements, which will be largely reflected in higher livestock productivity levels. This is likely to lead to higher food and income sources and an improvement to Stressed (IPC Phase 2) outcomes. In some eastern pastoral areas, even if total cumulative rainfall is below-average, the short rains are still likely to be sufficient to register an improvement in forage and water resources since the rainfall deficits were not as severe during the 2017 long rains in most areas, outside of Isiolo. However, emergency humanitarian assistance will still likely be required for some of the most vulnerable households, who will still experience Crisis (IPC Phase 3) outcomes at the end of January. Overall, Stressed (IPC Phase 2) outcomes are expected across the majority of the marginal agricultural areas.

February to May 2018: This period is expected to be marked by steady improvements in household income and food availability. Maize prices are likely to gradually decline further, driven by the short rains harvests, beginning in February, from the marginal and agropastoral areas, but are likely to still oscillate at 21 – 24 percent above average. Overall, household
incomes in the pastoral and marginal areas will likely improve from March at varying levels depending on the rainfall performance and recovery. Due to the significant improvements that are likely to take place across the majority of the country through May 2018, Minimal (IPC Phase 1) outcomes are expected in most marginal agricultural areas as well as the high and medium-producing areas. However, Stressed (IPC Phase 2) outcomes are likely to persist in some coastal marginal agricultural areas. As incomes continue to rise in pastoral areas with improved herd sizes, livestock productivity, and sales, more poor households are expected to move to Stressed (IPC Phase 2) acute food insecurity. However, Crisis (IPC Phase 3) outcomes are likely for some of the most worst-affected pastoralists, particularly for households in Tana River (Tana North, Tana River), Mandera (Lafey, Mandera South), Garissa (Lagdera, Balambala), Wajir, and Isiolo (Merti Garba Tulla). These households are likely to continue to require humanitarian assistance through May, particularly if they experience below-average 2017 short rains, followed by poor 2018 long rains.

**AREAS OF CONCERN**

**Northwestern Pastoral Livelihood Zone in Turkana County**

**Current Situation**

Following the poor performance of the 2017 March – May long rains, with some southern areas of Turkana County receiving less than 50 percent of average rainfall, atypical and above-average rains, ranging mostly from 150 – 400 percent of normal since July, have significantly improved water and forage availability. Current water sources are boreholes, shallow wells, and rivers that have been recharged and allowed trekking distances for domestic water use to fall by 18 percent, but they still remain 58 percent above the long-term average. However, distances between grazing grounds and water sources for livestock have improved to average levels. The quality and quantity of pasture and browse is good across the County, and as a result, livestock body conditions have improved to good for all species. Approximately 80 – 90 percent of all livestock species are in the grazing areas along the Kenya-Uganda border after pastoralists moved them back from Karamoja, Uganda, once the off-season rains began in July.

Improvements in livestock body conditions and available forage and water is supporting conception for all species, with ongoing calving, lambing, and kidding, helping restore livestock losses from the previous poor rainy season. In April 2017, due to the severity of the drought, livestock deaths affected approximately 10 percent of the County’s goat and sheep population. Milk production, which is primarily from camels and goats, is improving and increased from 39 liters per household per month in August to 43 liters in September but remains 54 percent below average. Access to milk at the household level, however, remains constrained as most of the livestock remain far from homesteads. Households have been forced to purchase powdered milk from shops, which is facilitated by higher incomes, but the level of need is declining with improved milk production. In September, there were typical cases of Mange, Contagious Bovine Pleural Pneumonia (CBPP), Contagious Caprine Pleural Pneumonia (CCPP), and Trypanosomiasis; however, no livestock deaths were reported.

Household purchasing power has significantly improved as terms of trade in September were 11 percent above the five-year averages, the highest level to date in 2017. Pastoralists were able to buy 38 kilograms of maize with the sale of one goat compared to the average 34 kilograms (see Figure 4). This improvement was facilitated by good body conditions as goat prices were 33 percent above the five-year averages in September, while maize prices remained relatively stable, but 19 percent above average, due to depleted household stocks and increased demand. Cattle prices have increased as well, but not by as much at seven percent, and remain within averages.

Food consumption from NDMA sentinel site data shows an improving trend, facilitated by higher incomes from livestock sales, but still remains below average at one to two meals per day compared to the normal three. Some poor households continue to apply consumption-based coping strategies, though at reduced levels, such as reducing meal frequency and portion size, and adults forgoing meals to feed children. According to the September NDMA sentinel site data, the Reduced Coping Strategies Index remained stable at 14 in September but is lower in the agropastoral zones at 13 in September, and 63 percent of households in the County had borderline to poor food consumption score, an improvement from 67 percent in August.

[Figure 3. Reference Map for Northwestern Pastoral Livelihood Zone]

Source: FEWS NET
After Turkana County recorded an Extremely Critical Global Acute Malnutrition (GAM) prevalence of 31 percent in June (CI: 28.7-33.3), as part of the SMART nutrition surveys conducted for the long rains assessment, proxy data from September shows improvements in malnutrition rates due to improvements in food availability and access. The SMART surveys had indicated a deterioration from typical Critical levels (GAM 15-30 percent) of acute malnutrition but with no increases in mortality. The high GAM prevalence was attributable to household food insecurity caused by low milk availability and high food prices as well as from high morbidity reported at 37.8 percent. Chronic factors, such as poor child feeding practices, prevalent poverty, inter-community conflict, low literacy, and limited access to health facilities also likely played a role. In July, the proportion at risk of malnutrition, measured by Middle Upper Arm Circumference (MUAC) < 135mm, from the National Drought Management Authority sentinel sites showed the proportion of children at risk of malnutrition was within average at 19 percent but has since gradually decreased to 16 percent in September, reflecting improvements in milk and food consumption at the household level.

Currently, there is a variety of emergency humanitarian assistance ongoing in the County, which is helping to target the most vulnerable households and mitigate acute food security outcomes. This assistance includes emergency cash transfers that are facilitating needed market purchases and direct food assistance, including blanket supplementary feeding. In addition, there is emergency nutrition support in Turkana Central, Loima, and Turkana South. In addition to the regular safety net assistance for 39,500 households, emergency Hunger Safety Net Programme (HSNP) cash transfers for households are planned, funded, and likely to continue through the entire scenario period for approximately 7,500 households in the County.

Favorable terms of trade and improving food and milk consumption have led to marked improvements in food security in the County, significantly reducing Crisis (IPC Phase 3) outcomes. For the majority of areas in Turkana, except in Turkana North, Stressed (IPC Phase 2) outcomes prevail as poor households still face limited income, even with ongoing humanitarian assistance, and can only meet their minimum food requirements and are forgoing essential non-food needs. However, in some areas in Turkana North Sub-County (Kaaleng, Kibish, Lakezone), where poor infrastructure constrains humanitarian assistance delivery and market function, and sporadic conflicts between communities tends to disrupt livelihood activities, a number of households are still experiencing consumption gaps and are in Crisis (IPC Phase 3).

Assumptions

In addition to the national assumptions described above, the following assumptions have been made about Northwestern Pastoral Livelihood Zone in Turkana County:

- Based on an analysis of current prices and drivers, FEWS NET’s integrated price projections show that the average maize prices in Turkana County, between October 2017 and January 2018, are expected to be 12 – 14 percent above average due to continued supply shortfalls. In February, prices are expected to drop to five-year average levels and thereafter are likely to gradually increase and remain eight to ten percent above average through May 2018 as household and market supplies dwindle.
- FEWS NET projects that on average goat prices will oscillate from about 28 percent above average in October 2017 and gradually decline to 19 percent above five-year averages in February 2018 due to heightened dryness and slightly deteriorating livestock body conditions. From March onwards, prices are likely to gradually increase to 27 percent above average in May 2018.
- The October – December short rains are likely to boost livestock body conditions and production, thereby increasing milk access and income from livestock. This, together with the on-going health and nutrition interventions, such as treatment of acute malnutrition and school feeding programs from the County and national government and other humanitarian actors, is expected to contribute to improvement of acute malnutrition. However, nutrition improvements will likely be reversed during the dry months of January – March 2018 when livestock production is low. Overall, typical Critical levels of acute malnutrition are likely to be sustained through May 2018.
Most Likely Food Security Outcomes

October to January: From October, income from livestock sales, mainly of goats, will likely continue to be above average due to good body conditions, facilitating needed market food purchases. Increases are expected in income from livestock-related wage labor and milk sales as livestock return to their homesteads, likely by November, as the short rains are established and as their productivity improves. Milk production will increase with lambing and kidding that is occurring through November. However, for a majority of the poor households, income and meat products will remain below-average levels due to low livestock holdings. Dependency on typical wild foods, such as doum palm fruit, roots, and berries, will increase through November as other food sources remain low. During this period, poor households will likely intensify the sales of livestock and charcoal and remain dependent on remittances and humanitarian assistance to cover their minimum food needs. In December, as short cycle crops become available at expected average levels from the cropping areas, dietary diversity and food consumption is expected to improve further. From mid-November, more households will improve to Stressed (IPC Phase 2) acute food insecurity from Crisis (IPC Phase 3). However, in areas in Turkana North (Kaaleng, Kibish, Lakezone), poor households are expected to continue to experience restricted food access at least until December, as humanitarian assistance and market functions remain restricted by poor infrastructure, leaving them dependent on below-average livestock-related food and income sources, remaining in Crisis (IPC Phase 3).

February to May: Further improvements in food security are expected during this period as staple food prices slightly drop in February and above-average terms of trade continue to facilitate food access. The March – May long rains are set to improve livestock productivity to average levels as calving, lambing, and kidding occur from March through April, decreasing the high level of need for market purchases. Livestock-related wage opportunities are likely to improve to average as pastoralists move their livestock back to homesteads in March, and herd sizes increase. As a result, dependence on wild foods, remittances, and charcoal sales will likely drop back to average levels. In addition to the mentioned improvements, in Turkana North, between April and May, typical conflicts are set to be low due to the likely presence of adequate forage, improving access to markets, and expected humanitarian assistance. The available average harvest of short cycle crops in May is expected to increase household food availability and consumption. Dependence on humanitarian assistance is likely to decline as a food source as the long rains bring about further improvements that are reflected in higher livestock productivity and favorable livestock prices, increasing purchasing power and milk consumption. The households in Crisis (IPC Phase 3) in Turkana North are expected to improve to Stressed (IPC Phase 2), while across the County, some more households are expected to improve to None (IPC Phase 1) acute food insecurity. However, due to underlying vulnerabilities of the population, most notably poverty, a majority of households will still be unable to afford some essential non-food expenditures without engaging in irreversible coping strategies and are likely to be in Stressed (IPC Phase 2).

Northern Pastoral Livelihood Zone in Marsabit County

Current Situation

Food security continues to wane in Marsabit County, following the below-average 2017 long rains that marked the second consecutive poor season across all areas, except the southern part of Laisamis Sub-County, where it marked the third consecutive poor season. However, from July through September, parts of Moyale, Laisamis, and northwestern parts of North Horr received atypical off-season rainfall that eased the severity of water shortages and led to marginal improvements in pasture and browse. Other areas of the County remained seasonally dry until the second dekad of October when there was above-average rainfall that recharged some surface water sources in select areas. Boreholes, however, remain the main source of water. Trekking distances to household water sources and for livestock from grazing areas to water sources remain above average, except in the areas that received off-season rainfall.

Due to poor regeneration and increased pressure from in-migration, generally pasture conditions remain poor, while browse ranges from fair to poor. As of late September, pasture was depleted in the agropastoral areas of Moyale and Saku sub-counties and in the pastoral areas of North Horr (Turbi, Bubisa, El-Gade), Laisamis (Farakoen, Logologo, Korr, Laisamis, Kargi), Moyale (Obbu, Golbo), and in the dry-season grazing areas of Moyale (Badanrero, Laqi, Dabel, and Amballo). Due to even poorer rangeland resources in neighboring areas, over the last few months, there has been atypical in-migration as pastoralists have brought their livestock from Isiolo, Wajir, Samburu,
Mandera, and even from southern Ethiopia. (However, some out-migration has been observed to southern Ethiopia and Samburu.) About 70 percent of livestock have migrated to grazing areas, and livestock are concentrated where there is better pasture; to date, no unusual livestock disease outbreaks have been reported.

Generally, livestock body conditions remain poor for cattle, fair to poor for sheep and goats, and fair for camels, with some slight variations depending on off-season rainfall levels. Only approximately 30 percent of livestock are near homesteads, and even though most are milking herds, milk production is primarily taking place in the dry season grazing areas and is below average. For example, in northern areas of North Horr Sub-County, milk production was 53 percent below normal in September, which is affecting both household consumption and income. Camels remain the primary sources of milk production due to the poor body conditions of other species.

Weakened body conditions have kept goat prices below average by about 22 percent, as of September, and with stable, but above-average maize prices, terms of trade are approximately 30 percent below the five-year average, marking a further reduction in household purchasing power. As a result, poor households are increasingly using consumption-based strategies to bridge their food gaps. According to the September NDMA bulletin, the average Reduced Coping Strategies Index (rCSI) rose from 20.3 in August to 21.2 in September as households reduced their meal frequency, skipped meals, reduced meal portion sizes, relied on less preferred or expensive foods, and borrowed food on credit. The majority of households were consuming one to two meals a day instead of the normal three, and NDMA September sentinel site data showed that about 35 percent of households in the County had borderline to poor food consumption score.

In late June/early July 2017, four sub-county SMART nutrition surveys in Marsabit recorded a weighted County GAM prevalence of 16.9 percent (CI: 14.5-19.7), indicating Critical (GAM 15-30 percent) levels. North Horr recorded an Extreme Critical GAM prevalence of 31.0 percent (CI: 25.4-37.1) and Laisamis Critical levels at 24.8 percent (CI: 20.3-29.9). Due to reduced food and milk intake and a high disease burden in the County, the September NDMA bulletin indicated that the proportion of children under five years of age “at risk” of malnutrition increased from 18.1 to 22.3 percent from August, which was eight percent above the five-year average, showing further deterioration. The nurses’ strike, which had previously affected 60 – 80 percent of households that sought treatment from public health facilities; low immunization coverage, and high morbidity also contributed to the increased risk of malnutrition in children under five years of age.

Humanitarian assistance, in the form of both food and non-food interventions, was implemented across Marsabit by the national and County governments and NGOs between August and September. This included direct food distributions and cash transfers, as well as water trucking, livestock slaughter offtake and feed distribution. Most interventions were concentrated in Laisamis and North Horr sub-counties since this is where needs are highest and are likely mitigating the severity of the worst outcomes. In addition, the Supplementary Feeding Program (SFP) is ongoing in all sub-counties, covering about 78 facilities, and is funded through April 2018. In addition, blanket supplementary feeding took place in North Horr and Laisamis Sub-Counties, covering about 30,600 beneficiaries. In addition, regular safety net cash transfers from the Hunger Safety Net Programme (HSNP), which can cover a months’ worth of minimum kilocalorie food needs for a household, is planned, funded, and likely to continue through the scenario period for approximately 20,200 households across Marsabit County.

With below-average terms of trade, which has severely restricted purchasing power, and low milk production that has reduced consumption levels, a large proportion of poor households are dependent on humanitarian assistance to meet their minimum food needs, particularly in western areas of the County where there were significant long rains’ deficits. The severity of outcomes varies across the County, with Saku and Moyale sub-counties generally better-off as a majority of poor households have minimally adequate food consumption and are facing Stressed (IPC Phase 2), but in Laisamis (Laisamis, Loiyangalani) and North Horr (Ileret, Maikona, North Horr, Turbi) sub-counties, the majority of poor households are experiencing Crisis (IPC Phase 3).

Assumptions

In addition to the national assumptions above, the following assumptions have been made about Northern Pastoral Livelihood Zone in Marsabit County:

- Even with generally forecast average short rains across this zone, in December, rangeland conditions are likely to still be below average due to the level of degradation, but are projected to fully recover by April 2018 during the long rains.
Based on an analysis of current prices and drivers, FEWS NET’s integrated price projections show that maize prices in Marsabit County are likely to be six to seven percent above average through May 2018 but relatively stable. FEWS NET projects that on average goat prices are expected to fluctuate between KES 2,600 and 3,000 throughout the scenario period. They are expected to be six to eight percent below average through January 2018, likely dropping further to 11 percent below average in February, and thereafter are likely to rise and stabilize within average levels through May.

With the short rains, a general improvement in the level of wasting is expected, and nutrition and health interventions, such as targeted food supplementation, are likely to mitigate acute malnutrition. Generally, the level of acute malnutrition through May 2018 period is likely to be Critical (GAM 15-30 percent) in North Horr and Laisamis and Alert (5-10 percent) in Saku and Moyale sub-counties.

**Most Likely Food Security Outcomes**

**October to January**: Food consumption is expected to continue to deteriorate through November, with households relying on high priced staple foods from the markets and humanitarian assistance to fill food gaps, but gradual improvements are expected thereafter. By mid-November, with partial pasture regeneration, pastoralists will start to bring their livestock back to homesteads and livestock body conditions will steadily improve. However, income from livestock sales, particularly goats, is expected to be below average as market prices remain low due to the influx of livestock from Ethiopia and lower priced livestock from Garissa. In parts of North Horr and Laisamis that experienced significant livestock losses, poor households are likely to limit sales in an effort to restock their herd sizes, further reducing income from this source. Due to lower herd sizes, wage-earning opportunities, such as herding, are expected to improve but remain below average and this will apply to calving, lambing, and kidding levels as well. However, conception rates are expected to be at normal levels. Through January 2018, milk production is expected to remain below average, and with no available crop production until the green harvest in December, reliance on the markets for food items will remain high but constrained by low income levels, forcing households to rely on other income sources, such as charcoal sales and remittances. The most severely drought-affected households in Laisamis and North Horr sub-counties are likely to experience food consumption gaps, characterized by high acute malnutrition, and face Crisis (IPC Phase 3) outcomes. In Saku and Moyale sub-counties, due to the expectation that the majority of poor households will have minimally adequate food consumption but will be unable to afford some essential non-food expenditures, without engaging in irreversible coping strategies, they will be in Stressed (IPC Phase 2) acute food insecurity.

**February to May**: Continued steady improvements in income and food sources is expected during this period. First, in February, the expected average short rains harvest will improve household food availability for a minority of households that engage in crop production, reducing dependence on markets, and slightly reducing staple food prices. By mid-March, with the forecasted favorable long rains, livestock body conditions and prices are expected to be restored to average levels. Also, livestock numbers are expected to rise as calving, lambing, and kidding are expected to increase from mid-March through April, improving milk production and livestock-related wage-earning opportunities to average. With increased purchasing power due to better incomes, there will be less reliance on charcoal sales, remittances, and humanitarian assistance. In May, the expected average short cycle crops from the long rains harvest will be available, further improving household food availability and consumption. The most marked improvements will be in North Horr and Laisamis where poor households are expected to be able to meet their minimum food needs and move to Stressed (IPC Phase 2) by mid-March 2018. However, while there will also be higher food and milk consumption in Saku and Moyale sub-counties, Stressed (IPC Phase 2) outcomes are still likely for at least one in five households as poor households work to rebuild their livelihoods after two poor rainy seasons.

**Southeastern Marginal Mixed Farming Livelihood Zone**

**Current Situation**

The 2017 March – May long rains marked the third consecutive below-average season for the majority of areas in the livelihood zone. The rainfall was delayed and erratic and the severest deficits were in eastern and northern parts of Kitui, southern Makueni, northern Tharaka, southern Mbeere, and
northern Meru North counties, where rainfall was only 25-50 percent of normal. As a result, the long rains harvest was well-below seasonal averages – the maize, sorghum, green grams, and pigeon peas harvests were up to 30, 60, 40, and 30 percent of normal production, respectively. In addition, there was a FAW infestation in southern and northern Kitui, northern Tharaka, southern Mbeere, and northern Makueni, which caused estimated losses of 10 percent of overall production. Most counties have pre-positioned pesticides to control a potential outbreak during the short rains season.

Pasture, browse, and water availability declined substantially across the livelihood zone during the recent dry season, increasing grazing and watering distances and leading to atypical migration flows. Areas most affected include northern and eastern Kitui, parts of northern Meru, and northern and southern Tharaka. Subsequently, livestock (primarily cattle) body conditions deteriorated significantly in these areas, during August through mid-October, where some livestock mortalities could have occurred in the absence of livestock assistance and a well-targeted off-take program. Regardless, some poor households have had to resort to distressed livestock sales, and a minimal number have sold their milking herd. As a result, milk production has declined to 0.5-0.8 liters of milk per day, as compared to a seasonal average of about 1-1.2 liters, in Tharaka and Kitui counties. In addition, livestock prices declined significantly in many markets in the zone. Cattle prices fell most sharply, and in September, the average price was about 16 percent below the five-year average. While goat prices have declined as well, the downward pressure is moderated by generally good to fair body conditions.

Due to the severity of the drought in nearby areas outside the zone and inter-tribal conflict, there have been skirmishes along the Tharaka/Isiolo border, which has resulted in an indeterminate number of displaced households. They reportedly have limited access to traditional food and income sources, accentuating the impacts of the successive poor production seasons.

Staple food prices remain well above season averages, which has meant that terms of trade (kilograms of maize purchased with the sale of one average goat) are significantly lower than five-year averages in most counties, restricting household purchasing power. In September, the steepest decline was in Meru North, where terms of trade were 38 percent below the five-year average. A significant proportion (50-75 percent) of poor households suffered significant crop losses, depleting household stocks by the end of September, atypically early by up to three months, which has meant an earlier reliance on market food purchases with below-average incomes. However, the near-normal forecast for the short rains has resulted in increased engagement in land preparation across the zone, improving household labor income-earning opportunities with stable wage rates.

In response to the drought, most counties in the zone have some ongoing mitigation and humanitarian assistance activities, including cash transfers in Makueni and Kitui. While it is not considered emergency assistance, there are cash for asset programs that are addressing immediate household food gaps in Makueni, most significantly, but also in Kitui and Tharaka.

According to the September NDMA bulletins, food consumption score (FCS) was highest in Tharaka where about 74 percent of households had borderline to poor FCS. The lowest level in the zone was in Makueni, where approximately 43 percent of households had borderline to poor FCS, largely reflecting the County’s sizable safety-net cash transfer intervention.

The counties in the Southeastern Marginal Mixed Farming Livelihood Zone have generally stable levels of acute malnutrition, with past nutrition surveys recording mostly Acceptable (GAM<5 percent) to Alert levels (5-10 percent). In August 2017, the IPC nutrition analysis projected an Acceptable (GAM by MUAC<6 percent) in all counties in the zone in October 2017, with the exception of Meru County, which had an Alert (GAM by MUAC 6-11 percent). According to the September NDMA Bulletin for Tharaka Nithi, the proportion of children at risk of malnutrition (MUAC) remained stably high at 10.1 percent, and in Makueni, rose by 37 percent from the previous month and this was mainly attributed to reduced milk availability and consumption and poor feeding, including reduced feeding frequency compounded by the limited consumption of protein, such as beans. However, during September, the risk of malnutrition was within the five-year averages for both Nyeri and Makueni counties.

With above-average staple food prices, constrained incomes, and depleted household food stocks, a majority of households in parts of Tharaka (Tharaka), Meru (Igembe Central, Igembe North, Igembe South), Embu (Mbeere South, Mbeere North), Kitui (Kitui Central, Kitui East, Kitui Rural, Kitui South, Mwingi Central, Mwingi North, Mwingi West), and Makueni (Kibwezi East, Kibwezi West, Kilome, Makueni, Mbooni) counties are Stressed (IPC Phase 2). However, in the other areas of the livelihood zone, a majority of households are able to meet their essential food and non-food needs without engaging in unsustainable strategies, and are in Minimal (IPC Phase 1).
Assumptions

In addition to the national assumptions above, the following assumptions have been made about the Southeastern Marginal Mixed Farming Livelihood Zone:

- Following a period of extended dryness and severe depletion of pasture and browse, coupled with depletion of water and drying of several seasonal rivers in northern Tharaka, southern Mbeere, Meru North, and northern and eastern Kitui, pasture and water availability are at atypically low levels, and full regeneration is not expected with just the 2017 short rains season.
- Current poor livestock body conditions, particularly for cattle, suggest that the characteristic dip in atmospheric temperatures and increased rainfall during the short rains onset is likely to cause an upsurge in the Contagious Bovine and/or Caprine Pleuro Pneumonia, during the first month of the rainy season.
- The upward pressure on staple food prices is anticipated to increase through November, keeping prices 50-80 percent above five-year averages. However, harvests from Kenya’s North Rift grain-basked, coupled with increased availability of short cycle vegetables, will likely cause a moderate decline in maize prices in December. Regardless, well above average prices are anticipated to persist through mid-February due to the reduced supply from Tanzania because of the export ban and below-average production in the North Rift. However, the short rains harvest, beginning in February, is expected to lead to a seasonal reduction in staple food prices through May.
- Based on an analysis of current prices and drivers, FEWS NET’s integrated price projections show that bean prices, in Kitui market, are projected to be six to nine percent above average through May 2018. Similarly, maize prices are projected to be 14 to 25 percent above average.
- Household food stocks are anticipated to be atypically low through January 2018, following poor production in 2017 and most of 2016. However, household food stocks are likely to increase markedly from February, after the bean and green harvest. Then they are expected to rise further following harvests of maize, millet, sorghum, green grams, and cowpeas.
- It is likely that an Aflatoxin (Aspergillus Flavus) outbreak could occur in the southeastern marginal agricultural areas, which is highly susceptible to infestations. Inadequate on-farm storage for even average production, and limited preventive measures, which could cause aflatoxin poisoning in maize and pulses, and loss of crop, from February 2018 through the end of the scenario period is possible.
- Crop damage, resulting from an FAW infestation, is likely in southern and northern Kitui, northern Tharaka, southern Mbeere, and northern Makueni during the early stages of crop development from mid-October through mid-November.
- Poor 2017 long rains cereal production, particularly for maize, is expected to reduce household food access, affecting acute malnutrition. However, with expected better food access from the impact of the short rains, a stable Acceptable (GAM<5 percent) to Alert (5-10 percent) level of acute malnutrition is likely to be sustained during the November – May 2018 period.

Most Likely Food Security Outcomes

October to January: There will be a significant decline in household food consumption until December when the short cycle crops appear. Up until this point, there will be an atypically higher dependence on markets for food commodities due to exhausted household stocks and lower in-kind wages. Since household incomes are expected to be lower, constraining purchasing power, distressed livestock sales, at depressed prices, are anticipated to increase significantly through early November. Livestock productivity is expected to continue to decline until the short rains lead to improvements, limiting milk availability. Then between mid-November and January, households will likely attempt to rebuild their herds, limiting the number of livestock sales in an effort to compensate for a succession of below-average production seasons. In addition, households are expected to expand areas under cultivation, which should provide average wage labor opportunities from October to January. To obtain additional income to make needed food purchases, households are expected to rely on charcoal and firewood sales and petty trade. Remittances are also likely to provide some income but there will be a higher dependence on safety nets, particularly in Makueni County, with its extensive cash transfer program, which will be a very significant income source. Acute malnutrition for children under five years of age is likely to increase as food consumption falls through late November, as food gaps widen, and there is lower milk production. While some of the most vulnerable households, particularly in parts of eastern and northern Kitui, southern Makueni, northern Tharaka and Meru North, and southern Mbeere, are likely to face Crisis (IPC Phase 3) outcomes, most households are expected to meet their minimum food needs and will face Stressed (IPC Phase 2) outcomes. From December, the green harvest, coupled with improved milk availability, is expected to improve household food access and gradually acute food security outcomes.
February to May: Food security will improve, beginning in February, with the short rains harvest, restoring household stocks, lessening market dependence, and improving incomes as households are expected to sell more produce than normal to bridge income gaps after three poor seasons. With forecasted average to below-average long rains, agricultural wage labor though may be slightly below normal. By April, there will still likely be improvements in pasture, browse, and water availability, leading to better livestock body conditions and productivity. However, for the small number of poor households that sold their milking herd in Tharaka and northern Meru, below-average milk production is expected through May. The short rains is the principal season for this livelihood zone, and it is expected the harvest, even if slightly below normal, will improve food availability and incomes to support generally average consumption levels through May 2018. Improved food access and diversity is expected to continue to uphold improvements in child nutrition. With improved food and income sources, the majority of poor households will move to None (IPC Phase 1) acute food insecurity, beginning in February. However, the small proportion of poor households that experienced Crisis (IPC Phase 3) outcomes from October 2017 to January 2018, will take longer to recover their livelihoods and are likely to face Stressed (IPC Phase 2) outcomes through May.

EVENTS THAT MIGHT CHANGE THE OUTLOOK

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

<table>
<thead>
<tr>
<th>Area</th>
<th>Event</th>
<th>Impact on food security outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western portions of the country</td>
<td>Cessation of the above-average extended unimodal long rains</td>
<td>If the rainfall ends by mid-November, which is already two months longer than normal, there could be better harvesting conditions and drying of the maize crop in the North Rift region. This would reduce the amount of post-harvest losses and allow for an almost near-average long rains crop production, significantly increasing the staple food supply in the markets and reducing average price levels.</td>
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<tr>
<td>Nationally</td>
<td>Lifting of the maize export ban by the Government of Tanzania</td>
<td>If the Government of the Republic of Tanzania lifts the ban on grain maize exports, this will significantly increase the amount of imports from Tanzania, increasing Kenya’s national supply and reducing local prices. This would significantly facilitate better food access for poor households.</td>
</tr>
<tr>
<td>Northeastern pastoral areas and southeastern marginal agricultural areas</td>
<td>Less than 50 percent of normal rainfall for the remainder of the short rains season</td>
<td>Significantly below-average short rains in northeastern pastoral areas for the remainder of the season would result in below-average regeneration of forage and water resources. Livestock productivity would likely drop, lowering livestock prices and limiting meat and milk production. Below-average livestock body conditions would limit income as high staple food prices reduce food access. Crop production would also likely be below average, further reducing food availability and consumption at the household level. This would result in more households moving into Crisis (IPC Phase 3) and potentially some of the most vulnerable moving to Emergency (IPC Phase 4). If the remainder of the short rains season is significantly below-average in southeastern marginal agricultural areas, relatively dry conditions would be sustained, likely causing livestock mortalities. If this leads to a significantly below-average harvest or even crop failure, consumption gaps would widen, leading to an increased prevalence of acute malnutrition in children. Coping capacities would be eroded and likely increase the severity of acute food insecurity to Crisis (IPC Phase 3) at the area level. An expected activation of County-level mitigation, contingency, and response plans would likely stem further deterioration beyond Crisis (IPC Phase 3).</td>
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ABOUT SCENARIO DEVELOPMENT

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