

## KENYA Food Security Outlook

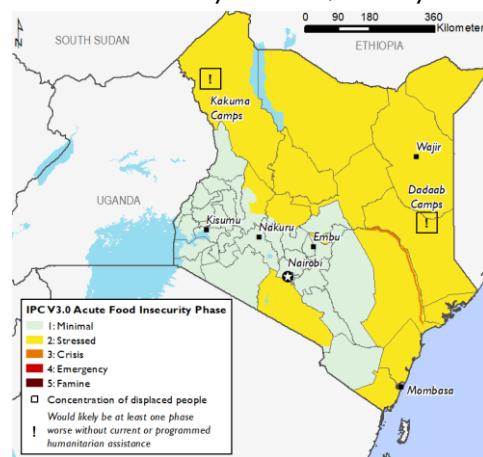
February to September 2020

*Control measures and favorable rainfall anticipated to mitigate impact of desert locust upsurge*

### KEY MESSAGES

- Based on data collected during the 2019 short rains assessment, the Kenya Food Security Steering Group (KFSSG) estimates that 1.3 million Kenyans are facing Crisis (IPC Phase 3) or worse outcomes, a decline of nearly 50 percent compared to the preceding long rains season. Although floods in late 2019 caused crop and livestock losses, the above-average 2019 short rains season led to favorable harvests in most marginal agricultural areas as well as above-average livestock sale values and milk productivity. Many areas of concern have improved to Stressed (IPC Phase 2), but Crisis (IPC Phase 3) persists in Tana Riverine livelihood zone, where 55 percent of planted area was destroyed.<sup>1</sup>
- Desert locusts are present in 21 counties of Kenya, but the impact on food security has been localized and limited to date. In pastoral areas, rangeland resource availability is historically above normal and livestock migration is atypically low. In marginal agricultural areas, net short rains production is approximately 26 percent above the long-term average. Crop losses in late 2019 were primarily affected by heavy rainfall, including post-harvest losses equivalent to more than 10 percent of unimodal production in high and medium potential areas.
- Food availability has improved in early 2020 compared to late 2019, but the delayed unimodal maize harvest, below-average beans harvest, and tight regional supply are still driving high maize and bean prices. In February, the retail maize price in key urban and rural reference markets reached up to 33 percent above the five-year average while wholesale bean prices reached up to 40 percent above the five-year average. However, livestock price increases have outpaced maize price increases and the goat-to-maize terms of trade ranged from 15 to 55 percent above average. A forecast of above-average March to May rainfall is expected to consolidate recent gains in livestock production and lead to near-normal crop production, driving Minimal (IPC Phase 1) or Stressed (IPC Phase 2) outcomes through September. The negative impacts of desert locust are expected to be mitigated by current and planned control efforts, headwinds and cooler temperatures that discourage locusts from entering high production areas, and the likelihood that rainfall will regenerate pasture. Areas of greatest concern include Tana Riverine areas, where households are still recovering from the floods, and parts of Northeastern Pastoral livelihood zone, where insecurity will limit control efforts.

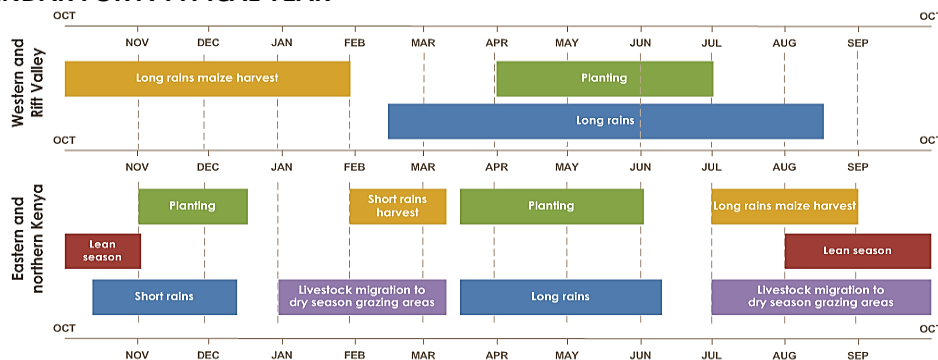
Current food security outcomes, February 2020



Source: FEWS NET

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

### SEASONAL CALENDAR FOR A TYPICAL YEAR



Source: FEWS NET

<sup>1</sup> FEWS NET is a member of the KFSSG. However, FEWS NET's mapping units differ from the KFSSG, leading to a difference in mapped area-level outcomes.

## NATIONAL OVERVIEW

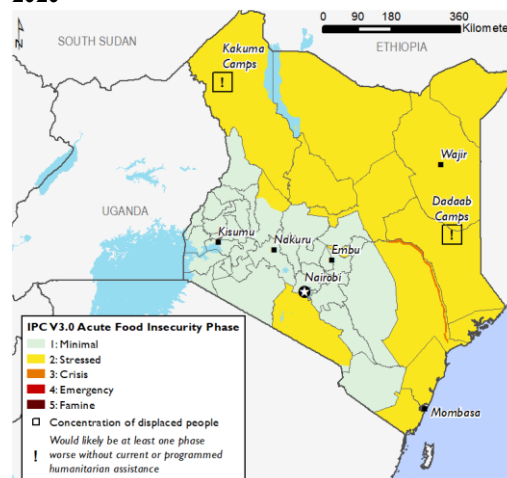
### Current Situation

After the 2018/19 drought, exceptionally above-average rainfall during Kenya's 2019 short rains season disrupted livelihoods activities and slowed the pace of recovery in many areas, but food security conditions are now gradually improving. Cumulative rainfall was 140-350 percent of the 1981-2010 average across the country, leading to large-scale floods that caused landslides, contaminated the water supply, caused crop and livestock losses, and destroyed critical health, irrigation, road, and social infrastructure (Figure 1). According to final estimates by the Kenya National Disaster Operations Centre, the floods affected approximately 472,000 people, displaced an estimated 24,000 people, and left 266 dead, 82 injured, and 17 missing. In addition, the floods killed an estimated 30,000 heads of livestock. Northwestern Pastoral, Northern Pastoral, Northeastern Pastoral, Southeastern Pastoral, Mandera Riverine, and Tana Riverine livelihood zones were the worst-affected areas, where damage to roads and bridges suspended market functioning and many households endured livestock losses or crop losses. Due to the loss of household food and income sources, Crisis (IPC Phase 3) outcomes persisted through December in many areas. The start of the dry season in January has permitted normal livelihoods activities to resume, which has enabled recovery to Stressed (IPC Phase 2) area-level outcomes in most areas of concern. However, many poor households are still experiencing food gaps or engaging in crisis livelihoods coping strategies indicative of Crisis (IPC Phase 3) or worse.

The heavy rains, coupled with tropical cyclones in the Indian Ocean, created conducive conditions for the spread of desert locust in Kenya, but the negative impacts on crop and livestock production have not been large scale to date. As of late February, desert locusts had spread to 21 counties in Kenya (Figure 2). Crops were broadly in the maturation stages or had already been harvested, while the rains and positive soil moisture anomalies facilitated rangeland regeneration and offset pasture losses. The Kenya Food Security Steering Group (KFSSG) and County Steering Groups estimate that pasture and crop losses from desert locust are 1-5 percent in southeastern Kenya and 5-15 percent in northern Kenya. At the national level, national and county governments, NGOs, and international organizations have funded about USD 18.5 million out of the 21.4 million allocated to aerial and ground control operations. To date, only 35,000 hectares of infested areas have been sprayed, which represents a small proportion of affected areas. According to FAO's [Desert Locust Watch](#) and confirmed by the KFSSG's short rains assessmen, there is ongoing hatching of locust nymphs and formation of immature swarms in northern and central counties.

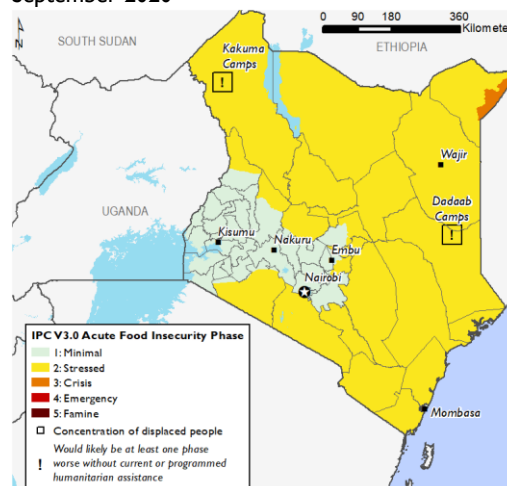
**Crop and livestock production:** Food availability has broadly improved in early 2020, though crop losses in unimodal, high and medium potential agricultural areas due to the atypically heavy rains has resulted in tighter-than-normal supply. According to FEWS NET's estimates, total maize production in 2019 – including national long and short rains production – is three percent below average and eight percent below 2018. The easing of rainfall during the January to February dry season permitted the completion of both the delayed, unimodal long rains harvest in high and medium agricultural areas in western Kenya and the bimodal short rains harvest in marginal agricultural areas in central and southeastern Kenya. Based on the Ministry of Agriculture (MOA) estimates, post-harvest losses are estimated to be upwards of 10 percent since the heavy, sustained, heavy rainfall constrained maize drying and storage causing losses from rotting.

Projected food security outcomes, February – May 2020



Source: FEWS NET

Projected food security outcomes, June – September 2020



Source: FEWS NET

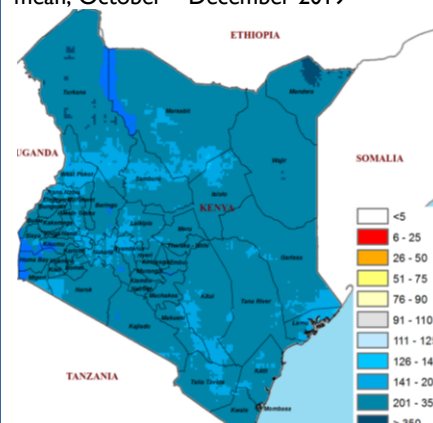
FEWS NET classification is IPC-compatible. IPC-compatible analysis follows key IPC protocols but does not necessarily reflect the consensus of national food security partners.

In rain-fed marginal agricultural areas, specifically, short rains production of maize, cowpea, and green grams generally performed better than previously expected. Beans, which are less moisture tolerant, performed poorly. According to the findings of the KFSSG Short Rains Assessment, total maize production is approximately 26 percent above the five-year average, attributed to above-average area planted and high yields in areas not affected by floods. However, below-average area planted and crop losses from flooding, leaching, and water logging, as well as minimal losses from Fall Army Worm and desert locust infestations, resulted in below-average maize production in Kilifi, Kwale, Embu (Mbeere), and Tharaka Nithi (Tharaka), where production ranged from 10 to 18 percent below average on the county level. Total cowpea production was 68 percent above average and green grams production ranged from 15 to 33 percent above average on the county level, primarily attributed to an increase in area planted and county government subsidy programs for seeds, fertilizers, and chemicals. In contrast, beans production ranged from 25 to 38 percent below average on the county level.

The 2019 floods caused livestock losses in some areas, but livestock production is now largely benefitting from enhanced rangeland conditions as a result of the above-average rains. Based on field information and supported by the satellite-derived Normalized Difference Vegetation Index (NDVI), pasture and browse conditions are good and above-normal. In late February, NDVI data showed vegetation greenness was upwards of 140 percent of normal across most of the country and 105-120 percent of normal in western and northeastern Kenya (Figure 3). Similarly, surface water availability ranges from normal to above normal, though some water sources were destroyed by floods. As a result, return trekking distances for livestock from grazing areas to water sources were considerably below average in February, ranging from 2 to 8 kilometers (km) compared to 4-15 km normally. Consequently, livestock are being watered twice as regularly across all pastoral areas except in Wajir and Isiolo, where the frequency remains normal at once every two days. Most livestock have remained close to homesteads in the wet season grazing areas and have not migrated to typical dry season grazing areas.

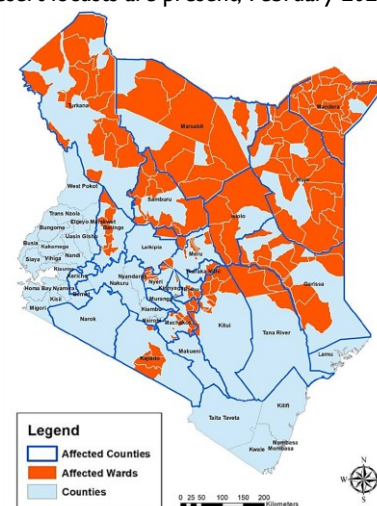
Good rangeland resource availability and lower return trekking distances have helped to maintain good livestock body conditions, which has in turn supported healthy livestock births and conceptions, boosted milk production, and improved livestock value on the market. In February, the National Drought Management Authority (NDMA) observed that all livestock species exhibit good body conditions due to good pasture, browse, forage, and water availability. Birth and conception levels have generally returned to normal among small stock, but births among large stock remain below normal as they have only recently fully recovered. However, field assessment information collected by the KFSSG in February shows that poor households' livestock holdings in terms of tropical livestock units (TLUs)<sup>2</sup> remain below the 10-year average due to losses during recent droughts and floods as well as distressed sales. On the county level, poor households' livestock holdings range from 2 to 6 TLUs, compared to the 10-year averages of 3-10 TLUs. Despite lower livestock holdings, milk production has rebounded from the drought, reflecting good birth levels and body conditions. Daily net production levels are 2-7 liters per household per day compared to 2-6 liters normally. However, some exceptions exist, such as in Isiolo, where livestock holdings are lowest (2 TLUs) and milk production is one liter per household per day on average. Veterinary department interventions have also proven instrumental to limiting livestock disease outbreaks and

**Figure 1.** CHIRPS cumulative rainfall anomaly as a percent of the 1981-2018 mean, October – December 2019



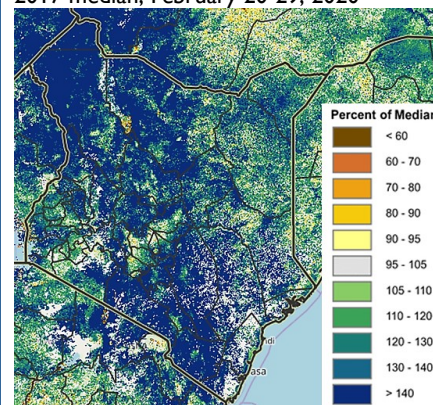
Source: FEWS NET/USGS

**Figure 2.** Counties and wards where desert locusts are present, February 2020



Source: Kenya Food Security Steering Group

**Figure 3.** NDVI as a percent of the 2003-2017 median, February 20-29, 2020



Source: FEWS NET/USGS

<sup>2</sup> Tropical Livestock Units are livestock numbers converted to a common unit. Conversion factors are: cattle = 0.7, sheep = 0.1, goats = 0.1, pigs = 0.2, chicken = 0.01.



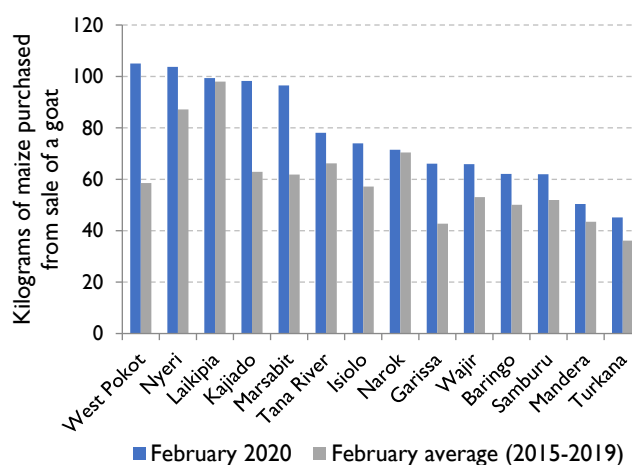
maintaining livestock health. Despite widespread flooding, no livestock disease outbreaks have been reported since October except in Marsabit, where FMD, CCPP, and PPR cases have resulted in a mortality rate of around six percent of small stock.

Adequate water availability has similarly benefitted domestic consumption and food utilization. In February, the cost of water is near normal or up to 50 percent below normal, ranging from KES 2 to 5 for a 20-liter jerrican across most pastoral areas and KES 10 in Turkana. Return trekking distances from domestic water sources are similarly normal to below normal, ranging from 2 to 5 km compared to 4 to 8 km normally. Reductions in trekking distances have resulted in improved access to clean water for cooking, cleaning, and drinking, which has reduced household vulnerability to waterborne disease. Households are also spending less time trekking to fetch water, leaving more time to engage in livelihood activities to obtain food and income. However, an exception to this trend is Tana Riverine livelihood zone, where severe flooding contaminated water sources and led to increased waterborne disease incidence.

In addition to improved productivity, adequate availability of rangeland resources has led to generally lower levels of resource-based conflict in pastoral areas. Nonetheless, localized insecurity, cattle rustling, and sporadic intercommunal conflict periodically affects local livelihoods and market access. In Marsabit, for example, retaliatory attacks in response to cattle rustling in parts of North Horr sub-county recently led to temporary closures of markets and primary schools and displaced about 150 households. Sporadic cattle raids also affected market operations at the border of West Pokot and Turkana at Kainuk, but the situation has since returned to normal. In Samburu, recurring communal and resource-based conflicts also periodically limit access to forage and water for livestock and impede market operations in Baragoi.

**Markets and trade:** The delayed unimodal maize harvest, below-average beans harvest, and tight regional supply are driving high maize and bean prices in most urban and rural key reference markets, which is affecting food access among poor households who lost crops due to the floods, have few saleable animals, and primarily rely on labor income. Although FEWS NET cross-border monitoring data indicate that maize imports into Kenya during the fourth quarter of 2019 accounted for 12 percent of total regional imports, imports have not filled the national cereal gap. NDMA price data in February showed that the retail price of maize was 14-33 percent above the five-year average in most reference markets; exceptions included markets in Kwale county, where the price of a kg of maize was near average, and markets in Turkana county, where the price was 16 percent below average due to sufficient supply flows from source markets in Trans Nzoia county. Similarly, the wholesale price of dry beans ranged from 18 to 40 percent above the five-year average in urban reference markets and from near average to 14 percent above average in rural markets.

**Figure 4.** Observed goat-to-maize terms of trade in kg/goat across select key reference markets, February 2020 compared to the five-year average



Source: NDMA data

Despite high maize prices, household purchasing power as measured by the goat-to-maize terms of trade is broadly favorable due to high livestock prices, benefitting poor households with saleable livestock. Livestock prices have remained strong since December, attributed to good livestock body conditions and lower livestock supply during a period of restocking. In February, goat prices were 10-37 percent above the five-year averages across pastoral reference markets, except in Mandera where the price of a goat is near average. High livestock prices have outpaced high maize prices, pushing the goat-to-maize terms of trade to approximately 15-55 percent above the five-year average (Figure 4). The terms of trade were highest in West Pokot, where the sale of a goat could fetch 105 kg of maize, which is nearly 80 percent above the five-year average.

Although the terms of trade are favorable in pastoral areas, insecurity can periodically disrupt trading activities or impede market access with temporary impacts on household access to food and income sources. In northeastern Kenya, clashes between Somali and Jubaland defense forces affected Mandera town in late February, suspending livelihood activities and market operations. The threat of Al Shabaab attacks also remains imminent, which led to the Government of Kenya to enact a ban on trading activities in mid-2019 to reinforce the closed Kenya-Somalia border, restricting livestock and staple food supply flows. In Wajir, terror-related attacks in parts of Wajir East and Tarbaj sub counties in late January disrupted market supply flows and household market access.

**Interannual and emergency food assistance:** In 2019, the World Food Programme (WFP) provided over 5,000 metric tons of food assistance and approximately 2.9 million USD in the form of cash transfers, reaching more than 600,000 beneficiaries across the country. WFP further provided in-kind food assistance to approximately 260,000 beneficiaries as well as supplementary feeding to health centers for approximately 57,319 beneficiaries in Turkana, Marsabit, Wajir, Garissa and Tana River. NDMA's interannual Hunger Safety Net Programme (HSNP), funded by DFID, continues to reach about 100,000 households (600,000 beneficiaries) bi-monthly in Mandera, Turkana, Marsabit, and Wajir counties, providing an amount equivalent to 40 percent of total household food needs.

### *Current Food Security Outcomes*

**Pastoral area outcomes:** Overall, significant gains in livestock productivity and value have driven an increase in livestock-related income and milk consumption to near-normal levels despite the slow pace of recovery of poor households' livestock holdings. In addition, relatively low levels of resource-based conflict have permitted increased freedom of movement to rangeland and markets compared to recent dry seasons, while household time and money spent on accessing water is atypically low. Based on current milk production levels of 2-7 liters per day, the typical poor household is likely consuming some goat or cow milk several days per week. Improved milk consumption and the above-average goat-to-maize terms of trade, coupled with other income sources such as seasonal charcoal and firewood sales and interannual safety nets, is driving a relative improvement in dietary quality and quantity among most poor households. However, chronic food insecurity remains of concern, particularly in terms of dietary quality. February SMART surveys were carried out in Isiolo and Tana River counties, where global acute malnutrition (GAM) prevalence was measured by weight-for-height z-score (WHZ), and NDMA sentinel site data was collected in other counties, where GAM was measured by middle upper arm circumference (MUAC) measurements. Despite reductions in the prevalence of acute malnutrition at the county level, 'Critical' (GAM WHZ 15.0- 29.9 percent or GAM MUAC 10-14.9 percent) acute malnutrition persists in Isiolo, Mandera, Wajir, Garissa, most of Turkana, parts of Marsabit (Laisamis, North Horr), and Tiati sub county in Baringo. Samburu, West Pokot, and Tana River counties were classified as 'Serious' (GAM WHZ 10.0 -14.9 percent or GAM MUAC 5-9.9 percent). The lowest acute malnutrition prevalence was observed in Saku and Moyale sub counties in Marsabit at 'Alert' (GAM MUAC <5 percent) levels.

As a result, acute food insecurity outcomes have broadly improved to Stressed (IPC Phase 2) on the area level. However, NDMA sentinel site data and field assessment data collected by the KFSSG in February suggest that there are some poor households who are still experiencing food gaps or engaged in crisis livelihoods coping strategies in most pastoral livelihood zones. Of greatest concern are pockets of households that are experiencing food gaps indicative of Emergency (IPC Phase 4) within Northwestern, Northern, and Northeastern Pastoral livelihood zone. These households have had their assets progressively eroded by drought and floods and have few to no livestock holdings, while they and other households also remain particularly vulnerable to other shocks such as high staple food prices and insecurity.

**Marginal agricultural area outcomes:** With the exception of Tana Riverine livelihood zone, most marginal agricultural households are currently able to meet their minimum food needs. The recent short rains harvests provided own-produced food stocks, resulting in a good seasonal food availability in the month of February even in areas that harvested below-average maize stocks. Above-average livestock prices and milk production are also supplementing food and income from crop production. According to NDMA sentinel site data, more than 80 percent of households in the southeast reported an acceptable food consumption score (FCS). However, at least 20 percent of households in Kwale, Lamu, and Taita Taveta counties reported a borderline or poor FCS. Trends in FCS broadly improved from January to February, reflecting an increase in dietary quality and quantity given ongoing harvesting activities. Similarly, the use of consumption-based coping strategies as measured by rCSI broadly declined from October 2019 through February 2020, showing steady improvement. GAM analyzed from MUAC data collected at NDMA sentinel sites indicated that acute malnutrition has been maintained at 'Acceptable' (GAM MUAC <5 percent) levels.

As a result, Minimal (IPC Phase 1) outcomes exist in Makueni, Kitui, Nyeri (Kieni), Meru (Meru North), Embu (Mbeere), Taita Taveta, and Tharaka Nithi (Tharaka). However, Stressed (IPC Phase 2) outcomes are present in Lamu, Kilifi, Kwale, and irrigated areas of Mandera Riverine livelihood zone, where the loss of some agricultural labor income during the floods and relatively lower terms of trade is constraining households' ability to meet their non-food needs. However, Crisis (IPC Phase 3) outcomes are present in Tana Riverine livelihood zone, due to substantial crop losses from the floods and delayed harvests that have left many households with food consumption gaps.

### *Assumptions*

The February to September 2020 most likely food security outcomes are based on the following national-level assumptions:

- According to the convergence of NOAA, ECMWF, and GHACOF forecasts, probabilistic models indicate the March to May bimodal long rains season and February to August unimodal long rains season are most likely to be above average. The forecast is driven by a likelihood of slightly warmer-than-normal Indian Ocean sea surface temperatures and neutral ENSO and IOD conditions through mid-2020.
- Ongoing desert locust breeding is expected to result in the formation of new swarms in March/April in grasslands and croplands in central, northern, and eastern Kenya, which coincides with the vegetative stage in bimodal cropping areas. A second wave of breeding is expected in June. Based on recent funds committed by donor governments and the Kenyan government, aerial and ground control measures are expected to continue to mitigate the impact of desert locust on crop and livestock production, though efforts will likely be limited by insecurity in areas along the Kenya-Somali border. In addition, relatively colder temperatures and a shift in seasonal wind patterns are most likely to mitigate the spread of desert locust to western high potential areas, while forecast above-average rainfall is expected to help offset pasture losses during the long rains season. As a result, desert locusts are most likely to cause localized cash and food crop losses in southeastern marginal agricultural, western agropastoral, and central highland high potential areas. In pastoral areas, atypical pasture deterioration in localized areas, particularly in the east, is likely during the June to September dry season.
- Based on the above-average long rains forecast, planned desert locust control operations, and high likelihood that better-off households will seek to maximize crop production prospects during a favorable rainfall season, area planted for the unimodal and bimodal long rains seasons is expected to be above average. However, the bimodal long rains harvest in July/August is most likely to be near average due to the likelihood of crop losses in marginal agricultural areas from desert locust.
- Agricultural labor demand is generally expected to be above normal from February through September as a result of increased area planted and heightened demand for weeding during above-average rainfall seasons, especially in high and medium potential areas. Labor demand may also be driven by farm-level control efforts to spray or scare away desert locusts. However, crop losses from desert locust may lead to declines in agricultural labor demand during the weeding stages and during the July/August bimodal harvest in localized areas.
- Based on FEWS NET estimates, the national maize balance is expected to be approximately 3.06 million metric tons (MMT) in June 2020, prior to the start of the long rains harvest. The anticipated balance is near the five-year average of 3.147 MMT, but due to population growth and increased household consumption levels that is eight percent above the five-year average, the ending stocks in June are projected to be 0.1 MMT, 52 percent below the five-year average and indicative of a deficit. The maize import gap is anticipated to be about 0.69 MMT, or 10 percent above the five-year average. Although imports from Tanzania, Uganda, and Ethiopia are expected to fill the gap, above-average demand and high marketing costs are expected to contribute to above-average maize prices.
- Based on FEWS NET's technical price projections in reference markets in Nairobi, the retail price of a kg of maize is expected to range from 34 to 40 percent above the five-year average throughout the scenario period. Prices are most likely to peak at around KES 50 between April and August. The wholesale price of a kg of beans is expected to be approximately 55-60 percent above average throughout the scenario period, peaking at about 120 KES.
- Based on current above-normal vegetation, the above-average rainfall forecast, and anticipated desert locust control operations, rangeland resources are expected to remain broadly above normal throughout the scenario period. As a result, livestock migration is broadly expected to occur at below-normal levels during the June to September dry season. However, atypical pasture losses and associated migration is likely in localized areas of Mandera, Wajir, and Garissa, where insecurity will limit desert locust control operations.
- Outbreaks of Rift Valley Fever (RVF) are likely to occur in Marsabit, Isiolo, Wajir, Mandera, Garissa, Tana River and Kilifi counties in February and from late May. The long rains will be the second above-average rainfall season and, based on current above-normal soil saturation levels, there is an increased likelihood of standing water that creates habitats for RVF mosquito vectors. However, the outbreaks are anticipated to be less severe than those of 2019 due to heightened awareness, surveillance systems, and improved control measures both at the national and county level.
- Given that favorable rangeland resources will most likely support good livestock body conditions, most households are expected to limit livestock sales in order to restock their herds, and quarantines may be imposed in response to RVF outbreaks which will further restrict market supply, livestock prices are expected to be sustained at moderately to significantly above average prices throughout the scenario period.

- Humanitarian assistance is expected to continue across the country as vulnerable and food insecure households are supported by a combination of the national and county governments and humanitarian agencies. Interannual assistance in the form of cash transfers amounting to KES 2,700 per month by NDMA's Hunger Safety Net Programme (HSNP), funded by DFID, is expected to reach about 100,000 households (600,000 beneficiaries) in Mandera, Turkana, Marsabit, and Wajir counties. Cash transfers, supplementary feeding and in-kind distribution of food commodities by WFP to over 800,000 beneficiaries will likely continue throughout the scenario period.
- The refugee populations in both Dadaab and Kakuma refugee settlements, continue to receive food assistance rations reaching more than 25 percent of their population. However, as anticipated in October due to funding constraints, WFP cut rations down to 70 percent of daily kilocalorie needs and this will persist throughout the scenario period.

### *Most Likely Food Security Outcomes*

**Pastoral area outcomes:** Stressed (IPC Phase 2) outcomes are expected to be sustained in most pastoral livelihood zones throughout the scenario period, and many poor households who are currently in Crisis (IPC Phase 3) in Northwestern, Northern, and Northeastern Pastoral areas are expected to improve to Stressed (IPC Phase 2). During the March to May long rains season, household income from livestock production and household milk consumption is expected to range from normal to above-normal levels, based on above-normal rangeland resources, anticipated livestock births, high milk production, and above-average terms of trade. This trend is likely to broadly continue through the June to September dry season, given the positive effect of two consecutive above-average rainfall seasons on household income from livestock production. Improved livestock productivity and high terms of trade are most likely to prevent most households from experiencing food consumption gaps throughout the lean season. Although the ongoing desert locust upsurge is of high concern, above-average rainfall is anticipated to continue to regenerate pasture, forage, and browse from March to May, offsetting losses. Further, current and planned control measures are most likely to control the intensity of breeding and mitigate the severity of damage to rangelands. However, given the likelihood that RVF outbreaks will result in quarantines during the rainy season and suspend livestock sales, poor households in affected areas will be likely to periodically engage in stressed or crisis coping strategies to meet their minimum food needs. In addition, persistently low livestock holdings will continue to be a limiting factor to their ability to purchase non-food needs.

Although Stressed (IPC Phase 2) outcomes are expected in most livelihood zones at the area level, inaccessible, insecure areas in Northern Pastoral livelihood zone are most likely to deteriorate to Crisis (IPC Phase 3) during the lean season. In these areas, household access to food and income sources is increasingly likely to be disrupted by the impact of insecurity on market functioning, while the additional, new hazards presented by desert locust and RVF outbreaks are likely to be more severe given more limited control measures. Households that are currently in Emergency (IPC Phase 4) due to the impact of the floods are expected to regain access to labor income or gifts in the context of more widespread community recovery, but given low to no livestock holdings, these households will likely continue to experience food consumption gaps through the lean season and will be in Crisis (IPC Phase 3). Throughout the scenario period, acute malnutrition levels are expected to remain stable or marginally improve across all pastoral areas, given improvements in milk and food intake. For example, Turkana (Turkana West) is expected to improve from 'Critical' to 'Serious'. However, chronic food and non-food security factors are likely to sustain high but typical 'Critical' levels of acute malnutrition in Mandera, Turkana, and Wajir counties and in parts of Baringo (East Pokot sub-county) and Marsabit (Laisamis and North Horr sub-counties).

**Marginal agricultural area outcomes:** Minimal (IPC Phase 1) or Stressed (IPC Phase 2) outcomes are most likely throughout the scenario period. Poor households' own-produced food stocks from the short rains harvest are expected to last through April in Kwale, Lamu, Kilifi, Makueni and Tharaka Nithi (Tharaka) counties and through July in areas that had better production. Due to anticipated above-average labor demand, income earned from land preparation activities for the long rains cropping season is most likely to normalize food access beginning in March, despite high food prices. Although localized staple and cash crop losses from desert locust are expected, high agricultural labor demand for replanting and locust control is expected to provide income that partially offsets poor households' own-produced crop losses. However, given the early depletion of own-produced food stocks, poor households in Kwale, Lamu, Kilifi, Makueni, and Tharaka counties will likely continue to face difficulty meeting non-food needs given increasing dependence on higher priced staple food purchases from May until the short rains harvest in July. By July, the near-average long rains harvest, which comprises only about 30-40 percent of the total annual harvest in these areas, is expected to provide an additional food source. However, given localized crop production shortfalls due to desert locust, likely reductions to income from harvesting labor that a large proportion of poor households depend on, and high staple food prices, additional households in areas like Meru (Meru North), Nyeri (Kieni), Embu (Mbeere), Kitui, Makueni, and Taita Taveta will deteriorate to Stressed (IPC Phase 2). Based on historical trends and given that milk availability will remain high, 'Acceptable' levels will likely be sustained throughout the scenario period.

### Events that Might Change the Outlook

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

Area	Event	Impact on food security outcomes
<b>National</b>	Well-coordinated surveillance and control of desert locusts.	Well-coordinated surveillance and control of locusts involving proper budgeting and use of the allocated funds set aside for the control of the locusts will result in minimal effects on crops and forage resources. Improved control will likely prevent a resurgence of the pests from mid-March and minimize crop or rangeland resource losses, thereby enabling more households to improve to Stressed (IPC Phase 2) or Minimal (IPC Phase 1).
	Significantly below-average March to May long rains	Significantly below-average March to May long rains would result in the erosion of the gains brought about by the 2019 October to December short rains and lead to a worst-case scenario from desert locust damage. Below-average forage and water availability would be expected from June onward, while farming households would suffer crop losses, due to the interaction of poor rainfall with desert locusts even in the presence of aerial and ground control operations. Low livestock prices, high staple food prices, low livestock productivity, heightened conflict and insecurity, increased migration, and an early and more intense lean season would be expected. Crisis (IPC Phase 3) would be likely in vulnerable pastoral areas, while more households would experience Crisis (IPC Phase 3) outcomes across the country.
<b>Northeastern Pastoral Livelihood Zone in Mandera County</b>	Boosting of security in the Kenya-Somalia border zones by the national security agencies	Reduced insecurity would facilitate the resumption of normal livelihood activities, trade flows, and market functioning. Increased security could lead to re-opening of the border, which would likely improve Kenya-Somalia cross-border trade by increasing both the demand and supply of livestock and staple foods, respectively. These factors would lead to an increase in household income and consequently their food access, maintaining an area classification of Stressed (IPC Phase 2).

## AREAS OF CONCERN

### Tana Riverine Livelihood Zone (Figure 5)

The Tana Riverine Livelihood Zone is a mixed agricultural area. Among poor households, crop and livestock production account for about half and a third of household income, respectively. Petty trade, fishing, the sale of firewood and charcoal, and remittances and gifts from better off households are also important supplementary sources of income.

#### Current Situation

The above-average 2019 short rains season severely affected local livelihoods in Tana Riverine areas. According to the Tana River County Steering Group (CSG), river flooding affected 15,464 households in the Tana river flood plain from November to January. By February, those who had been displaced have returned home and critical transport routes have reopened. Based on CSG estimates, approximately 55 percent of planted area (3,500 acres) was destroyed during the floods. Only 25 percent of the land was replanted, as households lacked additional seed stocks and received inadequate seed relief assistance. In February, surviving crops were at vegetative stages with green harvests expected from late March to mid-April. Although mature desert locusts were reported in Nanighi and Sala sub counties, the CSG and KFSSG learned during field community interviews that households have been able to scare the locusts off through time-intensive noise-making methods, using sticks and sheets of iron, ullulating, and whistles. The damage has thus far been negligible, as the desert locust have mainly fed on the invasive *Prosopis Juliflora* shrubs. However, young hoppers (first instar) were sighted in neighboring pastoral areas of Buwa, Boka, and Asaku in mid-February, which pose a significant hazard to maturing crops as well as pasture and browse.

Due to the delayed harvest, households are highly dependent on purchasing food from markets, which is atypical at this point in the season. Yet poor households have not earned much income yet from crop sales, while minor sources such as petty trade, fishing, the sale of firewood and charcoal, and remittances and gifts from better-off households offer limited expandability. Livestock production is currently the main source of own-produced food and income, supported by good livestock body conditions and milk productivity after the above-average rainfall season. However, according to the findings



of the KFSSG 2019 Short Rains Assessment, poor households only own two TLUs on average – primarily goats or cattle – compared to the 10-year average of six TLUs due to cumulative losses during the 2016/17 and 2018/19 droughts. Despite the lower livestock holdings, favorable vegetation has supported normal milk production and livestock conception rates. In February, milk production per household per day is 1.5 liters compared to the five-year average of 1 liter.

Below-normal household income from crop and livestock sales is limiting household food access, but purchasing power measured by the goat-to-maize terms of trade is favorable. According to NDMA sentinel site data, the price of a mature medium goat rose by nine percent from January to February and was 16 percent above the five-year average in February. During the same time period, the retail price of maize at the reference market in Hola declined by 23 percent as supplies from the long rains harvest in neighboring areas began to reach the market, but remained seven percent above the five-year average. Driven by rising livestock prices and falling staple cereal prices, the sale of a goat in February could purchase 78 kg of maize compared to the five-year average of 72 kg.

Given significant shortfalls in food and income sources since the onset of the floods, emergency food assistance has likely played a role in mitigating food gaps in January and February among households that received assistance. However, distribution data is not available from humanitarian agencies to determine if unique households received this assistance and it is possible the same household received multiple distributions. The Kenya Red Cross provided a one-time cash transfer of Ksh 5,400 (USD 54) per household to 1,000 households and distributed a 52 percent ration to 1,200 households. Aldef Kenya also provided a one-time cash transfer of Ksh 5,613 (USD 56) per household to 1,700 affected households. Meanwhile, interannual food assistance through the WFP's Sustainable Food Systems Program provided monthly food assistance to 5,833 households in the county, including approximately 3,469 households located in the Tana Riverine livelihood zone. Each household is receiving cereals (54kgs), pulses (10.8 kgs) and vegetable oil (3.6 kgs), meeting 65 percent of their minimum dietary requirements.

Based on the delayed harvest and below-normal household income, the majority of poor households in Tana Riverine livelihood zone are most likely in Crisis (IPC Phase 3) in February. Although emergency food assistance may have mitigated food gaps among households that received it, the information available on household-level distribution is not sufficient to conclude if food assistance reached 25 percent of the population or if it prevented worse outcomes. NDMA sentinel site data collected in February indicated that 35 percent of households were adopting crisis consumption-based coping strategies, while the proportion of households with poor or borderline FCS dropped to 16 and 24 percent in February, respectively, from 24 and 30 percent in January, respectively. Field interviews conducted in mid-February indicate dietary diversity in many poor households is poor, with meals composed mainly of maize meal and green vegetables. The majority of poor households, including children below five years of age, are consuming only 1-2 meals a day compared to 3-4 meals normally. According to February NDMA sentinel site data, engagement in crisis livelihood coping strategies fell to 29 percent of households compared to 30 percent in January, respectively. The most commonly reported coping strategies include borrowing money, spending savings, purchasing food on credit, and reducing non-food expenditures such as healthcare, fertilizer, or veterinary inputs.

Based on historical nutrition data, the typical prevalence of acute malnutrition in the county is 'Serious' (GAM WHZ 10-14.9 percent) across seasons. Severe flooding during the 2019 short rains contributed to elevated water and vector-borne disease incidence, including AWD. A SMART survey conducted in Tana River County in February 2020 indicated that acute malnutrition prevalence was 13.1 percent (GAM WHZ), which is lower than the 14.8 (GAM WHZ) prevalence recorded during the 2018/19 drought. On the other hand, data from the Ministry of Health information system show that admissions into the Supplementary Feeding Program and Outpatient Therapeutic Program are currently higher than the same time last year. The proportion of fully immunized children (FIC) has declined to 68.6 percent between July and December 2019 compared to 71.6 percent same time last year due to flooding that hindered access to health facilities and immunization outreach programs. Vitamin A supplementation coverage has also decreased to 66.7 percent compared to 80 percent same time last year. Although there are improvements in food availability and access, most poor households in the Tana Riverine Livelihood Zone are classified as Crisis (IPC Phase 3).

**Figure 5.** Area of concern reference map, Tana Riverine livelihood zone



### Assumptions

In addition to the assumptions made at the national level, the following assumptions have been made for Tana Riverine livelihood zone:

- Since flood waters along the Tana River have yet to recede to normal levels and rainfall over the river catchments in central Kenya are forecast to be above average from March to May, additional river flooding is expected during the short rains season.
- The below-average, late-planted short rains crops are expected to be fully mature for harvesting in late April, at the peak of the March to May rainy season. In order to minimize losses from rotting or flooding, households are likely to consume green harvests beginning in late March.
- Based on the rainfall forecast, likelihood of desert locust infestation, inadequate household seed stocks for planting, and anticipated river flooding, the 2020 long rains harvest in Tana Riverine areas is most likely to be below average.
- There is an elevated likelihood of water and vector-borne diseases, mostly malaria and AWD, from March to July given that heavy rains and new river flooding would contaminate water sources or increase the presence of stagnant water. Access to clean water, sanitation, and healthcare facilities are likely to be limited by possible damage to transport infrastructure.
- According to FEWS NET technical price projections, maize prices in the reference market of Hola are likely to range between KES 66 and 80 per kg, which is approximately 44-56 percent above the five-year average, throughout the scenario period. Prices are unlikely to follow seasonal trends due to an anticipated shortage in local supply due to the impact of flooding and the lingering effects of below-average production locally and nationally over the past two consecutive seasons.
- According to FEWS NET technical price projections, goat prices in Hola market are projected to remain near average through September, following seasonal trends and ranging between KES 2,900 and 3,700. Although goats are currently commanding above-average prices nationally due to their good body conditions and quality, food-insecure households in Tana Riverine areas, especially those that lost their crops in the floods, are expected to sell more livestock than usual. The increase in local market supply is expected to exert downward pressure on prices, preventing the local price from rising above average levels.
- The County Government of Tana River is planning a general food distribution of 105,000 kgs of rice and 37,500 kgs of beans to flood-affected households.

### Most Likely Food Security Outcomes

**From February to May 2020**, Crisis (IPC Phase 3) outcomes are expected to persist as food availability and access are likely remain constrained. The minimal short rains crops harvested in March will primarily be for own consumption rather than sold for income, as they will have not fully matured. These stocks are only expected to last for up to one month, leaving poor households heavily reliant on purchasing food at the market. However, households will likely have enough milk, around 1-2 liters/day, to support normal milk consumption while increasing milk sales to earn some income to purchase of staple food items. Households are likely to rely on other food and income sources like agricultural labor, fishing, charcoal and firewood sales, and remittances, particularly since the below-average short rains harvest will limit access to seeds and other inputs for long rains production. However, the limited expandability of income sources will likely constrain household purchasing power and food access. In addition, any quarantines imposed in response to a likely Rift Valley Fever outbreak would affect normal market operations or suppress improvements in herd sizes due to deaths and abortions, though the outbreak is not expected to be prolonged or widespread given improved surveillance and awareness at the national and county levels. Given the limited expandability of these food and income sources, many poor households are likely to continue to have food consumption gaps or employ crisis coping strategies to meet their minimum food needs. Acute malnutrition levels will likely deteriorate within 'Serious' (GAM WHZ 10-14.9 percent) levels, driven by reduced household food availability and access and by elevated waterborne disease incidence as a result of new flooding.

**From June to September 2020**, the availability of green, long rains harvests and income from cash and perennial crops from late June and dry long rains harvests from late July will most likely offer moderate improvements to household food availability through September, despite being below-average. Households will also continue to supplement own production with income earned through petty trade and firewood and charcoal sales and accessing interannual assistance through the

WFP SFSP. The breeding and swarming of desert locusts in June could pose a significant threat to pasture and browse availability in localized areas during the dry season; however, based on planned desert locust control measures and above-average rainfall, rangeland resources are anticipated to remain above normal through late August, sustaining good livestock body conditions and productivity. This should provide households with milk through August, but milk availability is expected to seasonally decline by the peak of the dry season in September, when livestock body conditions and productivity typically decline. Based on the relative improvement in food availability and access from June to August, outcomes in Tana Riverine livelihood zone are expected to improve to Stressed (IPC Phase 2). However, some households who are worst affected by desert locust or floods may be in Crisis (IPC Phase 3). The prevalence of malnutrition is likely to remain at 'Serious' levels.

### **Northeastern Pastoral Livelihood Zone of Mandera County (Figure 6)**

The primary income sources for poor households in the Northeastern Pastoral livelihood zone are small ruminant livestock and milk sales, while secondary income sources include wage labor, charcoal/firewood sales, and interannual safety nets such as the HSNP. Poor households purchase most of their food, though livestock milk and wild foods are important secondary sources.

#### **Current Situation**

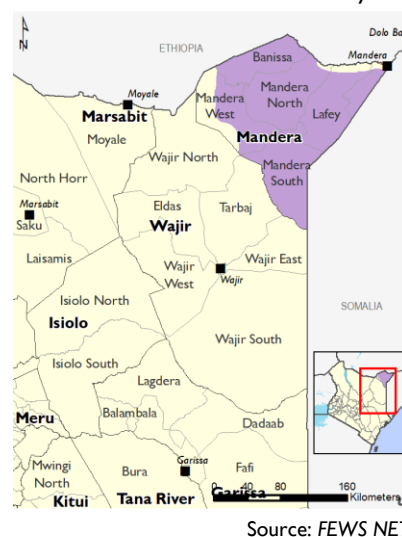
Floods in late 2019, the high presence of desert locust, and prolonged insecurity pose significant risks to food security in Northeastern Pastoral areas of Mandera county. During the short rains season, cumulative rainfall was more than 350 percent of normal, leading to extensive floods that destroyed 10 percent of the area's water facilities, including rural water supply facilities, earth pans and dams, and underground tanks (*berkads*). 31,000 heads of livestock were killed, primarily concentrated in Kotulo, Lafey, and Mandera West sub counties. As the rains began to subside in December, desert locusts entered Kenya through Mandera from Somalia. To date, control measures have been limited due to insecurity along the border, but vegetation remains above normal levels in most areas based on current NDVI data and field observations during the February 2020 short rains assessment. Although swarms remain present in February, damage to be pasture has been broadly minimal, as swarms were immature when they arrived and pasture was already dry and mostly standing hay. However, infestations of mature locusts were reported in parts of Mandera South, West, Lafey and Banisa sub counties in January, where they damaged about 30 percent of browse in late January. On the other hand, given that the historic rains regenerated forage to historically above-average levels, forage availability has yet to be significantly reduced except in parts of Mandera East and Lafey sub counties along the Somalia border, where insecurity limits livestock movement and forage is about 20-30 percent below average due to overgrazing.

After flood waters receded, the abundant availability of rangeland and water resources has restored livestock body conditions, value, and milk productivity. Further, since livestock are able to stay closer to the homesteads than normal, intrahousehold access to milk has been sustained during the dry season. However, due to livestock losses during the 2019 floods and during the 2016/17 and 2018/19 droughts, poor households currently own an average of two tropical livestock units (TLUs) compared to the ten-year average of three TLUs. As a function of lower livestock holdings and births but enhanced productivity, milk production and consumption are normal compared to the ten-year averages. NDMA sentinel site data indicated that poor households are producing four liters per day and consuming two liters of it per day, respectively, in February. The good supply of milk has exerted some downward pressure on prices sold at the household level, which were reportedly below average at KES 70 per litre compared to the five-year average of KES 80 per litre.

Household food access has consequently improved, despite high staple food prices and periodic market access constraints arising from insecurity. In February, the retail price of maize in February was KES 79 per kg, which is approximately 20 percent above the five-year average. However, most households are earning more for a single livestock sale due to good body conditions and the effect of limited livestock holdings on supply, as many are restocking their herds at this time. The rising price of a mid-size goat has outpaced the increase in maize prices, reaching 39 percent above five-year average. Despite high maize prices, the goat-to-maize terms of trade is 50 kg, which is 16 percent above the five-year average.

Insecurity along the Kenya-Somalia border and in Mandera town continues to affect trade flows and market operations and temporarily disrupt livelihood activities. Although attacks are sporadic, tensions remain high and shops cautiously operate

**Figure 6.** Area of concern reference map, Northeastern Pastoral Livelihood Zone of Mandera County



due to the constant threat of attacks by Al Shabaab, especially in Mandera town and along the borders with Somalia. In June 2019, cross-border trade was banned, further hardening the closure of the Kenya-Somalia border that has been in place since 2014 and restricting normal trading activities. Transportation is limited, and recent attacks targeting vehicles have affected the movement of food commodities and their prices. Major roads to Lafey Moyale and El Wak are currently impassable due to frequent attacks by terrorist groups. Further, clashes between the Somali National Army (SNA) and Jubbaland forces spilled into Mandera town in late February. The closing of market operations in insecure areas has impacted household food access.

Regular, interannual humanitarian assistance is assisting 357,286 people, approximately 41 percent of Mandera County's population. The Hunger Safety Net Program provides regular bi-monthly payments of KES 5,400 (USD 53) to 15 percent of the county (22,231 households). WFP's Sustainable Food System Programme is providing food amounting to a monthly 65 percent ration of cereals (sorghum/maize), pulses (split peas/beans) and oil to 7,000 households across all sub-counties. The Kenyan government is also supporting 288 primary schools (94,728 children) in Mandera County through the home-grown school meals programme (HGSMP).

NDMA sentinel site data collected in pastoral livelihood areas of Mandera in January and February suggest that food consumption outcomes have improved, likely driven by daily milk and staple cereal consumption. 100 percent of assessed households have reported an acceptable Food Consumption Score since January. 80 percent of households reported that they were applying stressed consumption-based coping strategies per the Reduced Coping Strategies Index, while 20 percent were not using any consumption-based coping strategies. SMART survey data was not collected in February, but recent SMART surveys conducted by the KFSSG in June/July 2019 recorded a Critical GAM prevalence of 21.9 percent in Mandera. Based on historical nutrition data and MUAC sentinel site data, acute malnutrition in Mandera is typically 'Critical' across seasons. In February, the proportion of children 'at risk' of malnutrition, measured by the Mid-Upper Arm Circumference (MUAC) <135mm, was 20 percent in Mandera, which is high but 12 percent below the five-year average. The relative improvement in nutrition outcomes is attributed to better food access, including increased milk consumption, during the short rain period. However, according to findings of the KFSSG Short Rains Assessment, morbidity trends for under five and the general population remain high due to an increase in malaria, upper respiratory tract infections and diarrhea compared to the same time last year. There were no reports of epidemic prone diseases apart from a cholera outbreak in Kutulo and Mandera West sub counties in 2019, which was contained. Based on the above outcome indicators and contributing factors, Mandera is classified as Stressed (IPC Phase 2). Some households are in Crisis (IPC Phase 3) in areas bordering the Kenya – Somalia border, due to successive shocks from the floods and insecurity that have constrained livelihood activities.

### *Assumptions*

In addition to the assumptions made at the national level, the following assumptions have been made for this zone:

- Insecurity along the Kenya-Somalia border is expected to persist throughout the scenario period, periodically disrupting livelihood activities, market operations, and access to education, healthcare, and transport in the affected areas.
- Desert locust control efforts, particularly in Lafey and Mandera East sub-counties, are likely to be limited due to insecurity that limits aerial control operations along the Kenya- Somalia border. Breeding grounds may be concentrated in these areas, leading to two waves of hatching in March and again in June. Although the forecasted above-average long rains are expected to mitigate pasture losses from March to May, atypical pasture losses and deterioration are expected from June to September. The potential for resource-based conflict will increase as grazing lands diminish.
- Based on FEWS NET'S integrated price projections for Mandera town, which is representative of the northern area of this livelihood zone, the retail maize price is likely to reach up to 20 percent above the five-year average. On a monthly basis, prices will likely vary according to seasonal trends and will be driven by low local stocks of maize grain from poor 2019 long rains production, flooding during the 2019 short rains, and insecurity along the border.
- Based on FEWS NET'S integrated price projections for Mandera town, the price of a goat is expected to drop to below average levels. This assumption is based on the expectation that the livestock supply will begin to normalize after the second consecutive above-average rainfall season, and that the recent ban on cross-border trade activities with Somalia will likely disrupt markets. Goat prices are expected to decline to 7-16 percent below average, ranging from KES 2,200–3,400 throughout the scenario period.
- Although no Rift Valley Fever (RVF) outbreaks occurred immediately after the 2019 short rains season, a second consecutive season of above-average rainfall is expected to create conducive environments for the Aedes mosquito RVF





vector by May. Due to prevailing insecurity, surveillance and control activities are likely to be constrained, leading to an increased likelihood of an RVF outbreak that would prompt a quarantine on livestock trade.

### *Most Likely Food Security Outcomes*

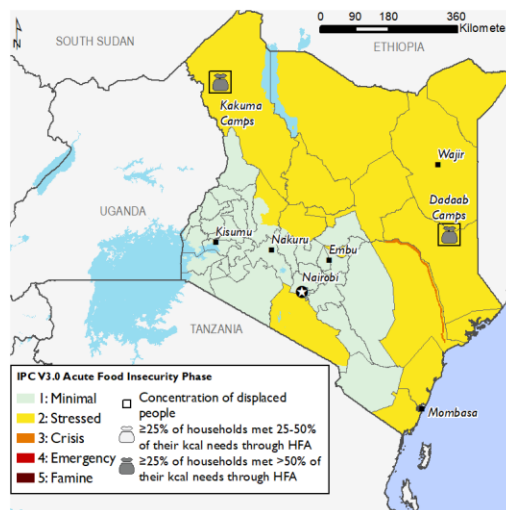
**From February to May 2020**, it is expected that previously laid desert locust eggs will hatch into nymphs and feed on available vegetation, causing minimal to moderate pasture losses mitigated by existing above-average forage and above-average March to May rains. Above-average livestock births, especially small stock, are expected following above-average livestock conception during the short rains. However, this will not translate into additional herding opportunities for at least a year until the current newborn livestock are old enough to migrate with the rest of the herd. As supply normalizes and trading activities are increasingly impacted by the border closure, income from livestock sales is expected to decline, leading to a reduction in the goat-to-maize terms of trade. Though milk production is expected to be above normal based on anticipated high births and good rainfall, oversupply will likely continue to exert downward pressure on milk prices and reduce household income from this source. The increase in milk production should, however, continue to drive reductions in acute malnutrition prevalence, though 'Critical' (GAM 15-29.9 percent) levels are most likely to persist due to chronic factors such as low coverage of health and nutrition services, poor child feeding and care practices, and chronic food insecurity. Outcomes within the livelihood zone are expected to be indicative of Stressed (IPC Phase 2), but households whose livelihoods are most affected by insecurity or the trade ban are expected to be in Crisis (IPC Phase 3).

**From June to September 2020**, above-average forage and water resources from the long rains season are expected, but vegetation, especially browse, may be impacted by desert locusts, particularly in the areas where insecurity impedes control measures. Significant losses of pasture and browse could lead to resource-based conflicts as livestock are forced to migrate early. Staple food prices are expected to remain above average, reducing household access to food and limiting income. The risk of a Rift Valley Fever (RVF) outbreak is expected to lead to enforcement of quarantines that restrict the sale and slaughter of livestock and livestock products, while affecting herd size, milk productivity, and household income. Along the border, inaccessibility by veterinary services and lack of quarantine enforcement may result in the infection and death of livestock. Above-average milk production is still likely, however milk consumption may decrease as more milk is sold for income. Milk consumption will continue to support the nutrition of children under five years of age. Overall, household income in insecure areas is expected to remain below average, and families are likely to rely on the sale of charcoal and firewood and remittances from better-off and middle-income relatives in urban areas and other livelihood zones. Stressed (IPC Phase 2) outcomes are expected to continue for many households, but poor households in insecure areas of Mandera East, Laikipia, and Mandera South sub counties are likely to experience food consumption gaps leading to Crisis (IPC Phase 3) outcomes.

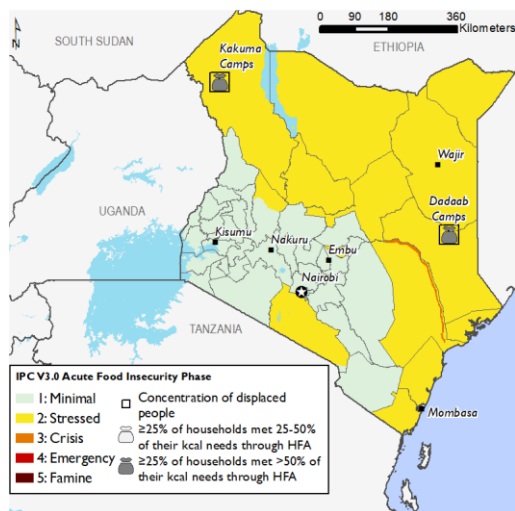
## MOST LIKELY FOOD SECURITY OUTCOMES AND AREAS RECEIVING SIGNIFICANT LEVELS OF HUMANITARIAN ASSISTANCE\*

Each of these maps adheres to IPC v3.0 humanitarian assistance mapping protocols and flags where significant levels of humanitarian assistance are being/are expected to be provided.  indicates that at least 25 percent of households receive on average 25–50 percent of caloric needs from humanitarian food assistance (HFA).  indicates that at least 25 percent of households receive on average over 50 percent of caloric needs through HFA. This mapping protocol differs from the (!) protocol used in the maps at the top of the report. The use of (!) indicates areas that would likely be at least one phase worse in the absence of current or programmed humanitarian assistance.

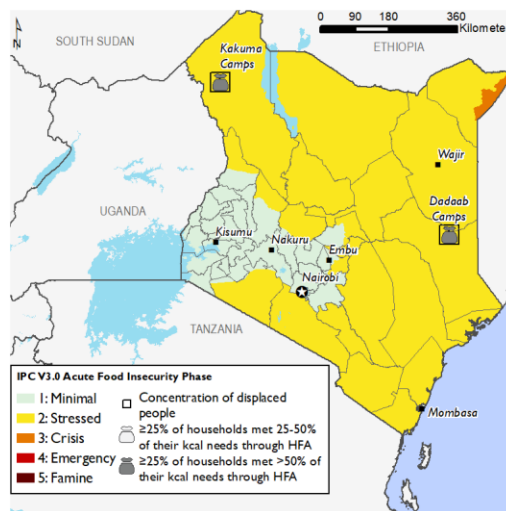
Current, February 2020



Projected food security outcomes, February – May 2020



Projected food security outcomes, June – September 2020



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.

### ABOUT SCENARIO DEVELOPMENT

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