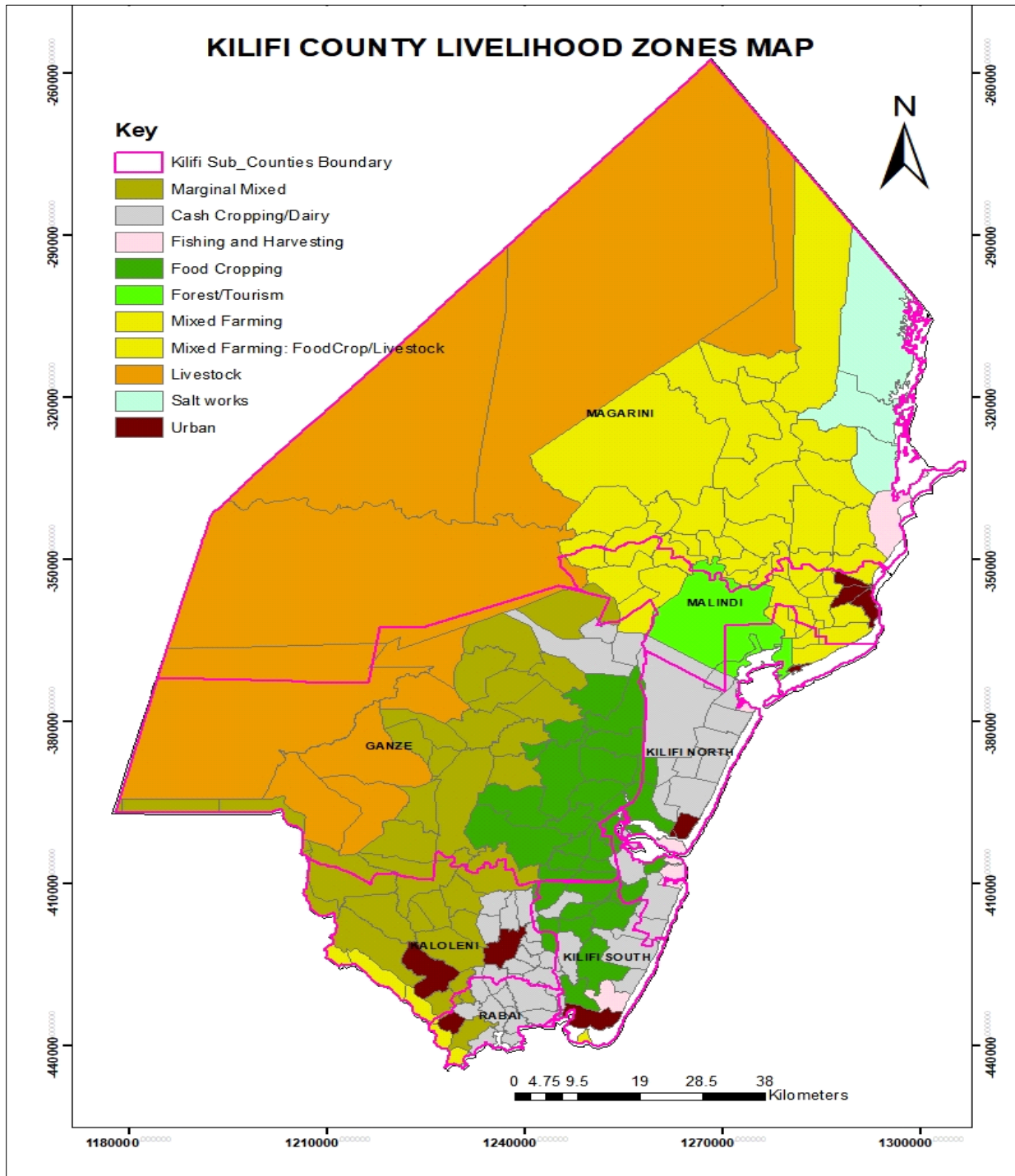


**KILIFI COUNTY
2023 LONG RAINS FOOD AND NUTRITION SECURITY ASSESSMENT REPORT**



**A joint report by the Technical County Steering Group, World Vision and Plan International, Kenya Red Cross, Islamic Relief-Kenya
July 2023**

Executive Summary

The 2023 long rains food security and nutrition assessment was conducted jointly by the Kenya Food Security Steering Group (KFSSG) and Kilifi County Steering Group (CSG) between 3rd and 21st July 2023. A multi-sectoral approach was adopted during the assessment covering livestock, agriculture, health and nutrition, water and sanitation and education sectors. The assessment aimed at establishing an objective, evidence-based and transparent food security situation.

Rainfall performance was fair to good compared to normal during the season with an average of fair to good temporal distribution and fairly even spatial distribution. During the 2023 long rains season, the area under production for maize recorded 25 percent increase compared to long-term average (LTA). The increased acreage was attributed to the biting hunger and increased prices of basic food commodities motivating farmers to increase cropland for enhanced production. The major crops have all had improved acreage compared to the LTA with decrease in production for the pulses. Maize crop harvest is projected to be 40 above the LTA, green grams to be 4 percent above the LTA with cowpeas recording decrease of 9 percent below the short-term average. Low cowpeas projected harvest can be attributed to enhanced rains, which made the crop to be more vegetative. High cost and non-availability of farm inputs hindered smooth planting during the season. Acreage has increased over the LTA as there has been adequate rains well distributed in time and space in all the livelihood zones critical to crop production. County government also supported farmers with subsidized ploughing operations and certified hybrid maize, green grams, sorghum seeds, cassava cuttings and cashewnuts seedlings. The area under irrigation recorded a decrease following good to fair rains which supported rain-fed production. The decrease can be attributed to higher prices of inputs like fuel for pumps as most farmers used petrol driven pumps and the favorable conditions to grow rain-fed maize.

Cereal stocks held by farmers were 41 percent of the LTA, which can be attributed to poor to failed successful previous three to four rainfall seasons. Notably, the harvest for the current season is expected in August. Traders held 176 percent of maize above the LTA attributed to high demand of the cereal whose production in the county had declined significantly in the last four seasons. Millers held 212 percent of the LTA following demand for sifted maize meal as maize scarcity continued to be recorded within the county. In the livestock farming livelihood zone, pasture and browse is expected to last for one month compared to two months normally. The pasture and browse condition is generally good across the livelihood zones equally to the livestock body condition. The current milk production per household for livestock, mixed farming and dairying zone is 2, 5 and 7 litres respectively compared to long-term averages of 4,6 and 8 respectively.

The main commodities traded in the market were sifted maize meal, maize grains, green grams, cowpeas, and vegetables, which recorded above LTA prices. The terms of trade (ToT) in June 2023 were 67 kilograms of maize, which is low when compared to the long-term average of 73. Water in the pans and dams recharged to 85 percent is projected to last for 3-4 months. The average household distance to water sources was 1-2 km and was low compared to the long-term average of 2-3 km. The waiting time at water sources in all the livelihood zones reduced significantly as there was reduced concentration of people at the water sources. The cost of water at the source in the county reduced from an average of Ksh. 5 -10 to Ksh.2 - 5 for a 20 litre jerrican. The average water consumption has increased from 15 -20 litres per person per day (pppd) to 20 - 40 litres pppd. The livestock and

marginal mixed farming zone recorded the lowest consumption 20 - 30 litres per person per day, which is higher compared to the same period last year.

Approximately 68.6 percent of households recorded acceptable food consumption scores (FCS) while 27.7 percent and 3.7 percent had borderline and poor food consumption scores respectively. The Coping Strategy Index (CSI) for the County in July recorded a decrease compared to June from 7.2 to 5.8. Based on the food security outcomes and contributing factors, Kilifi County is classified as Stressed (IPC Phase 2) food Security classification.

Table of Content

Executive Summary	2
1. INTRODUCTION	6
1.1 County background	6
1.2 Methodology and approach	6
2. DRIVERS OF FOOD AND NUTRITION SECURITY IN THE COUNTY	7
2.1 Rainfall Performance	7
2.2 Insecurity/Conflict	7
2.3 Other shocks and hazards	7
3.0 IMPACTS OF DRIVERS ON FOOD AND NUTRITION SECURITY	8
3.1 Availability	8
3.1.1 Crops Production	8
3.1.3 Livestock Production	10
3.1.4 Impact on availability	16
3.2 Access	16
3.2.1 Market operations	16
3.2.2 Markets prices	17
3.2.3 Terms of trade (ToT)	18
3.2.4 Income sources	18
3.2.5 Water access and availability	19
3.2.6 Food Consumption	21
3.3 Utilization	23
3.3.1 Morbidity and mortality patterns	23
3.3.2 Immunization and Vitamin A supplementation	24
3.3.3 Nutritional status and dietary diversity	24
3.3.4 Sanitation and Hygiene	26
3.4 Trends of key food security indicators	27
3.5 Education	28
3.5.3 Effects of long rains on schools	29
3.5.4 School Meals	29
3.5.5 Inter Sectoral links where available	30
3.6 Child Protection	30
3.6.1 Child migration	30

3.6.2 Family Separation.....	30
3.6.3 Violence against children, GBV.....	31
3.6.4 Child marriage.....	31
3.6.5 Teenage pregnancies.....	31
3.6.6 Children that required special support during drought.....	31
3.6.7. Services provided.....	31
4.0 Food Security Prognosis.....	32
4.1 Prognosis Assumptions.....	32
4.2 Food security Outlook for the next 6 months.....	32
Outlook for August - October.....	32
5.0 Conclusion and Interventions.....	33
5.1 Conclusion.....	33
5.1.1 Phase classification.....	33
5.1.2 Summary of Findings.....	33
5.1.3 Sub- County ranking.....	34
5.3 Recommended Interventions.....	39

1. INTRODUCTION

1.1 County background

Kilifi County is one of the six counties in the coastal region of Kenya. The county lies between latitude 2°20' and 4°00' south, and between longitude 39°05' and 40°14' East. It borders Kwale County to the southwest, Taita Taveta County to the west, Tana River County to the north, Mombasa County to the south and Indian Ocean to the east. The county covers an area of 12,370.8km² and has a population of 1,453,787 (KNBS 2019). The county comprises seven sub-counties, including Malindi, Magarini, Ganze, Rabai, Kaloleni, Kilifi South and Kilifi North with four main livelihoods zones that include:

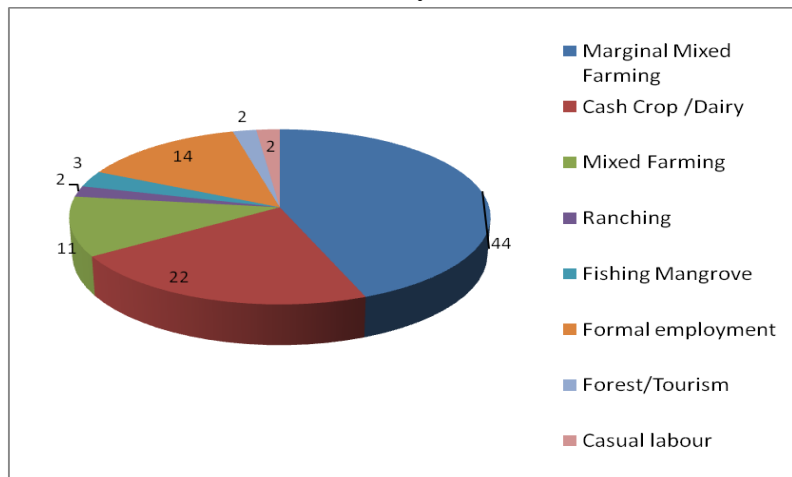


Figure:1 Kilifi County Livelihood Zones proportions

Marginal mixed farming livelihood zone with 44 percent of the population, cash cropping/dairy livelihood zone 22 percent, mixed farming livelihood zone 11 percent and ranching livelihood zone two percent (Figure 1). Other livelihood zones include fishing and mangrove livelihood zone three percent, formal employment livelihood zone (14 percent) and forest/tourism livelihood zone and casual labour livelihood zone two percent each. The main livelihood zones received good amounts of rainfall during the long rains, which has supported crops growth, which is envisaged to be harvested. Pasture and browsing condition are reported to be good considering adequacy of the rainfall hence food-secure households is anticipated alongside the expected harvest.

1.2 Methodology and approach

Qualitative and quantitative methods were used for 2023 long rains assessment, data collection and analysis. Primary data was obtained from checklist administered at sub-county level by sectors officers, data collected through key informant interviews, focus group discussions and observation through transect drives. Secondary data used during the assessment was from drought monitoring bulletin produced by the National Drought Management Authority (NDMA), data from Kenya Health Information System (KHIS), sector reports, Rainfall Estimates maps, population, previous assessment reports. Checklists data validation was done through transect drives and focused group discussions across the livelihood zones. Both secondary and primary data analysis was done by sectors and thereafter production of the County report.

2. DRIVERS OF FOOD AND NUTRITION SECURITY IN THE COUNTY

2.1 Rainfall Performance

The 2023 long rains season was characterized by delayed onset. The onset was realized in third dekad to fourth dekad of April in some parts of Magarini and Ganze sub- counties with good temporal and even spatial distribution while along the coastal strip minimal rains were recorded compared to the hinterland. As shown in the RFE map, the livestock farming zone of Magarini sub-county recorded the highest amount between 126-140 percent of normal while some parts of Ganze, Kaloleni, Kilifi north and south recorded between 91-110 percent of normal. The season rains recorded significant recharge of surface water sources after remaining dry for more than four seasons. The county continued to record enhanced rains in July with good temporal distribution and even spatial distribution. Some parts of Magarini, Ganze recorded poor temporal distribution of the rains leading to crop failure of the main crops.

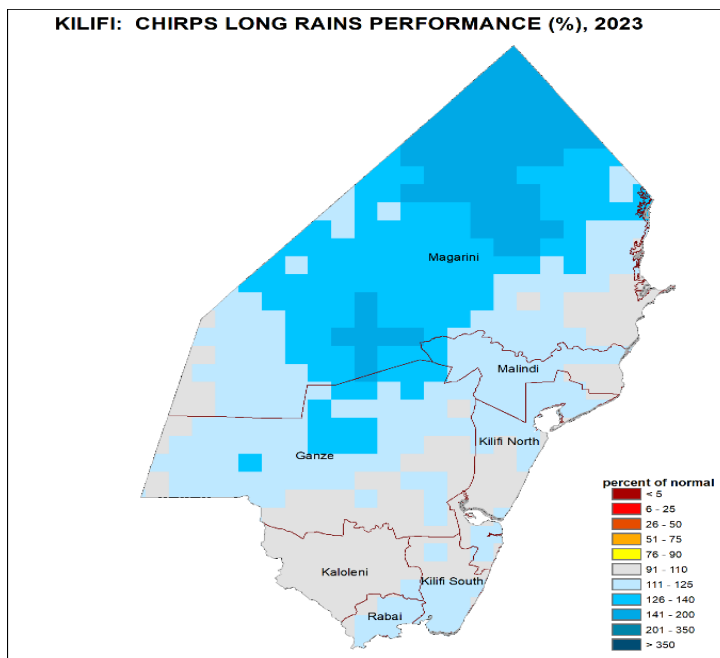


Figure 2: Rainfall Performance

2.2 Insecurity/Conflict

Elephants invaded crop farms in parts Magarini and Ganze sub-counties bordering Tsavo East national park was evident with significant crop damage recorded in these areas. Kenya Wildlife Service (KWS) officers were alerted for urgent intervention. There is high likelihood of households' food insecurity following damage caused by the elephants couples with poor temporal distribution in the same areas. The elephants too are hindering access to water in the above areas as they have camped at the water sources.

2.3 Other shocks and hazards

Shocks

Food prices remained high as most households accessed their food from the market following more than four consecutive poor to failed rain seasons. Most food supplies in the market were from outside the county coupled with high fuel prices. Food prices will remain high until the next harvest.

Hazards

Following lessons learnt from fall army worm invasion, most farmers were able to take control of the pest, but few farms recorded no control thus minimal harvest expected. Following high intensity of the rains recorded in April and May, some farmers along the coastal strip recorded water logging. It increased soil leaching causing poor crop condition leading to low harvest.

3.0 IMPACTS OF DRIVERS ON FOOD AND NUTRITION SECURITY

3.1 Availability

3.1.1 Crops Production

Kilifi County experiences two rainfall seasons, the long rains season, March, April and May (MAM) and the short rains season, October, November and December (OND). The long rains season is the most reliable season in the mixed farming and cash cropping/ dairy livelihood zone and contributes about 60 percent of the total annual agricultural production in the county. The major crops grown during the long rains season include maize, green grams, cow peas and cassava. In the marginal mixed farming livelihood zone, maize and cassava contribute 70 and 20 percent to food respectively. Cassava and cashew nuts contribute 30 and 50 percent to income in the marginal mixed farming livelihood zone. In the cash cropping/dairy farming and food cropping livelihood zone, maize and cassava contribute 40 and 20 percent to food respectively. Maize and cassava contribute 25 and 18 percent to income in the food cropping livelihood zone. Other crops that contribute to income across most of the livelihoods include coconut, cassava, tomatoes, green vegetables, cowpeas, pineapples, oranges and mangoes. Area planted during the long rains for the three main crops, maize, green grams, and cowpeas recorded an increase.

Table 1. Rain-fed crop production

Crop	Area planted during 2023 long rains season (Ha)	Long term average (5 year) area planted during the long rains season (Ha)	2023 Long rains production (90 kg bags) Projected/Actual	Long-term average production (5 year) during the long rains season (90 kg bags)
1. Maize	68,484	54,670	782,333	56,0362
2. Green grams	5,881	4,403.5	19,603	18,819
3. Cowpeas	7,062	5,022	21,818	24,019

During the 2023 long rains season, the area under production for maize recorded 25 percent increase compared to long-term average (LTA) as shown in Table 1. The increased acreage could be attributed to the biting hunger and increased prices of basic food commodities motivating farmers to increase cropland as a coping strategy. The major crops have all had improved acreage and production compared to the LTA. Maize crop harvest is projected to be 40 percent above the LTA, green grams to be four percent above the LTA with cowpeas recording decrease of nine percent below the short-term average. Low cowpeas projected harvest was attributed to enhanced rains, which made the crop to be more vegetative. High cost and non-availability of farm inputs hindered smooth planting during the season. Acreage has increased over the long-term average as there has been adequate rains well-distributed in time and space in all the livelihood zones critical to crop production. County government also supported farmers with subsidized ploughing operations and certified hybrid maize seeds.

Table 2. Irrigated Crop (three main irrigated crops)

Crop	Area planted during long season (Ha)	2022 rains	Long-term average area planted during the long rains season (Ha)	2022 long rains season production (90 kg bags) projected/actual	Long-term average production during the long rains season (90 kg bags)
1. Maize	10		548	250	13,700
2. Amaranth	404		178	17,361	1,640
3. Tomatoes	37		23	512	255

During the reporting period, the area under irrigation for the main crops recorded 97 percent decrease of maize 126, 37 percent increase of amaranth and tomatoes respectively as shown in Table 2. The decrease can be attributed to fair rains where land usually under irrigation production was rain-fed coupled with higher fuel prices.

3.1.2 Cereals stock

Table 3: Quantities held currently (90-kg bags)

Commodity	Maize		Rice		Sorghum		Green gram	
	Current	LTA	Current	LTA	Current	LTA	Current	LTA
Farmers	31,810	54,413	0	213	2	0	47	819
Traders	113,942	41184	39,682	13,750	3,131	1,295	15,405	4,818
Millers	22,141	7,076	0	0	0	0	0	0
Food Assistance	0	0	622	0	0	0	0	0
NCPB	0	4,004	0	0	0	0	0	0
Total	167,893	106,677	40,304	13963	3,133	1,295	15,452	5,637

Various players held cereal stocks of different amounts following the prevailing market situations. Farmers held 41 percent of the LTA, which can be attributed to total crop failure of previous three to four consecutive seasons. The harvest for the current season is expected in August. Traders held 176 percent of maize above the LTA attributed to high demand of the cereal whose production in the county had declined significantly in the past four seasons. Millers held 212 percent of the LTA following demand for sifted maize meal as maize scarcity continued to be recorded within the county (Table 3). Maize stock held by traders and millers was imported from outside the county and the importation is likely to continue in the next one to two months when the next harvest is expected. Due to increased rainfall coupled with reduced sunshine, there is likelihood of mould developing resulting to aflatoxin for the current crop because of the ongoing rainfall. Households have less stock compared to the LTA because of poor harvest in the previous long and

short rains seasons. Demand for the same has been high so the reason for improved stock at traders and millers.

3.1.3 Livestock Production

The main livestock in Kilifi County include cattle, goats, sheep, and poultry contributing widely to many households' cash and food income through the sale of livestock or by-products (meat, milk, eggs, and hides and skin). Livestock production contributes 75 percent to cash income in livestock livelihood zone. In the mixed farming livelihood zones, livestock production contributes 30 percent to cash income while in the cash cropping/dairy livelihood zone, livestock production contributes 15 percent to cash income. In the livestock farming livelihood zone, cattle, goat and poultry contributes 15 percent, 20 percent and 50 percent to food. While in the mixed farming areas cattle, goat and poultry contribute 10 percent, 82 percent, and three percent respectively. The herd size remained low across the livelihood zones following the mortality recorded in the county during 2016/17, 2021 and 2022 drought and prolonged dry spell seasons.

Pasture and browse situation

The long rains started in the third dekad of April with fair distribution. The marginal mixed, mixed farming and Cash crop/dairying zones received sufficient rainfall thus improvement on pasture and browse conditions from poor to good. The livestock zone also received some fair amount of rainfall during this season with poor temporal distribution in June. On average fair to good rainfall in almost all the zones enabled good pasture and browse regeneration.

The pasture duration in the cash crop/ dairying zone is expected to last for about four months and the browse six months. In mixed livelihood zones, three months and browse five months. In mixed marginal zone the pasture is expected to last for about two months and browse about 3-4 months. Animals are trekking an average distance of between 1-2 km in search of pasture.

Factors affecting access to pastures and water include encroaching thorny bush and conflict in the livestock zone especially in Bamba ward, presence of invasive annual weeds, especially *Senna occidentalis*. Land ownership and utilization of land for crop farming in the dairying and mixed farming zones.

Table 4: Pasture and Browse condition

Livelihood zone	Pasture					Browse				
	condition		How long to last (Months)		Factor s Limiting access	Condition		How long to last (Months)		Factors Limiting access
	Current	Normal	Current	Normal		Current	Normal	Current	Normal	
Cash Cropping /Dairy zone	good	good	4	4	Land ownership and demarcation, cropping	Good	Good	5	5	Land ownership and demarcation, cropping

Mixed farming	good	good	4	4	Bush encroachment, land ownership and demarcation	Good	Good	4	4	Bush encroachment, land ownership and demarcation
Mixed marginal zone	good	good	3	4	Bush encroachment, conflict, land ownership and demarcation	Good	Good	4	4	Bush encroachment, conflict, land ownership and demarcation

Pasture/ fodder conservation status

Table 5: baled hay status

Sub-County	No. of Hay Stores	Storage Capacity (Total number of bales)	No. of Bales currently being held	How long is expected to last (months)	Sub County demand	Average Weight per bale (in Kgs)	Average price per bale (Kshs.)	remarks
Kilifi South & North	20	30,000 bales	10,000	2 months	100,000	15	200	

Hay conservation is mainly done by individual large-scale farms in the county. Efforts through development project are sensitizing and mobilizing dairy farmers to produce and conserve fodder. The small-scale farmer utilized 100 percent of the hay and crop residue conserved though the number of farmers practicing fodder production and conservation is still very low in the county. The limiting factor in conservation include lack of adequate material/fodder, attitude towards pasture growing instead of maize, and lack of adequate fodder conservation skills.

Currently, there is no supplementary feeding carried out because of sufficient pastures and browse in almost all the areas. The limiting factor in conservation include lack of adequate material/fodder, attitude towards pasture growing instead of maize, and lack of adequate fodder conservation skills. The good amount of rainfall received facilitating crop growth will result to increased crop residues that will be more compared to normal compared to the past seasons.

Livestock Productivity

Livestock body condition

The Livestock Body condition is generally good to all species across the county. This is attributed to the good rainfall which was received in the area. The trend is expected to be on the upward trend in all the zones because of prevailing rainfall. However, when the rainfall declines as expected, also the livestock body condition score will be expected to be on a down wards trend.

Table 6: Livestock body condition

Livelihood zone	Cattle		Sheep		Goat		Camel	
	Current	Normal	Current	Normal	Current	Normal	Current	Normal
Livestock zone	BCS4	BCS 4	BCS 4	BCS 4	BCS 4	BCS 4	BCS 4	BCS 4
Mixed farming zone	BCS 4	BCS 4	BCS 4	BCS 5	BCS 4	BCS 5	BCS NA	BCS NA
Dairying zone	BCS 4	BCS 4	BCS 4	BCS 4	BCS 4	BCS 4	BCS n/a	BCS n/a

Note: BCS – Livestock Body Condition Score

BCS 1 – Very Poor (Emaciated) BCS 2 – Poor BCS 3 – Fair BCS 4 – Good BCS 5- Very Good

Tropical livestock units (Tropical Livestock Units)

The current TLU for livestock and mixed farming is 3 and dairying 1 compared to a normal of 6 ,4 and 1 for poor income households. Current of 7, 5 and 3 for livestock, mixed farming, and dairying against a normal of 9, 7 and 3 for livestock, mixed farming and dairying respectively for medium income households

The observed variation in the number of TLU per livelihood zones/across the county in the last 10 years is due to the prolonged drought and their herds are still recovering from drought effects.

There are observable livestock declines in TLU in both mixed farming and pastoral zones because farmers in these zones previously lost some of their livestock during the prolonged drought and their herds are still recovering from drought effects.

Table 7: Tropical Livestock Units

Livelihood zone	Poor income households		Medium income households	
	Current	Normal	Current	Normal
Livestock farming zone	3	6	7	9
Mixed farming zone	3	4	5	7
Cash Cropping/Dairy zone	1	1	3	3

Birth rate

There were not any significant unusual changes in birth rate (if any) compared to normal.

Milk Production and consumption

The current milk production per household for livestock, mixed farming and dairying zone is 2, 5 and 7 litres respectively compared to long-term averages of 4,6 and 8 respectively. It is attributed to enough pasture and browse thus increment of milk across the livelihood zones. While the current consumption per household is 1, 2 and 1 litres for livestock and mixed farming and dairying zone compared to long term average of 2,3 and 1 litres for livestock, mixed farming, and dairying zones respectively.

The milk production variation between livelihood zones is due to the availability of pasture and water. In the dairying livelihood zone, we have dairy cattle cross breeds thus a better production per cow per day. The milk consumption in all zones will be on the increase trend as the volume of production continues to increase due to adequate pasture and water in these zones. The milk prices are likely to decrease due to increased production in all zones due to increased production of milk because of abundant pastures and waters.

The main factors affecting milk production, consumption and prices at the households' level include type and breed of animals kept, animal management practices, economic status of the family and availability of the milk. The current price of packaged milk is very high selling at Ksh. 60-80 per 500ml. The normal price is usually between Ksh. 45-60 per 500ml. The milk prices went very high due to prolonged dry spell that was witnessed all over the country before the onset of long rains. It affected pasture and water availability for livestock hence low supply of milk that could not meet the market demands.

The households cope to fill milk production gap by engaging in keeping alternative livestock that will be able to earn them income like poultry. The households will also be able to cope with consumption gaps by eating alternative source of proteins that are cheaper e.g like eggs.

Table 8: Milk availability

Livelihood zone	Average milk Production (Litres)/Household/day		Average milk consumption (Litres) per Household/day		Prices (Kshs)/Litre	
	Current	LTA	Current	LTA	Current	LTA
Livestock Zone	2	4	1	2	70	60
Mixed farming zone	5	6	2	3	60	50
Cash cropping/Dairy zone	7	8	1	1	60	50

Migration

During the period under assessment, there was no notable migration of livestock across all the livelihood zones. The good amount of rainfall received enabled availability of pasture across reducing livestock movement.

Mortalities

There was no notifiable disease outbreak that was reported. Endemic diseases include tick borne infections, Trypanosomiasis, and worm infestation. Moreover, there were no reported mortalities related to food security across livelihood zones. So, mortality rate was reported to be within the normal range for all species across the livelihood zones.

Water for Livestock

Table 9: Water availability and access

Livelihood zone	Sources		Return average distances (km)		Expected duration to last (months) for each source	
	Current	Normal	Current	Normal	Current	Normal
Cash Cropping/Dairy zone	Borehole and tap water	Borehole and tap water	<1	<1	12 months	12 months
Mixed farming zone	Piped water, water pans and seasonal rivers	Rivers, piped water, bore holes and dams	0.5-1	5-6	6 months	6 months
Livestock farming zone	Piped water, water pans, River Sabaki, boreholes and seasonal rivers	Rivers, piped water, bore holes and dams	2	7	5 months	5 months

The main water sources for livestock and domestic are rivers, piped water, boreholes, and dams. Recharge was good and is expected to last for about 12 months in the dairy zones, five months for livestock and six months for mixed farming livelihoods. Against a normal of 12 months for dairy, six months for mixed farming zone and five months for livestock. Current trekking distance is averaged 2 km compared to normal 7 -10 km at normal times of the year for livestock zones, mixed farming zone current trekking of 0.5-1 km against normal of 5-6 km. The short distance was attributed to rainfall that saw almost all the water pans recharged. In addition, earth depressions and excavations made by road contractors are filled with water hence reducing the watering distances drastically. The watering frequencies for all the species was seven days a week across all the livelihood zones against a normal of 3-4 times a week. It was attributed to the adequate rainfall, which led to good recharge of water points.

Table 10: Watering frequency (no. of days per week)

Livelihood zone	Cattle		Camels		Goats		Sheep	
	Current	Normal	Current	Normal	Current	Normal	Current	Normal
Livestock farming zone	7	3	7	3	7	3	7	4
Mixed farming zone	7	7	7	3	7	3	7	5
Cash Cropping/Dairy g zone	7	7	n/a	n/a	7	7	7	7

3.1.4 Impact on availability

The availability of pasture for livestock and adequate water brought about a positive change in body condition and milk production, which resulted in a good health of the livestock and productivity hence improving meat and milk availability for households and food security in general.

3.2 Access

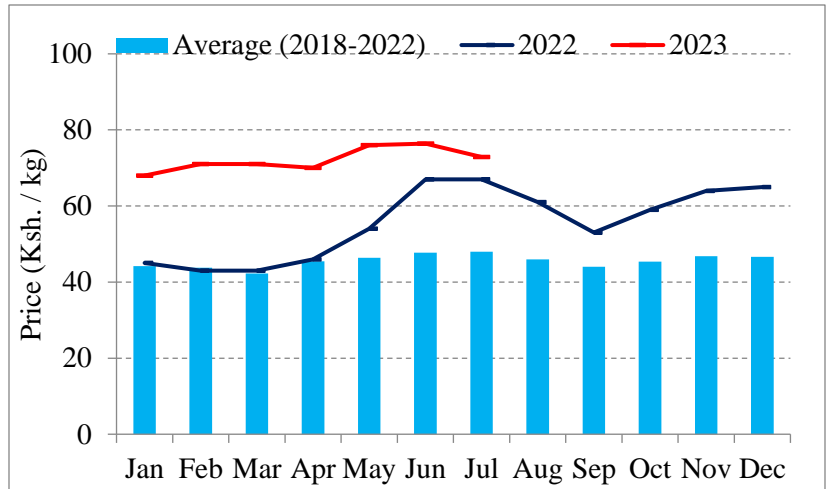
3.2.1 Market operations

The main food commodity markets are Mtwapa in Kilifi South sub-county, Bamba in Ganze, Mariakani in Kaloleni sub-county, Malindi, Mazaras in Rabai sub-county, Charo wa Mae and Oloitiptip in Kilifi North. Other markets are Gongoni and Marereni. The major food items in the markets were maize, green grams, cowpeas, vegetables, and rice. The main livestock markets include Bamba, Vitengeni, Tsangatsini, Mariakani and Gotani. Livestock in the markets included poultry, sheep, goats and cattle, which were mainly from the livestock keeping households and livestock traders. The market infrastructure was fair in the livestock farming zone with renovation ongoing at Bamba market. The volumes traded is still low because many farmers are reluctant to sell their livestock following availability of pasture within the county. The expected improvement in livestock body condition means good prices in future. There were no distress sales or purchases witnessed in the county. However, in June, the volumes of livestock in the markets had increased slightly due to Muslims' festive season of *Eid-al Adha*.

3.2.2 Markets prices

Maize price

The current average price per kilogram remained even higher compared to the previous year. Higher price is attributed to poor to failed successful seasons leading to many households' high dependency on the market. The marginal mixed farming zone recorded the highest average of Ksh.81 attributed to supply from outside the county. While the livestock farming zone recorded the lowest average price of Ksh. 52 due to local supply in the zone of Magarini following irrigation along the river Sabaki. The current average price was significantly high compared to the long-term average at this time of the year. Average maize price likely to decline following good projected long rains maize crop harvest across the livelihood zones following fair rains season. **Figure 3: Maize Price**



Goat price

The current average price was higher with the marginal mixed farming zone recording the highest average price of Ksh. 5,625 while mixed farming recorded the lowest average price of Ksh. 5,000. The current average price was higher than normal at this time of the year. Prices likely to increase following good body condition and low supply in the market as more households are expected to harvest thus reduced household food insecurity.

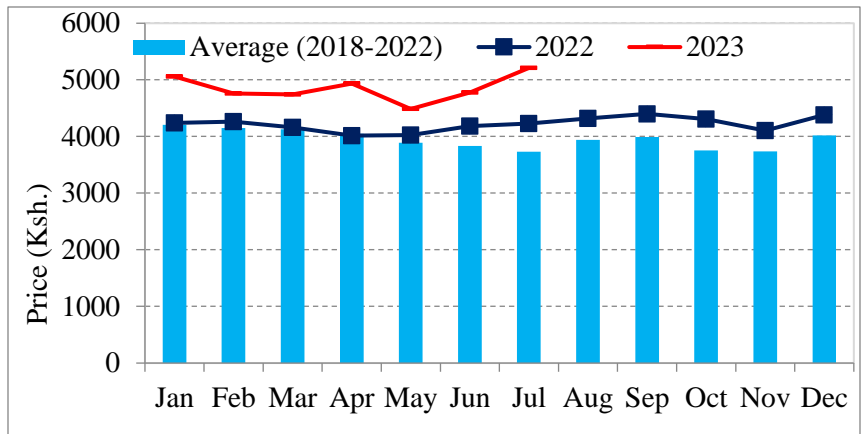


Figure 4: Goat Price

3.2.3 Terms of trade (ToT)

The current Terms of Trade recorded an increase compared to June and this can be attributed to slight reduction in average maize prices and an increase in average goat prices. The current Terms of Trade were below the long term average due significantly high average maize price. The livestock farming zone recorded the highest ToT with the food cropping zone recording the lowest. Terms of Trade expected to increase following the expected maize harvest which will contribute to a decrease in average price.

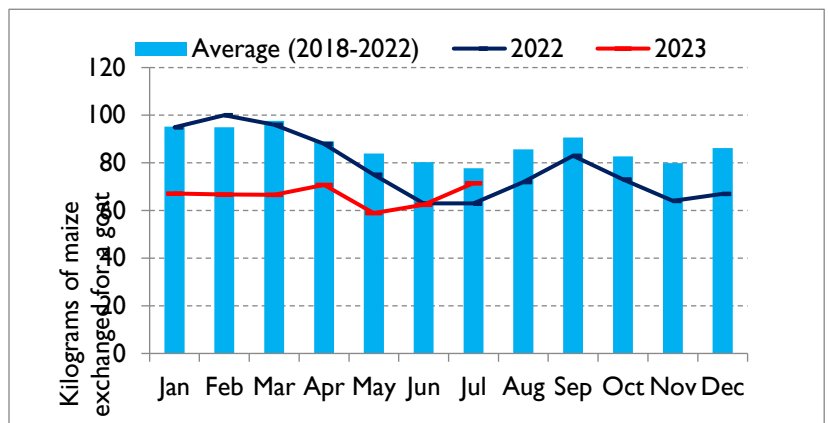


Figure 5: Terms of Trade

3.2.4 Income sources

The main source of income in the mixed farming and cash cropping/dairy livelihood zones is crop production contributing 60 and 35 percent respectively. Sale of livestock was the main source of income at 75 and 30 percent in the livestock/ranching and mixed farming livelihood zones respectively. Other income sources include sale of firewood and charcoal, casual labor, and informal employment among others.

3.2.5 Water access and availability

Introduction

The major water sources serving the county include pipelines extended from boreholes, wells, and springs (Baricho wells and Mzima springs), water pans and earth dams, rivers and small streams. Majority of households (31 percent) depended on pans and dams, while 27.6 percent depended on shallow wells while 24.1 percent, 10.3 percent and 6.9 percent depend on rivers, boreholes, and traditional river wells respectively. The proportion of households using the various water sources is as shown in the Figure. The recharge level was approximately 85 percent of their capacity for most of the water pans and dams.

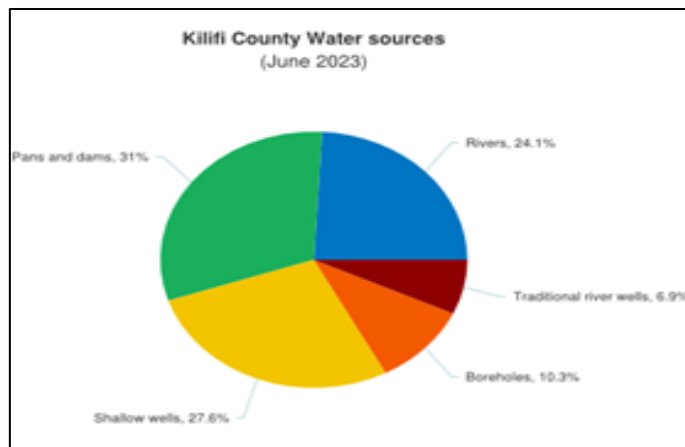


Figure 6: Water Sources

Boreholes and shallow wells also recharged and are at normal levels. The livestock and marginal mixed farming livelihood zones depend on water pans/dams and streams. While the mixed farming and cash cropping zones of Malindi, Kilifi North, parts of Kilifi South sub-counties depend mainly on piped water and boreholes supply was normal. Most household are using water harvested from the rains. Following the recharging of numerous surface water sources, many households are accessing water at reduced distances and concentration at community watering points has also reduced especially the piped water sources due to the availability of alternative water source from rainwater harvesting structures.

Water pans in most areas of the livestock, marginal mixed farming and mixed farming zones had good recharge except a few, which are non-operational mainly due to siltation. However, areas in Ganze and Magarini recorded poor recharge of the water pans and dams as rainfall in those areas was inadequate. Water in the pans and dams is projected to last for 3-4 months.

Distance to water sources

The average household distance to water sources was 1-2 km and low compared to the long-term average of 2-3 km attributed to the good recharge in most of the surface water sources. The livestock livelihood zone recorded the longest distances at 2-3 km. While the marginal mixed, mixed farming and cash cropping zone had distances of 0.5 – 1km as more households depended on sources that were nearer than the usual piped water systems that were further away. However, there are hotspot areas, which received inadequate rainfall to recharge including areas in the marginal mixed farming zone and the livestock zone, such as Goshi, Gede, Shomella. Some surface water sources were also non-operational due to siltation and structural failure (embankment breach), such as Misterini, Vibaoviwili in Ganze and Magarini sub-counties respectively.

The cash cropping zone recorded average distance of 0.5-1km compared to a normal of 2.5km. While the average distance in the marginal mixed farming zone was 1 km compared to a normal of 3km.

Table 11: Water Accessibility and Utilization

Ward / livelihood zone	Return trekking distance to water for domestic use (km)		Cost of water at source (Ksh. per 20litres)		Waiting time at water source (Minutes)		Average water consumption (Litres/person/day)	
	Normal	Current	Normal	Current	Normal	Current	Normal	Current
Livestock farming zone	4	2-5	5	5-10	15	15	20	30
Marginal Mixed Farming	3	2-5	5	5 - 10	20	15	20	30
Mixed farming	2	1-3	3	3-5	5	20	30	40
Cash cropping/ dairy	2.5	0.5 -1	3	3-5	30	20	40	40

Waiting time at the source

The waiting time at water sources in all the livelihood zones reduced significantly as there was reduced concentration of people at the waterpoints. There was no over reliance to piped water in most areas, which reduced concentration at pipeline water points. The county average waiting time at the water sources was 5 - 10 minutes compared to a normal of 15 - 20 minutes. The longest average waiting time was in the livestock livelihood zone, which recorded 30 - 40 minutes against a normal of 15-20 minutes with Gede in Ganze sub-County being most affected as the only available water sources are being depended on by many households. The situation was worsened by rationing because of inadequate rainfall to recharge the surface water sources in the area. While areas with piped water recorded the least waiting times due to the above-mentioned issues. The times were significantly lower than normal in all the livelihood zones.

Cost of water

The cost of water at the source in the county reduced from an average of Ksh. 5 -10 to Ksh.2 - 5 for a-20 litre jerrican. The mixed farming livelihood zone recorded the lowest cost at Ksh. 3 compared to a normal of Ksh.5. While the livestock livelihood zone recorded higher price of approximately Ksh. 5 from pipelines and Ksh. 15 - 20 compared to a normal of Ksh. 20-25 mainly from private water vendors. Vibao Viwili and Gede sub-location in Magarini and Ganze sub-county still depend on water vendors respectively. Gede sub-location, Ganze sub-county recorded high cost of water at Ksh. 50 per 20 litres jerrican due to poor rains recorded in the area.

Water consumption

The average water consumption has increased from 15 -20 litres per person per day (pppd) to 20 - 40 litres pppd. The livestock and marginal mixed farming zone recorded the lowest consumption 20 - 30 litres per person per day, which is higher compared to the same period in 2022 attributed to water availability at shorter distances and reduced cost. The cash cropping zone with areas like Rabai reported moderate consumption at 30-40 litres per person per day, which was within the normal ranges.

3.2.6 Food Consumption

Food Consumption

Household with acceptable food consumption score were 68.8 percent,

poor: 3.7 percent and borderline: 27.7 percent. The food consumption varied across the livelihood zones with mixed farming, marginal mixed farming and cash cropping/dairy recording the highest number of households at borderline with none at poor food consumption attributed to dietary diversity following fair rains during the 2023 long rains season. The livestock zone recorded 17.1 percent of household at poor food consumption attributed to successful five poor to failed season with the 2023 long rains recording poor crop and pasture condition in some pockets of the livelihood zone.

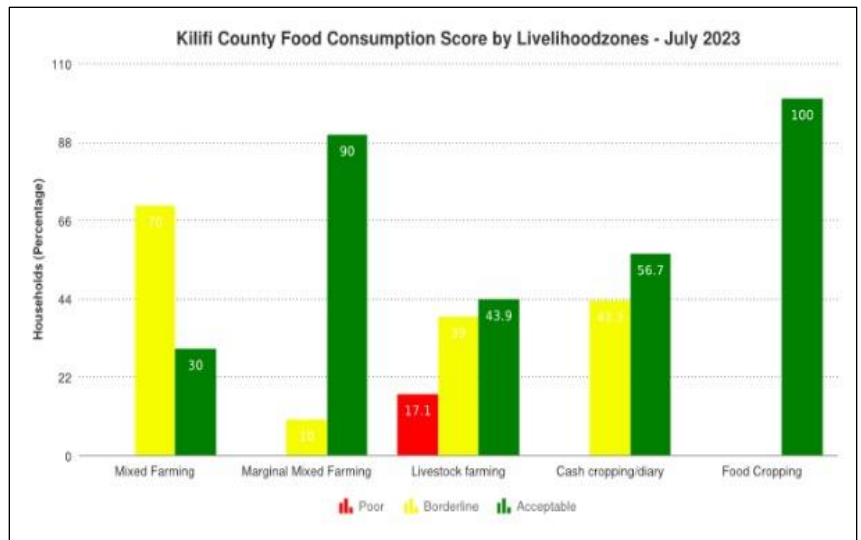


Figure 7: Food consumption score

Milk consumption

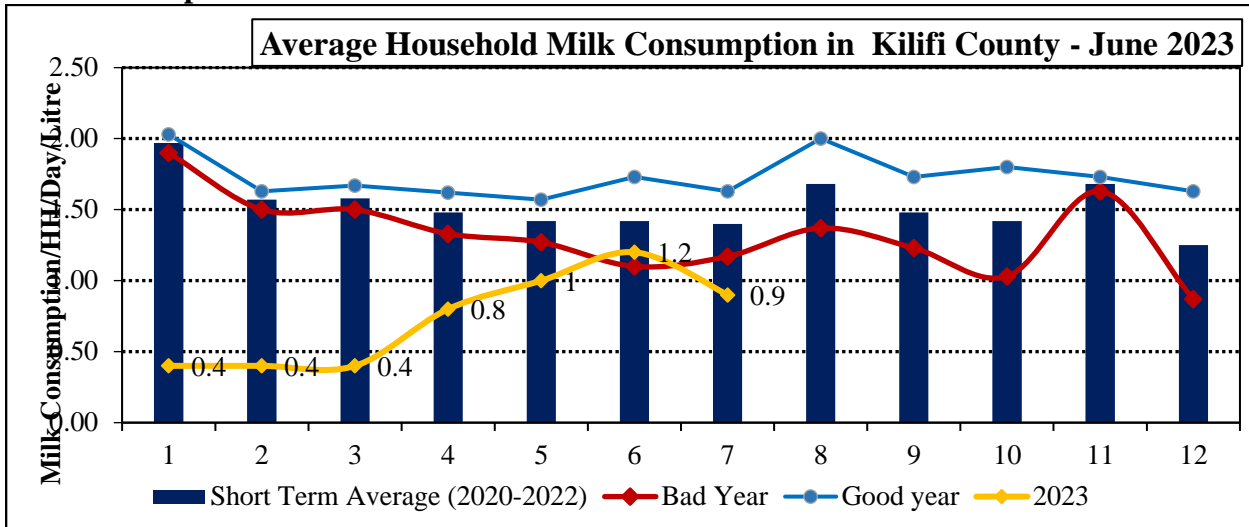


Figure 8: Milk Consumption

The current milk consumption in litres per day was 0.9 compared to 1.2 l/h/d recorded in the previous month. The consumption was below long-term average at this time of the year, which can be attributed to decrease in production in the livestock farming zone where pasture condition was declining fast due to poor regeneration necessitating increased livestock movement in search for pasture.

3.2.7 Coping strategy index

The mean of reduced coping strategy index (rCSI) 5.85 with the livelihood zones as follows: Livestock farming: 4.8, Mixed farming: 5, Cash crop/dairy: 7.4, Marginal mixed: 5, and food cropping: 8.4. Reliance on less preferred or less expensive food, reduced portion size of meals and reduced number of meals eaten per day were the most frequent coping mechanisms adopted across the livelihood zones.

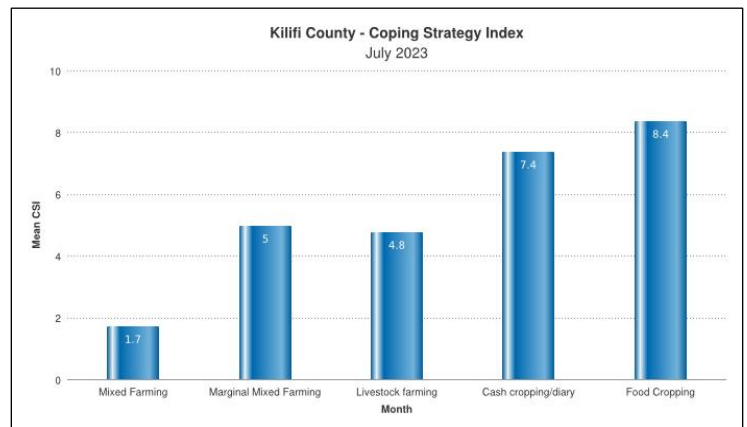


Figure 9: Coping strategy Index

3.3 Utilization

3.3.1 Morbidity and mortality patterns

The main illnesses reported among under-fives were Upper Respiratory Tract Infections (URTI) diarrhea and malaria. A spike in URTI and diarrhoea cases was observed in the month of May and June as indicated in figure 1. The increase in URTI and diarrhoea cases was attributed to seasonality, with current rains triggering URTI cases due to cold/chilly conditions while diarrhoea attributed to limited access to improved water sources for drinking as result of contamination by surface run-off. According to SMART survey conducted in June 2023, the prevalence of URTI, Malaria and diarrhoea among children aged (6-59 months) was 28.7 percent, 10.9 percent and 9.3 percent respectively. The survey also revealed that 64.5 percent of caregivers of reported ill children sought treatment at health facility (most preferred) while others preferred other alternative treatment methods to include purchasing medicine at pharmacy (representing 23.1 percent), engaging a community health volunteer (9.5 percent), and traditional healer (0.4 percent).

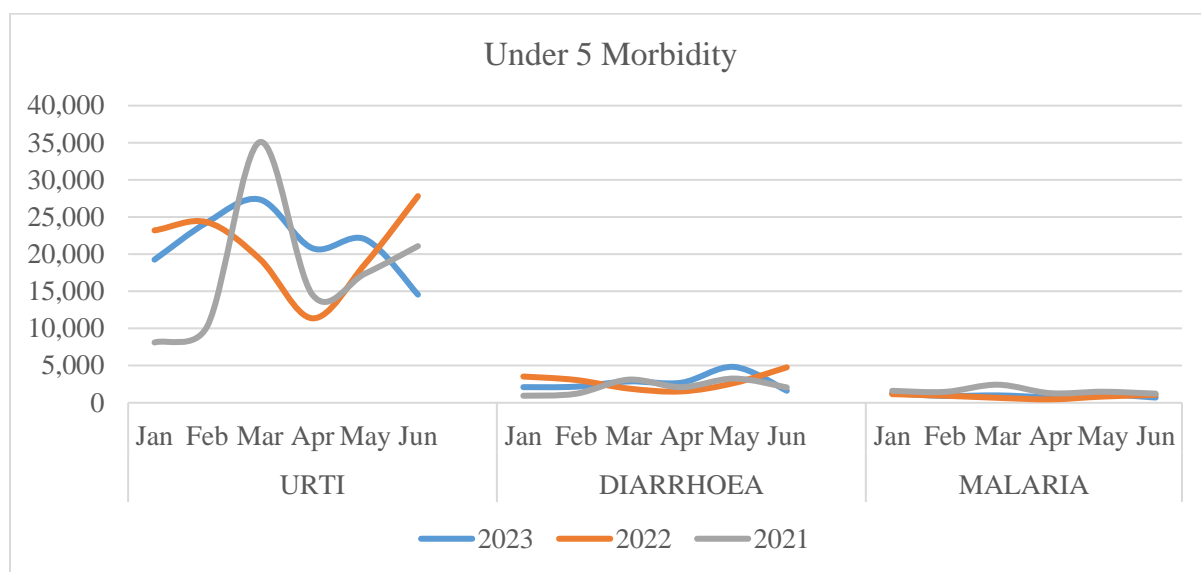


Figure 10: Kilifi County Under 5 morbidity patterns

The Crude Mortality Rate (CMR) and Under-five Mortality Rate (U5MR) based on SMART survey indicated CMR of 0.10(0.04-0.26) and U5MR of 0.15(0.02-1.27) respectively. The CMR and U5MR are below emergency thresholds of (1-2)/10,000/day and >2/10,000/day respectively. No unusual deaths among the community were reported during the interviews. CMR had minimal variation compared to last year and both rates are within the acceptable range.

3.3.2 Immunization and Vitamin A supplementation

The percentage of Fully Immunized Children (FIC) for the period January to June 2023 was 54.4 percent, a decline from 84.2 percent the previous year while the coverage of BCG, OPV1, OPV3, Measles (9months) and Measles (18 months) was 86.2 percent, 82.7 percent, 75.1 percent, 77.1 percent and 57.1 percent respectively as illustrated in Figure 12. The decline in immunization coverage with exception of measles (second dose at 18 months) was attributed to challenges in funding health campaigns, such as *Malezi Bora* activities, which hindered activities aligned to vaccination efforts.

The Vitamin A supplementation for children aged (6-11) months and (12-59) months for the period January to June 2023 was 97 percent and 58 percent respectively, with overall Vitamin A supplementation coverage among children (6-59) months at 77.5 percent. Vitamin A coverage was also attributed to limited *Malezi Bora* campaigns, which usually helps improve Vitamin A supplementation coverage. The coverage of fully immunized child and vitamin A supplementation (6-59 months) were below National targets of above 80 percent.

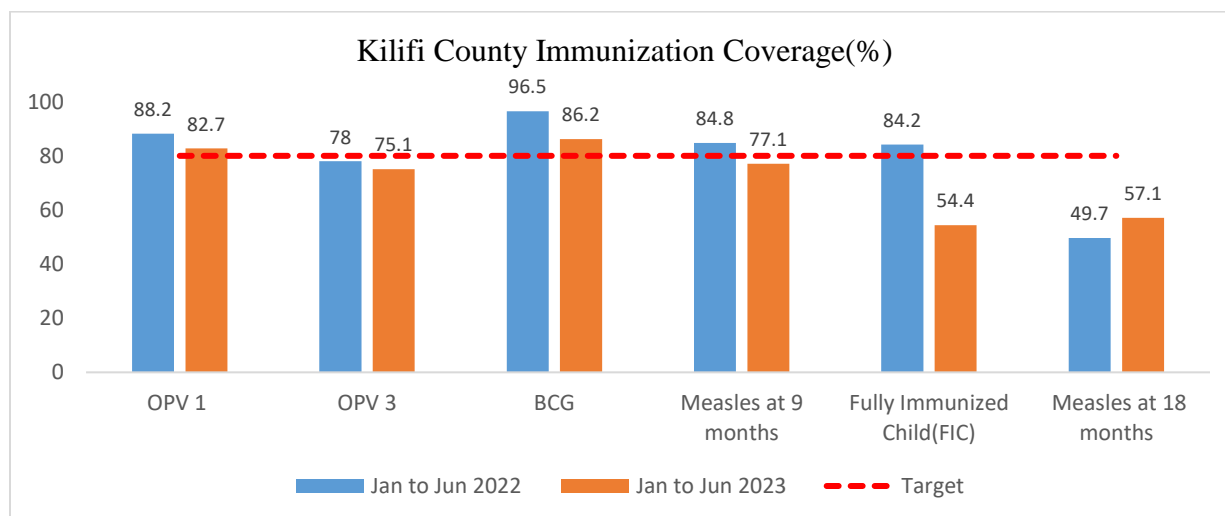


Figure 12: Immunization and Vitamin A Supplementation

3.3.3 Nutritional status and dietary diversity

Admission Trends into Selective Feeding Programs

There was a significant increase in the number of children admitted into Supplementary Feeding Programme (SFP) in the county between January to June 2023, compared to the same period the previous year, as illustrated in Figure 3. This may be attributed to the prevailing food insecurity at the time as well as availability of commodities for the treatment of Moderate Acute Malnutrition (MAM). The number of admissions for Outpatient Therapeutic Program (OTP) remained stable compared to the previous year. Highest MAM cases were reported from Ganze and Kaloleni, while Kilifi County Hospital stabilization centres reported the highest number of Severe Acute Malnourished (SAM) children.

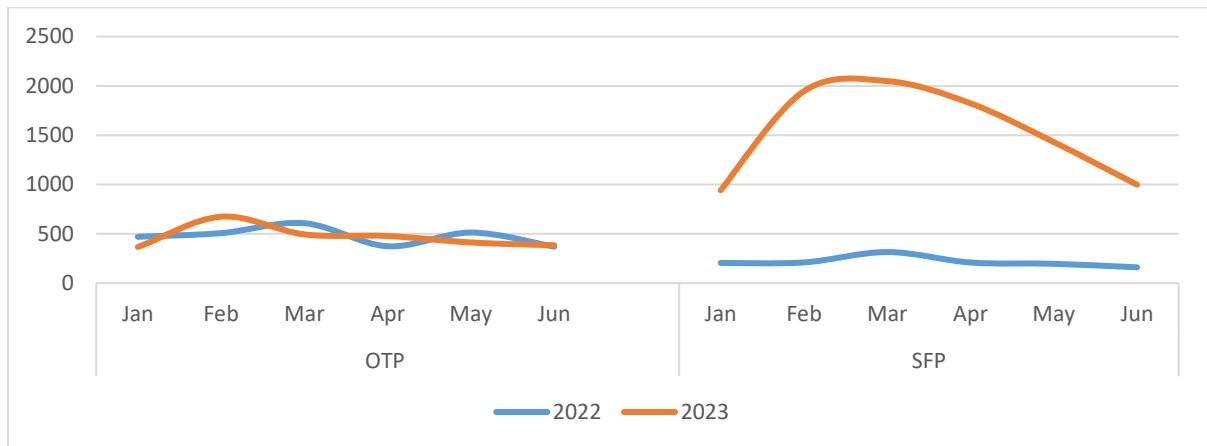


Figure 13: SFP and OTP admission trends in Kilifi County

The Kilifi County Nutrition SMART Survey conducted in June 2023 revealed a Global Acute Malnutrition (GAM) prevalence based WHZ of among children aged (6-59) months at 6.2 percent (4.4 - 8.7 95 percent C.I.), which places the county at Alert (IPC AMN phase 2). The GAM prevalence remained at alert IPC AMN phase when compared to Kenya Demographic Health Survey (KDHS) of 7.2 percent conducted in 2022 same period.

Dietary Diversity

Dietary Diversity has generally improved compared to the previous season owing to the rains that have been experienced in the area. More food groups are available including green vegetables, legumes as well as flesh foods like Omena. Due to good pasture and browse, milk production has also improved, and children are able to drink more milk.

The exclusively breastfeeding rates was at 95.5 percent based on reporting period between January – June 2023 (CHANIS), a slight decline compared to 99.8 percent reported in 2022 same period.

According to SMART survey, child feeding practices were suboptimal as observed among young children revealed Minimum Dietary Diversity (MDD), Minimum Meal Frequency (MMF) and Minimum Acceptable Diet at 33.6 percent, 68.7 percent and 24.1 percent respectively. Most diets fed to young children were mainly cereals/grains and vegetables group while the least were mainly eggs, flesh meat and fruits. The percentage young children who received solid, semi solid or soft foods was 35.6 percent. The SMART also unveiled 48% of households in the County are consuming (3-5) food groups mainly composed of cereals/grains (92 percent) and vegetables (83 percent), while least consumed fish, tubers, meats and offal's representing 3 percent, 7 percent, and 14 percent respectively.

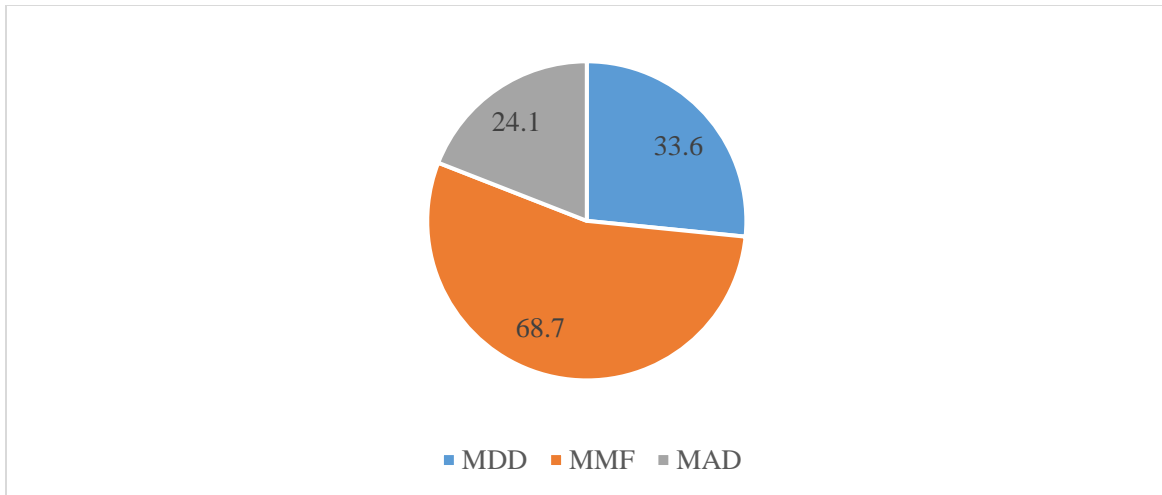


Figure 14: IYCF indicators

3.3.4 Sanitation and Hygiene

Significant number of households (60-70) percent mostly in urban areas used protected water sources mainly pipelines and boreholes. More than 90 percent of the pans and dams are unprotected and only 20 percent or less of households treat drinking water by using treatment chemicals or boiling. Chemical such as water guard are purchased by household from the retail shops. Cases of diarrhoea continued to be evident across the county and were mainly attributed to contamination of water due to poor waste disposal as such as open defecation. However, there is improvement of latrine coverage compared to last year same time. The ratio has improved from 6/ 10 to 8/10.

Latrine coverage for the county for the period between January to June 2023 was 77 percent, with the highest coverage being in Rabai and Kilifi South and the lowest in Magarini sub-County. The coverage levels remained stable compared to the same period last year.

3.4 Trends of key food security indicators

Table 12: Food security trends in Kilifi County

Indicator	Short rain assessment, Feb 2023	Long rains assessment, July 2023
% of maize stocks held by households	61 percent of the LTA	58.5 percent
Livestock body condition	Livestock Farming: Fair-poor Mixed Farming: Fair-good Cash Crop/Dairy: Fair-good	BCS 4- good
Water consumption (litres per person per day)	Livestock Farming: 10 Marginal Mixed Farming: 10 Cash Crop/Dairy: 20	20 - 40 litres pppd
Price of maize (per kg)	68	72.9
Distance to grazing	Livestock Farming: 6 Mixed Farming: 3 Cash Crop/Dairy: 1	1-2 km
Terms of trade (pastoral zone)	80	72
Coping Strategy Index	Mean: 4.38 Livestock Farming: 6.7 Mixed Farming: 0.4 Cash Crop/Dairy: 4	Mean: 5.85 Livestock farming: 4.8 Mixed Farming: 5 Cash crop/Dairy: 7.4 Marginal Mixed: 5 Food cropping: 8.4
Food consumption score	<u>Overall</u> Poor: 4.7 percent Borderline: 29 percent Acceptable: 66.3 percent <u>Livestock Farming:</u> Poor: 22 percent Borderline: 29.3 percent Acceptable: 48.8 percent <u>Mixed Farming:</u> Poor: 0 percent Borderline: 70 percent Acceptable: 30% <u>Cash Crop/Dairy:</u> Poor: 0 percent Borderline: 12.9 percent Acceptable: 87.1 percent	<u>Overall</u> Poor: 3.7 percent Borderline: 27.7 percent Acceptable: 68.6 percent <u>Livestock Farming:</u> Poor: 17.1 percent Borderline: 39 percent Acceptable: 43.9 percent <u>Mixed Farming:</u> Poor: 0 percent Borderline: 70 percent Acceptable: 30 percent <u>Cash Crop/Dairy:</u> Poor: 0 percent Borderline: 43.3 percent Acceptable: 56.7 percent

3.5 Education

3.5.1 Enrolment

The enrolment of learners from ECD to secondary level across all schools in the county increased. There was a 3.7 percent increase in the number of boys in ECD and 8.5 percent increment of girls from term one to term two. The number of boys and girls increased by 1.9 percent and 1.6 percent respectively in term two as compared to term one in primary schools. The number of boys and girls enrolled also increased by 3 percent and 3.2 percent respectively in term two compared to term one in secondary schools. There were 762 more boys than girls in ECD, a record 9,808 more boys than girls in primary schools and some 250 more girls than boys in secondary schools, as well illustrated by the graph below.

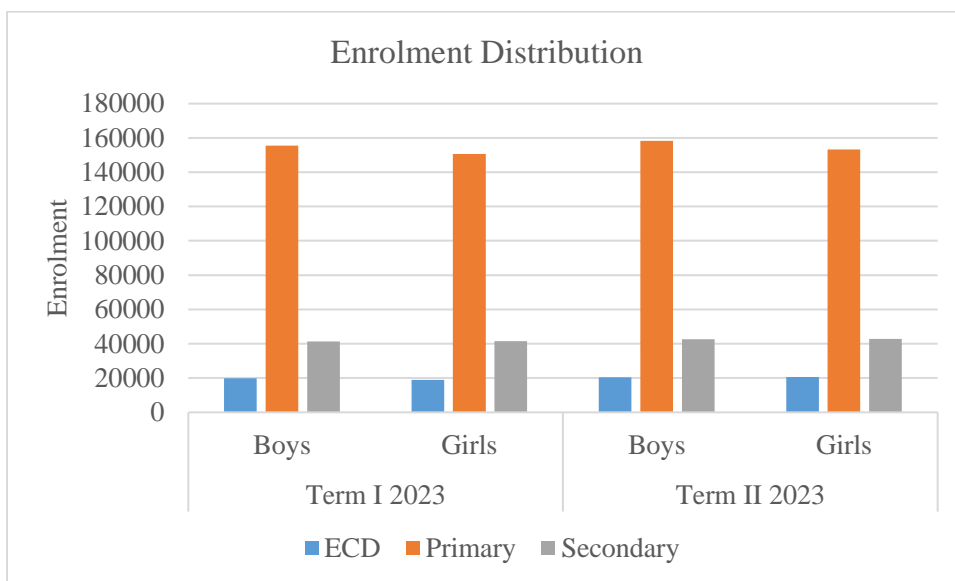


Fig. 15 Enrolment of Boys and Girls across schools in the county.

Continued rise in enrolment of learners in Early Childhood Development Centres (ECDE) was because of provision of county supported meals programme, such as provision of porridge and availability of ECDE centres. High population of boys in primary schools was because of teaching on the awareness on the importance of education to boy child and providence of meals in schools. The enrolment was also boosted by access to quality education through improved textbook provision for each learner, improved pedagogy through retraining of teachers in use of diverse learning resources, collaboration and communication hence increased attendance, participation, and transition. There was a drop in the number of boys in secondary schools thereby having more girls as a result of some over-age boys who were shy to learn and interact with other younger learners as well as the rush to make and earn some money from boda boda riding, leading to school dropouts. Several girls too dropped out of school for early marriages and early pregnancies. This was well outlined by the graph below.

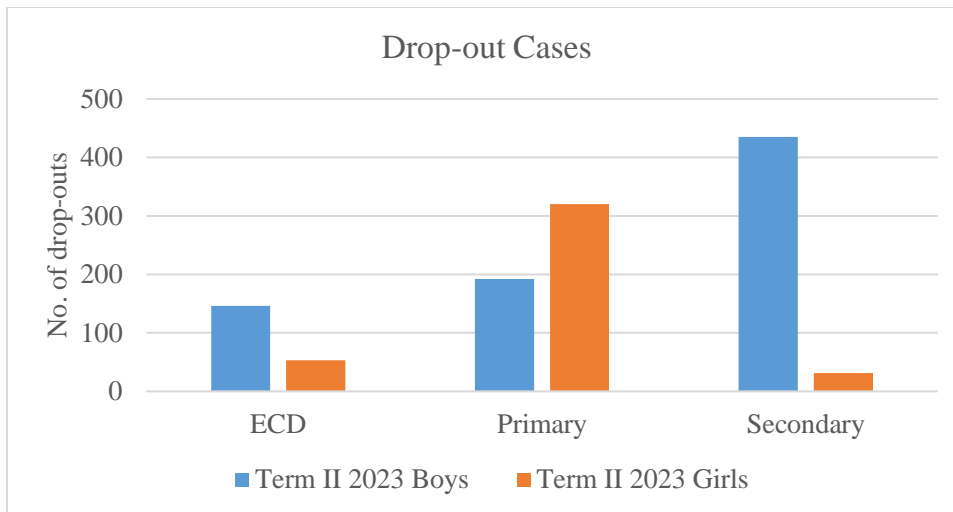


Fig. 16: The drop-out cases in schools in term II.

3.5.3 Effects of long rains on schools

The long rains increased water availability for schools as most schools harvested water that would sustain learners for extended periods, particularly for cooking meals, washing classrooms and pavements. Inversely, the rains led to destruction of classroom roofs, flooding in classes and muddy roads, as compared to the short rains where it only provided minimal water for usage.

Some classrooms had leaking roofs causing flooding in classes, hence disrupting the conducive environment. This resulted to sometimes learners being taught under trees which disrupted the conducive learning environment.

Trees grown near classrooms and offices; some fell on the premises destroying them instantly as well as others fell on the power grid resulting in power outages affecting the normal running of schools' routines. One school in Ganze Sub County was damaged because of the prevailing long rains. Estimated 278 boys and 274 girls were directly affected, as there was no electricity, and the roads were mostly impassable as well due to too much mud associated with the rains.

3.5.4 School Meals

Cash transfer and support from well-wishers were the type of school meal programme offered in schools in the county. There were 32,503 primary pupils and secondary students in the cash transfer Programme and 10,208 boys and girls from ECD to secondary were under the well-wisher meals programme. Constituting of 11,808 boys and 11,680 girls.

School feeding programme had led to reduced number of dropouts because they were providing food that enabled retention of learners in schools. As a result, the attendance of learners was well-enhanced and sustainable due to the feeding programmes. Proper learning in schools led to above average performances from learners accompanied by great participation and communication by learners.

The other feeding programme of well-wishers was unreliable because of the ratio of food available to the number of learners who needed food support. So, some of them ended up missing food. There were 530 schools without any type of those feeding Programme in term one and two of the year 2023.

The total number of learners enrolled in those schools was 168,360. Constituting of 85,222 boys and 83,138 girls.

3.5.5 Inter Sectoral links where available

The number of schools with inadequate functional latrines was quite alarming because there were 180 ECD, 241 primary and 82 secondary schools with the above inadequate sanitation infrastructure. The number of schools with no or inadequate hand-washing facilities was as well very high with 183 ECD schools and 77 primary schools.

Some of the health and nutritional interventions offered in schools ranged from ECD to secondary schools. They included but not limited to deworming, Vitamin A, Jigger infestation control measures and the supply of school meals programme. They were all practiced countering the threats of malnutrition, lack of food, diarrhea and flu.

Protection issues and concerns about teachers and learners in and around schools comprised, protection against; child labour, bullying, and corporal punishments and sexual abuse. During school closure, girl child's access to sanitary/hygiene packs was greatly interfered with because some girls relied on the aid of the packs from schools which ended up affecting them. There were no any population displacements or migration in the county as the conditions were normal.

3.6 Child Protection

Kilifi is one of the counties that experienced prolonged drought with poor to failed three to four successful seasons. As a measure to ensure child protection issues during emergencies a questionnaire was provided to collect qualitative data on the effects of drought to children and the kind of child protection issues that emerged as a result of the drought. The data was collected by Child Protection Volunteers from the seven constituencies in Kilifi County namely Kilifi South, Kilifi North, Ganze, Malindi, Magarini, Rabai and Kaloleni with the aim of establishing the effects of drought to children and the child protection concerns that emerged. A key informant questionnaire was too administered.

3.6.1 Child migration

There was incidence of children migrating from their locality to other sub counties and other counties due to the impact of drought. There were incidences of children moving from Magarini subcounty to Mombasa and Kwale County. From Ganze sub-county to Kilifi North Sub county, from Bamba to Kilifi South and from Kilifi South to Kwale County. There were also those that moved from Kaloleni subcounty to Mombasa County. The main reason included the inability of the parents to provide their basic needs like food, education, clothing, and health. Domestic violence and abandoned children, children moving to stay with their relatives was also cited as contributing to child migration and parents moving to search for job opportunities.

3.6.2 Family Separation

Kilifi County recorded incidences of children being separated from their families. Unaccompanied children, children who are homeless and child headed households.

3.6.3 Violence against children, GBV

Due to drought, there were cases of violence against children that were reported that included Sexual violence, Neglect cases, psychosocial violence, Child trafficking, corporal punishment and child labor. There were also children that were engaging in transactional sex in exchange for food and sanitary pads. *Boda Boda* operators were cited as perpetrators to transactional sex.

3.6.4 Child marriage

Kilifi County has been known as one of the counties that is leading in child marriage. The drought situation has also contributed to child marriage. Some of the reason cited included neglect by parents and caregivers, children dropping out of school due to lack of provision by parents and parents not exercising their parental responsibilities, peer pressure, pressure from family and poverty.

3.6.5 Teenage pregnancies

Teen pregnancies incidences were also cited in the data collection exercise. 67 girls 10-14 years and 1,781 girls 15-19 years were recorded as teenage pregnancy cases on the health information management system. Girls would lack provision of basic needs and engage in sex to obtain essential items like pads, sex for food and money. Other reasons cited was poverty, school dropout that was worsened by drought and girls engaging in unprotected sex. Internet use and lack of information was also cited as one of the causes.

3.6.6 Children that required special support during drought

In Kilifi County, there is a tendency of parents hiding children with disability making it difficult to provide for interventions for these children and for these children to interact with others and socialize. Orphaned and children of single parents were also considered vulnerable during the drought period. Sexual harassment has been cited in the data collection exercise.

3.6.7. Services provided

The kind of services that the children received from the Directorate of Children Services and other child protection actors included: Family reunification services, Psychosocial support, Cash Transfer. Child protection volunteers, other services in the county include case management, Referrals for multi sectoral services, Community based complaint mechanism, referrals to 116, Justice services, health services, prevention services, social norms, change programmes.

4.0 Food Security Prognosis

4.1 Prognosis Assumptions

- Following the fair performance of MAM 2023 and the forecast from Kenya Meteorological services that the July rains and showers will continue to the end of July and decrease in August is an indication of low temperature thus a boost to the late planted maize and ongoing pulses planting across the livelihood zones.
- Following an increase in acreage for the three main crops and high projected maize and green grams' harvest will boost households' food security.
- On average forage condition across the livelihood zones expected to remain stable following the rains and showers being recorded and improve during the OND due to forecasted El-Niño.
- On average, food prices expected to reduce in the next one month after 2023 long rains crop harvest across the livelihood zones with some exception of some parts of the livestock farming zone where the rains performed poorly.
- Average livestock prices expected to remain stable following stable body condition and due to harvest expected, supply to the market likely to remain stable.
- Population in need of assistant is expected to remain low with Ganze, Kaloleni/Magarini, Rabai expected to record high numbers due to current performance of the 2023 long rains and cumulative effects of previous poor to failed seasons.

4.2 Food security Outlook for the next 6 months

Outlook for August - October

In general, food security expected to improve across the livelihood zones following the fair performance of the 2023 long rains season. Food consumption score likely to improve as the harvest of the long rains continued. Malnutrition cases expected to decrease as food security is expected to improve due to harvest and milk availability. On average, livestock prices expected to remain stable following availability of water, pasture and browse across the livelihood zones with stability in supply. Average food prices expected to remain stable following expected long rains season harvest and due to the high fuel prices and high cost of production, high likelihood of no decrease in average price soon. Following on average good recharge of water sources. Average distance to water sources expected to remain low and average water consumption expected. Access to water expected. Following an average of good and browse condition across the livelihood zones, an average of good livestock body condition is expected.

Outlook for November - January

Following El-Niño forecast during 2023 OND by Kenya Meteorological services, good season is expected. Due to some harvest recorded during the 2023 long rains leading to a reduction in household food security, improved access to the farm inputs is expected during OND hence more than long term average acreage planted. Significant recharge of the surface water sources is expected thus a decrease in average distance to water sources. Pasture and browse access expected to remain stable due to good regeneration during 2023 MAM season, low temperatures experienced currently coupled with expected good OND season.

5.0 Conclusion and Interventions

5.1 Conclusion

Following good to fair rains during the 2023 long rains season, good crop harvest is expected mainly for maize being the staple food. On average, pasture and browse condition regeneration was good across the livelihood zones with some pockets in the livestock farming zone where pasture were fair following minimal rains recorded there. Food commodity prices expected to remain stable following long rains harvest expected in the next one month, on average the projected harvest will last for an average of 3-4 months. Average distance to water sources for households and livestock, expected to remain low. Average livestock prices expected to remain stable following the good body condition and good harvest expected thus stable supply in the market. Household food consumption expected to improve following the harvest expected with coping strategy score decline due improved food availability at the household level. With good postharvest management practices, available stock and expected harvest likely to boost household food security after successful failure to poor seasons.

5.1.1 Phase classification

Based on the food security outcomes and contributing factors, Kilifi County is classified as Stressed (IPC Phase 2) food Security classification.

5.1.2 Summary of Findings

Projected harvest for maize and green grams is projected to be above the long-term average following fair to good rains recorded during the season. Cowpeas projected production below the long-term average following enhanced rains which made the crop to be more vegetative. On average livestock body condition was good across the livelihood zones. Forage condition ranged between fair to good across the livelihood zones with some pocket of the livestock farming zone recording poor pasture condition. Market operation were normal for food supplies and livestock high average prices for food supplies. Livestock body condition expected to remain stable in most parts where pasture and browse condition was good except the livestock farming livelihood where the body condition is likely to deteriorate. On average, pans and dams recorded significant recharge after remaining dry for three to four successful seasons. Parts of mixed farming and livestock farming recorded minimal recharge due to uneven spatial distribution of the rains. Households food security expected to improve starting August as the long rains harvest started with a reduction in number of households depending in the market. Average food prices expected to decrease slightly after the long rains harvest. Average livestock prices expected to increase as body continue improved following the availability of pasture, browse and water and low supply expected due to improved food security.

5.1.3 Sub- County ranking

After detailed analysis of the of different variables, the sub counties were ranked from most food insecure ranked number one and least food insecure ranked number seven as shown in table 13 below;

Table: 13: Kilifi County - Sub County Ranking_2023

Sub county	Severity Rank	Predominant Livelihood/(s)	Main food security threat / Contributing factors
Ganze	1	Marginal Mixed	<ul style="list-style-type: none"> • Poor temporal and uneven spatial distribution of rainfall in some pockets • Poor crop performance expected. • Poor regeneration of pasture in some packets • Human wildlife conflict (Elephant invasions into farms) • Low herd sizes because of four-five successive drought seasons • High drop out in schools
Kaloleni	2	Marginal Mixed	<ul style="list-style-type: none"> • Poor temporal and uneven spatial distribution of rainfall in some pockets • Fair crop performance expected. • Low herd sizes as a result of successive drought seasons • Low coconut production due to loss of coconut trees because of four to five successive drought seasons
Rabai	3	Cash cropping/ Dairy	<ul style="list-style-type: none"> • Poor temporal and uneven spatial distribution of rainfall • Low coconut production due to loss of coconut trees because of successive drought seasons • Increase in school dropouts. • Access to employing in Mombasa and industries in Rabai •
Magarini	4	Marginal Mixed Farming zone	<ul style="list-style-type: none"> • Poor temporal and uneven spatial distribution of rainfalls in Adu ward. • Low rainfall recording poor recharge of some strategic surface water sources. • Increase in school dropouts. • Access to alternative income sources at the salt farms, hotels • Access to irrigation along River Sabaki
Malindi	5	Mixed Farming	<ul style="list-style-type: none"> • Poor temporal and uneven spatial distribution of rainfall. • Poor crop performance expected. • Access to alternative income sources in hotels • Access to irrigation along River Sabaki
Kilifi North	6	Mixed Farming	<ul style="list-style-type: none"> • Flash floods affected crops in Kibarani and Mnarani. • Households holding stocks from the 2022 long rains season.

			<ul style="list-style-type: none"> • Access to alternative income sources • Farmers holding some maize stocks from the 2022 long rains.
Kilifi South	7	Food Cropping Zone	<ul style="list-style-type: none"> • Low coconut production due to loss of coconut trees because of successive drought seasons • Water logging of farms in Ngamani-main farming zone for the community. • Households holding maize stocks from the 2022 long rains season. • Access to alternative income sources at the hotels, Mombasa and Kilifi town.

5.2 Ongoing Interventions

Agriculture							
Sub- County	Ward	Intervention	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost (Kshs)	Time Frame
							July- October
All Sub-counties	All wards	Post-harvest handling demonstrations	70,000 households	Crops Directorate, dept. of Agriculture livestock and blue economy	Reduced levels of aflatoxins and post-harvest losses	2 million	

Water Sector							
Immediate On-going Interventions							
Sub County/ Ward	Intervention	Location	No. of beneficiaries	Implementers	Cost	Time Frame	Implementation Status (% of completion)
	Pipeline extensions and rehabilitation	Kanagoni, Ramada, Kadzandani, Bodoi, Boyani	20000	CGK	40m	2 years	70%

	Boreholes rehabilitations	Kadzandani,	30000	CGK,griot	20m	2 year	30
	Tanks construction and rehabilitation	Kathama, Kadzandani	7000	CGK	10m	1 year	40%
Medium- and Long-Term On-going Interventions							
Magarini	Pipeline extensions	Chamari,	6000	CGK			
Magarini	Pipeline rehabilitations	Baricho Dakacha,	25000	CGK	40m	2 yrs	0
Magarini	Booster pump	Marereni, Marafa	10000	CGK	15m	2 yrs	0
Magarini	Boreholes drilling	Kambicha		k-cep	4m	1 yr	5%

Livestock Sector							
On-going interventions							
County	Sub-County	Intervention	No. of beneficiaries	Implementers	Impacts on food security	Cost (Kshs)	Time Frame
Immediate							
Kilifi	All sub counties	Capacity building of livestock farmers with the aim of increasing production	6000	Department of livestock production and partners	Increased food security	6M	JUNE 2024
Kilifi		Identification of various CIG engaging in livestock value chain for funding	10000	KEMFSED PROJECT	Increased food security		JUNE 2024

Sub County	Intervention	Location	Number of Beneficiaries	Implementers	Impacts in terms of food security	Timeframe
Magarini	Mapping for food distribution	Marafa	All schools	Ward Administrators, Head teachers SCDE/TSC SCD	School dropouts	6 months
Kauma,	Provision of seeds and fertilizers	Jaribuni, Vyambani & Kauma	All schools	Ministry of Agriculture	Good harvest	6 months
Malindi	Renovation on old roofs	Ganda	Primary and secondary schools in that ward	MOE, PTA and well-wishers	Avoid breakdown and flooding during rainy season	6 months

Health

Sub county	Intervention	Location	No. of beneficiaries		Implementers	Estimated Cost (Ksh)	Time Frame
			Male	Female			
Kilifi county	Vitamin A Supplementation	Entire county	113,249	104,957	DoH UNICEF, WVK,Afya Pwani	878,000	On going
Kilifi county	Zinc Supplementation + ORS	Entire county	70000		MoH		On going
Kilifi County	Therapeutic Feeding Programs to manage acute malnutrition (OTP, ITP)	Entire county	5,788	5364.	DoH, UNICEF	14,887,212	On going
Kilifi County	Support for RUSF and Roll out of moderate acute malnutrition program	Entire County	15,203 children <5 years		DOH, WFP, UNICEF		Ongoing
Kilifi County	Scheduled intergrated health and nutrition outreaches	Ganze, Magarini, Kaloleni, Malindi	55 outreach sites		DOH, UNICEF, WFP, WVK		

Kilifi County	Baby-Friendly Community Initiative- NICHE through JIM Grant	-Kaloleni S.C (Mtsengo Cu and Kibwabwani CU) -Ganze SC (Mirihini, Jila Midoina Rima rapera, & Jaribuni CUs) -Magarini SC (Marikebuni CU, Kadzandani, & Dakaach) - Rabai Sub-County	1983 households		MOH, UNICEF, WVK, SDSP	19,000,000	Ongoing
Kilifi county	Iron Folate Supplementation among Pregnant Women	Kilifi county	53,381		MoH	17,039,059	On going
Kilifi county	Deworming	Kilifi county	100,665	93,295	MoH	3,598,000	On going
Kilifi County	Family MUAC	25 CUs Kaloleni, Ganze , Magarini, Kilifi North, Kilifi South	88,976 Households		MoH		Ongoing
Kilifi county	HiNi OJT , support supervision and data quality audits	Kilifi county	All facilities		MoH	10,000,000	Monthly
Kilifi county	Preposition nutrition supplies (RUTF)	Kilifi county			MoH	1,080,000	During emergency
Kilifi County	Scheduled Integrated Health and Nutrition Outreaches	Entire county	208,532 Children <5		MOH	5,000,000	Ongoing
			53,381 Pregnant and Lactating women				
Kilifi County	Establish defaulter tracing mechanisms	Entire County	Defaulted Clients		MOH		Ongoing
Kilifi County	Commercialization of Cassava	Entire County	1509503		MOA, MOH	-	Ongoing

5.3 Recommended Interventions

5.3.1 Food interventions

Population in Need of Food/Cash Assistance

Sub county	Wards	Sub County Population	Percentage of total population in phase 3	Population in Need per ward-July 2023
KILIFI NORTH	TEZO			789
KILIFI NORTH	SOKONI			394
KILIFI NORTH	KIBARANI			789
KILIFI NORTH	DABASO			394
KILIFI NORTH	MATSANGONI			394
KILIFI NORTH	WATAMU			394
KILIFI NORTH	MNARANI			789
SUB COUNTY TOTAL		178,824	5	3,943
KILIFI SOUTH	JUNJU			394
KILIFI SOUTH	MWARAKAYA			1,183
KILIFI SOUTH	SHIMO LA TEWA			789
KILIFI SOUTH	CHASIMBA			789
KILIFI SOUTH	MTEPENI			789
SUB COUNTY TOTAL		269,088	5	3,943
KALOLENI	MARIAKANI			4,731
KALOLENI	KAYAFUNGO			4,731
KALOLENI	KALOLENI			3,154
KALOLENI	MWANAMWINGA			3,154
SUB COUNTY TOTAL		193,682	20	15,770
RABAI	MWAWESA			3,548
RABAI	RURUMA			3,548
RABAI	KAMBE/RIBE			2,366
RABAI	RABAI/KISURUTINI			2,366
SUB COUNTY TOTAL		120,813	15	11,828
GANZE	GANZE			2,957
GANZE	BAMBA			9,855
GANZE	JARIBUNI			986
GANZE	SOKOKE			5,913
SUB COUNTY TOTAL		166,544	25	19,710
MALINDI	JILORE			5,323
MALINDI	KAKUYUNI			1,183

MALINDI	GANDA			591
MALINDI	MALINDI TOWN			1,774
MALINDI	SHELLA			2,957
SUB COUNTY TOTAL		333,226	15	11,828
MAGARINI	MARAFI			1,183
MAGARINI	MAGARINI			591
MAGARINI	GONGONI			1,774
MAGARINI	ADU			5,914
MAGARINI	GARASHI			1,774
MAGARINI	SABAKI			591
SUB COUNTY TOTAL		191,610	15	11,828
GRAND TOTAL		1,453,787		78,850

5.3.2 Non-food interventions

Health and Nutrition Immediate Recommended Interventions							
Sub-County /Ward	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Kilifi County	Mass Screening	Entire County	All Under 5 children Pregnant and Lactating women	MOH, UNICEF, WVK, KRCS		Personnel	Continuous
Kilifi County	Food Aid to vulnerable household to act as protection rations	Kilifi County	Households with children and P&L with malnutrition	MOH, WFP, UNICEF, WVK		Personnel	July 2323-Jan-2023
Malindi, Kilifi South	Scale up BFCI in other sub-counties	Malindi, Kilifi South	Pregnant and Lactating Women, Infants 0-6 months, Children 6-23 months, Children 12-59 months	MoH., UNICEF, WVK		Personnel	Jan-Dec 2023

All sub-counties of Kilifi County	Scale up family MUAC in other sub-counties	Kilifi North, Kilifi South, Kaloleni, Rabai, Malindi	Pregnant and Lactating Women, Infants 0-6 months, Children 6-23 months, Children 12-59 months	MoH, UNICEF, WVK		Personnel	Jan-Dec 2023
Kilifi County	Scale up NICHE	Entire County	1713 households	DOH, SDSP, MOH, UNICEF, WVK		Personnel	Jan-Dec 2023
All sub-counties of Kilifi county	Micronutrient Supplementation for children under 5	Entire County	Children 6-59 months	MoH, UNICEF,		Personnel	From July 2023

Medium and Long term Recommended Interventions

Sub-County /Ward	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Kilifi County	Conduct a Nutrition SMART Survey (for accurate data on malnutrition and health status of the county)	Across the sub counties	All under 5s	MOH, UNICEF, WFP, WVK, KRCS		Personnel	May-July 2023
County-Wide	Scale-up NICHE (Nutrition Improvement through Cash Transfer and Health Education)	Entire County	31, 904 (9332 under 2 yrs, 816 PLW, 21756 Elderly people)	MLSP, MOH	-	Personnel	2023
County	Establish a secretariat for the Multi-Stakeholder Platform (MSP) to address issues of	Across the sub counties	1,509,503	Members of FNS MSP	-	Personnel	July 2023

	food insecurity in the county						
County	Promotion of the consumption of orphaned drought resistant crops	Across the sub counties	1,509,503	MOH, MOALF	-	Personnel	Continuous
County	Growth monitoring and promotion at ECD centers	Entire County		MOE, MOH	-	Personnel	Continuous

Livestock

All sub counties	Carry out tick control and de-worming campaigns in the Agro-pastoral and Marginal mixed zones to reduce stress to the animals.	Across the county	10,000 cattle	Veterinary Department, FAO, CARITAS, WV	11M	Expertise	2023
Magarini, Ganze and Kaloleni	Pasture reseeding during long rains-short rains	Livestock farming zone	300-500 hectares	Livestock production, WV,	3.5M	E Expertise	July 2023-Dec 2023
All sub counties	Farmers sensitization of fodder and pasture conservation	Across the county	1000-1500 farmers	Livestock production	4.2M	Expertise	

Education							
Sub-County	Intervention	Location	No. of targeted beneficiaries	Proposed implementers	Required Resources	Available Resources Kshs	Timeframe
ALL	Tree-crop planting	Across the county	Start with 300 schools	MOE, County Govt, NGO's, Environment department, MoA	16 M	Land, labour	July 2023- June 2024 thereafter continuous
Malindi, Ganze, Kaloleni, Ganze, Rabai	Provision of School meals	250 primary and ECD centers	All pupils in public primary with ECD	GoK, MOE and well-wishers	78M	Structures	Starting A
Kauma	Enhancing 4-k club activities	28	All Students	Teachers, Ministry of Agriculture officials & SCDE	1,000,000	Structures	Continuous
Magarini, Ganze and Kaloleni	Purchase and installation of water tanks (10,000ltrs) and gutters	80 tanks- 10 schools per ward	40 schools @two tanks	Water Department, Water department, WV, NDMA,Plan International, Helping hand, MoE	24M	Classrooms	July 2023- March 2024
Agriculture							
Sub-County	Intervention	Location	No. of targeted beneficiaries	Proposed implementers	Required Resources	Available Resources Kshs	Timeframe
All	Training of famers on Post harvest Management	20 famers (ToT) per sub county	Across the sub counties	MoA, Plant Village, Islamic Relief	1.4M	Personnel	July- Dec 2023, continuous

Ganze, Magarini and Malindi	Support to irrigated Agriculture along the rivers	5600 farmers	River Sabaki, Nzovuni	MoA, NDMA, WV, Islamic Relief, Plan, CDA,	12M	Land, Water, officers	Starting September 2023
All	Training on vegetable conservation	All sub counties	25 farmers per sub-county	MoA, WV, Plan, KRCS, plant Village, Islamic Relief	1,8M	Personnel, vegetables	July 2022- June 2023

**Water Sector
Immediate recommended Interventions**

Sub-County/ Ward	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Ganze/magarini/kaloleni	Water treatment chemical provision	Ndigiria, kanagoni mistemerini, gotani, msono barini	40000	CGK, partners	4.2M	personnel	3 months
magarini	Water source enhancement	Kazandani	40000	CGK, world vision, action aid, Islamic relief, red cross, NDMA	3.5M	personnel	2 years
Across all sub counties	Rainwater harvesting strategies	Across the county	250000	CGK, partners, Islamic Relief, WV, Plan International, MoE	8.7M	personnel	2 yrs
Ganze, Magarini, Kaloleni	Rehabilitation of water pans	Mitangani, Mereni, Kidemu, Mistemerini, Ndigiria, Mistikistini, Kajiri	28000	CGK, WV, NDMA, KRCS, Islamic Relief-Kenya.	45M	personnel	1 year
Magaraini Kaloleni,	Boreholes rehabilitation	Adu, Ndatani, Mwamrama	75000	Cgk. partners	23M	personnel	2 years

Kilifi North							
Medium and Long Term recommended Interventions							
Rabai, Kaloleni, Magarini	Pipeline constructions/upgrading	Bwagamoyo Mkapuni , Mazeras Mkapuni , Junju Mtepeni Mwarakaya, rabai,	60000	CGK, partners	18M	personnel	3 years
Across all sub counties	Tanks construction	Construction of 5000m3 Masonry tank at Buni,	25000	CGK, partners	12M	Personnel, Land	2 years

CHILDREN DEPARTMENT					
Child protection sector short-term recommended interventions					
Sub-county	Ward	Intervention	No. of targeted beneficiaries	Proposed Implementers	Required resource
Rabai	Kisurutini	<ul style="list-style-type: none"> Provision of items for children with disability Cash transfers 	4	Directorate of children services National Council for Persons with Severe Disability	Financial resources
Kilifi North	Kibarani Matsangoni Tezo	<ul style="list-style-type: none"> Case management services Educational support Follow up services by CPVS. Provision of food and water 	10	Directorate of children services Local Partners	Human Resources Financial Resource
Kilifi South	Mtepeni Junju	<ul style="list-style-type: none"> Sensitization of <i>boda boda</i> riders on VAC Sensitization of <i>Nyumba Kumi</i> elders on Child Protection Cash transfer Justice Services Sensitization on OCSEA Sensitization on positive parenting Family tracing and unification 	2370	Directorate of children services Chiefs	Financial resources Ksh 1,800,000

Child protection sector medium to long term recommended interventions.

Sub-county	Ward	Intervention	No. of targeted beneficiaries	Proposed Implementers	Resources required
Malindi	Kakuyuni Madunguni	<ul style="list-style-type: none"> • Provision of food • Cash transfer 	4600	GOK NGO	Financial resources
Kaloleni	Mwanamwinga	<ul style="list-style-type: none"> • Provision of food and clean water • Provision of bursary • Sensitization on positive parenting • Construction of dams • Provision of sanitary pads • Provision of fertilisers and seeds to family 	5	GOK	Financial resources
Ganze	Bamba	<ul style="list-style-type: none"> • Counselling • Family tracing. • Cash transfers • Case management • Provision of food • Justice services 	50	DCS Chiefs	Financial resources
Magarini	Garashi	<ul style="list-style-type: none"> • Food provision 	20	NGO	Financial resources