Food security to deteriorate as lean season sets in earlier than normal

KEY MESSAGES

- Poor households in parts of the Northeastern pastoral zone in Isiolo North and the Southeastern pastoral zone in Garissa are likely to move to Crisis (IPC Phase 3) by September. The March to May long rains, which were 25 to 50 percent of normal in these areas, deteriorated rangeland conditions and significantly lowered livestock productivity. As a result, there will be reduced household income to support food purchases and fewer livestock products for food consumption.

- Food insecurity conditions are likely to persist throughout the outlook period, especially in the northeast, northwest, and southeast pastoral areas, and coastal and southeast marginal agricultural areas. The typical recovery of rangeland and cropping conditions during the October to December period is unlikely, as the forecasted La Niña conditions are likely to lead to below-average October to December short rains. The majority of households are expected to remain Stressed (IPC Phase 2).

- Despite the average to above-average long rains in the high and medium rainfall areas, maize crop production is likely to be only average. A long dry spell from mid-May to mid-June, during a critical period in maize development, caused some plant wilting. While the rains have resumed and are expected to continue through August, some plants were affected by the moisture stress.

SEASONAL CALENDAR FOR A TYPICAL YEAR
NATIONAL OVERVIEW

Current Situation

Nationally, food security remains very stable, supported by adequate supplies of major food staples in the markets due to the previous season’s production and continued trade inflows. According to the Ministry of Agriculture’s “Food Security Report” for May 2016, the available national maize, beans, wheat, and rice stocks stood at 0.85, 0.11, 0.1, and 0.045 million metric tons (MT), respectively. This is currently supporting stable staple food prices across most markets in the country. FEWS NET analysis of wholesale maize prices across major urban reference markets of Nairobi, Eldoret, and Kisumu, between April and May, shows stability. The only major fluctuations were observed in Mombasa, where prices increased 10 percent between this time period, mainly due to dwindling local supply. Maize prices were lower as compared to their respective five-year averages, as much as up to 18 percent lower, implying sufficiency in market supplies. Likewise, dry bean prices remained stable across these urban markets and within averages, except in Kisumu where they were 15 percent above average due to dwindling supplies. A marginal increase of six percent was also noted in Mombasa. Both maize and beans prices are following seasonal trends.

According to the Kenya National Bureau of Statistics (KNBS), inflation eased from 6.45 percent in March to 5.27 percent in April and then to five percent year-on-year in May 2016. Food takes up the largest share (36 percent) of the basket of goods that is used to calculate inflation, meaning it is the main driver of a household’s cost of living. So the marginal decline in inflation is supported partly by stability in major staple food prices. However, slower price increases were noted for some essential food commodities like maize flour. According to the previously mentioned May Food Security Report, the higher flour price is due to the shortage of good quality maize for flour making as millers have reported turning away large volumes of maize due to suspected aflatoxin contamination and discoloration.

Though the March to May long rains had a delayed onset, they were largely average to above average in the western parts of the country and central highland areas, which are also the main crop producing areas of Kenya. The long rains are key for crop production in these areas, accounting for close to 65 percent of total annual crop production. Many farmers had to dry plant in early April since the rains started later than normal. Regardless, crops developed well initially, but a lengthy dry spell through mid-May to mid-June resulted in moisture stress, restricting some plant growth.

In the Southeastern marginal mixed farming zone, the March to May long rains were mostly average, ranging from 80 to 120 percent of normal, in most parts of the zone. However, in isolated areas of Tigania North, Tigania West, and Akithi in Meru North, and Kilome, Kasikeu, and Mtito Andei in Makueni, rains were 50 to 80 percent of normal, and southern Mutomo in Kitui received 25 to 50 percent of normal rainfall. Across the zone, the rains were poorly distributed spatially and temporally, and ceased earlier than normal, except in Kieni in Nyeri County. As a result, the crop is currently showing moisture stress across all counties due to the current long dry spell. Currently crops are at various stages of development, with the maize crop at knee-height in Makueni and Meru North, to the flowering stage in Embu and Kitui counties. Weeding and top dressing
of grains, and harvesting of the leguminous crops, are currently providing on-farm labor opportunities, albeit at below-normal levels. Regardless of the less favorable cropping conditions, the majority of households remain in None (IPC phase 1) acute food insecurity. The previous season’s good harvest continues to support favorable staple food prices. Retail maize prices in reference markets remained stable in Kitui, Makueni, and Nyeri, between March and May, but went up 17 percent in Meru (though still low in absolute terms—KES 20). The typical increase signals stock drawdowns. Across all of these markets, retail maize prices remained up to 30 percent below their respective five-year averages. Likewise, bean prices also continued to remain stable and were lower by as much as up to 27 percent below average.

In the coastal marginal mixed farming zone, rainfall was below average, ranging between 25 and 80 percent of normal. The rains were erratic in space and time in most areas and ceased early, resulting in below-normal water levels and poor cropping conditions. Casual labor continues to be the major source of income at this time of the year but is available at below normal levels due to the reduced crop production activities because of the poor rains. Household food stocks are depleted. Apart from the available short cycle crops, most of the households are dependent on the well-functioning markets for food commodities, boosted also by stable staple food prices. The majority of households are able to afford food from markets, with approximately 50 percent of households having an acceptable food consumption score. The majority of households are currently at None (IPC Phase 1) acute food insecurity.

Northwestern pastoral areas, including Turkana, Samburu, Marsabit, and West Pokot, received cumulatively average to above average March to May long rains (see Figure 1), characterised by poor temporal and spatial distribution. However, localized areas had rainfall deficits, including parts of Marsabit, eastern Samburu, and northern parts of West Pokot. Current rangeland and forage conditions are favorable, though at below normal levels, and continue to support good to fair livestock body conditions. Forage is seasonally deteriorating in terms of quality and quantity. Return trekking distances to watering points for livestock are within normal ranges, one to five kilometers in agropastoral areas, and five to 10 kilometers in pastoral areas. Livestock are grazing in wet season grazing areas near homesteads, providing the much needed livestock products and some livestock-related income opportunities, which continue to support household food consumption. Livestock income is, however, available at below-normal levels due to low livestock holdings within communities. Milk production ranges from one to two litres in pastoral areas, and two to three litres in agropastoral areas, which is normal for this time of the year. Food consumption within the households is mainly supported by milk availability and market purchase of major staple foods, whose prices remain stable due to adequacy in supplies and availability of substitute commodities. While prices remain stable, not all households are effectively participating in market purchases due to income constraints. In the rainfall deficit areas, there are poor rangeland resources and low livestock productivity as households have already migrated their livestock to other areas with favorable rangeland resources. While some households are in None (IPC Phase 1), the majority of pastoral households remain Stressed (IPC Phase 2), due to an inability to effectively access income that supports their food and non-food needs.

The Southeastern pastoral zones of Garissa and Tana River counties experienced significant rainfall deficits and are characterised by poor rangeland resources. Faster than normal deterioration of these resources has been witnessed, which has led to poor livestock productivity, with some households having moved their livestock to dry season grazing areas earlier than usual. Effectively, livestock-related income-earning opportunities are low, and there is an increasing dependence on markets for food access. Most pastoral households in these areas are currently consuming poor quality diets and are not able to afford essential non-food needs. The majority of households remain Stressed (IPC Phase 2). In the Northeastern pastoral zone, where rains were generally average to below average (50 to 90 percent of normal), improvements in rangeland resources were below normal. Pasture and browse range from fair to good across most areas, except in localized areas like western and northern parts of Isiolo County where they are poor. While some improvements in livestock productivity were noted, these remain below average. Grazing of livestock near homesteads is providing some livestock products and income but also at lower levels than usual. Households are currently only able to meet basic food needs, but not essential non-food needs, and remain Stressed (IPC Phase 2).
Assumptions

The following assumptions have been made at the national level:

- According to CPC/IRI consensus forecasts, there is a 75 percent chance of a La Niña event setting in during the three-month season of September-October-November. A La Niña event is likely to drive below-average rainfall across much of the Horn of Africa. Subsequently, the October to December rains are likely to be below average throughout much of the country, with forecasts of approximately 50 to 60 percent of average rainfall for many eastern parts of Kenya.

- In mid-May and early June, a prolonged dry spell over most parts of the high and medium potential agricultural areas (Western and Rift Valley) affected crop development. Despite the above-average long rains received in these areas, only an average harvest is expected during the August to December harvesting period. In addition, effects of leaching, which resulted in yellowing of leaves on maize crops in parts of North Rift, is also likely to negatively affect maize yields.

- Maize prices across most markets will typically but gradually increase from June through July due to supply drawdown and increased demand as household stocks decline. However, continued inflows from Tanzania and Uganda will moderate prices, with no major price spikes expected. Prices in the major urban consumption market of Nairobi are expected to range between KES 2,500 – 3,000 for a 90 kg-bag and remain largely below average supported by improved stocks from the two previous good seasons’ harvests. Prices are expected to typically start declining but remain within the earlier stated range from August through January 2017 as the long rains harvest becomes available, further improving stocks.

- Maize imports from Tanzania are expected to typically increase from June as traders try to offload the 2015 stocks in preparation for restocking with the fresh supplies from the recent above-average production in Tanzania. Maize imports from Uganda are also expected to typically increase from June.

Most Likely Food Security Outcomes

Nationally, food security is expected to remain stable throughout the outlook period as availability of food stocks is supported by the expected increase in cross-border imports from Tanzania and Uganda, between June and September, and the expected average long rains harvest from September through December. The Ministry of Agriculture’s Food Balance Sheet projects surpluses for maize, beans, wheat, and rice through the end of September 2016, which is sufficient food to meet national requirements. FEWS NET projects that the long rains harvest will be largely average. Whereas the rains have been above average in high and medium potential agricultural areas, poor temporal distribution, which resulted in a lengthy dry spell in May and June, caused moisture stress to crops in the field. With the resumption of rains, most of the maize crop in the field is expected to recover from moisture stress, but some are unlikely to recover and develop to maturity. As a result, production is likely to be just average. In addition, the long rains harvest from the marginal agricultural areas, though expected to be below average, will also boost the national food stocks.

In the southeastern and coastal marginal mixed farming zone, staple food prices are expected to remain low and will continue to support household market purchase as market dependence increases due to declining household stocks. However, from the poor performance of the March to May long rains that have already resulted in moisture stress of the maize crop across the zone, it is expected that the harvest, especially for maize, sorghum, cowpeas, and beans, will be up to 40 percent below average. This will likely result in reduced food availability and higher market prices, resulting in reduced food consumption beginning in August. The forecasted below-average October to December short rains are likely to reduce agricultural activities and on-farm casual labor opportunities, which will negatively impact household income and purchasing power. Short cycle crops, which usually bring a temporary reprieve in November/December, are expected to be below average and will subsequently affect food consumption levels and dietary diversity, further exacerbating food insecurity. While the majority of households will remain in None (IPC Phase 1) acute food insecurity, poor households are unlikely to meet both food and non-food expenditures, such as education and health, and will be in Stressed (IPC Phase 2) from August to January 2017.

In the pastoral areas, rangeland resources are expected to typically deteriorate during the June to September dry season. In these areas, poor access to water for both human and livestock consumption and forage for livestock will be the biggest impediment to food security. Households will keep their livestock further from their homesteads, which is likely to result in a reduction in livestock-related labor earning opportunities, reducing household income and constraining food access, including consumption of livestock products. Through September, by intensifying the use of various coping mechanisms,
including charcoal and firewood burning, labor reallocation to other sectors, and borrowing, the majority of households across these areas will be able to maintain enough food consumption to meet minimal dietary requirements. As a result, they will largely remain in Stressed (IPC Phase 2). However, there is likely to be a more rapid deterioration of food security outcomes in areas that experienced significant rainfall deficits and which have had more of a decline in livestock productivity, household income, and food access, especially in parts of Isiolo and Garissa. Poor households in these areas will not be able to maintain adequate food consumption and are likely to move to Crisis (IPC Phase 3) during the peak of the lean season in August and September. With the onset of the short rains, forecasted to be below average, only a modest recovery of pasture, browse, and water is expected. While modest improvements in food security are expected, this is not likely to cause any improvements in the food insecurity phase classification through January 2017. More poor households in parts of the northwest and northeast pastoral zones, that will receive substantial rainfall deficits during the short rains, are likely to move into Crisis (IPC Phase 3) towards end of the year and into early 2017.

AREAS OF CONCERN

Coastal Marginal Agricultural Mixed Farming livelihood zone

Current Situation

The March to May long rains were below average across the zone with rainfall amounts ranging between 25 and 80 percent of normal in most areas, and they were erratic in terms of spatial and temporal distribution. Rainfall cessation was normal across the zone, except in Taita Taveta and Kwale, where the rains ended early. This caused wilting of the germinated maize crop, and in some cases, crops needed to be replanted. While the rains increased water availability, water levels have remained below normal in Taita Taveta and Kilifi counties, evidenced by return distances to domestic water sources that remain 25 to 38 percent above average. In Lamu and Kwale, however, trekking distances are seven and 55 percent below average, respectively. The rains, despite being below average, regenerated forage with good pasture and browse in all counties, supporting good livestock body conditions and average to above-average milk production.

A FEWS NET assessment in mid-May found that across the counties, the maize crop was at varying stages, ranging from germination for the late-planted crops, to knee-height for the earlier planted crop, and first weeding was underway. Most of the maize crop was fair but exhibiting moisture stress due to the dry conditions prevailing in the region. However, the condition of the leguminous crops were good.

In April, flooding occurred in Lunga Lunga Sub County of Kwale County due to heavy rains, affecting about 3,000 households and destroying houses and property. In the affected villages, flooding destroyed about 5,000 acres of maize and 150 acres of rice, which according to the Kwale County Department of Agriculture is equivalent to 28 and nine percent, respectively, of the total sub county crop area. A large number of the affected farmers were unable to replant their crops. Flooding also affected farmers in the hilly areas of Kimorirgo in Taita Taveta. This resulted in the stoppage of agricultural labor activities that are a major source of household income at this time of the year, hence reduced household purchasing power. Additionally, food consumption from own production will greatly reduce, increasing households’ reliance on markets at a time of income constraint.

Casual labor is the major source of income at this time of the year, with an average daily wage rate of KES 200 per day across the area for planting and weeding activities. On-farm labor opportunities, however, have fallen due to reduced crop production activities caused by the erratic and below-average March to May long rains. Off-farm labor opportunities in the tourism industry have also reduced due to the terror-related insecurity incidents over previous years. Taita Taveta County, however, is the beneficiary of additional labor opportunities with the on-going construction of the Taveta - Mwatate road and the Standard Gauge Railway, both of which offer opportunities for many locals.

Household food stocks are depleted, and aside from the available short cycle crops like vegetables that are currently supporting household food needs, most of the households are dependent on the markets for food. Markets are functioning well in this area and are well-supplied with commodities like grains, pulses, vegetables, and packaged foods from different parts of the country and across the border from Tanzania. Retail maize prices remained stable between March to May, ranging from KES 35 – 42, due to supply from neighboring southeast counties that had a bumper harvest and cross-border inflows. These prices remained within their five-year averages in Taita Taveta and Kwale, while in Kilifi they were six percent below the average due to availability of alternative staples like cassava. Retail bean prices also remained stable. Overall for the zone, staple food prices remained about average due to available stocks from recent harvests and either a steady market supply
from neighboring counties, cross-border imports from Tanzania or a combination of both. The majority of households are able to afford food from markets with income from on-farm and off-farm activities. The majority of households are currently at None (IPC Phase 1) acute food insecurity.

**Assumptions**

In addition to the national assumptions described above, the following assumptions have been made about the Coastal Marginal Agricultural Mixed Farming livelihood zone:

- Maize prices are expected to remain stable through August despite supply drawdowns as imports from Tanzania increase. Price stability will likely persist through January 2017, further boosted by availability of maize from North Rift, which will become available from October onwards. Maize prices, however, will atypically remain five to ten percent above average, following two consecutive below-average production seasons in this area.

- Bean prices are expected to seasonally remain stable but at elevated levels throughout the outlook period. Any price increases will be moderated by increased supplies from Tanzania and Ethiopia through Moyale, between now and August, and later on by inflows from other parts of the country after the long rains harvest begins. The prices will, however, range between one and eight percent above the averages owing to marketing costs.

- Resource conflict is projected to increase from the lean season in July as the nomadic pastoralists move into Taita Taveta (Taveta, Mwakitau, Mwatate, Voi, and Mgeno), Kwale (Godo and Kiliimangodo), and Kilifi (towards River Sabaki in Malindi and Magarini) from the pastoral areas of Kajiado, Tana River, and as far as Isiolo, and Garissa counties, and Tanzania, across the border, in search of pasture. This will likely result in competition and likely conflict with the residents for the available but dwindling forage.

- Human-wildlife conflict is expected to increase between July and September, especially in Mgeno in Taita Taveta, which neighbors Tsavo National Park, because elephants in search of forage are likely to destroy the maize, which is at the development stage, resulting in substantial crop loss.

- The below average March to May long rains, coupled with the flash floods in April which destroyed crop fields, are likely to result in a below average harvest during the July to August harvesting period.

- On-farm casual labor opportunities are expected to be below average during the October 2016 to January 2017 period when the effects of La Niña are expected to result in below-average October to December short rains, which will reduce the usual agricultural activities of land preparation and planting.

- After a FEWS NET assessment, it is estimated that the slump in the tourism industry in the coastal counties of Lamu, Kilifi, Mombasa, and Kwale due to terror-related incidents that have occurred in the recent past in Lamu and Garissa caused about 60 percent of those previously employed in the industry to be jobless. As a result, the unemployed have been unable to remit funds to their relatives in the inland coastal areas within the Coastal Marginal Agricultural Mixed Farming livelihood zone, resulting in a decline in remittances by about 40 to 50 percent, which will likely remain the same throughout the scenario period.

**Most Likely Food Security Outcomes**

**June to September:** Affected by the below-average March to May long rains, the poor conditions of the current planted maize crop point to an expected below-average harvest in July to August. As a result, household production will be lower, resulting in reduced food availability and consumption. In July, depleted household stocks will increase household dependence on markets for food commodities, which is going to intensify through January. Retail maize prices between June and September are expected to be stable, fluctuating between KES 40 and 45 per kilogram. Pasture regenerated by the erratic March to May long rains is expected to support average milk production, providing an alternative food source to households with lactating animals from June until August when production will begin to drop as the livestock body conditions deteriorate. Income from on-farm wage labor is projected to be atypically lower because of below-average rainfall that will reduce crop production activities like harvesting in the July to August period. The below-average crop harvest will result in significantly lower staple crops sales that normally take place between July through January, leading to reduced household income and purchasing power. Reduced household food stocks and below-average production will also not permit in-kind wages as payment for on-farm labor from July, so this food source, which poor households rely on, will diminish. Dependence on off-farm wage labor as an income source will typically increase and remain high from July to September as households increasingly seek the availability of these opportunities due to reduced income from typical agriculture-based activities, like weeding, harvesting,
and sale of livestock and staple foods. The large infrastructural development projects, like the construction of the Voi- Mwatate road and the Standard Gauge Railway in Taita Taveta County, and other infrastructural projects initiated by county governments following decentralization efforts, will offer potential labor opportunities. Reliance on remittances from relatives working outside these areas is set to increase from July when the lean season begins about a month early, and households are faced with lower income-earning opportunities, constraining food access. Through the various coping mechanisms, the majority of households will be able to afford food and basic non-food needs and remain in None (IPC Phase 1), while some localized poor households will move to Stressed (IPC Phase 2) by September.

**October to January:** The forecast for the October to November short rains points towards below-average rainfall due to the expected La Niña effects. This is likely to result in a below-average short rains crop production. On-farm labor opportunities for land preparation, planting, weeding, and harvesting, usually available at this period, will remain below normal, resulting in lower household income throughout the period. This is likely to affect food access from the markets, and household dependence is expected to be high due to their total depletion of stocks and two poor successive crop production seasons. The below-average short rains will also mean low availability of short cycle leguminous crops that are normally available from early December to support household food consumption. Livestock productivity is also expected to remain low due to poor forage conditions, which are expected to regenerate at below-normal levels, reducing consumption of livestock products. The use of more coping mechanisms, which is atypical at this time, is expected to bridge the food-income gaps. Households that had moved to Stressed (IPC Phase 2) are expected to maintain the same phase through January 2017.

**Northeastern and Southeastern Pastoral livelihood zones**

**Current Situation**

Food security in the Northeastern pastoral areas has continued to improve after the long rains, which were generally average to below average (50 to 90 percent of normal). The start of the season was delayed by two to three weeks, with the rains not starting until early April. Rangeland resources typically improved, though at below normal levels, and much later than usual after the onset of rains. The rains replenished most water sources, with open water sources recharging at 50 to 80 percent of their carrying capacity. Forage conditions range from fair to good across most areas, except in localized areas like western and northern parts of Isiolo County where they are poor (see Figure 2).

Livestock productivity has somewhat improved typically due to the availability of forage and water resources. However, below normal calving, lambing, and kidding activities have resulted in below-average milk production and consumption at the household level. Milk production at the household level is currently at one to two liters per day, compared to the normal of two to four liters a day. The majority of households have their livestock currently grazing near homesteads, supporting access to livestock products and household income from sales and livestock-related earning opportunities, though at below normal levels. This is because some households kept their livestock in the dry season grazing areas, especially in Isiolo County. About 40 percent of pastoral households retained their livestock in the dry season grazing areas. Return trekking distances to livestock watering points are less than 10 kilometers, largely within the normal ranges. Availability of household income continues to support food access from the markets, boosted also by stability in staple food prices. Importantly to note, poor households continue to have fewer livestock units, hence they are not able to adequately participate in livestock sales to raise sufficient income to support their food and non-food needs. The proportion of the population who lack livestock, either due to losses from previous droughts, conflicts or sales, are accessing livestock products (milk and meat) either through relatives, gifts or market purchases. Despite the improvements, the majority of households are still only affording minimum dietary requirements but cannot sustain other nonfood needs and remain Stressed (IPC Phase 2).

Between April and May in the pastoral markets of Wajir, Isiolo, and Mandera, retail maize prices remained fairly stable, mainly due to the availability of substitutes like posho (maize flour) and rice, which reduced demand on maize, and inflows from other counties. The May maize prices remained near average in Wajir and Isiolo but were below average by eight percent in Mandera as the good harvest from riverine areas of Mandera during the short rains increased supplies into the local market.
Goat prices, on the other hand, remained typically stable in Wajir and Isiolo, and near averages, as body conditions and demand continued to improve following improved rangeland conditions. Household livestock-to-cereals terms of trade have remained near average in Isiolo and Wajir, but were atypically 30 percent above average in Mandera, implying favorable purchasing power for households.

The NDMA’s May monthly early warning bulletin noted that the proportion of children “at risk” of malnutrition, measured with the Mid-Upper Arm Circumferance (MUAC) <135mm, remained fairly stable at 16 and 10 percent in Wajir and Isiolo, respectively. These were up to 40 percent below average levels, attributable to the increased nutrition outreach programs in these two areas over the past one year. However, in Mandera, between March and May, surveillance data shows that “at risk” levels have gone up by 27 percent but remain near five-year average levels. This could be attributed partly to declining household food consumption but also to other underlying factors, such as poor childcare practices and the outbreak of diseases like Cholera and Chigukunya virus.

In the Southeastern pastoral zones of Garissa and Tana River counties, significant rainfall deficits were experienced from March to May since rains were 25 to 50 percent of normal across most of these areas. Due to the poor rains, seasonal improvement in forage and water resources was only modest, with these resources reported to be fair to poor and deteriorating faster than normal. Pasture and browse is more abundant and lusher closer to the River Tana, but this is rapidly depleting due to the high concentration of livestock in these areas. Areas with substantial forage deficits include Garissa Township, Balambala, Dadaab, and Fafi in Garissa County, and Tana North and Tana River sub counties in Tana River County. Livestock body conditions and productivity are deteriorating faster than normal as households have to move their livestock longer distances for forage and water. Return trekking distances to water sources for livestock are 10 to 14 kilometers in Garissa against a normal of 7.5 kilometers, while in Tana River the distance has increased by more than two kilometers as compared to normal for this time of the year. Households earlier than normal moved their livestock from the wet season to dry season grazing areas. In Garissa, households have migrated their livestock to Somali, from the sub counties of Dadaab, Fafi, and parts of Lagdera, while in Balambala Sub County, households had migrated livestock to Isiolo County. In Tana River, households migrated livestock towards Tana Delta and to the neighboring counties including Meru, Kitui, and as far as Taita Taveta. The deteriorating livestock body conditions have contributed to reduced milk production, which has declined by 10 to 20 percent between May and June, and remains about 20 and 60 percent below average in Garissa and Tana River counties, respectively. While the nutrition situation remains stable in Tana River, the situation is deteriorating in Garissa. The proportion of children “at risk” of malnutrition, as reported in the National Drought Management Authority’s (NDMA) early warning bulletins, has increased by 33 percent between April and May in Garissa County and was 71 percent above normal levels for this time of the year. This increase is mainly attributed to poor food consumption and a surge in diseases like diarrhea, malaria, and cholera. In May, flooding incidents were also reported after River Tana burst its banks, following heavy rains upstream, causing Masinga and Kiambere reservoirs to overflow. The flooding resulted in the displacement of about 10,000 households each in Garissa and Tana River, primarily affecting the farming communities residing adjacent to the river. The floods also caused some destruction to farmland along the riverine, damage to access roads and bridges to the farms, and livestock deaths. While some pastoral households are in None (IPC Phase 1) acute food insecurity, the majority are already facing constraints to afford adequate dietary needs and meet their non-food expenditures, and therefore are Stressed (IPC Phase 2).

Assumptions

In addition to the national assumptions above, the following assumptions have been made about Northeastern and Southeastern Pastoral livelihood zones:

- Livestock prices are projected to typically increase through the end of June, supported by favorable rangeland resources and expected increase in demand due to Ramadan festivities. However, from July through November, livestock (goats) prices will decline as body conditions deteriorate, reducing market value during the dry season. Livestock prices are expected to start improving in November, following improved livestock health and body conditions, though improvements are expected to be marginal due to the expected below-average rainy season. Throughout the scenario period, livestock prices in the reference markets of Isiolo and Mandera are expected to oscillate between KES 3,000 - 3,500 and KES 2,500 – 3,000, respectively. From September, prices are expected to remain near average.

- Maize prices will remain fairly stable through July, supported by availability of stocks from other regions from the previous season’s harvest. The availability of other substitute commodities will also ease pressure on maize demand.
However, from August through December, prices will typically but gradually increase, ranging between KES 40 – 50 per kilogram in the reference market of Isiolo due to tightening supplies and increased demand from pastoral households. These prices will continue to remain above their five-year averages.

- Households are expected to typically intensify their coping strategies, such as increasing reliance on firewood and charcoal burning, expanding the search for alternative casual labour opportunities, heavily relying on remittances, and collecting and selling bush products, between July and November when income-earning opportunities and household livestock productivity will be typically low.

- According to forecasts by FEWS NET, land surface temperatures (LSTs) are likely to be +1°C hotter than normal during the June to August period, especially in the eastern parts of Kenya.

- Rangeland resources that improved following the onset of the long rains are expected to remain favorable through July. However, since the rains were below-average in some areas, coupled with hotter than normal LSTs, rangeland resources have regenerated at below-normal levels and are expected to be depleted by August and will remain scarce through November. The onset of the short rains in October, forecasted to be below average, will provide some reprieve to pastoral communities, as rangeland resources regenerate, albeit at below-normal levels again.

- Livestock-related labor opportunities are expected to remain at below-normal levels as households intensify their efforts and earlier than normal migrate their livestock to dry season grazing areas in July instead of August. Though the onset of the short rains in October will signal some households to migrate their livestock back to wet season grazing areas near their homesteads, this is likely to occur at below-normal levels due to the expected poor regeneration of rangeland resources. As a result, livestock-related labor opportunities will remain low between October 2016 and January 2017 as most households keep their livestock in dry season grazing areas.

- During the peak of the lean season, August to September, it is expected that conflict incidences over forage and water resources will intensify due to competition for scarce resources, especially in conflict hotspots like Garbatulla, Yamicha, and Urura areas of Merti in Isiolo North and Eldas in Wajir West.

- The Government of Kenya’s announcement to close the Dadaab refugee camp that hosts about 350,000 refugees will likely lead to increased food insecurity outcomes for this population, especially between August 2016 and January 2017. The building tension among the refugee community is likely to disrupt livelihood activities and further constrain their access to income and markets for food purchase. Further, this is likely to distort livelihood activities of the host community around Dadaab, with the possibility of worst food security outcomes for the poor households in this area.

**Most Likely Food Security Outcomes**

**June to September**: Between June and September, household food consumption is expected to typically decline as household incomes reduce due to declining livestock prices and limited wage labor opportunities. Due to the below-average long rains, rangeland resources are likely to deteriorate faster than normal, with livestock body conditions and prices following this trend. Declining livestock prices will reduce income received by the majority of households who participate in sales. With pastoralists expected to move their livestock to dry season grazing areas earlier than usual, by July, livestock-related labor opportunities, which accounts for 50 to 60 percent of total household income, will remain atypically low. However, income from other non-farm wage activities will remain at typical levels during this period, as households seasonally engage in activities like petty trade and offer unskilled labor to other sectors like construction. The decline in household income will constrain market purchase, which is the main source of food, in the wake of a gradual increase in staple food prices. With the expected typical decline in livestock productivity as rangeland resources deplete, household milk production, for consumption and sale, is set to reduce faster than normal. The majority of households are expected to have a poor food consumption score as they resort to low quality diets. While many households are expected to remain Stressed (IPC Phase 2) at the peak of the lean season between August and September, some poor households, especially in parts of Isiolo and Garissa, are likely to move to Crisis (IPC Phase 3). These areas have had more than two consecutive below average rainfall seasons, with poor rangeland conditions persisting for longer periods than usual, resulting in a significant reduction in livestock productivity, household income, and food consumption. This has left these poor households unable to meet both their food and non-food needs.

**October to January**: With the October to December short rains forecasted to be below average, mainly driven by the La Niña effects, it is unlikely that the majority of pastoral communities, who migrated with livestock to dry season grazing areas, would migrate back. Poor short rains will not trigger normal regeneration of rangeland resources to support improved livestock productivity and health. Livestock productivity is expected to be atypical, with livestock products, including milk and...
meat, becoming scarcely available, further constraining household consumption of these products. With below-average availability of livestock products, following a below-average performance of the current season, households will rely more heavily on markets for food. Livestock-related labor opportunities are likely to be available at below-normal levels, further limiting availability of household income from livestock sales and herding activities to support market purchases. With the main sources of household income and food likely to remain at below-normal levels during this period, most of the pastoral households will intensify their use of coping mechanisms, including charcoal/firewood collection for sale, the search for alternative casual labor opportunities, collection and sale of bush products, such as gum Arabic and aloe; and heavy reliance on remittances. The contribution of remittances to household income is expected to increase as a way of mitigating the increasing income gap due to lost or reduced earning opportunities. While the nutrition support programs are expected to ensure some stability, the declining food consumption, and delay in recovery of food security conditions due to forecasted poor short rains, will likely maintain malnutrition outcomes at critical and very critical levels. Households already in Crisis (IPC Phase 3) and Stressed (IPC Phase 2) in October are likely to remain so through January 2017.

**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>National</td>
<td>Average performance of the short rains.</td>
<td>For the short rain dependent areas (mainly southeast and parts of the coastal marginal agriculture livelihood zones) and other cropping areas of Kenya, this would result in average agricultural labor opportunities and crop production. This would improve food availability, food consumption, income, and nutrition status, which would result in a Minimal (IPC Phase 1) acute food insecurity classification for these areas. For the pastoral areas, this would lead to average recovery of forage and water availability, improvement of livestock productivity, increased availability of livestock products, and overall rise in household income as more livestock-related earning opportunities become available. Food security would improve, with some households moving to None (IPC Phase 1) acute food insecurity.</td>
</tr>
</tbody>
</table>

**ABOUT SCENARIO DEVELOPMENT**

To project food security outcomes over a six-month period, FEWS NET develops a set of assumptions about likely events, their effects, and the probable responses of various actors. FEWS NET analyzes those assumptions in the context of current conditions and local livelihoods to develop scenarios estimating food security outcomes. Typically, FEWS NET reports the most likely scenario. Click here for more information.