REPUBLIC OF KENYA

The Ministry of East African Community,
Arid and Semi-Arid Lands (ASALs),
and Regional Development

The 2023 Long Rains Season Assessment Report

Kenya Food Security Steering Group

July 2023

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National Drought Management Authority
NDMA
Committed to ending drought emergencies

The 2023 Long Rains Season Assessment Report, Kenya Food Security Steering Group, July 2023

A collaborative report of the Kenya Food Security Steering Group (KFSSG): Ministries of East African Community, ASALs and Regional Development; Agriculture and Livestock; Water; Health; and Education, Science and Technology; the National Drought Management Authority (NDMA), KMD, KNBS, WFP, FEWS NET, UNICEF, FAO, and Arid and Semi-Arid Lands (ASAL) County Steering Groups (CSGs): with financial support from the Government of Kenya (NDMA), WFP, UNICEF and partners.

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Abbreviations and Acronyms

ASALs	Arid and Semi-Arid Lands
CSGs	County Steering Groups
ECDE	Early Childhood Development and Education
FAO	Food and Agriculture Organisation
FEWS NET	Famine Early Warning Systems Network
FNSA	Food and Nutrition Security Assessment
GAM	Global Acute Malnutrition
IPC	Integrated Phase Classification
IPCAMN	Integrated Phase Classification for Acute Malnutrition
KFSSG	Kenya Food Security Steering Group
KNBS	Kenya National Bureau of Statistics
KMD	Kenya Meteorological Department
LTA	Long-Term Average
MAM	March-April-May
MOE	Ministry of Education
NDMA	National Drought Management Authority
NGO	Non-Governmental Organisation
OND	October-November-December
RVF	Rift Valley Fever
SPHERE	Humanitarian Charter and Minimum Standards in Humanitarian Response
TLU	Tropical Livestock Units
UN	United Nations
WASH	Water Sanitation and Hygiene
WMO	World Meteorological Organisation
WFP	World Food Programme

Executive Summary

The Kenya Food and Nutrition Security Assessment (FNSA) is a multi-agency and multi-sectoral exercise led by the government of Kenya conducted in Kenya's 23 arid and semi-arid (ASAL) counties. The Kenya Food Security Steering Group (KFSSG) in collaboration with County Steering Groups (CSGs) carried out the assessment. The 2023 Long Rains Assessment exercise was conducted between 10th and 21st July 2023.

The main objective of the assessment was to determine the impacts of the 2023 long rains on food and nutrition security in Kenya's 23 ASAL counties grouped into five livelihood clusters namely - Pastoral North-West, Pastoral North-East, South-East Marginal Agricultural, Coastal Marginal Agricultural and Agro-pastoral.

The assessment involved collection of both primary and secondary data from, NDMA drought early warning and monitoring system, relevant sectors at county and sub-county levels, community and market interviews, nutrition surveys, field observations during transect drives and Agro-climatic data from FEWS NET. The Acute Integrated Food Security Phase Classification (IPC Version 3) protocols were used for the analysis.

The major drivers of food and nutrition insecurity included poor spatial and temporal rainfall distribution, cumulative effects of previous below average rainfall seasons, high staple food prices, high cost of farm inputs, below average crop production, conflict and insecurity, livestock pests and diseases, crop pests and diseases, poor dietary intake among children, high morbidity and poor Water sanitation and hygiene (WASH) practices.

From the assessment findings, the nutrition situation showed an improvement on the Global Acute Malnutrition (GAM) index across most counties. The observed improvement is attributed to scaled up drought response and improved food security situation resulting from the good performance of the long rains. However, levels of acute malnutrition have remained elevated across arid counties at Critical, except Turkana South Subcounty in extremely Critical phase (IPC AMN Phase 5).

An estimated 945,610 children aged 6 to 59 months require management of acute malnutrition, a reduction compared to 970,214 reported in February 2023, as well as an additional 144,940 pregnant and lactating women.

Overall, the food security situation has improved across the ASAL counties, with population facing acute food insecurity and consequently requiring humanitarian assistance significantly reducing from 4.4 million in February to 2.8 million in July 2023. Out of this, 2.3 million people are in Crisis (IPC Phase 3) while the other 0.5 million are in Emergency (IPC Phase 4).

The improvement across the counties and subsequent reduction in the numbers was largely attributed to the good performance of the March-April-May (MAM) 2023 season, which saw most parts of the country receive above average rainfall. The situation is projected to improve further with the forecasted above average October-November-December (OND) 2023 short rains occasioned by El-Niño conditions.

1 | Introduction

1.1 Scope of the 2023 Long Rains Assessment

The Kenya Food and Nutrition Security Assessment (FNSA) is a multi-agency, multi-sectoral exercise led by the Government of Kenya, and conducted in 23 arid and semi-arid (ASAL) counties. The Kenya Food Security Steering Group (KFSSG) in collaboration with the respective County Steering Groups (CSGs) carried out the assessment.

The KFSSG is a multi-agency body comprising Government departments, United Nations (UN) agencies and Non-Governmental Organisations (NGOs) concerned with food and nutrition security. The forum is chaired by the National Drought Management Authority (NDMA) and co-chaired by the World Food Programme (UN WFP).

Food security/insecurity in the country is highly dependent on rainfall, which overtime has become erratic and unpredictable owing to climate change. Given that the rainfall is bimodal in the ASAL counties, the assessments are conducted bi-annually - after the October to December short rains and the March to May long rains. The 2023 Long Rains Assessment was conducted between 10th to 21st July 2023.

1.2 Objective

The main objective of the assessment was to determine the impacts of the 2023 long rains on food and nutrition security in the 23 ASAL counties. The assessment also considered the cumulative effects of previous seasons and impacts of other shocks and hazards on food security.

1.3 Methodology

The food security/insecurity analysis focused on acute food insecurity, but also considered other chronic issues that had direct impacts on food security. The assessment was centered on the four pillars of food security: food availability, food access, utilisation and stability. The contributing factors and outcomes and their effects on the key sectors of agriculture, livestock, water, health and nutrition, education, peace and security, child protection and markets and trade were also considered. The assessment also identified and recommended interventions to address the issues arising in each sector.

The assessment covered the 23 counties that comprise the ASAL region of Kenya, and whose population generally is the most food-insecure given high levels of poverty, high vulnerability to shocks and hazards, and the aridity and rainfall variability of the areas. The area covers approximately 80% of Kenya's landmass, and for the purposes of the assessment, is classified into various livelihood zones grouped into five clusters: (i) Pastoral North-West, comprising Turkana, Samburu and Marsabit; (ii) Pastoral North-East, comprising Wajir, Garissa, Isiolo, Tana River and Mandera; (iii) South-East Marginal Agriculture, comprising of Kitui, Makueni, Tharaka Nithi, Embu, and Meru; (iv) Coastal Marginal Agriculture, comprising of Kilifi, Kwale, Taita Taveta and Lamu; and (v) the Agro-pastoral cluster that constitutes Baringo, Narok, Kajiado, West Pokot, Laikipia and the northern part of Nyeri county (Kieni sub-county). The main livelihood activities in these clusters are Pastoralism, Agro-pastoralism, Mixed Farming, Marginal Mixed Farming and some Irrigated Cropping, and these form units of analysis.

The assessment involved the collection of both primary and secondary data. The principal sources were: (i) the NDMA drought early warning and monitoring system; (ii) data collected from the relevant sectors at county and sub-county level (iii) community interviews and market interviews using focus group discussions and trader interviews; (iv) nutrition surveys (SMART surveys); (v) field observations during transect drives; (vi) Agro-climatic data from FEWS NET and (vii) secondary data from previous reports and other surveys.

The Acute Integrated Food Security Phase Classification (IPC Version 3) protocols were used for the analysis. The IPC is a standard global tool for classifying the severity of food insecurity and ensures that best practices are being applied. IPC Acute Malnutrition analysis was also carried out to understand both the food and non-food causes of malnutrition.

2 | Drivers of Food and Nutrition Security

2.1 Rainfall Performance

The onset of the 2023 March to May long rains varied across the country. While most areas experienced an early to normal onset, some parts of the southern Rift valley and the Coastal cluster had a delayed onset of 2-4 dekads. Additionally, parts of northwestern Marsabit, localised parts of Samburu, Turkana, Kitui, Tana River and Garissa had a late onset by 1 – 3 dekads (Figure 1).

Cumulative rainfall amounts were generally near average/ average {between 75 % and 125 % of the long-term average (LTA)} in the northern and southern Rift Valley, coastal and central parts of the country. Across the rest of the country, particularly the northern and eastern parts, above average (above 125% of the LTA) was received. However, parts of southern Kajiado received below average rains (below 75% of the LTA).

The distribution of rainfall in terms of space and time was uneven across the ASALs, with most of the rains received in March and April, while some areas experienced short-lived high rainfall events in late April. Throughout May, below average rainfall was experienced across most areas, with early cessation being witnessed over the same month. Temperatures were higher than average during the aforementioned period.

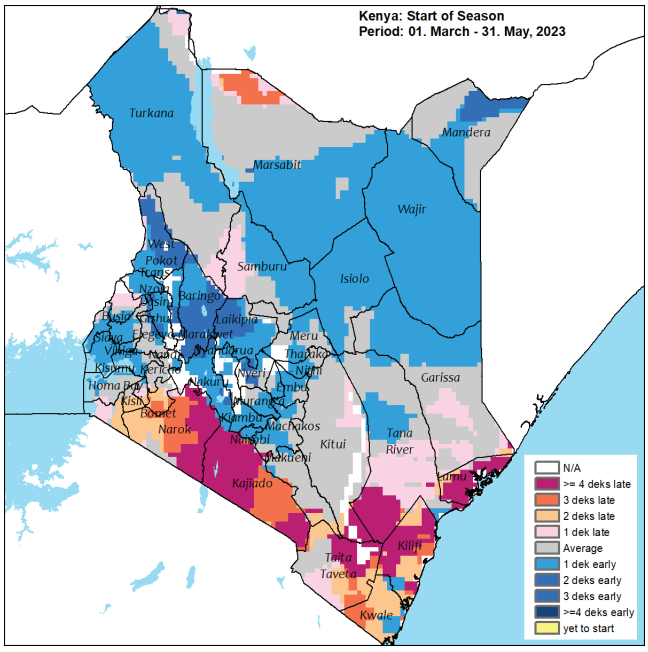
2.2 High Food Prices

Since early 2022 through the current period, staple food prices, particularly maize, have remained high. In July, maize prices across ASAL counties ranged from KSh 73 – KSh 122 per kilogramme and were 18 – 97% above the five-year averages owing to high demand driven by previous successive below average production seasons that resulted in depletion or below average household food stocks.

At market level, supplies have been low due to below average local availability and dependence on high priced cross-border imports from Uganda, Tanzania and Ethiopia. The cost of food production and marketing remains high due to factors such as the depreciation of the Kenya Shilling, high price of inputs such as fertilizer and the high cost of fuel that affects activities such as ploughing and transportation.

2.3 Below Average Crop Performance

The major crops grown in the agropastoral, southeast and coastal marginal clusters of the ASALs were maize, green grams and beans and their production registered an improvement from the previous seasons, driven by above average rains and availability of subsidized fertilizer.



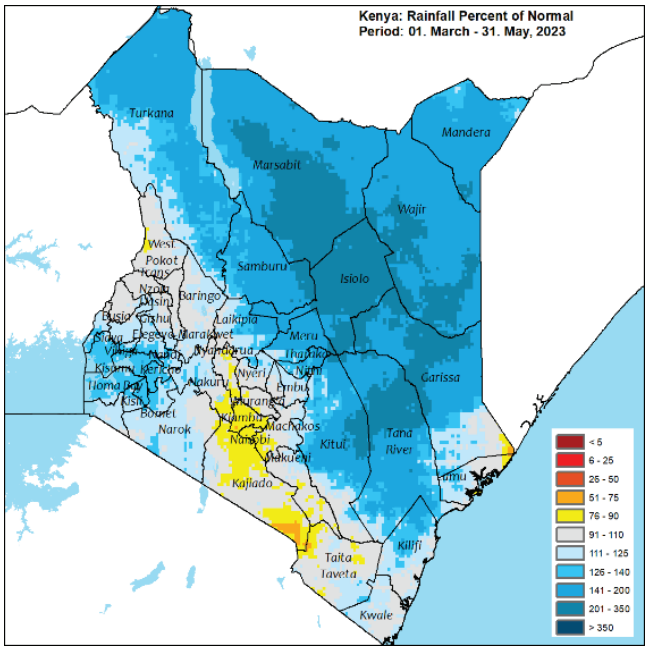


Figure 1: 2023 March to May long rains onset and performance

The total acreage planted was within average for beans but 11-12% above the LTA for the other crops. The production of green grams realised was 11% above LTA but was 17 – 36% below the average for maize and beans, which was attributed to early cessation of rainfall in Kajiado, Meru and Embu counties, Fall Armyworm infestation, excess moisture damage to beans, destruction of about 400 acres of maize crop by elephants, high costs of tractor hire and farm inputs.

It is worth noting that above average area planted and production of maize, green grams and cowpeas was achieved in the coastal marginal agricultural areas, driven by good spatially and temporally distributed rains, subsidised tractor-hire services and provision of relief seed.

2.4 Resource-based Conflicts and Insecurity

In early February, the Cabinet Secretary for Interior and National Administration gave a public order declaring a curfew in specified areas of Turkana, Elgeyo Marakwet, Baringo, West Pokot, Samburu and Laikipia counties. This followed raids by cattle rustlers that resulted in multiple human fatalities, theft of several heads of livestock, destruction of property and displacement of several households. The curfew is in force to date and applies to the hours of darkness, banning public gatherings, processions or movement, either alone or as a group except as has been permitted in writing by the Inspector-General of the National Police Service.

The enforcement of curfew has improved the security situation in the area with the local police supported by the Kenya Defence Forces carrying out regular patrols and operations to apprehend the perpetrators of the raids and individuals in possession of illegal arms. The improved security has enabled households to participate in livelihood activities such as livestock herding and sale, casual labour and trade though the curfew hours have also restricted the number of hours of operation for these livelihood activities particularly transportation of goods that is only limited to daytime hours.

Resource-based conflicts, mostly due to a long-standing border dispute, were reported in Garbatulla Subcounty in Isiolo County and along the border with Garissa County. The fear of attacks along the Isiolo-Samburu boundary prevailed following repeated cases of cattle rustling. Seven people were killed in two separate incidences in Meru County as residents clashed with herders from Isiolo County. Further, in June there were five human fatalities in an incident that saw over 400 heads of cattle stolen by cattle rustlers in Igembe North Sub County.

In Tana River County, conflict was reported between resident farmers and immigrant herders from Garissa and Wajir counties while the aftermath of terrorist attacks created fear and led to the disruption of supplies of essential commodities to markets in Kipini East Ward. In Lamu County, the fear of terrorist attacks has restricted livelihood activities significantly, particularly livestock herding, while terrorist attacks in Mandera resulted in several people getting injured, five fatalities and destruction of telecommunication masts.

2.5 Human-wildlife Conflicts

Human-wildlife conflicts were reported across different counties during the season, with the general complaint being delayed or no compensation from the Kenya Wildlife Service. In areas neighbouring protected areas such as Tsavo National Park and Shimba Hills National Reserve in Taita Taveta, Kilifi and Kwale counties, elephants destroyed crops and prevented farmers from accessing their farms. The jumbos also camped at water sources, preventing households and livestock from accessing water and posed a safety threat to school-going children.

Stray elephants destroyed over 300 hectares of sorghum in Tigania West in Meru County while over 1,000 hectares of farmland were destroyed in Kitui and in Kibwezi East in Makueni County. In Makueni County, one human fatality occurred because of human-wildlife conflict in Kibwezi East sub-county. In Kitui County, approximately 54 heads of sheep and goats were lost to hyenas and leopards in Kitui South, Kitui East and Mwingi Central sub-counties.

2.6 Flash Floods

Flash floods had a considerable impact across the ASALs during the long rains season, including loss of livestock, destruction of infrastructure, property, and farmland. The floods resulted in approximately 2,684 houses sustaining damage in Marsabit, while in Turkana and Garissa counties they had a considerable impact on infrastructure, including washing away of bridges and cutting off several roads, including the Garissa-Modogashe Highway. In Marsabit County, 360 acres of prepared and planted farmland were destroyed.

About 6,325 households were displaced by flash floods in Wajir County, while several settlements were impacted in Isiolo County, including property damage and marooning of 3,219 households across Sericho, Kina and Cherab Wards. In Garissa County, 100 households were displaced in Daadab and Lagdera sub-counties while 111 households were affected in Waso and Nyiro wards of Samburu County.

In Turkana County, 2,330 people were affected in Township, Kanamkemer, Kangatotha, Loima, Turkwel, Lobei/Kotaruk, Songot, Letea, and Kalobeyei wards. The floods led to loss of about 5,308 heads of livestock in Marsabit County and 2,196 heads of livestock in Turkana County. Livestock deaths attributed to hypothermia and pneumonia at the onset of the rains were witnessed in most parts of Kibish, Turkana North and West Subcounties.

3 | Summary of Key Findings

The food security situation has improved across ASAL counties, with the population facing acute food insecurity and consequently requiring humanitarian assistance significantly reducing from 4.4 million in February 2023 to the current 2.8 million as illustrated in Figure 2. Out of this, 2.3 million people are in IPC Phase 3 (Crisis) while the other 0.5 million people are in IPC Phase 4 (Emergency).

The improvement across the counties and subsequent reduction in the numbers was largely attributed to the good performance of the March to May 2023 season, which saw most parts of the country receive above average rainfall. The situation is projected to improve further with the forecasted above average October-November-December (OND) 2023 short rains occasioned by the El-Niño conditions.

Production of maize, green grams and beans which were the major crops grown during the season was 83, 111 and 64% of the LTA respectively. The decline in maize and beans production was attributed to Fall Armyworm infestation, rotting of beans due to excessive moisture, high cost of farm inputs, as well as crop damages by elephants in the coastal marginal agricultural cluster where up to 400 acres of maize farm were damaged. The total maize stock in the ASAL was about 54% of the LTA with farmers, traders and millers holding 33, 84, and 76% of the LTA respectively.

The total sorghum stock with farmers and traders was 136 and 246% of the LTA and was highest in the South-eastern Marginal Agricultural cluster. Harvesting had not been completed in most parts of the ASAL counties, hence the low maize stocks.

Livestock productivity equally registered improvement due to availability of forage and water resources. The condition of pasture and browse was generally fair to good, resulting in fair to good livestock body condition across the clusters, except in parts of Agro-pastoral and Coastal Marginal Agricultural clusters where the forage was poor. The good season performance led to the return of most livestock species to their traditional wet season grazing areas. However, there was less pressure on the pasture fields due to the low Tropical Livestock Units (TLUs) following the protracted previous severe drought that resulted in high livestock mortalities.

Birth rates were below normal, driven by the prolonged severe drought that resulted in loss of breeding stock and disrupted breeding cycle. This resulted in reduced milk production and consumption at household levels and increased milk prices. Adoption of pasture conservation in form of hay bales was low (8-24 %) due to lack of technical know-how and high cost of operations.

Trekking distances from the grazing field to watering points were within the normal ranges, except in parts of Samburu and Taita Taveta where the distance was longer than normal. Presence of endemic and notifiable livestock diseases were reported across the cluster, with no unusual livestock deaths except 45 cases of camel deaths and mass abortions, especially among small ruminants in Moyale Sub-County.

Terms of Trade across the Pastoral and Agro-pastoral livelihood clusters remained below the LTA mainly due to significantly high maize prices. In Marsabit County, which had relatively better terms of trade, households could purchase 58

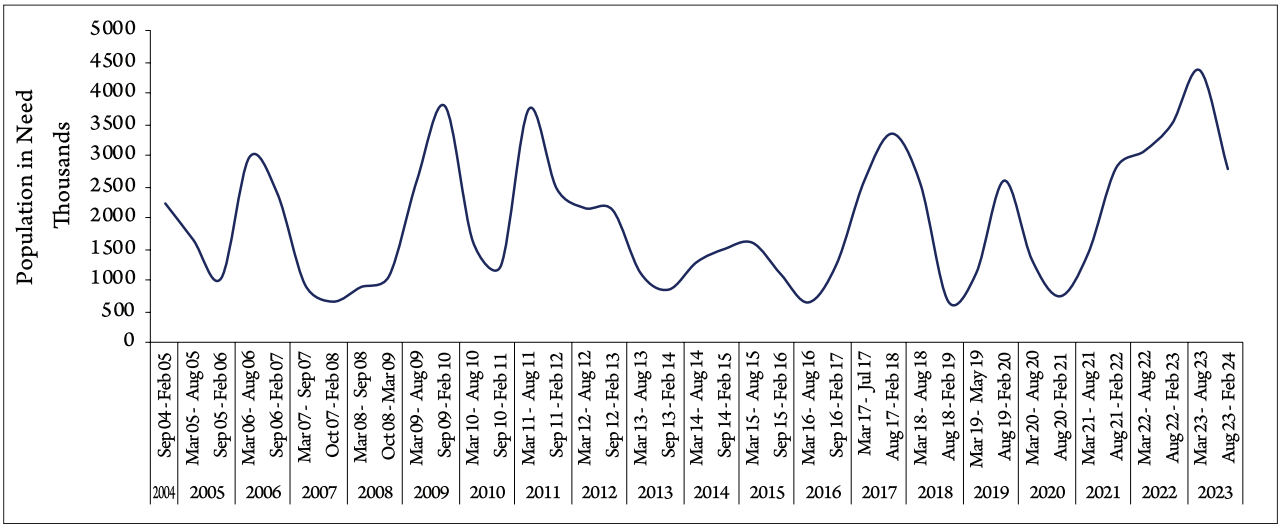


Figure 2: Trend of food-insecure population in ASAL counties.

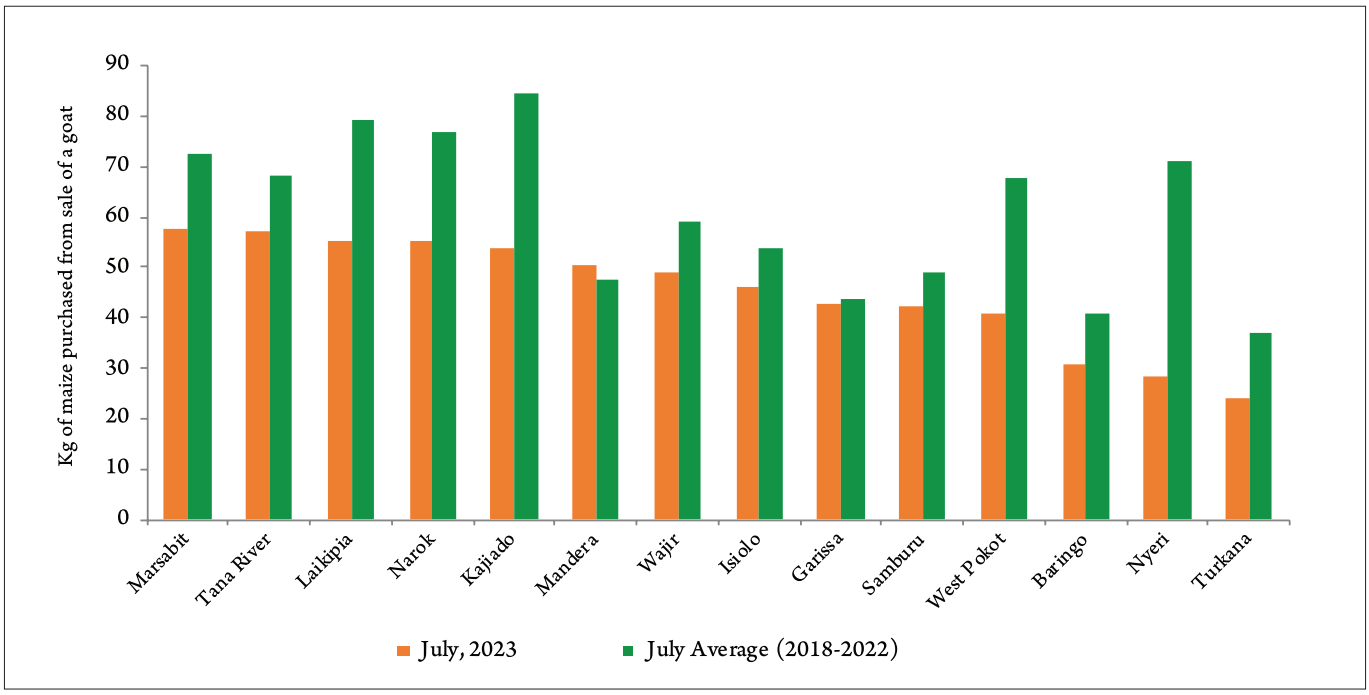


Figure 3: Comparative Terms of Trade in the Pastoral and Agro-pastoral Clusters

kilogrammes of maize from the sale of a medium-sized goat compared to the LTA of 73 kilogrammes (Figure 3). Significant drop in the terms of trade was reported in Nyeri County, where households could only obtain 28 kilogrammes of maize from the proceeds of a goat sale, representing a 61% margin below the LTA of 71 kilogrammes.

Recharge of open water sources for domestic use was generally good at 70-100% of their capacities with 65-80% of the open water sources holding adequate water volumes at the time of the assessment. Parts of the South-eastern counties comprising Kitui, Makueni, Tharaka Nithi, Embu, and Meru as well as the lowlands of Taita Taveta experienced a recharge of 40-70% of their capacities, thus the water volumes remained at 30-50% of their capacities. However, upstream over abstraction was noted, especially in rivers in Isiolo, Tharaka, Meru and Nyeri counties, which severely affected water availability and access in the downstream areas.

Non-operational water sources were also noted and attributed to drying of water pans due to high levels of siltation and breaching of walls during the heavy rains as well as breakdown and lack of repairs for boreholes. Return trekking distances to water sources greatly reduced to a maximum of five kilometres, with longer distances observed in Mandera County at up to 10 kilometres. Exceptionally longer distances of 15-20 km were reported in Nariamao, Loriu and Kalomwae in Turkana County.

Waiting time at water sources was within the normal range of 5-10 minutes in the Agro-pastoral and Mixed farming livelihood zones and 10-30 minutes in the other livelihood zones. However, there was a notable increase in waiting time of between 30 to 60 minutes in isolated parts of Kajiado, Taita Taveta, Makueni and Marsabit counties, which was attributed to concentration at water points as well as water rationing for piped water schemes.

The cost of water from vendors ranged from KSh 20-50 per 20-litre jerrican depending on distance and mode of transport. Water consumption in litres per person per day was generally within normal ranges across various livelihood zones. However, consumption reduced in parts of Taita Taveta and Kitui counties due to increased distances and longer waiting time at the sources.

Sanitation and hygiene practices remained sub-optimal, with water treatment at household level ranging between 35-50%, which was below the minimum Humanitarian Charter and Minimum Standards in Humanitarian Response (SPHERE) threshold. Handwashing practices generally remained below 50%, with Wajir recording the highest at 51% and lowest in Tiaty in Baringo County at 11%. Latrine coverage was also below 50% over most of the pastoral zones. Open defecation was as high as 40% and remained a challenge across most counties.

There was an overall increase in school enrolment in the 23 ASAL counties in Term II compared to Term I of 2023. ECDE enrolment went up by 2.32% while primary and secondary enrolment increased by 0.54% and 2.24% respectively. This was attributed to availability of school meals provided by the Government, communities and partners for ECDEs and primary schools.

Enforcement of Government policy on 100% transition and re-entry guidelines for secondary schools contributed to improved

enrolment. However, a notable decrease in enrolment was noted in some counties within South-eastern Marginal Agricultural and Agro-Pastoral clusters by 18,159 learners (Figure 4), which was attributed to the effects of prolonged drought that led to dropouts, drug abuse, early pregnancies/ marriages, lack of meals in some schools as well as insecurity in parts of Lamu and Baringo counties.

The Ministry of Education (MoE) funded school meals in all public primary schools in Arid counties with a population of 1,096,173. In Semi-Arid counties, some public primary schools with a population of 1,404,989 were supported by MoE through cash transfers for meals. From the data provided, 348,208 learners in Semi-Arid counties were not on government-supported school meals programme. ECDE centres with a population of 802,347 were supported by county governments and/or parents through community supported school feeding programme.

In Turkana and Marsabit counties, feeding in ECDE centres were supported by Mary's Meals Organisation and Welthungerhilfe, targeting 95,791 and 21,296 learners respectively. Other challenges to learning continuity included insufficient or lack of water in most schools, chronic absenteeism, child labour and inability of parents to provide basic needs and school fees across all the counties.

3.1 Categories of Food-insecure Population

The 2023 long rains food and nutrition security assessment used the Integrated Food Security Phase Classification (IPC) to analyse the severity of the food security situation and identify the key drivers leading to the current situation. IPC has three analysis scales that include acute malnutrition, acute food insecurity and chronic food insecurity. This analysis was for acute food insecurity that identifies areas and populations with food deprivation that threatens lives or livelihoods.

The analysis classified households into five severity phases.[1] Households classified in Phase 3 (Crisis) or worse are considered to have urgent need for humanitarian assistance required to protect livelihoods and reduce food consumption gaps; Phase 4 (Emergency) signals urgent need to save lives and livelihoods; while the worst phase – Phase 5 (Catastrophe) – calls for urgent action to prevent widespread death and total collapse of livelihoods.

3.1.1 Current Food Security Situation

The validity of the current analysis is up to September 2023, after which the situation is expected to significantly change in October with the forecasted early onset of the October to December short rains season. Using IPC, the current analysis gives the number of people in need of humanitarian assistance at approximately 2.8 million and this situation is expected to last up to September 2023. The current food insecure population is an improvement from the 4.4 million people established during the short rains analysis conducted in February 2023.

3.1.2 Projected Food Security Situation

The food security situation is expected to significantly improve with the onset of the 2023 October to December rainfall, where the current forecast shows over 90% likelihood of an *El-Nino* hence above normal rainfall expected. The number of people in need of humanitarian assistance during the October 2023 to January 2024 period is expected to reduce to approximately 1.5 million. This number will be valid up to January 2024 when another IPC analysis will be conducted to establish the actual outcomes of the performance of the short rains season and consequently update of the food security situation.

3.1.3 Observed and Projected Changes

Despite the overall improvements in the current and the projected situation, some counties still have significant population of people in phase three or worse (requiring urgent humanitarian assistance) and may remain so even in the projected period (Figure 4). This situation is seen as a result of slow recovery across most livelihoods from the cumulative effects of the previous five consecutive failed rain seasons.

Despite some factors such as livestock prices having shown improvement, it was clear that the impacts of drought had affected livelihoods negatively, with lower livestock populations being in stock, significantly smaller areas under cultivation resulting from reduced purchasing power of inputs and reluctance to immediately invest back in agriculture after the previous consecutive failures. These conditions have been worsened by the high food commodity prices across all the markets in the ASAL counties.

Overall, Turkana, Marsabit, Samburu, Isiolo, Wajir, Mandera, Garissa and Tana River remained with an overall classification

1 **IPC severity phases: Phase 1 (None or minimal), Phase 2 (Stressed), Phase 3 (Crisis)** meaning households either have food consumption gaps that are reflected by high or above-usual acute malnutrition or are marginally able to meet minimum food needs but only by depleting essential livelihood assets or through crisis.
IPC Phase 4 (Emergency) meaning households either have large food consumption gaps, which are reflected in very high acute malnutrition and excess mortality; or can mitigate large food consumption gaps but only by employing emergency livelihood strategies and asset liquidation.
IPC Phase 5: Catastrophe/famine where households have an extreme lack of food and/or other basic needs even after full employment of coping strategies. Starvation, death, destitution and extremely critical acute malnutrition levels are evident.

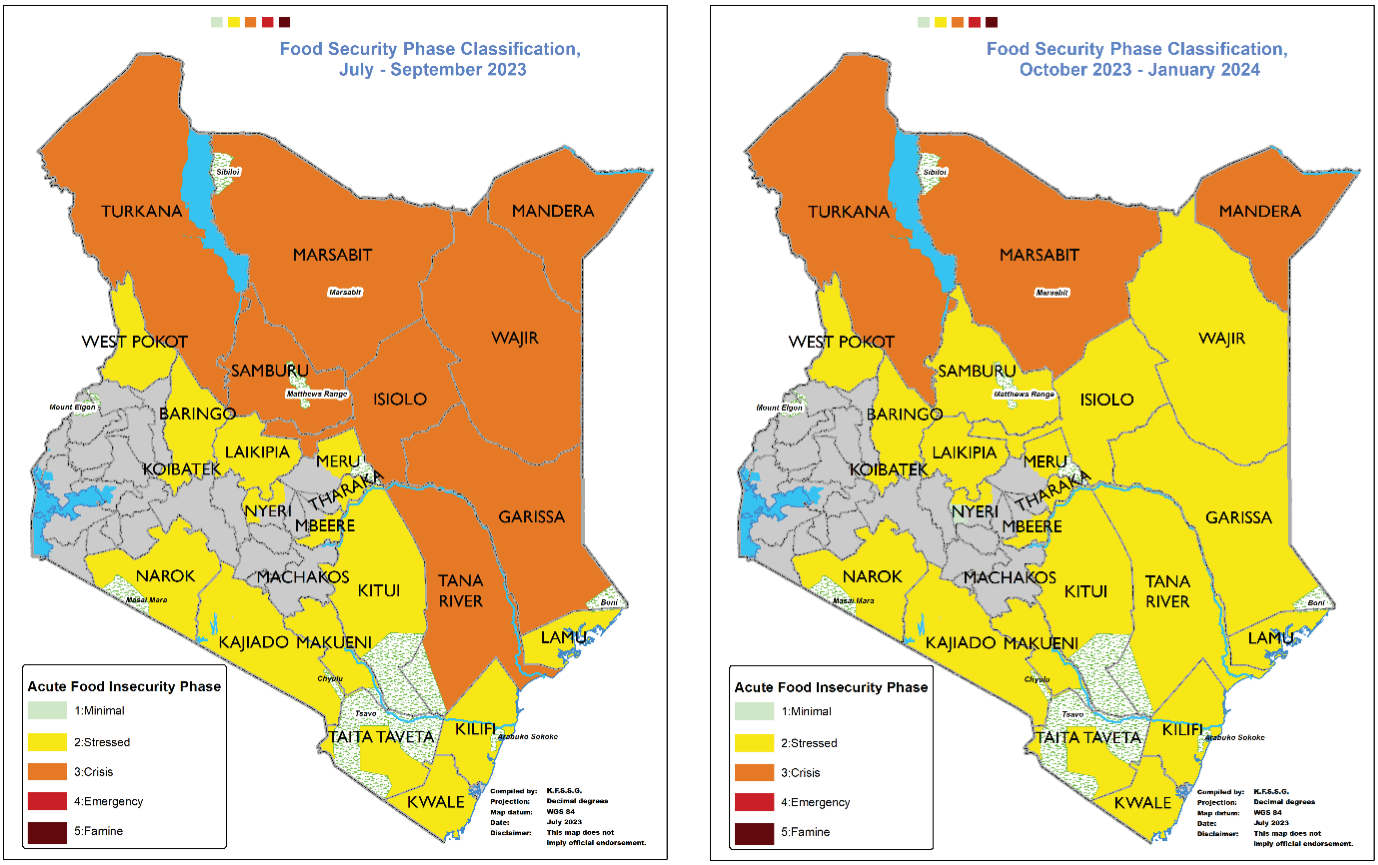


Figure 4. Current and projected food insecurity phase classification

of IPC Phase 3 (Crisis). In the projected period, it is expected that Turkana, Marsabit and Mandera will remain in IPC Phase 3 while the other counties are likely to improve to Phase 2 (Stressed). However, there are populations within most of the counties, including those in Phase 2, who may be experiencing significant food insecurity characteristics of Crisis and Emergency (IPC Phase 3 and 4), only that these populations are not proportionally large enough to classify the entire county in a worse phase).

3.1.4 Population Distribution by County

From the analysis, the proportion of people in need of urgent humanitarian assistance reduced across all the counties and livelihood zones. Among the counties with pastoralism as the most predominant livelihood, Turkana County had the largest population in IPC Phase 3 or worse at 358,050, a reduction from 511,400 in February (Table 1). Others with numbers above 100,000 were Mandera, Garissa, Marsabit and Wajir. For these counties in relation to the total population, the population in need reduced from about 55% to around 20 to 35%.

For the counties whose livelihoods are predominantly marginal agriculture and Agro-pastoral (largely the semi-arid areas), the same trend of reduced numbers of population in IPC Phase 3 or worse was observed. Kilifi, Kitui, Makueni, Kwale counties and Meru North in Meru County recorded highest numbers for these livelihood clusters.

3.2 National Nutrition Situation Summary

The Integrated Phase Classification for Acute Malnutrition (IPC AMN) analysis conducted in July 2023 shows that the situation has improved in most arid counties compared to the same analysis period last year. However, malnutrition levels have remained elevated in most arid counties due to the cumulative negative effects of the prolonged drought.

There is an extremely critical situation in Turkana South, Turkana County, with an IPC AMN Phase 5 and a GAM WHZ of over 30 % (Figure 6). Turkana North, Turkana West, Turkana Central in Turkana County, North Horr, and Laisamis in Marsabit County, as well as West Pokot, Mandera, Wajir, Garissa, Tana River, Samburu, East Pokot in Baringo County, and Isiolo, are currently experiencing a critical phase (IPC AMN Phase 4 - GAM WHZ 15 to 29.9 %). Saku Subcounty in Marsabit and Laikipia County are currently experiencing a serious phase (IPC AMC Phase 3 - GAM WHZ 10 to 14.9 %) of acute malnutrition. Moyale, Baringo North and South, Kwale, Kitui, Kilifi, Kajiado- Rural,

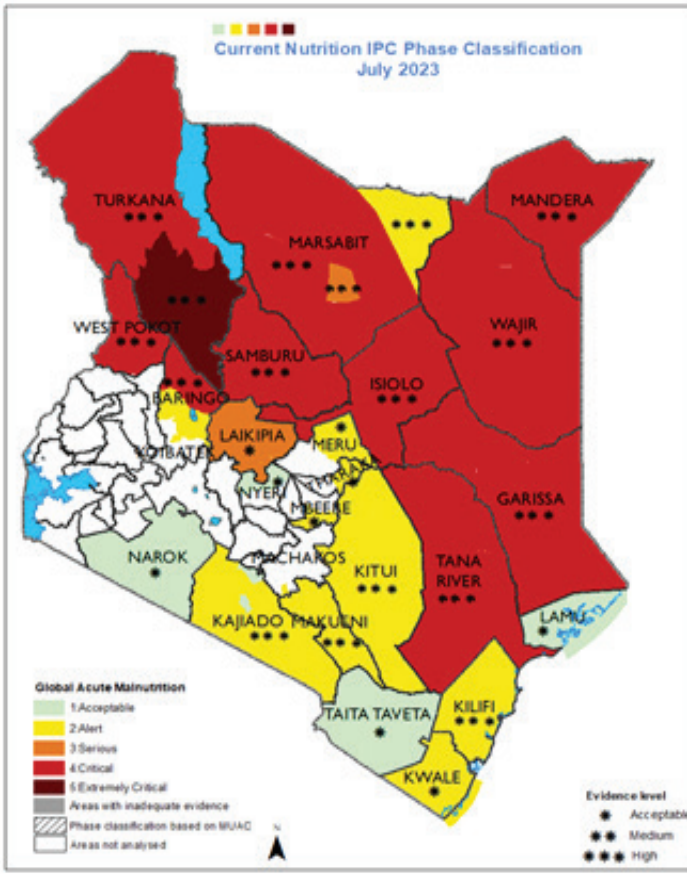
Table 1. Number of people in need of urgent humanitarian assistance (IPC Phase 3 or worse) by county

County	County population *(KNBS 2023 projection)*	Population in need of assistance Aug 2021	Population in need of assistance Feb 2022	Population in need of assistance Aug 2022	Population in need of assistance Feb 2023	Population in need of assistance Aug 2023
Arid Counties						
Turkana	**1,022,773**	370,800	370,800	463,500	511,400	358,050
Mandera	**959,236**	173,500	303,700	390,400	527,600	287,700
Garissa	**927,031**	168,300	210,400	378,600	509,900	324,450
Marsabit	**515,292**	160,900	229,900	206,900	283,400	206,000
Wajir	**870,636**	195,300	273,400	351,600	478,900	261,300
T/ River	**352,549**	63,200	79,000	94,800	158,600	88,250
Samburu	**348,298**	46,500	108,600	139,600	156,700	104,400
Isiolo	**315,937**	107,200	80,400	134,000	110,600	79,000
Baringo	**733,333**	133,400	233,400	139,700	220,000	109,950
Sub-total, Pastoral	**6,045,085**	**1,419,100**	**1,889,600**	**2,299,100**	**2,957,100**	**1,819,100**
Semi-Arid Counties						
Kajiado	**1,268,261**	55,900	111,784	55,900	190,200	126,800
Kilifi	**1,577,335**	145,400	218,100	72,700	78,900	78,850
Kitui	**1,229,790**	113,600	227,200	284,000	307,400	184,500
Makueni	**1,042,300**	98,800	98,800	197,500	208,500	156,300
Narok	**1,284,000**	57,900	57,900	57,900	128,400	64,200
Kwale	**944,464**	86,700	130,000	86,700	94,400	47,200
Laikipia	**561,223**	25,900	51,900	129,600	84,200	56,100
Meru (North)	**794,476**	38,200	152,900	153,000	158,900	79,500
Taita Taveta	**363,990**	17,000	34,100	34,100	54,600	54,600
Nyeri (Kieni)	**205,139**	9,900	19,800	29,800	30,800	20,500
T/Nithi (Tharaka)	**177,709**	6,700	13,300	26,700	17,800	8,900
Lamu	**167,332**	14,400	21,600	14,400	16,700	8,350
Embu (Mbeere)	**280,979**	27,200	13,600	40,900	28,100	14,050
W/ Pokot	**676,326**	31,100	31,100	31,100	33,800	67,600
Sub-total Marginal Agriculture	**10,573,324**	**728,700**	**1,182,084**	**1,214,300**	**1,432,700**	**967,450**
Total	**16,618,409**	**2,147,800**	**3,071,684**	**3,513,400**	**4,389,800**	**2,786,550**

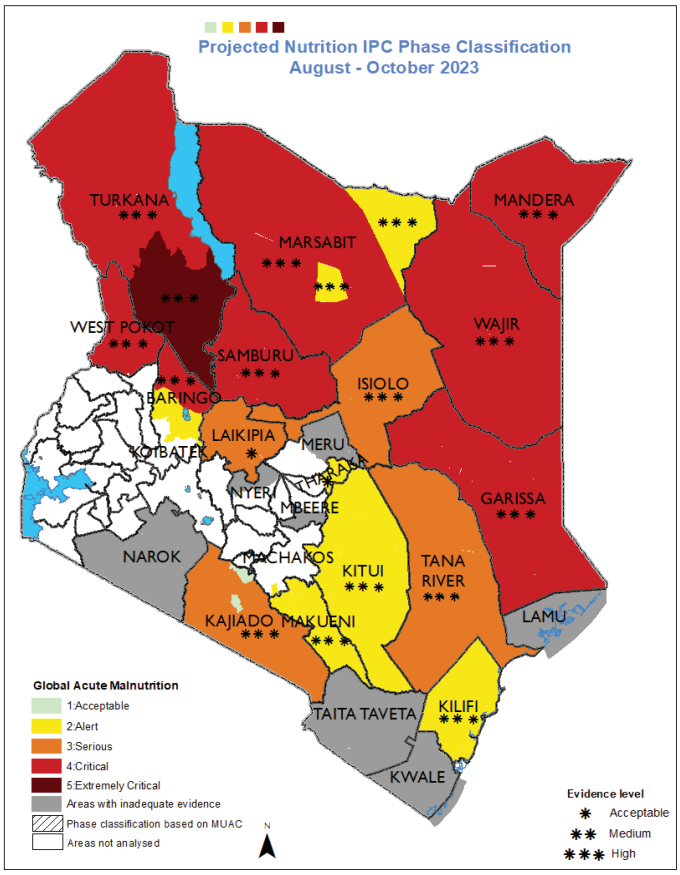
Meru North, Tharaka, Makueni, and Mbeere in Embu are in an alert phase (IPC AMN Phase 2 – GAM WHZ 5 to 9.9 %). Taita Taveta, Narok, Lamu, Kajiado -urban and Kieni in Nyeri are in an acceptable phase (IPC AMN Phase 1- GAM WHZ 0 to 4.9 %).

The improving nutrition situation is mainly attributed to scale-up of response to address immediate and underlying malnutrition causes and cumulative effects of drought as well as improved food security situation, including milk availability and food stocks resulting from the good performance of the long rains in several counties.

However, factors such as the cumulative effects of the five failed previous seasons, poor dietary intake among children, high morbidity, poor WASH, unfavorable terms of trade, high food prices and multiple recurrent shocks have slowed down the positive effects of the long rains. Over the August to October 2023 projection period, the nutrition situation is expected to improve within the same phase, except for Isiolo and Tana River which are expected to improve from Critical to Serious phase, and Saku from Serious to Alert phase (Figure 5).



Current (LRA 2023) Nutrition Situation



Projected Nutrition Situation, August –October 2023

3.2.1 Caseloads

The number of children 6 to 59 months requiring treatment for acute malnutrition has decreased from 970,214 reported in February 2023 to 945,610 reported in July 2023. In addition, 144,940 pregnant and lactating women require treatment of acute malnutrition (Table 2)

3.2.2 Key Proposed Response Actions

i) Update and implement costed contingency and response plans at national and county levels, including El Nino preparedness.

Table 2: Estimated caseloads and targets of children 6-59 months and pregnant & lactating women requiring treatment for acute malnutrition

	Global Acute Malnutrition 6 to 59 months		Moderate Acute Malnutrition 6 to 59 months		Severe Acute Malnutrition 6 to 59 months		Pregnant and lactating women	
Area	**Total Caseload**	**Target**	**Total Caseload**	**Target**	**Total Caseload**	**Target**	**Total Caseload**	**Target**
ASAL	653,519	361,930	512,837	256,419	140,682	105,511	142,876	142,876
Urban	71,629	42,950	43,085	21,542	28,544	21,408	2,064	2,064
Non- ASAL	220,462	122,123	172,894	86,447	47,568	35,676	-	-
TOTAL	945,610	527,003	728,816	364,408	216,794	162,595	144,940	144,940

ii) Continued multi-sectoral response action in affected communities, implementation of drought recovery interventions and resilience building activities among vulnerable communities.

iii) Continued mass screening for early detection and treatment of acute malnutrition through health facilities coupled with integrated outreaches in far flung hot spot areas.

iv) Scale-up of actions to address poor dietary intake among children aged six to 23 months, poor WASH, and high morbidity.

v) Sustained coordination, nutrition situation and disease surveillance, and response monitoring especially in areas where response is likely to be scaled down and areas which are prone to flooding given El Nino predication.

3.2.3 Factors to Monitor

i) Nutrition situation given the high levels of acute malnutrition in arid counties.

ii) Disease outbreak, water sanitation and hygiene (WASH) especially in flood prone areas given the predicted El Nino.

iii) The effect of the expected drought response scale down on access to health and nutrition services to ensure continued access to services by hard-to-reach populations.

3.3 Crop Production Prospects

The projected total national long rains maize production is estimated at 31,349,652 90-kilogram bags (2.82 million metric tons) including the production from the high and medium rainfall areas of Rift Valley, Western and Central Kenya, which is 5 –10% below the five-year average. The overall crop condition was favorable in many counties, with expectations of above-average production. However, Kajiado, Machakos, Makueni, and Kitui counties experienced below average production.

In the North Rift region, the maize crop condition is generally good, except for few areas in Uasin Gishu and lower parts of West Pokot, where crops are stressed due to uneven rainfall distribution and the projected production of maize 27% below the LTA. In the Agropastoral zone, the area planted maize was 12% above the LTA, with most production taking place in Narok, Baringo, and West Pokot. However, the production of maize was 26% below the LTA. In the coastal marginal areas, the acreage under maize was 29% above the LTA, resulting in production that was 59% above the LTA while in the South Eastern Marginal Agriculture cluster, the area under maize was within the LTA. However, production was 52% below the LTA.

In the Coastal Marginal Agricultural counties, the production of cowpeas and green grams was 46 and 44% above the LTA due to favorable rainfall and increased acreage supported by the County Governments of Kilifi, Kwale, and Lamu that provided subsidised tractor-hire services and relief seed. However, in the South Eastern Marginal Agricultural cluster, the production of green grams was within the average while that of cowpeas and beans was 35 and 34 below the average respectively due to erratic rainfall that affected the development of cowpeas and beans during pod filling stages. Despite these efforts, some challenges persisted, including the high cost of fertilizer and seed, Fall Armyworm infestations and crop destruction caused by wildlife in both the coastal and southeastern marginal agriculture regions.

3.4 Staple Food and Livestock Price Trends

Staple food prices remain at historically high levels across the country as a result of low local availability, dependence on high-priced cross-border imports, high production and marketing costs and depreciation of the Kenya shilling. Across the urban reference markets of Nairobi, Mombasa, Kisumu and Eldoret, wholesale maize prices ranged from KSh 5,200 – 8,100 and continue to follow seasonal trends and July prices are 50 – 86% above the five-year averages across all markets, except in Eldoret where the price was 112% above the average, more than double the average price driven by high demand for flour milling (Figure 6).

Maize prices in the marginal agricultural areas range from KSh 73 to 103 per kilogramme and 67 to 97% above the five-year averages attributed to the aforementioned drivers and are at the seasonal peak before the harvest. The prices are expected to decline seasonally as the long rains maize harvest becomes available increasing availability in the markets and reducing demand for the commodity at household level. Prices are, however, lowest in Kilifi at KSh 73 and at 52% above average due to a lower demand for the commodity occasioned by a preference for sifted maize flour.

In the pastoral areas, maize prices range from KSh 85 to 112 and are within the five-year average in Samburu due to locally available harvests and supplies from neighboring Laikipia County and are 18% above average in Garissa and Mandera as a result of relatively lower demand for the commodity

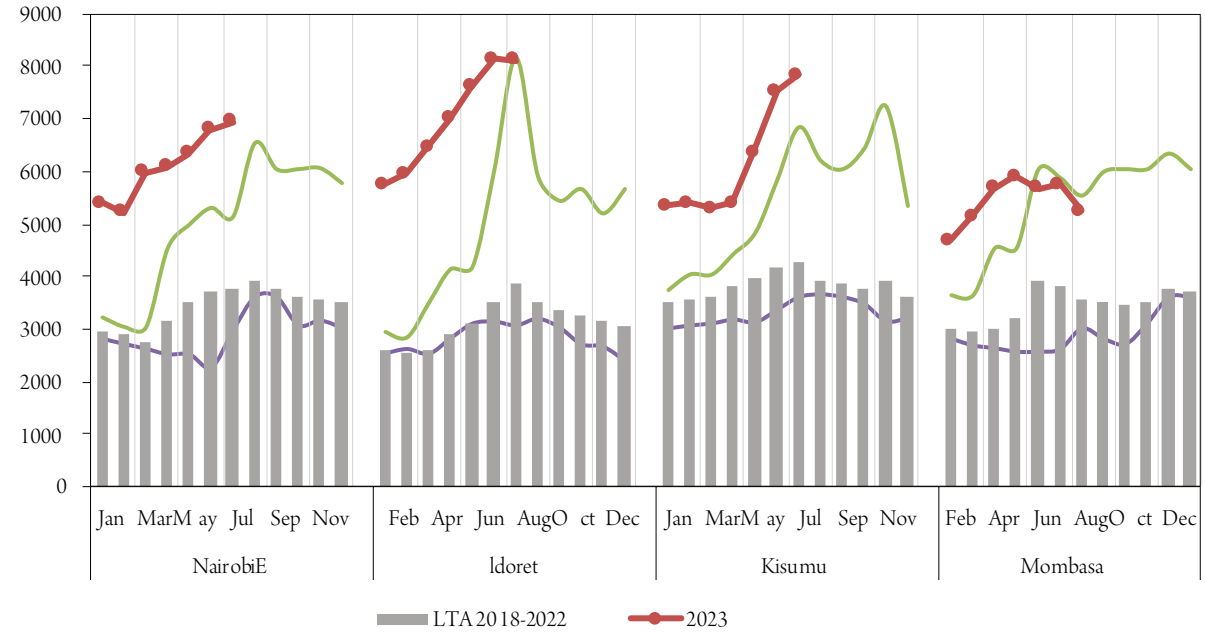


Figure 6: Wholesale maize prices across major urban markets

due to increased availability of milk as a source of food and increased fodder which has reduced the demand for maize as a livestock feed.

Goat prices across the pastoral and agropastoral counties improved significantly driven by the impacts of the above average long rains that improved forage and water conditions and livestock body conditions. Goat prices in Nyeri were 29% below the five-year average due to a fair to poor body condition, which was below average (Figure 7). Prices in Turkana were within average while across the rest of the counties, goat prices were 13 to 46% above the five-year averages, showing a significant improvement from April as the livestock body conditions improved steadily and as the livestock owners aimed to restock their herds by selling only when necessary.

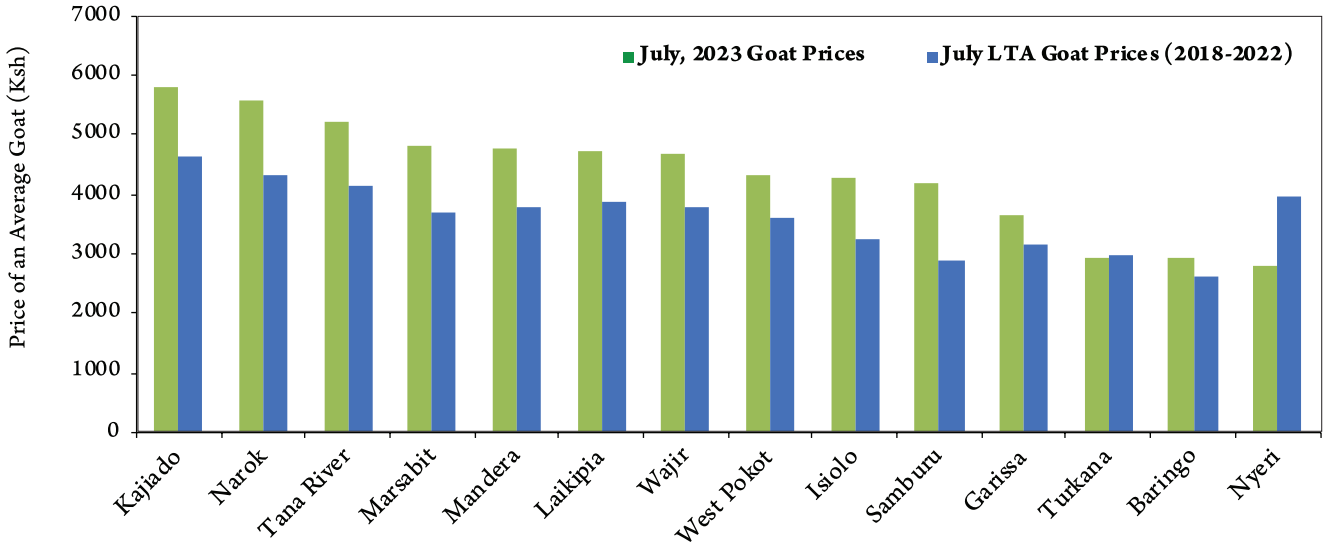


Figure 7: Comparative goat prices in the Pastoral and Agro-Pastoral Cluster

4 | Food Security Prognosis

4.1 Assumptions

The evolution of food security during the October 2023 to January 2024 projection period is based on the following assumptions:

- According to the preliminary forecast by the Kenya Meteorological Department (KMD), in addition to the World Meteorological Organization (WMO) and other global forecasts, and based on historical analogs of El Niño events, the 2023 October to December short rains will likely be average to above-average across the country. Ensemble forecasts based on July initial conditions indicate that in the northern and eastern parts of the country, the short rains are most likely to be above average.
- The forecast above-average October to December short rains are likely to result in localised flooding along the Tana River in Tana River and Garissa counties, along River Daua in Mandera, River Sabaki in Kilifi County, River Kerio in Turkana County, River Nyando in Kisumu County, River Nzoia in Siaya and Busia counties, and in Wajir county. The flooding is likely to result in crop destruction and displacement of households within the flood plains, and loss of livestock.
- The risk of Rift Valley Fever (RVF) outbreaks in pastoral areas is likely to be high following the short rains as a result of the widespread occurrence of stagnant water from late November through to January 2024, which is a breeding ground for the Aedes and Culex mosquitoes, the disease vector, and exacerbated by poor handling of infected livestock and livestock products.
- Throughout the scenario period, livestock holdings will remain below average despite the expected average birth rates due to drought-related losses and sales incurred during the just concluded multi-seasonal drought.
- In the marginal agricultural areas, the forecast above-average short rains will result in above average crop production, improving household food availability from January. However, between October and December, households in the Southeastern Marginal Agricultural areas will depend heavily on market supplies, having depleted their stocks in early September compared to early December normally.
- Households in the marginal agricultural areas are likely to earn above-average incomes from agricultural waged labor as the demand for labor during planting, weeding, spraying, and early harvesting is expected to be above average throughout the season.
- According to FEWS NET price projections, the maize wholesale prices in Nairobi reference market are projected to range between 70-105% above the five-year average and are likely to follow seasonal trends through January. The wholesale prices of dry beans are projected to be 40-75% above the five-year averages and follow seasonal trends but above the 2022 prices.
- Although the prevalence of acute malnutrition among children below five years is expected to decline during the projection period, factors such as poor dietary intake among children due to the high costs of food commodities, high morbidity due to increased prevalence of diarrheal and malaria illness during the wet season, poor childcare practices and consumption of unsafe water will continue to sustain wasting at Critical phase (GAM 15-29.9%).

4.2 Food Security Prognosis (October 2023 – January 2024)

4.2.1 Pastoral areas

Between October 2023 and January 2024, the availability of rangeland resources will improve to above-average levels driven by the forecast above average short rains, reverting livestock grazing and watering distances to less-than average levels. Consequently, livestock body conditions will improve to seasonal levels, while milk production and household milk availability will likely improve to above average levels.

Although average livestock birth rates are expected during the scenario period, livestock holdings will continue to remain low following the drought-related losses and increased sales during the just concluded multi-season drought. In addition, the high possibility of flash floods and outbreaks of Rift Valley Fever (RVF) due to the widespread occurrence of stagnant water offering breeding grounds for the mosquito vector may increase livestock mortalities, further lowering livestock holdings with quarantines likely to constrain markets.

However, the improvements in livestock body conditions and the typical decline in the number of livestock available for sale during the wet season will drive livestock sale values to average to above average levels, improving household incomes. Household purchasing capacities and access to food will however be constrained by the unseasonably high staple food prices resulting from low local availability and high marketing costs associated with the increasing fuel prices. Consequently, a significant proportion of poor households are likely to continue adopting consumption-based coping strategies indicative of Stressed (IPC Phase 2), such as reducing the number of meals consumed in a day and consumption of less preferred foods, and livelihood coping strategies indicative of Stressed (IPC Phase 2), such as purchasing food on credit.

The prevalence of acute malnutrition among children under five years will gradually improve but remain at Critical phase (GAM 15-29.9%) in most areas due to atypically low food availability and constrained access to food due to the high commodity prices, and increased cases of water-borne diseases and Malaria cases. However, the prevalence of acute malnutrition in Isiolo and Tana River counties is expected to decline from Critical (GAM 15-29.9%) to Serious (GAM 10-14.9%) while in Saku Subcounty in Marsabit is expected to decline from Serious (GAM 10-14.9%)to Alert (GAM 5-9.9%).

Overall, at least one in five households will have minimally adequate food consumption but be unable to afford some essential non-food expenditures without engaging in stress-coping strategies and be in Stressed (IPC Phase 2), while the worst affected households will be unable to recover in two average to above average seasons and will be in Crisis (IPC Phase 3).

With the expected improvements in rangeland resources and livestock productivity in Turkana, Marsabit, and Mandera, a significant proportion of poor households will gradually transition to Stressed (IPC Phase 2).

However, despite the improvements, one in five poor households in these counties will continue to face Crisis (IPC Phase 3) or worse outcomes through January 2024, having been most impacted by the recent multi-seasonal drought. The households are likely to continue experiencing food consumption gaps forcing them to rely on unsustainable consumption and livelihood-based coping strategies indicative of Crisis (IPC Phase 3) and Emergency (IPC Phase 4) to bridge these gaps. These most-affected households incurred significant losses of their livelihood assets, particularly livestock through increased sales and deaths caused by drought to bridge food gaps and are likely to lose more from an expected RVF outbreak, and impacts of enhanced rains such as drowning, hypothermia and pneumonic diseases.

At the same time, due to the high household indebtedness and the anticipated high staple food prices, household access to food will continue to be constrained throughout the scenario period. In addition, the prevalence of acute malnutrition is expected to remain at Critical phase (GAM 15-29.9%) due to atypically low food availability and poor dietary diversity, and increased morbidity from waterborne diseases, diarrhea, and Malaria during the season.

4.2.2 Marginal Agricultural areas

From October, households are likely to increase acreage under food crops, given that this is the most important crop production season, but the high cost of inputs such as seeds and costs of ploughing is likely to limit a significant expansion. With the forecast enhanced rainfall likely to improve crop production to above average levels, the demand for agricultural waged labor throughout the season, during planting, weeding, spraying, and harvesting, is expected to gradually increase, improving household incomes to above average levels.

Households in the Southeastern Marginal Agricultural cluster are likely to atypically rely on markets through December due to an earlier-than-normal depletion of stocks from the below average long rains production. The gradual improvements in household milk availability coupled with the availability of green harvests in late December and January, will gradually improve household food availability.

Although household incomes are expected to gradually improve through January, purchasing capacities and access to food are likely to be constrained by high staple food prices. Consequently, households are likely to continue engaging in consumption-based coping strategies indicative of Stressed (IPC Phase 2), such as reducing the number of meals consumed in a day and consumption of less preferred foods, and livelihood coping strategies indicative of Stressed (IPC Phase 2), such as purchasing food on credit.

The prevalence of acute malnutrition among children under the age of five years is expected to gradually decline as household food availability and access improves, but will remain within Alert (GAM 5-9.9%) levels in most areas due to the expected increase in water-borne and diarrhea diseases and Malaria. The gradual improvement in food availability and income sources will lower the severity of food insecurity in most households, but they will be unable to afford some essential non-food expenditures without engaging in stress-coping strategies and be in Stressed (IPC Phase 2), while the worst affected households will be in Crisis (IPC Phase 3).

5 | Options For Response

Table 3: Priority Response Interventions

Sector	Priority Interventions	Description	Projected Cost (KSh Billion)
Food Security and Resilient Livelihoods	Humanitarian assistance and shock-responsive, resilient and improved livelihoods	▪ Relief assistance and Safety Net Programmes: In-kind food and non-food items, cash transfer to food insecure households. ▪ Build resilience to climate change and future shocks through more inclusive food systems and market linkages and stimulation programmes	7.59
Water and Sanitation	Support to operation of boreholes and other water infrastructure, harvesting, storage and treatment	▪ Servicing, maintenance, rehabilitation and extension of boreholes and pipelines, water pans and dams' auxiliary facilities). ▪ Maintenance and protection of dams embankments (soil and water conservation structures. – ▪ Promotion of rain water harvesting. ▪ Provision of water treatment chemicals.	3.85
Livestock	Promotion of fodder production and conservation Livestock Restocking Supportive veterinary services	▪ Restocking to Build Tropical Livestock Units (TLUs). Disease surveillance, parasitic control, treatment & vaccination. ▪ Livestock insurance coverage. ▪ Support capacity building of beef and dairy value chains. ▪ Development of water infrastructure in strategic livestock grazing areas ▪ Pasture production & conservation. ▪ Promote grazing management and conservation ▪ Strengthening rangeland Management structures (peace, markets, water).	2.5

Sector	Priority Interventions	Description	Projected Cost (KSh Billion)
Health & Nutrition	Public health and nutrition support	▪ Continued mass screening with integrated outreaches in far flung and hot spot areas. ▪ Continued implementation of integrated management of acute malnutrition. ▪ Update and implement costed contingency and response plans including El Nino preparedness. ▪ Continued multi-sectoral response action in affected communities. ▪ Implementation of drought recovery interventions and resilience building activities among vulnerable communities. ▪ Scale-up of actions to address poor dietary intake among children aged six to 23 months, poor WASH, and high morbidity. ▪ Sustained coordination, nutrition situation and disease surveillance and response monitoring, especially in areas which are prone to flooding given El Nino prediction. ▪ Intensify disease surveillance and response monitoring ▪ Continued resource mobilisation to ensure healthy supply pipeline. ▪ Advocate for counties to finance data and surveillance activities to allow for comprehensive nutrition situation analysis. ▪ Enhance essential medical supplies. ▪ Scale up of nutrition situation monitoring & surveillance, especially in Semi-Arid counties. ▪ Sustain micronutrient supplementation to cushion children and women. ▪ Actions to address dietary intake among women of reproductive age.	7.9
Education	Sustaining education access in the ASALs	▪ Maintain and increase amount per child for the School Meals Programme. ▪ Construction of storage facilities for food commodities provision of water tanks and promotion of water harvesting in schools. provision of school fees bursaries for vulnerable learners.	2.5
Wildlife management and conservation	Minimize incidences of human wildlife conflicts	▪ Facilitate safe migration through provided corridors ▪ Conduct community sensitisation on conservations ▪ Provide compensations to the losses and damages ▪ Promote participatory policing, surveillance and reporting ▪ Identify and designate core conservation areas to minimise competition over resources	0.5

Sector	Priority Interventions	Description	Projected Cost (KSh Billion)
Child Protection	Child Protection, Assessment, Training	▪ Provision of Cash Plus, Life Skills and Livelihood programmes. ▪ Support parenting and Gender Transformative programmes. ▪ Case Management Services. ▪ Provision of mental health and psychosocial support services and psychosocial support. ▪ Enforcement of Child Rights. ▪ Provision of child-friendly services and temporary shelters. ▪ Training and capacity building of institutions with child protection mandate. ▪ Mapping children with disability and creating linkages to appropriate service providers.	2.9
Peace & Security	Support safe and peaceful coexistence and access to resources	▪ Peace-building initiatives to resolve conflict over resources. ▪ Monitoring of potential conflict locations and support to affected communities to build back better. ▪ Regular peace dialogue meetings and sensitisation. ▪ Intensify peace-building efforts in conflict hotspots. ▪ Promotion of peace messages through local FM stations and information materials.	0.65
Agriculture Sector	Drought recovery support	▪ Provision of assorted certified seeds. ▪ Rehabilitation and development of Irrigation infrastructure. ▪ Crop pests and disease surveillance and control. ▪ Farmers training on crop husbandry and post- harvest management. ▪ Subsidised mechanisation and provision of inputs. ▪ Timely extension services and capacity building. ▪ Compensation to farmers who lose crops to wild animals.	4.5
Coordination	Drought response coordination	Coordination meetings and stakeholder mobilisation activities	0.4
Total Budget			**33.29**
* 1USD~Ksh 143.12 (***CBK exchange rate as of 8th August 2023)***			**4,764. 5**

6 | Conclusion

1. The impact of the near-average to above-average rainfall seasons has been felt more in the ASAL counties, which are mostly dependent on rainfall for both crop and livestock production. Measured improvements have occurred following the average to above-average season, paving the way for recovery after previous five consecutive poor seasons.
2. Crop conditions, particularly for maize and pulses, were favourable across the country. However, high cost of fertilizer, high cost of mechanisation and Fall Army Worm infestation limited production.
3. The maize stocks in the ASAL region was low but is expected to increase as the harvesting season draws to a close by the end of August 2023.
4. Livestock body conditions have improved, leading to an increase in prices. However, terms of trade still remain below average.
5. Milk production and consumption still remains low due to the effects of the previous poor seasons.
6. Recharge of open water sources was adequate, leading to reduced distances and waiting time to normal levels.
7. The levels of acute malnutrition have remained elevated in most arid counties but gradual improvement of nutrition situation during the projection period is expected due to improving food security situation. The main drivers of malnutrition included, poor dietary intake, high morbidity, poor WASH practices, high food prices and poor terms of trade.
8. Education access and consistency in attendance, participation and completion in ASALs is facing challenges despite a national increase in enrolment.
9. Child protection in the context of food insecurity is a pressing issue that requires urgent attention because it significantly impacts on the children's physical, mental health and overall child development.
10. It is crucial that more funding is availed to support sectoral interventions towards recovery and anticipated El Nino according to the forecast.

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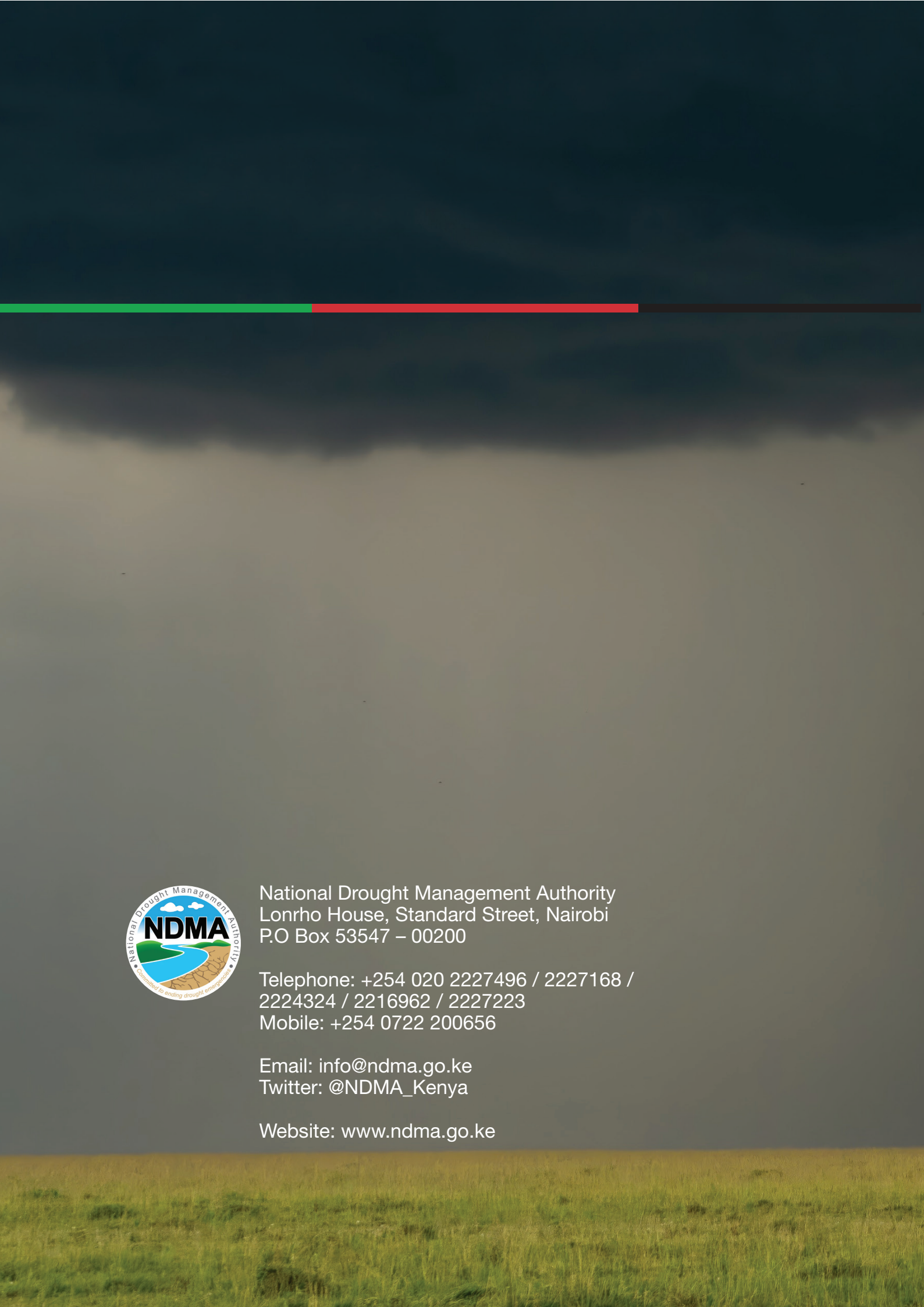

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