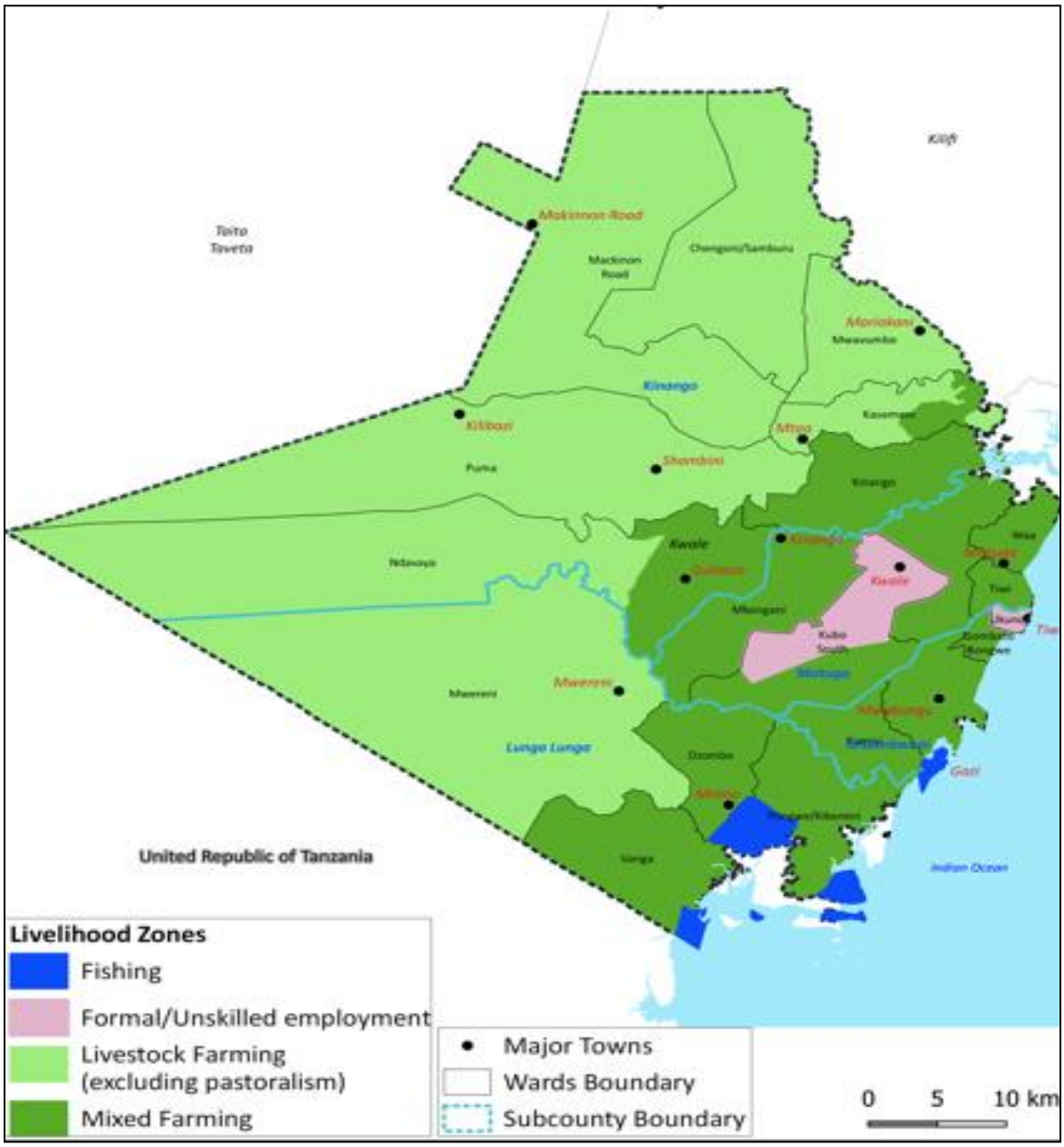
KWALE COUNTY
2023 SHORT RAINS FOOD SECURITY ASSESSMENT REPORT



A joint report by the Technical County Steering Group, Kwale County
February, 2024

EXECUTIVE SUMMARY

Food security assessments are bi-annual and typically conducted following the county's bi-modal rainfall regime after the two main seasons March-April-May (MAM) long rains and October-November-December (OND) short rains. The National Drought Management Authority (NDMA) coordinated departments of agriculture, livestock, water, health and education to conduct the 2023 short rains assessment. The main objective of the assessment was to undertake an objective, transparent and evidence-based analysis of the food security situation to determine the impact of the short rains on the sectors mentioned. The assessment took into consideration the cumulative effects of the previous seasons to inform food and non-food interventions for the next six months.

The short rains season's performance was above normal characterized by normal onset, good temporal distribution, even spatial distribution and late cessation. Most parts of the county received 201-350 percent of normal rains. The production of maize, green grams and cowpeas was projected to increase by 34, 17 and 9 percent respectively above the long-term average. The production of tomatoes, kales and okra was 67, 88 and 88 percent of the long-term average respectively which was attributed to reduced acreage and damage of crops caused by floods. The total maize stock in the county 34 percent above the LTA with household 134 percent of LTA. Pasture and browse condition was good in the mixed farming livelihood zone but fair in the livestock farming livelihood zone. Trekking distance to grazing reduced in the Livestock Farming livelihood zone to 3 km compared to normal 4km.

All major markets were operational, with normal volumes of food and livestock being traded. The average price of maize per kilo was Ksh 50, representing a 34 percent decrease from the five-year average price of Kshs 41 per Kg. The average goat price was Ksh 7500, which was double the long-term average price of Kshs 3,612. The average milk price increased reaching Ksh 70 per litre, compared to the long-term average of Ksh 50 across the livelihood zone. The terms of trade for the period under review were 136, marking a 134 percent increase compared to the long-term average of 58. The water recharge level varied across the livelihood zones, with rivers in the Mixed Farming zone at 70-90 percent of normal capacity and water pans and dams in the Livestock Farming zone at 60-90 percent of normal capacity. The distance to water sources decreased due to increased availability across all livelihood zones. Water consumption per person per day was 40-80 litres per person per day compared to normal 80 litres per person per day in the mixed Farming and in the Livestock Farming Livelihood zone consumption was 20- 40 litres per person per day compared to the normal range of 20-60 litres per person per day. Households consumed 3-4 meals per day, with children accessing three meals a day across all livelihoods. The Reduced Coping Strategy Index (rCSI) decreased to 9.4 compared to 11.3 during the long rains of 2023, indicating slightly improved household food security during the scenario period. Casual labor provided households with steady income to meet basic needs. There was a general improvement in households consuming recommended food groups, particularly in the Livestock Farming livelihood zone, with 45.7 percent compared to 17.9 percent during the long rains of 2023. The county was classified in Stressed Phase (IPC Phase 2) for both the Mixed Farming and Livestock Farming livelihood zones.

1.0 INTRODUCTION

1.1 County background

Kwale County comprises six sub-counties namely: Matuga, Kinango, Msambweni, Samburu, Lunga and Shimba Hills. The county has a population of 866,620 persons (2019 Kenya Population and Housing Census) and an area of 8,960 km^2. The county borders Kilifi County to the North, Mombasa County to the North-east, the Republic of Tanzania to the South, the Indian Ocean to the East and Taita Taveta County to the West. The county is divided into four livelihood zones, as illustrated in Figure 1; however, the assessment focused specifically on two primary livelihood zones: mixed farming and livestock farming. The main sources of income in the livestock farming zone include casual waged labour, firewood collection/charcoal burning and livestock production. In the mixed farming livelihood zone, the income sources include food crop production, cash crop production and livestock production.

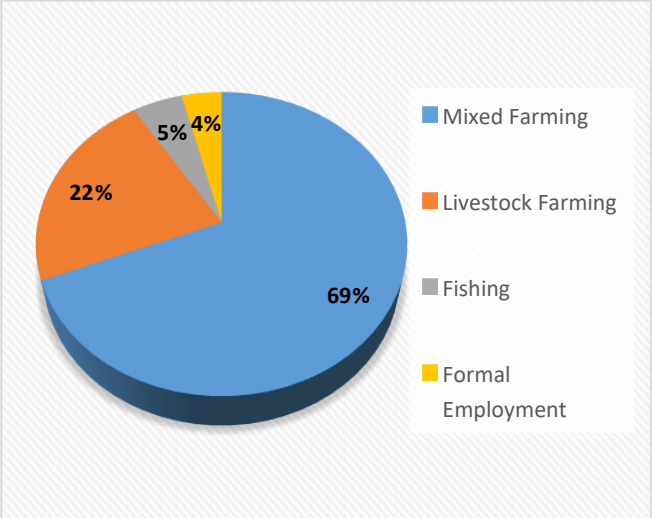


Figure 1: Proportion of Population by Livelihood Zones

1.2 Methodology and approach

The SRA 2023 was conducted from 29th January 2024 to 9th February 2024. NDMA coordinated the multi-sectoral and multi-agency assessment with representation from the technical departments of agriculture, livestock, nutrition, education and water. Data was collected using both quantitative and qualitative methods. Primary data was collected from key informants, observation and community interviews. Secondary data was obtained from the Kenya Health Information System, National Drought Management Authority (NDMA) early warning bulletins and Famine Early Warning Systems Network (FEWSNET) food security outlook reports.

The county steering group (CSG) held an initial briefing meeting on January 29th, 2024, with support from Plan International. A two-day transect drive, involving data collection from key informants, households, and focus group discussions, took place on February 6th and 7th, 2024 supported by Kenya Red Cross and World Food Program (WFP). The assessment team visited various sites during this period, including Matuga Sub- County (Boyani), Msambweni Sub-county (Milalani), Kinango Sub-county (Mbita and Metani), Shimba Hills Sub-county (Shimba Hills), Lunga Lunga Sub-county (Mwangulu), and Samburu-Kwale Sub-county (Kilibasi, Busho and Samburu Market). Report-writing was done by the assessment team on 7th and 8th of February 2024 followed by a de-briefing CSG meeting on 9th February 2024 which was supported by Plan International.

2.0 DRIVERS OF FOOD AND NUTRITION SECURITY IN THE COUNTY

2.1 Rainfall Performance

The onset of the October to December season started on the third dekad of October which was normal. The temporal and spatial distribution was good and even across the county. The overall performance of the short rains was above normal with about 90 percent of the county receiving 201-350 percent of the of the normal while the coastline bordering Msambweni and Lower parts of Lunga Lunga receiving over 350 percent of normal rains which was characterized as el-nino phenomenon as shown in Figure 2. The cessation of the short rains was in the third dekad of December although some off-season rains was received in the first two weeks of January in few parts of the County.

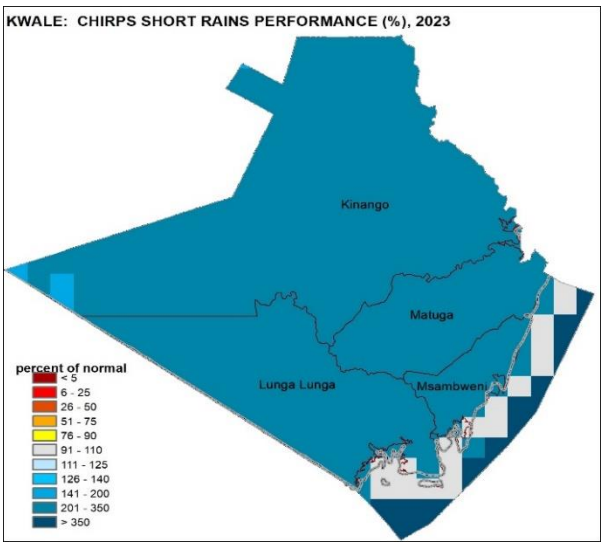


Figure 2 : Distribution of Kwale Rainfall

2.2 Drivers of food insecurity

Floods

The major irrigation scheme (Nyalani in Kinango) was largely affected by the flooding which hampered production activities for all the crops in the irrigation scheme leading to below average production for irrigated crops. The total area under crops damaged floods was 2407 Ha**,** impacting 1400 households. The Livestock Farming Zone bore a more severe impact from the floods, experiencing losses of up to 40 percent of the total production. Water logging and flooding also caused leaching of minerals especially in Msambweni Sub County and Lower parts of Lunga lunga affecting crop production. Specific areas mostly affected were: Kiwegu, Jasini, Majoreni Bondeni, Pongwe Kikoneni and Dzombo from vanga while 1.5 acres were from Kubo South. About Two cattle and 212 chicks were washed away by floods from Kinango and Matuga Sub Counties respectively.

A total of 1,369 households were directly affected across the County, Lunga lunga Sub County leading with 764 households. Five camps were established in Kiwegu primary school(62hh), Kidomaya(19hh), Bondeni Church (21hh), Mwangwei primary school (13hh) and Mwavinde Church (21hh). A total of 13 people died, 7 from Lunga Lunga, three from Kinango , two from Matuga and one from Msambweni Sub County. Nine people were rescued after being marooned by floods, 5 from Matuga and 4 from Msambweni Sub counties.

A total of 65 roads were destructed across the County, the main one being Likoni – Lunga lunga Road at Kibiboni, kanana and Ramis bridge that was not passable for several days as follows: Lunga lunga – Vanga Road was also not passable at Jasini, Jego areas; Kwale -Kinango Road was also impassable at Mbandi River; Several bridges were not passable, including Ramisi, Mwache, Ngenyeni additionally, several electrical polls were damaged along the affected areas.

High cost of production and food

Higher cost of farm inputs resulted in farmers recycling seeds there for leading to poor performance of crops. The prices of maize remained above the long-term average which was attributed to general high inflation in the country and high production costs.

Crop failure and damage by wild life

Crop failure was experienced Mbuguni in Tsimba/Golini Ward, Mwabila in Mwavumbo Ward and Makina in Mackinnon Road Ward where insufficient rainfall was received. Continued destruction of farms in parts of livestock livelihoods by elephants Puma and Macknon Road.

Livestock Diseases

Livestock diseases especially in Metani area of Samburu Sub County affected livestock productivity. The livestock diseases had a negative impact on income at the household level since production and productivity is reduced and the cost of veterinary drugs.

3.0 IMPACTS OF DRIVERS ON FOOD AND NUTRITION SECURITY

3.1 Availability

3.1.1 Crop Production

Crop production is both rain-fed and irrigated in the county. The main crops grown under rain-fed agriculture include maize, cowpeas, green grams and cassava while those grown under irrigation include tomatoes, kales, okra and capsicum. Maize, the staple food crop in the county, heavily relies on the long rains. Conversely, short rains are more dependable for early maturing short-season crops such as cowpeas and green grams. The short rains contribute to approximately 60 percent of the annual production of cowpeas and green grams but only about 30 percent for maize.

Rainfed Crop

Maize, cowpeas and green grams were the three main food crops grown in the mixed farming and livestock livelihood zones during the season. The area planted for maize, green gram and cowpeas increased and was 115, 110 and 118 by percent of the long-term average respectively. The increase was attributed to prediction of above-normal rainfall by the Kenya Meteorological Department. The prices of farm inputs was reported to be high which hindered maximum cultivation of arable land despite the good rainfall received in the county.

The crop production prospects indicate a potential increase in the production of maize and cowpeas increased significantly by 34 and 17 percent respectively compared to the long-term average while green gram increased marginally by nine percent (Table 1). The increase in projected production is attributed to above-normal rainfall and increased acreage under crops, coupled with additional support provided to farmers by the National Government, County Government, and Kenya Red Cross. The support included ploughing service and provision of certified maize seeds, rice green grams and cowpeas. High cost of farm inputs led to recycling of seeds which poor maize in areas.

However, despite these positive developments, excess rainfall resulted in flooding, waterlogging and leaching with major impact felt in Mixed Farming livelihood zone areas of Msambweni, Tiwi and Kinondo resulting in poor crop performance. Most farmers in areas of Vanga**,** Ramisi, parts of Waa/Ngombeni as well as Gombato had to replant their crops after the initial planting was adversely affected by flood. The areas affected by floods in the Livestock Farming livelihood were Mwavumbo, Puma, Kasemeni and kinango. The total area under crops damaged floods was 2407 Ha**,** impacting 1400 households. Destruction of Continued of crops by elephants was experienced in Puma and Macknon Rd in the Livestock Farming livelihoods. Although minimal incidences of pests (such as FAW) occurred across the livelihood zone, they were effectively managed. Although subsidized fertilizer was available in the county, the uptake remained low due to limited awareness and usage. Sensitization efforts are undertaken by department of agriculture to increase awareness and uptake of fertilizers as well opening up of more pick points of the subsidized fertilizer.

Table 1: Rainfed Crop

Crop	Area planted during 2023 Short rains season (Ha)	Long term average (5 year) area planted during the short rains season (Ha)	2023 Short rains production (90 kg bags) Projected/ Actual	Long term average production (5 year) during the short rains season (90 kg bags)
Maize	48,478	42,007	612,365	456,814
Green gram	21,404	19,465	127,691	117,074
Cowpeas	12,462	10,583	75,563	64,465

Irrigated Crops

Tomatoes, kales and okra were the main crops grown under irrigated agriculture during the season. Other crops grown in small scale include onion capsicum and amaranthus. The area under the Tomatoes, kales and okra was 59, 85 and 80 percent of the long-term average respectively. The major irrigation scheme (Nyalani in Kinango) was largely affected by the flooding which hampered production activities for all the crops. The production of tomatoes, kales and okra was 67, 88 and 88 percent of the long-term average respectively which was attributed to reduced acreage and damage of crops caused by floods (Table 2). The Livestock Farming Zone bore a more severe impact from the floods, experiencing losses of up to 40 percent of the total production.

Table 2: Irrigated Crop

Crop	Area planted during the 2023 Short rains season (ha)	Long term average (3 years) area planted during short rains season (ha)	2023 Short rains season production (90 kg bags/MT) Projected/Actual	Long term average production (3 years) during short rains season (90 kg bags/MT)
Tomatoes	74	126	880	1,318
Kales	163	192	1,021	1,156
Okra	68	86	262	297

3.1.2 Cereal Stocks

The main cereal stock in the livelihood zones was maize, green grams and rice. The total maize stock in the county was 134 percent of the long-term average. The household and traders held 134 and 132 percent of the long-term average respectively. The high stock level held by different players was attributed to the good harvests from the short rains 2023 and carry over stock from the 2023 long rains. Greengrams stock with farmers and traders was 109 and 84 percent of the long-term average respectively (Table 3). Above average stock with farmers was attributed to harvesting of the short rain crop and carryover stock from the long rain season. Rice stock was mostly with traders. The high rice stock held by traders was attributed cross border inflows along the Lunga Lunga border with Tanzania. The maize stock is expected to last for 2-3 months in the Livestock Livelihood Zone as opposed to normal two months while for the Mixed Farming Zone, the maize stock is projected to last for 3 months which is normal for the season. There were no cases of aflatoxin contamination reported for the cereals handled.

Table 3: Cereal Stocks Quantities held currently (90 kg bags)

Actor	Maize		Rice		Green gram	
	Current	LTA	Current	LTA	Current	LTA
Farmers	612,365	456,814	1,579	1,687	127,691	117,074
Traders	71,183	54,045	31,830	24,950	11,560	13,830
Millers	-	-	-	-	-	-
Food Assistance	-	-	-	-	-	-
NCPB	-	-	-	-	-	-
Total	683,548	510,859	33,409	26,637	139,251	120,904

3.1.3 Livestock Production

The main livestock species kept in the County include: Cattle, goats, poultry and sheep. The short rain season is significant for livestock production as it promotes significant pasture, browse regeneration and recharges water sources in both livelihood zones. Livestock production contributes approximately 20 and 50 percent to cash income in the Mixed Farming and Livestock Farming Livelihood Zones respectively.

Pasture and Browse Condition

Pasture and browse conditions was good in the mixed farming zone which is normal for this time of the year. However, certain areas, including Mbuguni in Tsimba/Golini Ward, Mwabila in Mwavumbo Ward, Maji ya chumvi in Samburu/Chengoni Ward and Makina in Mackinnon Road Ward where pasture and browse is in fair condition due to early cessation of the rains. Moreover, waterlogging affected pasture and browse in the lower regions of Lungalunga Sub-County, making grazing fields inaccessible and compelling farmers to relocate their livestock to higher ground. Increased crop farming activities has resulted in reduced size of grazing fields thus limiting access to pasture and browse in the mixed farming zone.

The average distance to grazing in Mixed Farming livelihood zone was 1.5Km which was the within the normal range. However, in the Livestock Farming Livelihood zones, the distance to grazing reduced to 3 km, compared to the usual 4 km which was attributed to enhanced forage regeneration during the short rains (Table 4). Increased crop farming activities have led to a reduction in the size of grazing fields, thereby limiting access to pasture and browse in the mixed farming zone. A significant hindrance to accessing pasture and browse is the proliferation of the Mathenge shrub, *Prosopis juliflora*, particularly in Kasemeni and Mwavumbo Wards, especially in areas near Kasemeni and Mkilo slaughterhouses. About 10 hectares is infested with affected *Prosopis juliflora* with no current measures being implemented to control the weed.

The available pasture is expected to last for three months and browse for four months, respectively in both the Mixed Farming and Livestock Farming livelihood zones. While this duration falls within the normal seasonal range for the Mixed Farming zone, it contrasts with the normal three-month period for pasture and two-month period for browse in the Livestock Farming livelihood zone. However, exceptional areas such as Mbuguni in Tsimba/Golini Ward, Mwabila in Mwavumbo Ward, Maji ya chumvi in Samburu/Chengoni Ward and Makina in Mackinnon Road Ward are likely to experience fodder shortages starting from mid-March 2024 due to poor forage regeneration.

Table 4: Pasture and Browse Condition

Livelihood zone	Pasture					Browse				
	Condition		How long to last (Months)		Factors Limiting access	Condition		How long to last (Months)		Factors Limiting access
	Current	Normal	Current	Normal		Current	Normal	Current	Normal	
Mixed farming	Good	Good	3	3	Limited grazing fields due to crop farming	Good	Good	4	4	Limited grazing fields due to crop farming
Livestock farming	Good	Good	3	2	Water logging, insufficient rain	Good	Very good	4	3	Insufficient rains, water logging

Status of baled hay

There are 25 hay stores with a combined capacity of 51,250 bales spread across the livelihood zones. However, during the season there was no hay store in all the stores. Despite a significant hay requirement estimated at around 500,000 bales, pasture conservation remains minimal across the livelihood zones due mainly to low demand. Typically, crop residues are left in the farms to for direct animal feeding. Crop residues is expected to contribute 40 percent of the livestock feeds. Crop residues in the farms was increased compared to normal as a result of increased crop farming activities occasioned by the good amount of rainfall received.

One large-scale farmer in Gozani, Puma ward Kinango actively grows and conserves pasture on a substantial scale. This farmer has a grass farm and hay store and is anticipated to harvest up to 50,000 bales. The prevailing average price per 15 kg bale is Ksh. 200-250 across the livelihood zones (Table 5). Some stockists opted to import grass hay, mostly from regions like Laikipia, Nyandarua, and Kiambu. The imported hay is sold to livestock keepers at the Samburu market in Kwale. The key factors impeding widespread pasture conservation include low adoption rates of pasture conservation technologies and uncontrolled grazing practices in communal grazing fields.

Table 5: Status of baled hay

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 (Ksh.)
Kinango	1	50,000 bales	0	N/A	500,000	15	250
Lungalunga	25	1250 bales	0	0	1500	10	200

Water for Livestock

Water pans, dams and seasonal rivers are the major water sources for livestock in the livestock farming zone while in the Mixed Farming livelihood zone, seasonal rivers, wells, boreholes, seasonal swamps and water pans serve as the key water source for Livestock Farming Zone. The status of water sources for Livestock Farming livelihood zone was normal across. In the Livestock

Farming livelihood zones, the trekking distance reduced to 2 km during the season, compared to the normal range of 3-5 km, while in the Mixed Farming livelihood zone, the trekking distance remained within the usual range of 2 km. Water from dams and pans is expected to last for 8-12 months, compared to the normal duration of 5-8 months. Similarly, water from seasonal rivers, streams, and swamps is expected to last for 2-3 months, compared to the usual 1-2 months. However, siltation is a remains a challenge for most of the water pans and dams due to soil erosion from farm and grazing areas. Watering frequency for all livestock species is seven days a week which is normal in both livelihood zones (Table 6).

Table 6: Water availability and access for livestock

Livelihood zone	Sources		Return average distances (km)		Expected duration to last (months) for each source	
	Current	Normal	Current	Normal	Current	Normal
Livestock farming	Major water-pans Dams, seasonal rivers Seasonal streams	Dams Major water pans Seasonal rivers	2	3-5	Dams – 12 Major water pans - 8 Seasonal rivers – 2	Dams – 8 Major water pans - 5 Seasonal rivers – 1
Mixed farming	Rivers, Streams, Wells, Boreholes, Water-pans and swamps	Rivers, Streams, Wells, Boreholes, Water-pans and swamps	2	2	Water pans – 8 Rivers and streams – 3 Swamps - 3	Water pans – 6 Rivers and streams – 2 Swamps - 2

Livestock Productivity

Cattle, sheep, and goat body condition was generally good across most parts of the Livestock Farming Zone, which is normal for the season. However, in specific areas such as Mbuguni in Tsimba/Golini Ward, Mwabila in Mwavumbo Ward, and Makina in Mackinnon Road in Samburu-Kwale Sub-County, cattle body condition was fair due to insufficient forage and limited water availability. In the Mixed Farming Livelihood Zone, the body condition of cattle was good, compared to fair condition observed in a normal season. Similarly, sheep body condition was very good compared to normal good condition, while goats body condition was very good and was comparable to normal condition in the typical season.

In the Mixed Farming Livelihood Zone, cattle body condition was good compared to fair in a normal season; sheep body condition was very good compared normal good; and goat body condition was very good which was comparable to a normal season (Table 7). The sustained and improved livestock body condition was attributed to enhanced forage and water availability in these areas.

Table 7: Livestock Body Condition

Livelihood zone	Cattle		Sheep		Goat		Camel	
	Current	Normal	Current	Normal	Current	Normal	Current	Normal
Livestock Farming	BCS 4 (Good)	BCS 4 (Good)	BCS 4 (Good)	BCS 4 (Good)	BCS 4 (Good)	BCS 4 (Good)	BCS 5 (Very Good)	BCS 5 (Very Good)
Mixed farming	BCS 4 (Good)	BCS 3 (Fair)	BCS 5 (Very Good)	BCS 4 (Good)	BCS 5 (Very Good)	BCS 5 (Very Good)		

Note: LCS – Livestock Body Condition Score

Milk Availability and Consumption

The average milk production increased in the Livestock Farming livelihood zone was four litres per household per day compared to normal three litres per household per day while in the Mixed Farming livelihood zone, milk production remained within normal production of three litres per household per day. The increase in milk production in the Livestock livelihood zone was attributed to enhanced availability of forage and water, as well as a increase in the number of lactating cows. Milk consumption increased to two litres per household per day compared to normal one litre per day in the livestock Farming livelihood zone while in the mixed Farming zone the average household consumption was within an average of two litres per day.

The average milk price increased reaching Ksh 70 per litre, compared to the long-term average of Ksh 50 across the livelihood zone (Table 8). The increase in milk prices was attributed to general inflation. To address the shortfall in production, households purchase packaged milk, which retailed at Ksh. 140 per litre.

Table 8 Milk Availability and consumption

Livelihood zone	Average milk Production (Litres)/Household/day		Average milk consumption (Litres) per Household/day		Prices (Ksh)/Litre	
	Current	LTA	Current	LTA	Current	LTA
Livestock farming	4	3	2	1	70	50
Mixed farming	3	3	2	2	70	50

Tropical livestock units (TLUs)

The Tropical Livestock Unit in most households was within the normal range of three for poor income households and 8-10 for medium income households across the livelihood zones (Table 9). Farmers capitalized on two consecutive good rainy seasons to replenish and sustain their TLUs. Additionally, the County Government of Kwale and other development partners aided some livestock keepers in restocking by providing breeding stocks. Farmer groups received support from government and donor-funded projects, such as the Kenya Marine Fisheries and Socio-Economic Development (KEMFSED) project, for restocking initiatives. Under this program, 1,000 meat (galla) goats were distributed among seven farmer groups. Additionally, Plan International provided support by distributing 270 meat (galla) goats to two farmer groups in Kinango and Matuga subcounties. Higher TLUs correlate with increased production in both meat and milk, thereby positively influencing food security.

Birth rate

Calving, kidding, and lambing rates remained within expected norms across both Mixed Farming and Livestock Farming livelihoods. Additionally, the cattle population in the region has exhibited signs of recovery subsequent to the 2021/22 drought, which previously had adverse effects on general health and reproductive productivity.

Table 9: Tropical Livestock Units

Livelihood zone	Poor income households		Medium income households	
	Current	Normal	Current	Normal
Livestock farming	3	3	10	10
Mixed farming	3	3	8	8

TLU Conversion factors: cattle = 0.7, sheep = 0.1, goats = 0.1, pigs = 0.2, chicken = 0.01. Donkey = 0.50, Camel = 1.3

Livestock Migration

The migration pattern was within the normal range for the season. No cases of in migration were reported for cattle and camels from other counties unlike the previous season. However, intra county migration was reported in some parts of the region such as Mbuguni in Tsimba/Golini Ward, Mwabila in Mwavumbo Ward, Maji ya chumvi in Samburu/Chengoni Ward and Makina in Mackinnon Road Ward which had relatively poor regeneration of pasture due to early cessation of the rains.

Livestock Diseases

Cases of East coast fever, Anaplasmosis, Babesia and Trypanasomiasis were reported in the region during the short rain season. The diseases are considered endemic in the County however, there was no reported cases of livestock disease outbreak reported during the season. Livestock diseases normally have a negative impact on income at the household level since production and productivity is reduced and the cost of veterinary drugs has significantly increased as a result of the general inflation. The County Directorate of Veterinary Services carried out mass vaccination against lumpy skin disease (LSD), Contagious Caprine pleuropneumonia (CCPP) and foot and mouth disease (FMD) before the onset of the season. The County Government of Kwale provided acaricides to cattle dip committees to assist in vector control. Effective vector control reduced the vector-borne disease incidences by approximately 60 percent.

Livestock Mortality

The livestock mortality rates were within the normal range at 0.30-1 percent for all species in both livelihood zones. The number of deaths per species was 1744 cattle, 1863 sheep and 1949 goats (Table 10). The County Directorate of Veterinary Services maintained continuous disease surveillance, mass vaccination and deworming across the livelihood zone.

Table: 10 Estimated Livestock Mortalities

Sub county	Livestock species	Total Sub County/ county livestock Population	Livestock deaths per species	Mortality rate per species	Remarks
Matuga	Cattle	39601	195	0.49%	Normal
	Goats	63035	225	0.35%	Normal
	Sheep	5443	33	0.6%	Normal
Msambweni	Cattle	23928	95	0.39%	Normal
	Goats	23829	74	0.3%	Normal
	Sheep	2578	14	0.54%	Normal
Lungalunga	Cattle	106975	504	0.47%	Normal
	Goats	108306	400	0.36%	Normal
	Sheep	39.844	216	0.54%	Normal
Kinango	Sheep	50,000	800	1.6%	Normal
	Cattle	80,000	450	0.5%	Normal
	Goats	140,000	500	0.3%	Normal
Samburu-Kwale	Sheep	80,000	800	1%	Normal
	Cattle	125,000	500	0.4%	Normal
	Goats	195,000	750	0.6%	Normal

3.2 Access

3.2.1 Market operations

The major food markets in the mixed farming livelihood zone include Kwale town and Kombani in Matuga Sub- County, Mamba and Mwangulu markets in Lunga Lunga Sub- County, Shimba Hills market in Shimba Hills Sub- County, Ibiza market in Ukunda in Msambweni Sub- County. In the livestock farming livelihood zone, the main food markets include Samburu and Taru markets in Samburu Sub- County, Kinango in Kinango Sub- County and Mariakani and Mazeras markets in neighbouring Kilifi County. Most markets were well provisioned with food staples and commodity flow and physical access was normal. However, food commodity prices were above average owing to increased transportation costs. Most food commodities were being supplied by internal sources as harvesting of food crops was still ongoing.

The major livestock markets are in the livestock farming livelihood zone with exception of Ndavaya in Kinango Sub- County which is the mixed farming livelihood zones. The rest include Mwangulu in Lunga Lunga Sub- County, Samburu in Samburu Sub- County and Kinango, Mwakijembe, Vigurungani and Malomani in Kinango Sub- County. Farmers and brokers were the main actors in these markets and livestock volumes traded were normal. The main livestock species traded include goats, cattle and sheep and volume traded were with normal for the season.

Maize Prices

The maize price trend reflects a general decline in prices from December 2023 to February 2024, although prices have consistently remained above the long-term average. The average price of maize per kilogram was reported at Kshs 55 in February which was an increase of 34 percent above the long-term average price of Kshs 41 (Figure 3). The increase in price was mainly attributed to higher production costs and the overall increase in the country's inflation rate. Notably, the lowest recorded maize price of Kshs 30 per kilogram was observed in the Lunga Lunga Mwangulu market. The lower maize prices can be attributed to the increased maize availability at both household and market levels, as well as cross-border supply, which has exerted further influence on local market prices.

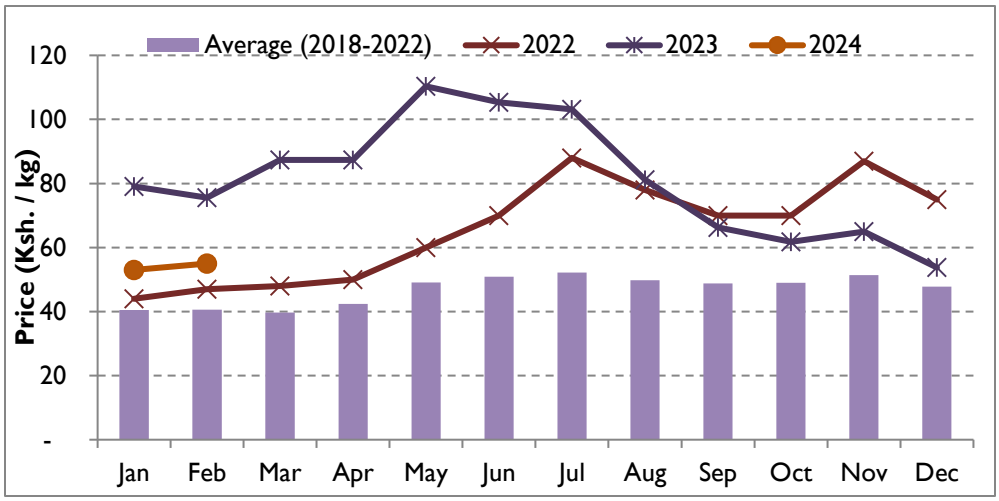


Figure 3: Maize prices

Goat prices

The goat prices trend indicates consistently above-average prices throughout the season. The average price of a medium-sized three-year-old goat was Kshs 7,500, doubling the long-term average price of Kshs 3,612. Additionally, this February price recorded a seven percent increase compared to the Kshs 7,041 recorded in January 2024 (Figure 4). The surge in goat prices can be attributed to the improved body condition of the goats, leading to more competitive pricing. However, it's worth noting that lower goat prices of Ksh 6,000 were reported in the Samburu market in Kinango sub-county.

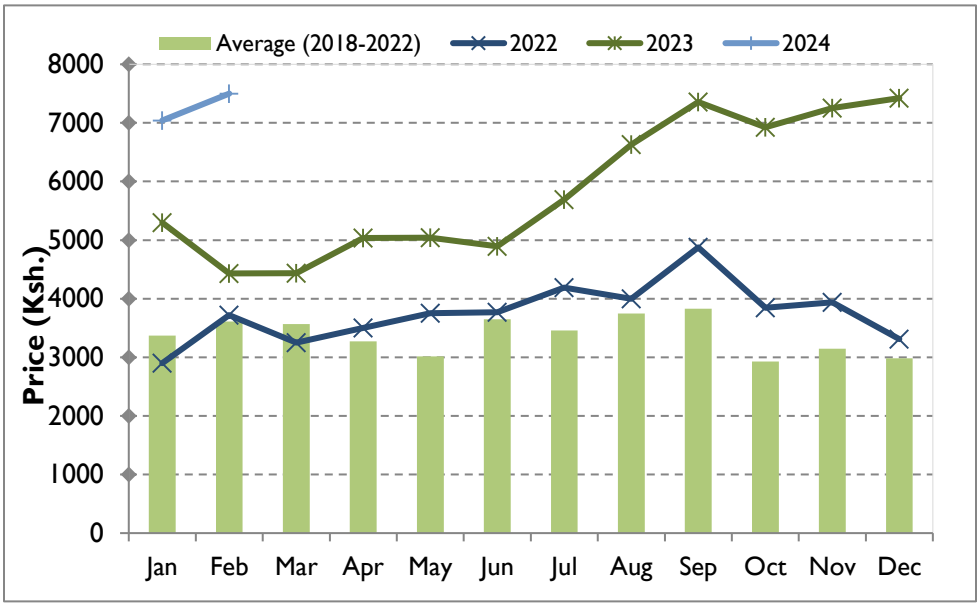


Figure 4: Goat Prices

3.2.3 Terms of trade (ToT)

Terms of trade" refer to the exchange ratio of a kilogram of maize for a goat. The trend in terms of trade remained above average throughout the short rain season and surpassed the values observed in 2022. In February, the average terms of trade reached 136, marking a 134 percent increase compared to the long-term average value of 58 (Figure 5). The increase in terms of trade was attributed to improve body condition of goats and comparable high price. The higher terms of trade indicate that households were able to purchase a more quantity of maize from the proceeds of selling small ruminants, implying an increase in purchasing power.

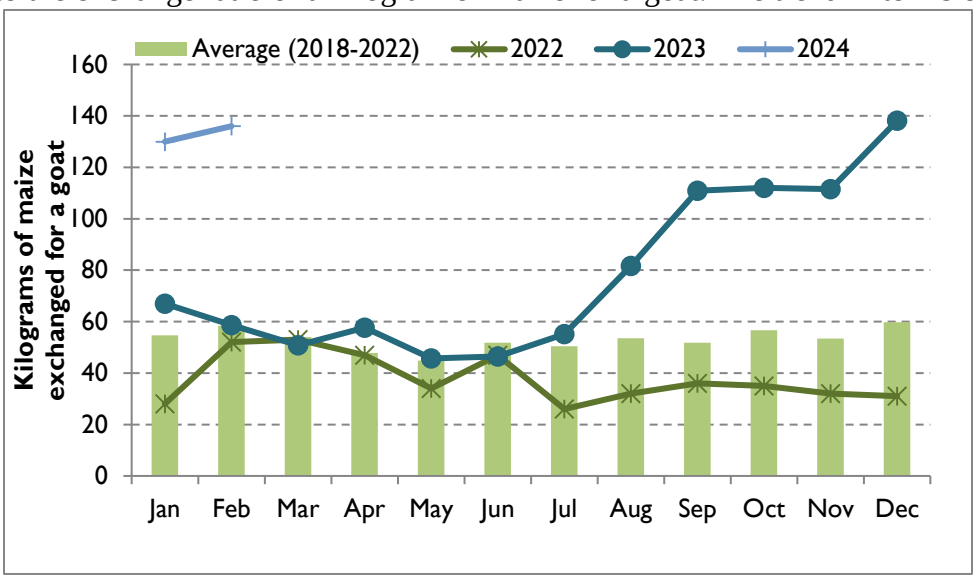


Figure 5: Terms of Trade

3.2.4 Income sources

Casual waged labour, livestock production and the sale of charcoal were the major income sources on which 15, 20 and 27 percent of households relied upon in the livestock farming livelihood zone respectively. In the mixed farming livelihood zone, 10,15 and 18 percent of households relied on casual waged labour, crop production and livestock production respectively (Figure 6). The high casual labour was mainly to attributed to Agricultural labour during the season

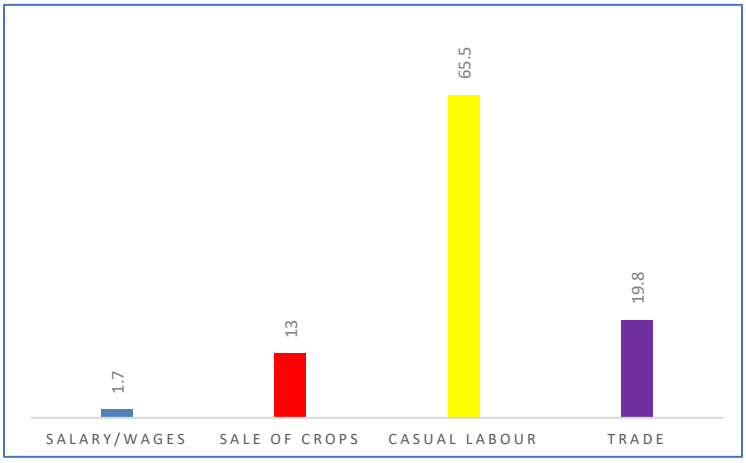


Figure 6: Sources of income

3.2.5 Water access and availability

The main water sources across the Mixed Farming and Livestock Farming livelihood zones were pipe water, rivers, boreholes, dams and water pans (Figure 7). The number of operational water sources were comparable to normal across the livelihood zone. The recharge level varied across the livelihood zone with rivers in the Mixed Farming livelihood zone experiencing 70-90 percent of normal capacity. Water pans and dams in the Livestock Farming livelihood zone was at 60- 90 percent of normal capacity. River Mwache in the Livestock Farming zone, had the highest recharge level of 85 percent while rest of the rivers in Samburu subcounty recharged at 60-80 percent. Rivers in Kinango and Lunga Lunga sub-counties, however, experienced low recharge. Water shortages was experienced in parts of these livelihood zones areas such as Lunga Lunga in Kinango Sub-counties. Additionally, there were operational issues affecting the pipeline water supply infrastructure. The Mzima connected pipelines are experienced intermittent operation due to low pressures along the main line. Similarly, the Marere pipelines are subject to rationing, impeding the reliable and sufficient distribution of water. Across the livelihood zones, pipeline and borehole sources are expected to remain available year-round, while water pans and dams in the Livestock Farming Livelihood zone are projected to last 6-12 months, compared to the normal 4-6 months. River water is anticipated to sustain for 6-12 months, which is within the usual seasonal range across the livelihood zones (Table 11).

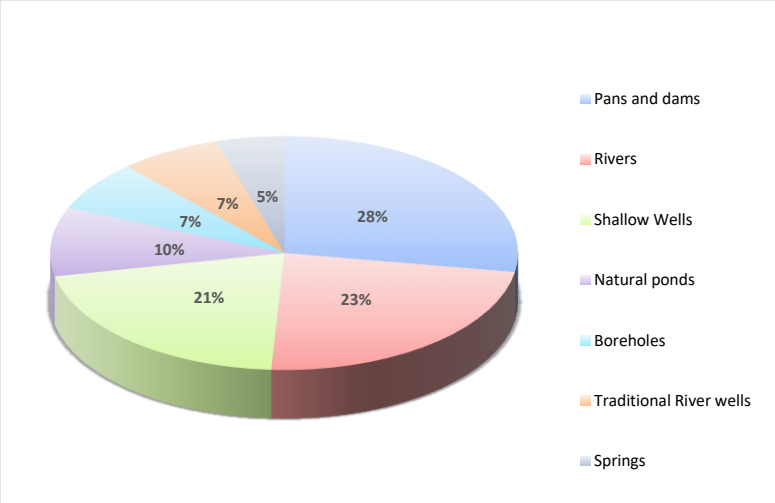


Figure 7: Sources of Domestic Water

Table 11: Status of major sources in Kwale County

Livelihood zone	Water Source (Three (3) major sources)	No. of Normal Operational	No. of Current Operational Sources	Projected Duration (Operational Sources)	Normal Duration that waters Last in Months	Current water level in % of full capacity after recharged by the Rains
Mixed-farming	1. Pipelines	19	18	12	12	N/A
	2. Boreholes	126	127	12	12	N/A
	3. River	5	5	6-12	12	70-90%
Livestock farming	1. Pipelines	31	31	12	9-12	N/A
	2. Boreholes	28	28	12	12	N/A
	3.Water pans/Dams	18	18	4-6	6-10	60- 90% for pans and medium dams.

	4. Rivers	1	1	6	6-12	85% - for Mwache River, the rest of the rivers are at 60%-80% in Samburu while some in Kinango and Lunga Lunga are very low.

Distance to water sources

The average return distance to water sources in the Mixed Farming livelihood zone was less than 1km which is within the normal range, however, the return distance in the Livestock Farming livelihood zone was reduced and was 1-2 km compared to normal 2-4 km. The normal but lower than normal in the livestock farming livelihood zone (Table 12). The cost of water was within normal range of Ksh 5 per 20 litre jerican or less normal in both livelihood zones at Kshs 5 per 20-litre jerrycan and less than Ksh 5 in some parts of the Mixed farming Livelihood zone. The current waiting time at source was at 2-5 minutes normal in the mixed farming livelihood zone while in the Livestock Farming livelihood zone, the waiting time varied and was 15 minutes for tap water and less than five minutes for pans and dams. Household relying on Mzima pipeline had to wait slightly longer than normal due to reduced pressure and those using Marere pipeline had to wait due to water rationing (Table 13)

The average water consumption per person per day was 40-80 litres per person per day compared to normal 80 litres per person per day in the mixed Farming Livelihood zone, implying reduced consumption in some households where water shortage was experienced. Water consumption in the Livestock Farming Livelihood zone was 20- 40 litres per person per day compared to the normal range of 20-60 litres per person per day, indicating reduced consumption of water by households experiencing challenges such as water rationing low supply (Table 12).

Table 12: Water accessibility and utilization

Ward / livelihood zone	Return 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
Mixed-farming livelihood zone	<1	<1	≤5	<5	2-5	2-5	80	40-80
Livestock farming livelihood zone	2-4	1-2	5	5	10-15	15 for tap water and less than 5min for pans and dams	20-60	20-40

3.2.6 Food Consumption

Food Consumption score

The Acceptable food consumption score in the county was estimated at 46 percent in January 2024 having dropped from 52 percent in December (Figure 8). The drop in trend was attributed to poor dietary diversity at the Livestock Farming Livelihood Zones due to other competing needs such as school fees. The mixed farming livelihood zone recorded the highest percentage of households with borderline and poor food consumption scores (33.3 percent) while the livestock farming livelihood zone had 20.7 percent in the same category. The implication was that there was significant deterioration in the food frequency, dietary diversity for households was experienced by households that experienced crop failure and those who had not started harvesting.

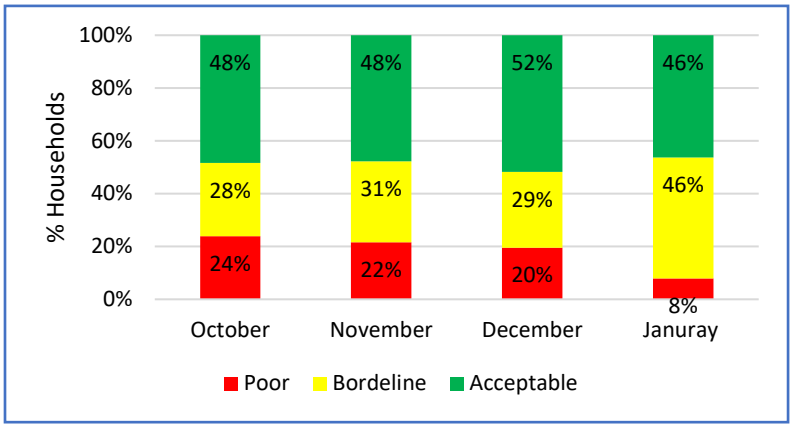


Figure 8: Food Consumption Scores

3.2.7 Coping strategy

The average reduced coping strategy index trend for the county was on an upward trend from September of 2023 to December due to diminishing stock and floods which affected access to markets, casual labour and businesses. It then reduced from 11.35 in December to 9.4 in January (Figure 9). The Downward trend of the rCSI was as a result of onset of the harvesting which provided more demand for casual labour making households to have a steady income to meet basic household needs. The mixed farming livelihood zone posted the proportion of household employing crisis strategies (rCSI of 33.3 percent) compared to 20.7 percent in the same category in the Livestock Farming livelihood zone in January 2024. The most commonly employed strategy being reliance on less preferred and/or expensive food. Food commodity prices had risen way above their seasonal ranges forcing households to engage strategies measures to mitigate food consumption gaps. The situation is attributed to factors such as floods which affected the region especially the lower sides of Lungalunga. Although the harvest from long rains was trickling in, severity of food coping strategies to bridge food gaps was still employed by poor and very households with minimal income in areas of crop failure and where harvesting was yet to commence. Majority of poor and very poor household to spending savings, borrowing money and reducing nonfood expenditures.

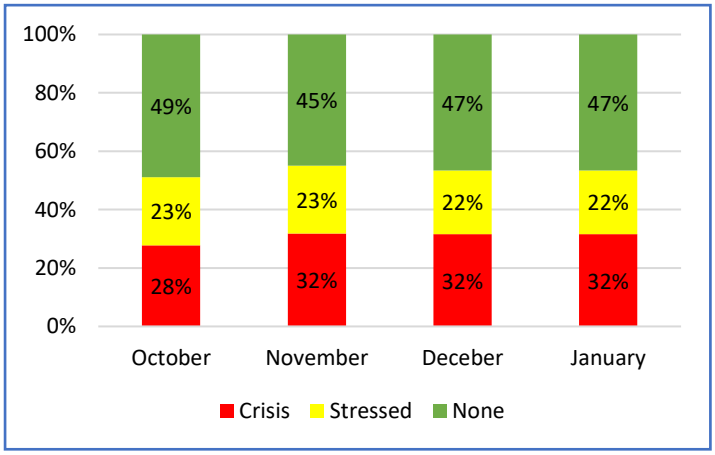


Figure 9: Coping strategy Index

Livelihood coping Strategies

The trend in livelihood based coping strategies indicate that the proportion of household that has experienced crisis coping strategies and worse was above 20 percent. There severe coping strategies were used to also not only to buy food but to cope with payment of school fees and other requirements. A high proportion of household (38.8 percent) in the Mixed Farming livelihood zone were employing livelihood coping strategies in crisis and emergency compared to 5.7 percent in the same category in Livestock Farming livelihood zone. Considering the high cost of food, nonfood expenditure and high inflation rated some households sold households assets, reduced nonfood expenditure, sold more animal and sold last female animal assets

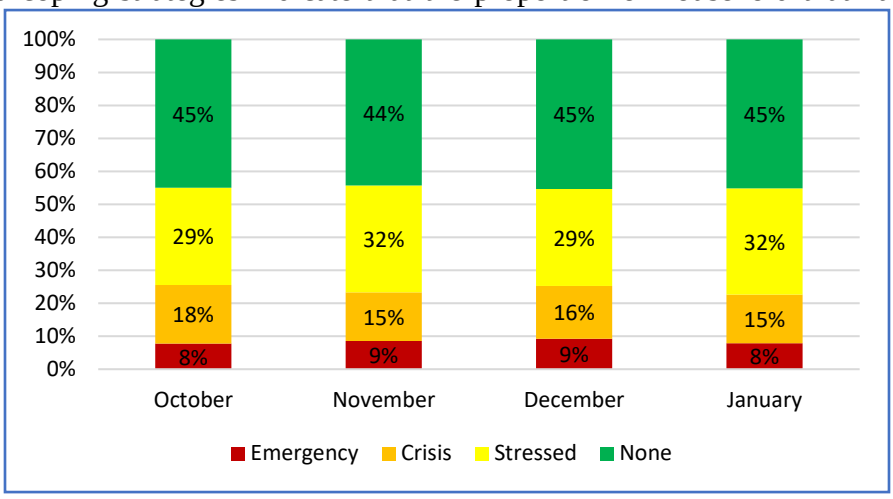


Figure 10: Livelihood coping strategies

3.3 Utilization

3.3.1 Morbidity and mortality patterns

There was a mixed trend observed in the prevalence of the three major diseases among children under five years old in the county, namely upper respiratory tract infections (URTI), diarrhoea, and malaria. Cases of URTI saw a slight increase of 0.24 percent, while malaria cases increased by 15 percent and diarrhoea cases decreased by 7.4 percent. The URTI and diarrhoea cases indicated a stable trend for the under-five children which is within the normal trends. The increase in malaria cases was attributed to the presence of uncleared bushes around houses, creating conducive breeding grounds for mosquitoes, coupled with low usage of mosquito nets.

In the general population categories, there was an increase in all three major diseases that includes URTI, diarrhoea, and malaria by 13.6 percent, 2.2 percent, and 40 percent, respectively. The rise in URTI cases was linked to cold weather conditions, while diarrhoea cases were attributed to the use of untreated water and poor hygiene practices. Similarly, the increase in malaria cases was associated with the presence of uncleared bushes around houses and low usage of mosquito nets, a situation also observed among children under five years old (Table 13).

Table 13: Morbidity trends in URTI, diarrhoea and malaria

Reported diseases for children aged below five years			% change	Reported diseases for the general population		% change
Disease	**July-Dec 2022**	**July-Dec 2023**		**July-Dec 2022**	**July-Dec 2023**	
URTI	114,720	114,997	0.24%	239,060	271,576	13.6%
Diarrhoea	18,806	17,423	-7.4%	18,706	19,114	2.2%
Malaria	9,597	11,104	15.7%	33,515	46,948	40%

Source: Kenya Health Information System

Morbidity trends in epidemic-prone and water-borne diseases

There was a general increase in suspected measles cases attributed to frequent cold and coughs which led to spread while water-borne diseases cases showed a decline across the county due increased sensitization during the el-nino phenomenon and frequent visits to health facilities as shown in Table 14.

Table 14: Morbidity trends in epidemic-prone and water-borne diseases in Kwale County

Disease	July-Dec 2022		July-Dec 2023		% change
	Cases	Deaths	Cases	Deaths	
Measles (Suspected)	108	0	298	0	175%
Cholera	0	0	0	0	0
Dysentery	1,709	0	1269	0	-25.7%
Diarrhea	37,512	0	36537	0	-2.6%
Typhoid	1,015	0	446	0	-56%

Source: Kenya Health Information System

3.3.2 Immunization and Vitamin A supplementation

The fully immunized child (FIC) in the county increased by a 12 percent in 2023 compared to the previous period in 2023. The increase was attributed to outreaches services and household mapping to identify defaulters through the supported of stakeholders (Table 15). Immunization coverage from increased by 5.4 percent from 67.2 percent in 2023 to 72.6 percent in 2023.

Table 15: Fully Immunized Child and coverage

Year	July – Dec 2022	July – Dec2023	% Change
Percentage of fully immunized children in the county	11,969	13,409	12%
Immunization Coverage	67.2%	72.6%	5.4%

Vitamin A Supplementation coverage

The vitamin A coverage for children aged 6-11 months and 12-59 months increased by one and four percent respectively (Table 16). This was attributed to integrated outreaches and malezi bora campaigns in the period under review.

Table 16: Vitamin A Supplementation coverage

Year	Children 6-11 months			Children 12 to 59 months		
	Received vitamin A supplementation	Total Population (6-11 months)	% Received Vit A	Received vitamin A supplementation	Total Population (12-59 months)	% Received Vit A
July– Dec 2022	20504	18303	12%	113538	229037	-50%
July– Dec 2023	20702	18493	11.94%	118464	259202	-54%
	1%			**4%**		

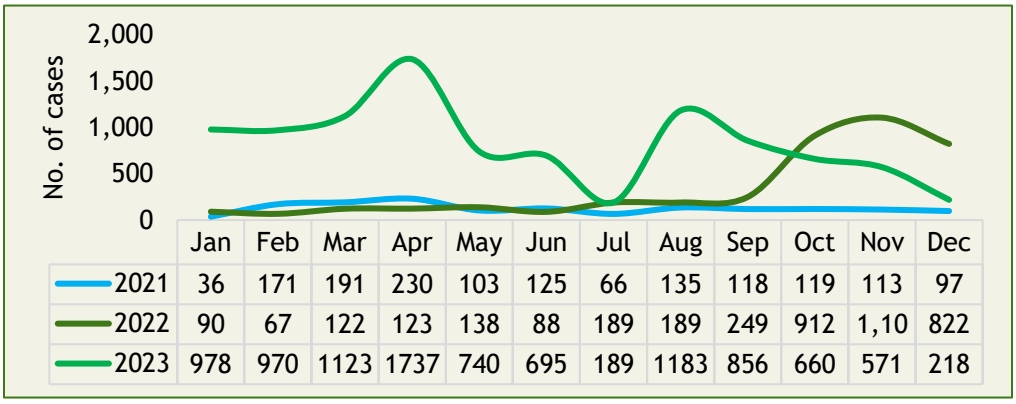
Source: Kenya Health Information System

3.3.3 Nutritional status and dietary diversity

Household consumed 3-4 meals per day with children accessing three meals in a day across all the livelihood zones. There was increased food diversity with common foods consumed including, *ugali*, green grams, rice, black tea, beans and vegetables (*mnavu* and *mchicha, Mtsunga)*. In the mixed farming zones, it was reported that the most common meals are ugali, rice, cassava, legumes and green vegetables which is highly compromised in terms of quality and quantity and below the recommended number. Milk consumption at household level by 1 out of 10 households consumed milk in the mixed farming livelihood zone.

MAM Admission Trends

A total of 9,820 moderately malnourished children 6-59 months have been reached from Jan- Dec 2023 out of the projected total and target caseload of 9,736 and 4,868 respectively. The sharp decline from the month of June is attributed to the end of the Outreach program support. The proxy coverage against caseloads and targets is 101.9 percent and 203.8 percent respectively. The total reached in 2021, 2022 and 2023 is 1,504, 4,095, and 9,820 respectively (Figure 11).

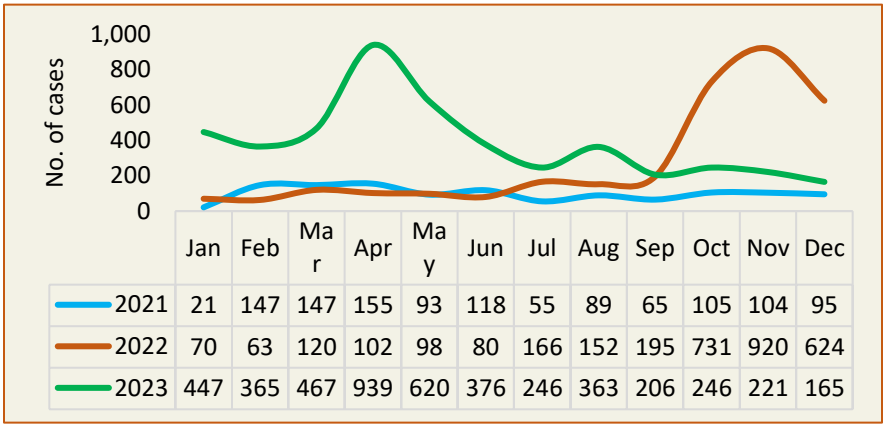


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2021	36	171	191	230	103	125	66	135	118	119	113	97
2022	90	67	122	123	138	88	189	189	249	912	1,10	822
2023	978	970	1123	1737	740	695	189	1183	856	660	571	218

Figure 11: MAM admission Trend

SAM Admission Trends 2021-2023

A total of 4,650 severely malnourished children 6-59 months have been reached from Jan- Nov 2023 out of the projected total and target caseload of 7,302 & 5,477 respectively. The sharp decline from the months of June to Nov is due to the end of the Outreach program support in June 2023. A coverage of 63.8 percent and 85 percent against caseloads and targets respectively has been achieved so far. The total reached in 2021, 2022 and 2023 is 1,194, 3,321 and 4,650 respectively (Figure12).



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2021	21	147	147	155	93	118	55	89	65	105	104	95
2022	70	63	120	102	98	80	166	152	195	731	920	624
2023	447	365	467	939	620	376	246	363	206	246	221	165

Figure 12: SAM admission trends

Middle Upper Arm Circumference

The children less than five years of age who were at risk of malnutrition as indicated by the Mid-Upper Arm Circumference (MUAC) measure was on a downward trend in January from the month of November (Figure 13). The MUAC percentage for children at risk of malnutrition decreased from 2.2 percent in November to 1.4 percent in December. However, the MUAC percentage slightly increased from 1.4 percent December to 2.6 percent in January but still remained within the normal range and below the LTA of 2018-2022. The within normal MUAC percent was attributed to improved household food diversity and food access which was attributed to short rain harvests and improved milk production and consumption for children.

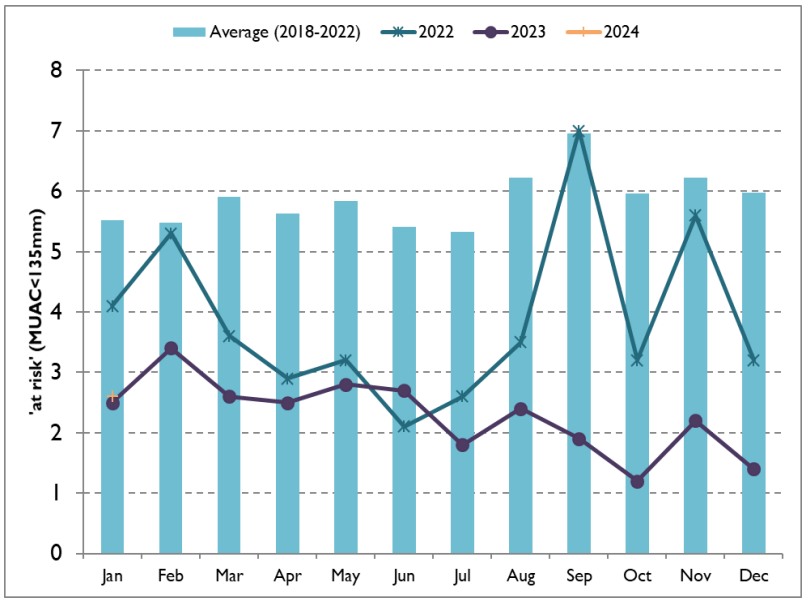


Figure 13 : Trend in MUAC

Sanitation and Hygiene

Based on the Kwale County Integrated Nutrition SMART Survey, 2022, approximately 59.4 percent of households access water from protected sources Water is drawn in 20-litre jerry cans and transported by households or motorcycles to homesteads then stored in larger 100-200 litre containers. At county level, the proportion of households that treated water before consumption was 15.2 percent with the mixed farming and livestock farming livelihood zones posting 20 and 10.4 percent. Given that over 40 percent of households accessed water from unprotected water sources, the fact that most consumed water without treatment could be a contributory factor to water-borne diseases ranking high in the county's disease burden. The preferred water treatment method was the use of water treatment chemicals such as chlorine and waterguard. An estimated 80 and 64 percent of the households that treated water in the livestock farming and mixed farming livelihood zones used these chemicals.

Latrine coverage averaged 64.5 percent during the period July to December 2022 having dropped slightly by a 4.4 percent margin in comparison with 67.5 percent recorded during the same period in 2021 (Department of Public Health, January 2022). The slight drop could have been occasioned by the sinking of toilets due to some rains experienced during the season under review in addition to chronic factors such as porous soils and poor workmanship. Open defecation was estimated at 19.2 and 38.2 percent respectively in the mixed farming and livestock farming livelihood zone. Only 19.5 percent of households washed hands during all four critical times i.e. after visiting the toilet, before cooking, before eating and after taking children to the toilet. The mixed farming and livestock farming livelihood zones posted proportions of 23 and 16 percent respectively (Kwale County Integrated Nutrition SMART Survey, 2022). The sub-optimal sanitation and hygiene practices were a major contributing factor to the prevalence of water-borne diseases in the county.

3.4 Trends of key food security indicators

Table 17: Food security trends in Kwale County

Indicator	Long rains assessment, Jul 2023	Short rains assessment, Feb 2024
% of maize stocks held by households	0 (nil)	134 percent of LTA
Livestock body condition	Mixed farming: Fair for cattle Good for sheep and goats Livestock farming: Poor for cattle Good for sheep and goats	Mixed farming: Good for cattle Good for sheep and goats Livestock farming: Good for cattle Very for sheep Very good for goats
Average Return trekking distance (kilometres)	Mixed farming: <1Km Livestock farming: 1-2Km	Mixed farming: <1Km Livestock farming: 1-2Km
Water consumption (litres per person per day)	Mixed Farming 50-80 Livestock farming: 40-50	Mixed Farming 40-80 Livestock farming: 20-40
Price of maize (per kg)	Ksh 103.1	Kshs 55
Distance to grazing	Mixed farming: 2-3km Livestock farming: 3-5km	Mixed farming: 1.5km Livestock farming:3km
Terms of trade (pastoral zone)	55.2	136
Coping strategy index	Mixed farming: 14.8 Livestock farming: 7.8 County: 11.3	(January 2023) Mixed farming: 11.6 Livestock farming: 7.2 County: 9.4
Food consumption score	Mixed farming: Poor: 0.0% Borderline: 8.7% Acceptable: 91.3% Livestock farming: Poor: 24.2% Borderline: 57.9% Acceptable: 17.9%	Mixed farming: Poor: 0.0% Borderline: 19.1% Acceptable: 81.1% Livestock farming: Poor: 8% Borderline: 46.3% Acceptable: 45.7%

3.5 Education

3.5.1 Access- (Enrolment)

The enrolment in Pre-primary school decreased by 2.6 percent from a total of 53,044 in Term III 2023 to 51,656 in Term I year 2024 which was attributed to slow pace of ongoing admissions of children due to financial constraints. Similarly, there was a notable decrease in enrolment at primary school level by about 8 percent from 214,663 in term 3-year 2023 to 197,571 in Term I 2024. The decrease was a result of the class 8 exit after completing the last KCPE exams. In the Junior School enrolment increased by 39.8 percent from 24579 in Term III 2023 to 34,355 in Term I 2024. Secondary schools also registered an increment in enrolment of 3 percent from 51,941 in Term III 2023 to 53,514 in Term I 2024. For the junior school the increase in enrolment was attributed to there was an additional grade that moved to this level making grade seven and grade eight (Table 18). Secondary school increment was due to 100 percent transition policy and specific

interventions that enhanced enrolment such as scholarships and bursaries. The girls' enrolment at junior secondary and secondary schools levels slightly exceeded that of boys.

Table 18: Enrollment in public schools for current and previous terms

Level	Term III 2023			Term I 2024			Indicate Increase (+) and Decrease (-)
	№ Boys	№ Girls	Total	№ Boys	№ Girls	Total	
Pre-Primary	27289	25715	53044	26513	25143	51656	-1.0
Primary	107643	104933	214663	99692	96564	197571	-1.1
Junior School	12648	12311	24579	17133	17415	34355	+0.7
Secondary	25414	26532	51941	25910	27604	53514	+1.0

Drop-out/retention/non-attendance

There were no cases of dropouts reported in Pre-primary schools across all subcounties. In primary school level there were 16 cases of dropouts reported. At primary school level 10 boys and six girls dropped out of primary school. The reasons reported for boys dropping out included parental conflict, movement to towns and bodaboda business while girls dropped out due to early pregnancy, parental conflict as well as movement to major towns. One girl dropped out of Junior school due to pregnancy and in secondary school two boys dropped out due to lack of school fees in boarding school while 1 girl dropped out due to pregnancy (Table 19).

Table 19: Drop out in Kwale County

Level	Term I 2024			Reasons for boys' drop-out	Reasons for girls' drop-out
	№ Boys	№ Girls	Total		
Pre-Primary	0	0	0	-	-
Primary	10	6	16	Parental conflict, moved to towns, bodaboda business.	Parental conflict, pregnancy, married, moved to town.
Junior School	0	1	1	-	Pregnancy case
Secondary	2	1	3	Fess in boarding schools	Pregnancy case

3.5.2 Effect of the short rain season in schools

The heavy rains during the season caused significant damage to schools across the livelihood zones, resulting in interruptions to learning at all levels. The damage was experienced in 18 pre-primary schools, impacting a total of 831 children; 47 primary schools, affecting approximately 16,917 learners; 37 junior secondary schools, with 6,654 learners affected; and 12 secondary schools, impacting 3,706 students (Table 20). The damages included sunk toilets, collapsed walls, fallen roofs, impassable roads, and flooding. The sub-counties most severely affected were Msambweni, Lungalunga, and Shimba Hills. Lungalunga, the situation was particularly dire, with exams having to be airlifted by helicopters due to extensive flooding. In other areas, children were unable to attend school due to swollen rivers.

Table 20: Effect of the season on Teaching and Learning process in Pre-Primary Schools

	No. of Schools	Boys	Girls	Total
Pre-Primary schools	18	427	404	831
Primary schools	47	8,410	8,621	16,917
Juniour Secondary schools	37	3,266	3,388	6,654
Secondary schools	12	2,053	1,653	3,706
Total	**114**	**14,156**	**14,066**	**28,108**

3.5.3 School Feeding

There are three different types of school feeding programs in the county, namely; In-kind School Meals Programme (IKSMP), Cash Transfer (CT), Community/Parents supported (CSSP), Government Relief Food (GRF). The county government sponsors the provision of porridge to pre-primary schools, benefiting a total of 13,930 children. Additionally, the national government allocates funds to primary schools for purchasing food through the Homegrown School Meals Programme (HGSMP) (Table 20). The initiative by the government has helped reduce cases of absenteeism, truancy and malnutrition and has improved attendance, retention and transition. However, the fund allocated for purchase of food is not adequate to last for a whole term.

In secondary provision of food was catered for by the parents through payment of fees or levies. Most boarding schools charged boarding fees which included accommodation and meals. Some Day schools, with the support of their Boards of Management (BOM) and/or Parent-Teacher Associations (PTA), organize school feeding programs by either contributing funds or seeking donors for support. Through these arrangements, 4,145 students were provided with meals during the specified period. In addition to enhancing school attendance, the provision of meals at all educational levels contributes to the students' overall health, consequently improving their academic performance.

For food safety protocols, each school designated a teacher in charge and routine inspections of foodstuffs were conducted by public health officers. Before the season commenced, headteachers received training on the safe handling of food in schools, organized by the Ministry of Education in collaboration with the World Food Programme (WFP).

Table 20: Types of school feeding programs in Kwale County

Category of School	Total Number of Public schools	Number of schools with School Meals Program	Types of School Meal Programmes Offered										Total number of beneficiaries on school meals program		Total number of Learners NOT on school meals program	
			In-kind School Meals Programme (IKSMP		Cash Transfer (CT)		Community /Parents supported (CSSP)		Government Relief Food (GRF)		Other types					
			№ Boys	№ Girls	№ Boys	№ Girls	№ Boys	№ Girls	№ Boys	№ Girls	№ Boys	№ Girls	№ Boys	№ Girls	№ Boys	№ Girls
Pre-Primary	657	485	7214	6716	0	0	0	0	0	0	11350	10750	7214	6716	0	0
Primary	276	44	0	0	4226	4730	0	0	0	0	4265	4157	8063	8521	34690	32441
Junior School	178	82	0	0	0	0	0	0	0	0	0	0	246	213	3128	3185
Secondary	66	11	0	0	0	0	2513	1632	0	0	0	0	2513	1632	9374	10371
Subtotal	1177	622	7214	6716	4226	4730	2513	1632	0	0	15615	14907	18036	17082	47192	45997
Grand total (boys + girls)	**1799**		**13930**		**8956**		**4145**		**0**		**30522**		**35118**		**93189**	

School-based programmes promoting food security and climate change action

The main activities promoting food security and climate change action include tree planting, water harvesting, crop farming, clubs/ Societies, 4-K clubs. The activities are sponsored by Ministry of Education, Parents, schools, NGOS, KCB and Base Titanium among others. The establishment of clubs and societies dedicated to environmental conservation and agricultural development, provides platforms for education, awareness-raising, aimed at promoting sustainable farming practices, environmental stewardship, and resilience-building initiatives (Table 21)

Table 21: Food security and climate change initiatives in schools

Programme /Activity	Number of schools involved				Sponsor	Effect on learning continuity
	Pre-Primary	Primary	Junior School	Secondary		
Tree planting	267	342	325	86	Gok, CEB, Parents	Safe environment
Water harvesting	50	159	142	35	NGOS, KCB, Base Titanium, MOE	Hygiene and Sanitation
Crop farming	0	114	98	21	Gok, cgk, NGOs, Parents	Retention
Clubs/ Societies	0	53	24	18	MOE, NGOS	Conducive Learning Environment, Climate Change
4-K CLUBS	0	1	0	0	School	Very positive and enlightening on Agriculture activities.
Kitchen gardening		52	50	18	Gok, CGK, NGOS	Good health
Total	**317**	**721**	**639**	**178**		

3.5.4 Inter Sectoral links where available

Water access, sanitation and Hygiene in schools

The main sources of water for schools across the county are taps, boreholes, water pans and rainfall harvesting. During the season some schools were able to harvest and store water in their tanks which they would use up to mid-February. However, majority of the schools whose water harvesting infrastructure was dysfunctional could not store water. Such schools either bought water from vendors or sent their students to fetch from water pans. A significant number of schools had no access to safe water which included 372 Pre-primary, 322 primary, 295 Junior, and 62 secondary schools. Additionally, 561 Pre-primary, 468 primary, 451 junior, and 71 secondary schools had no water treatment measures. The number of schools in need of water harvesting and storage facilities included 338 pre-primary, 417 primary, 409 junior and 95 secondary schools (Table 22).

The pupil-to-toilet ratio exceeded the Ministry's requirement of 1:30, with ratios above 1:60. There were 83 pre-primary, 261 primary, 247 junior and 52 secondary schools where the pupil toilet ratio was above 1:60 as opposed to the 1:30 required by the ministry. Hand washing facilities were also inadequate in 478 pre-primary schools, 321 primary schools, 319 junior schools and 47 secondary schools in the county. These deficiencies in sanitation infrastructure and facilities compromise the health and well-being of learners in schools.

Table 22: Water in schools

Main sources of water in schools	No of schools which has NO access to safe water (functional source within 100m radius)				№ of schools with no water treatment measures				№ schools in need of water harvesting and storage facilities e.g gutters, water tanks			
	Pre-Primary	Primary	Junior School	Secondary	Pre-Primary	Primary	Junior School	Secondary	Pre-Primary	Primary	Junior School	Secondary
Boreholes	2	40	33	11	0	50	50	8	6	66	73	21
Rain Water	0	0	0	0	0	0	0	0	23	6	5	18
Rivers	3	32	34	14	0	50	50	8	0	23	23	7
Taps	367	220	198	30	561	318	301	47	309	299	285	42
Water Pumps	0	30	30	7	0	50	50	8	0	23	23	7
Total	372	322	295	62	561	468	451	71	338	417	409	95

School Health and Nutrition

The primary health challenges encountered in schools during the season included Bilharzia, diarrhoea, malaria, and eye sight problems. Bilharzia infections were often linked to the consumption of contaminated water sources. The diseases were however not rampant because of the immediate measures taken by the department of health in conjunction with the ministry of education contain the infections. Various interventions were implemented in schools which included the provision of Vitamin A supplements pre-primary school children, deworming tablets to primary and junior school learners and Human Papillomavirus (HPV) vaccination to girls aged 10 years and above, eye screenings, cash transfer programs and COVID-19 sensitization initiatives. These interventions were coordinated by a range of stakeholders, including the County Government of Kwale, Ministry of Health, National Government, Kwale Eye Centre, Peek Visual Impact Project, and CBM (Table 23).

The availability of water occasioned by the rains during the season, led to improved sanitation and hygiene condition in most schools. Water availability made it possible to regularly clean toilets, replenish hand washing facilities and improve the general cleanliness of the schools. Provision of menstrual support has been an ongoing intervention to improve retention and promote learning continuity among girls. During the season there was distribution of sanitary towels to both primary, junior and secondary schools courtesy of the government of Kenya, non-state actors and well-wishers.

Table 23: Health and nutrition challenges in schools

School category	State health and nutrition challenges experienced in schools during the season	Indicate some of the interventions offered e.g deworming, vitamin A etc	Which organizations provided the interventions
Pre-Primary	Untreated rain water, Bilharzia, malaria	Vitamin A, Deworming	CGK, MOH
Primary	Untreated rain water, Lack of Adequate Food, Ill Health, Absenteeism	Deworming, Sanitary Towels	GOK, MOH
Junior School	Untreated rain water, Lack of adequate food, Health, Absenteeism	Eye Screening, Cash Transfer, Sanitary Towels	Kwale Eye Centre, MOH, MOE, CGK
Secondary	Eye Sight, Health, Absenteeism, Truancy	Sanitary Towels, HPV Vaccine, Covid 19 Sensitization	MOE, MOH, CBM. Peek Visual Impact Project

3.6 Child Protection Concerns

During the season, schools and communities encountered a range of child protection issues, including child labor, school dropout, teenage pregnancy, early marriages, and gender-based violence. Interventions aimed at addressing these challenges encompassed efforts such as supporting Out-of-School Children (OOSC) initiatives, providing food provisions, and conducting sensitization programs through collaboration with the Interior Department and Probation services. Organizations involved in supporting these interventions included UNICEF, the Ministry of Education (MOE), the World Food Programme (WFP), and the Ministry of Health (MOH).

Table 24: Child protection issues experienced in schools and interventions

School level	Issues of concern e.g Corporal punishment, sexual abuse, pregnancies, child marriages, child labour etc.	Gender affected (Girls or Boys)	Intervention offered	Organizations that supported
Pre-Primary	None	-	-	-
Primary	Child Labour, Drop Out, Teenage Pregnancy	Girls/Boys	OOSC, Child to Child, Provision of Food	UNICEF, MOE, WFP
Junior School	Child Labour, Drop Out, Teenage Pregnancy	Girls/Boys	Oosc initiatives, Child to Child, Provision of Food	UNICEF, MOE, WFP
Secondary	Drop Out, Early Marriages, Gender Based Violence	Both	Sensitization, Interior Department, Probation	OOP, UNICEF, MOE, MOH

Child Protection issues in communities

During the review period, the community provided information through household interviews that was used to compile prevalence of the following child protection issues:

Children Migrating without their parents

The migration of children from their homes, which exposes them to potential risks of exploitation and abuse, was highlighted. Regarding awareness of migrate parents of parents without parents, 14.9 percent of respondents were aware such cases, 57.6 percent of responded, said no and 27.5 percent were unaware of the situation. Household responses regarding awareness of family separation due to the impact of drought indicates that 37.5 percent of households were aware of such cases. Separation of children and parents has contributed to children living in the streets as well as child-headed households. Other impacts long migration are long distances to schools and lack of clean drinking water. Regarding services offered to children ,53.8 percent of respondents were awareness of case management services that children receive. Other services include family reunification Services responded to includes 17.8 percent cash transfer – 3.2 percent and Referrals for multi sectoral services - 24.2 percent.

Some of the cases cited involved children whose mothers had traveled to work in Arab countries, leaving their children in the care of both relatives and non-relatives. Additionally, there were instances of children whose mothers were imprisoned. The number of abandoned children was

notably high, particularly in marketplaces, urban, and semi-urban areas. It was observed that some children were joining gangs engaged in criminal activities such as theft and robbery, such as the "Wakali Wao" in Likoni and "Wakali Kwanza." These gangs recruited children from Ng'ombeni and Kombani, as well as those migrating from Kinango and Lunga in search of livelihood opportunities or food, and engaging in street vending in Likoni and Mombasa.

Violence against Children, GBV

Incidences of Sexual Violence was acknowledged by 77.3 percent of respondents. Among the challenges faced by children sexual violence, child neglect, psychological violence, child trafficking and corporal punishment. Child neglect received the highest response from respondents at 59 percent. Much of the violence, especially Sexual and Gender-Based Violence (SGBV), was inflicted on children by close family members, with some being victimized by bodaboda operators who exerted financial power.

Children (girls, boys & women) In Transactional sex for commodities

Transactional sex has been commonly reported among children who don't have responsible parents/caregivers. More than 27.8 percent of the respondent acknowledge the existence of the vices in the county. The behavior has jeopardized children's education and general wellbeing.

Cases of child marriage due to impact of drought

The response on prevalence of child marriage attributed to the effects of drought indicated that is 15.7 percent of respondents acknowledged cases, while 49.7 reported no instances, and 34.6 expressed uncertainty. Reasons cited for child marriage during drought include scarcity of food, water, sanitary pads, neglect, and family disintegration. The reasons for child marriage in drought Included lack of food, lack of water, lack of sanitary pads, child neglect and family breakups.

Special groups of children due to drought who need special care/support.

Children with disabilities or those living in particularly marginalized or impoverished communities are more at risk of abuse, violence, neglect, and exploitation in the community. Vulnerability neglect is exacerbated by drought-related hardships. Care and support may include various forms of assistance, such as access to clean water, nutritious food, healthcare services, shelter, psychosocial support, and educational resources. About 43.3 percent of the respondents agreed that there are children with disabilities in the community that require specialized care.

Table: 24: Child protection Sector Household & Key Informant Interview

Child protection issues	Household Responses on awareness	Reasons child protection issues	Challenges children Face	Awareness of services that children receive
Children Migrating without their parents	Yes – 14.9% No – 57.6 % Do not Know – 27.5 %	**Reasons for Migration** Separation of Parent In search of employment/ Domestic labour Child neglect	Long Distances to school Lack of clean Drinking water	-Case management services - 53.8% -Family reunification Services – 17.8% -Cash transfer – 3.2%

Family Separation due to impact of Drought	-Separation of Children – 37.5 % -Unaccompanied Children- 2.8 % -Children living on the Streets –2.5 % -Child headed House hold – 1.6 %			-Referrals for multi sectoral services - 24.2 %
Violence against Children, GBV	Incidences of Sexual Violence Yes – 77.3% No – 17.83% Do not Know – 4.87%		Awareness of Kind of Violence experienced by children -Sexual violence - 17.85% -Neglect -59% -Psychological violence – 13.67% -Child trafficking- 1.21 % -Corporal punishment – - 8.27% Other – 0.00%	
Children (girls, boys & women) In Transactional sex for commodities (food, sanitary pads, etc)	Yes - 27.85 % No – 36.61% Do not Know - 35.54 %			
Cases of child marriage due to impact of drought	Yes – 15.73 % No - 49.67 % Do not Know - 34.6 %	**Reasons for child marriage in Drought** -Lack of food -Lack of water -Lack of sanitary pads -Neglect -Family breakup		
Teenage pregnancies due to drought impact. impact of drought:	Yes – 17.55% No – 37.5% -Do not Know - 44.95%	**Reasons for Teenage pregnancies** -Exchange of sex for money -Exchange of sex for gifts e.g. Clothing, food -Lack of supervision as care givers move for such of food		
Special groups of children due to drought who need special care/support.	Yes – 43.34% No -45.13 % D/Know -11.53 %			

4.0 FOOD SECURITY PROGNOSIS

4.1 Prognosis Assumptions

- Global climate forecasts indicate that the ongoing moderate to strong El Niño is likely to continue into early 2024. There is an 80 percent likelihood that El Niño will remain the dominant ENSO state during the 2024 March to May long rains.
- According to the NDMA price trends, the prices of staple foods prices will likely to reduce but remain above the long-term average up to April as harvesting continues replenishing household stocks and increasing supply in the market across the livelihood zones.
- The crop production prospects indicate above-average short rains production which is expected to enhance household food availability until the month of April decreasing household reliance on markets
- Based on trends of long term goat price from NDMA Early Warning Bulletins, goat prices are likely to increase and remain above the long-term average due to sustained good body
- According to secondary data and primary field observations, the current pasture and browse are likely to be available until the onset of the short rains in October and the body conditions for all livestock species are likely to remain above average.
- Distances to water sources for livestock and grazing areas will follow sentinel variation but is likely to be above stable in the next three months.
- High Fuel prices will likely continue to drive high prices of staple food and nonfood items constraining household purchasing power

4.2.1 Outlook for April-June 2024

Food availability will likely increase during the scenario period as the projected harvests will replenish stocks at household level. Food commodity prices are likely to reduce slightly but remain above average thus improving access. As long rains season starts, income from agricultural labor opportunities is likely to increase therefor enhancing household income. Improvements in livestock productivity, including body condition, milk production, and birth rates are likely to improve with the projected above average long rains that will regeneration of forage and water. Goat prices are likely to remain above average and prices on an upward trend due to sustained good body condition. Increased milk production, sales of milk and crop produce will increase household income access. Households are therefore likely to engage in less severe consumption and livelihood-based coping strategies throughout the scenario period. It is likely that there will be an increase in households with acceptable food consumption scores across the livelihood zone. Most parts of the region will remain in IPC Phase 2 classification with a few households in the Mixed Farming and Livestock Farming livelihood zone in Phase 3 moving to stressed Phase 2 due to increased household food stock and livestock productivity.

4.2.2 Outlook for July – September 2024

The household food stock is expected to reduce slightly by June as households consume and sell harvested stock, however, early harvests from July to August will replenish food stocks at the household level. The long rains will sustain forage and water availability, thereby maintaining livestock body condition. Milk production and consumption are anticipated to increase slightly, especially in the livestock farming livelihood zone, but remain normal in the mixed farming livelihood zone. The prices of maize are projected to decrease slightly but remain above the long-term average. Goat prices will likely stay above the long-term average due to sustained good body condition. Terms of trade are expected to remain above the long-term average, providing households in the Livestock Farming zone with good purchasing power. Consequently, households are likely to

engage in fewer severe consumption- and livelihood-based coping strategies throughout the scenario period. It is probable that there will be an increase in households with acceptable food consumption scores across the livelihood zone. The region is expected to remain in stressed IPC Phase 2.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

5.1.2 Phase classification

The county was classified as Minimal Food security Phase (IPC Phase 2) in the both mixed Farming and in the Livestock Farming livelihood zone.

5.1.2 Summary of Findings

The performance of short rains was above normal across the livelihood zones. The production of the rainfed crops was projected to increase while irrigated crop production reduced due to flooding. Households maize stock increased due to carry over stock and harvesting of short rain crops the was ongoing. Food prices remained above long-term average, however, the high goat prices enhanced the terms of trade improving household purchasing power. The season contributed to the rejuvenation of forage in both the Mixed Farming and livestock farming livelihood zones. Average milk consumption per household per day increased in the Livestock Farming livelihood zone and was within normal in the Mixed Farming livelihood zone. Food consumption patterns improved with enhanced household food availability which improved nutritional status for children aged below five years. The food and livelihood based coping strategies were less severe compared a similar period last year and long rains 2023. Milk consumption and household food diversity improved across the livelihood zones and reported cases of children at risk of malnutrition reduced. Not all school in the region benefited from school meal programe. The enrolment in pre-primary and primary school decreased in Term I year 2024 which was attributed to slow pace of ongoing admissions of children due to financial constraints and exit of class eight pupils after KCPE exams. The main activities promoting food security and climate change action include tree planting, water harvesting, crop farming, clubs/ Societies, 4-K clubs. Child protection issues reported included children migrating without their parents, family separation due to impact of drought, violence against children, gender-based violence, children (girls, boys & women) in transactional sex for commodities (food, sanitary pads,) cases of child marriage due to impact of drought. Available child protection services included case management services, family reunification services, cash transfer and referrals for multi sectoral services.

5.1.3 Sub- County ranking

Table 25: Sub-county ranking in Kwale County

Sub-county	Rank	Main food security threats	Ward
Samburu-Kwale	1	Deteriorating forage condition Drying streams	Mackinnon Road
		Deteriorating forage condition Drying streams	Samburu/Chengoni
		Drying streams	Kasemeni
		Drying streams	Mwavumbo
Kinango	2	Deteriorating forage condition High livestock population	Puma
		Deteriorating forage condition	Ndavaya
		Deteriorating forage condition	Kinango
Lungalunga	3	Deteriorating forage condition Drying streams	Mwereni
		Deteriorating forage condition in upper parts of the Ward.	Vanga
		Water is available Crop residues are in abundant	Dzombo
		Water is available, Crop residues are in abundant	Pongwe/Kikoneni
Matuga	4	Deteriorating forage in Mbuguni area	Tsimba/Golini
		Water is available; Crop residues are in abundant	Mkongani
		Water is available; Crop residues are in abundant Low livestock population	Tiwi
		Water is available; Crop residues are in abundant Low livestock population	Waa/Ng'ombeni
		Water is available; Crop residues are in abundant	Kubo South
Msambweni	5	Water is available; Crop residues are in abundant	Ramisi
		Water is available Crop residues are in abundant	Kinondo
		Water is available; Crop residues are in abundant Low livestock population	Gombato/Bongwe
		Water is available; Crop residues are in abundant Low livestock population	Ukunda

Population in Need

Kwale County: Households in Need of Food Assistance as at March 2024

S/No	Sub county	Ward	Popn	No of HH	%in need	Popn in Need	HH in Need
1	**Samburu Kwale**	Mackinnon Road	48273	8628	10	4827	863
		Chengoni	50248	8187	10	5025	819
		Kasemeni	59946	10603	10	5995	1060
		Mwavumbo	43768	7652	10	4377	765
	Sub Total					**20,224**	**3,507**
2	**Kinango**	Puma	29903	4893	10	2990	489
		Ndavaya	38173	6110	10	3817	611

		Kinango	26144	5040	10	2614	504
	Sub total					**9,421**	**1,604**
3	**Lungalunga**	Mwereni	55112	9884	5	2756	494.2
		Vanga	44101	8828	5	2205	441.4
		Dzombo	44983	7971	5	2249	398.55
		Pongwe/Kikoneni	54227	10683	5	2711	534.15
	Sub total					**9,921**	**1,868**
4	**Matuga**	Tsimba/Golini	44158	9210	5	2208	461
		Mkongani	50280	8671	5	2514	434
		Tiwi	23914	4980	5	1196	249
		Waa/Ng'ombeni	50326	10904	5	2516	545.2
		Kubo South	25574	5466	5	1279	273.3
	Sub Total					**9,713**	**19,62**
5	**Msambweni**	Ramisi	48276	10244	5	2414	512.2
		Kinondo	32546	6853	5	1627	343
		Gombato/Bongwe	44331	12421	5	2217	621
		Ukunda	52537	15948	5	2627	797
	Sub Total					**8,885**	**2,273**
	Grand Total				**6.71%**	**58,164**	**11,214**

Table 26: Projection of Population in Need (April - June) 2024

S/No	Sub county	Ward	Popn	No of HH	%in need	Popn in Need	HH in Need
1	**Samburu Kwale**	Mackinnon Road	48273	8628	0.15	7241	1294
		Chengoni	50248	8187	0.15	7537	1228
		Kasemeni	59946	10603	0.15	8992	1590
		Mwavumbo	43768	7652	0.15	6565	1148
	Sub Total					**30335**	**5260**
2	**Kinango**	Puma	29903	4893	0.15	4485	734
		Ndavaya	38173	6110	0.15	5726	917
		Kinango	26144	5040	0.15	3922	756
	Sub Total					**14133**	**2407**
3	**Lungalunga**	Mwereni	55112	9884	0.05	2756	494
		Vanga	44101	8828	0.05	2205	441
		Dzombo	44983	7971	0.05	2249	399
		Pongwe/Kikoneni	54227	10683	0.05	2711	534
	Sub Total					**9921**	**1868**
4	**Matuga**	Tsimba/Golini	44158	9210	0.1	4416	921
		Mkongani	50280	8671	0.1	5028	867
		Tiwi	23914	4980	0.1	2391	498
		Waa/Ng'ombeni	50326	10904	0.1	5033	1090
		Kubo South	25574	5466	0.1	2557	547
	Sub Total					**19425**	**3923**
5	**Msambweni**	Ramisi	48276	10244	0.1	4828	1024
		Kinondo	32546	6853	0.1	3255	685

		Gombato/Bongwe	44331	12421	0.1	4433	1242
		Ukunda	52537	15948	0.1	5254	1595
	Sub Total					**17770**	**4546**
	Grand Total				**10.56%**	**91,584**	**18,004**

5.2 Non -Food Interventions

5.2.1 Ongoing Interventions

Agriculture Sector ongoing interventions

Sub County	Ward	Intervention	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost (Kshs)	Time Frame
All	All	Provision of inputs (pesticides and spray kits-PPEs and seeds)	2000	Department of Agriculture	Increased production	7m	Dec 2023-Jan 2024
Kinango, Lung,alunga Matuga	Macknon Rd, Ndavaya, Mwereni, Mkongani	Opening of new of Irrigation schemes and Provision of Kits/Materials	1600	Department of Agriculture	improved nutrition	18m	July 2023-june 2024
Medium term / Long Term interventions							
All	All	Provision of tractor ploughing services	12000	Department	Increased food production		Feb 2024-May 2024
All	All	Provision of inputs (maize seeds)	12000	Department of Agric	Increased food production	25m	Feb 2024-march 2024

Livestock sector

County	Sub County	Intervention	No. of beneficiaries	Implementers	Impacts on food security	Cost (Ksh)	Time Frame
Matuga Kinango Msambweni Lungalunga	All wards	Mass vaccination LSD, FMD, SGP and CCPP treatment and deworming	Estimated to be more than 100,000 Animals	County government of Kwale, Veterinary Division	Sustenance of healthy herd for higher productivity.	10M	2023/24

Matuga and Msambweni	All wards	Supply of breeding stock; dairy goats.	126	CG-Kwale Livestock Production Division	Increased food supply and improved nutrition	3.21	2023/24
Matuga Kinango Msambweni Lungalunga Samburu	All wards	Supply of breeding stock (galla goats)	540	CG-Kwale Livestock Production Division	Increasing meat production for improved income and nutrition	9.6M	2023/24
Lungalunga and Msambweni	All wards	Distribution of breeding stock	35	CG-Kwale Livestock Production Division	Improved milk production for increasing income and nutrition	5.5M	2023/24

Water Sector ongoing interventions

Sub County/ Ward	Intervention	Ward	No. of beneficiaries	Implementers	Cost	Time Frame
All subcounties Mixed-Farming Livelihood zone	Extention of Bububu water pipeline	Tsimba Golini	2000	CGK	23M	6 Months
	Pipeline construction of Mbuguni water pipeline	Tsimba Golini	633	CGK	7.5M	3 Months
	Drilling and equipping of solarized borehole at Magomani	Tiwi ward	300	CGK	4.5M	60% complete
	Equiping of Vukani BH	Bongwe	400	CGK	4.5M	6 MONTHS
	Drilling of Mwalaini BH	Bongwe	300	CGK	4.0M	6 MONTHS
	Mwaluvanga pipeline	kubosouth	400	CGK	4.5M	3MONTHS

	Drilling and equipping of Dzibwage Borehole	Ramisi	300	CGK	3.5m	3 MONTHS
	Rehabilitation of Msulwa –Mazumalume pipeline	Tsimba Golini	800	NDMA	7M	6 MONTHS
	Pipeline extention works from Fihoni borehole	Ramisi	750	NDMA	3.7M	3 MONTHS
Livestock Farming Livelihood zone	Rehabilitation and Improvement of sapo mbuluni borehole	Ndavaya	500	Red Cross	3.5M	3 Months
	Bofu dam	Kasemeni	2000	CGK	80M	1 Year
	Extension of kituoni Mitunguni pipeline	Samburu/ Chengoni	800	NDMA	7.6M	3 Months
	Silaloni Dam	Samburu	6000	CGK	40M-	6 Months
	Pipeline extension works from Mbuluni-Mluto and Kifyonzo	Ndavaya	750	NDMA	13.3 M	3 MONTHS
	Construction of Kalalani Magombani pipeline	Lungalunga	500	NDMA	8.9M	3 MONTHS
	Supply of 35 pvc water tanks in Kinango, Samburu and Lunga sub- counties and Construction of tanks bases	3 sub-counties on selected sites	5000	World vision	7.8m	Tanks delivered; 27 bases alredy constructed
	Equiping of Mwalewa/Charambeni BH- Chitsukwa Tank pipeline	Lunga	800	NDMA	8.6m	3 Months

Health Sector ongoing interventions

Sub County/Ward	Objectives	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources
All sub counties	To enhance evidence-based decision making	Conduct Nutrition assessment and integrated outreaches for malnutrition cases to the most affected areas in all children below 5 years (Mass screenings and outreaches)	COUNTY	143,519	MOH, PARTNERS	3,000,000	0
All sub counties	To reduce the occurrence and severity of diarrhea.	Scale up Zinc Supplementation	Kwale	N/A	MOH	309,184	
All sub counties	To reduce risks of morbidity and mortality.	Scale up Management of Acute Malnutrition (IMAM) through training of HCWs.	Kwale	160	MOH/PARTNERS	1,600,000	0
All sub counties	To improve knowledge, attitudes and behavior on infants and young child feeding.	Training on Baby Friendly community initiative	Kwale	160	MOH/PARTNERS	4,000,000	0

Education Sector ongoing interventions

Sub-county	Ward	Location	Intervention	Level of school (Pre-primary/primary/Junior School/Secondary)	No. of beneficiaries	Implementers	Impacts in terms of food security	Timeframe
Matuga	All	All	School Meals	All	10199	CGK, WELL WISHERS	Retention	Throughout
Matuga			Water Tanks	All	7867	BASE TITANIUM GOK, CGK, BANK	Health Hygiene	Termly
Matuga			Bursaries	Pri, Jss, Sec	13977	CGK, BANKS	Curb Drop Out	Yearly
Matuga			Sanitary Towels	Pri,Sec	10690	GOK/MOE ,W, well wishers	Transition Improvement, Retension	Throughout
Msambweni	All	All	Bursary	Secondary	4800	CGK, GOK	Academic Achievement	Annual
Lungalunga	Vanga	Lungalunga	N/A	N/A	N/A	N/A	N/A	N/A
Shimba Hills	All	All	Ecde Porridge Bursary	Primary/Secondary	2324	Cgk	Retention	Throughout
Shimba Hills					4000	Cgk,kcb,equity	Retention	Yearly
Kinango	Kinango	Kinango	Water Treatment	Primary	20,000	NGOS	Increase In Admissions	3 Months

5.3 Recommended interventions

5.3.1 Food interventions

Table 6: **Population in need of immediate food assistance**

S/No	Sub county	Rank	Popn	No of HH	%in need	Popn in Need	HH in Need
1	**Samburu Kwale**	1	202,235	35070	10	**20,224**	**3,507**
2	**Kinango**	2	94,220	16043	10	**9,421**	**1,604**
3	**Lungalunga**	3	198,423	37366	5	**9,921**	**1,868**
4	**Matuga**	4	194,252	39,231	5	**9,713**	**19,62**

5	**Msambweni**	5	177690	45,466	5	**8,885**	**2,273**
	Grand Total				**6.71%**	**58,164**	**11,214**

5.3.2 Non-food interventions

Agriculture Recommended Interventions

Immediate interventions

Sub County	Ward	Intervention	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
kinango	Puma	Rehabilitation of water pans	20000 Households	Water services department	10million	County supervision	March 2024
All sub counties	All Wards	Intensified Training of farmers on GAP	20000 farmers	Department of Agriculture	5 million	Technical officers Motor bikes	March 2024-July 2024
All sub counties	All Wards	Opening up of more pick points of the subsidized fertilizer and	1000 farmers	Department of Agriculture	10 million	Technical officers Motor bikes	March 2024-July 2024
All sub counties	All Wards	sensitization of the community about their availability	20000 farmers	Department of Agriculture	5 million	Technical officers Motor bikes	March 2024-July 2024

Livestock Sector Recommended Interventions

Recommended interventions – short, medium and long term							
County	**Sub County**	**Intervention**	**No. of beneficiaries**	**Proposed Implementers**	**Required Resources**	**Available Resources**	**Time Frame**
Kwale	Kinango	Farmer trainings on pasture conservation	700 households	County Government of Kwale, Livestock Production Division	2 million	Technical officers Motor bikes	March-July 2024
Kwale	Lungalunga	Farmer trainings on pasture conservation	400 households	County Government of Kwale, Livestock Production Division	2 million	Technical officers Motor bikes	March-July 2024
Kwale	Matuga	Farmer trainings on	500 households	County Government of Kwale,	2 million	Technical officers	March-July 2024

		pasture conservation		Livestock Production Division		Motor bikes	
Kwale	Msambweni	Farmer trainings on pasture conservation	400 households	County Government of Kwale, Livestock Production Division	2 million	Technical officers Motor bikes	March-July 2024
Kwale	Lungalunga Kinango, Matuga and Msambweni	Farmer trainings on Azolla farming and milk value addition	500 households	County Government of Kwale, Livestock Production Division	2 million	Technical officers Motor bikes	March-July 2024

Water Sector Recommended Interventions

Sub County/ Ward	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Mixed farming livelihood zone	Rehabilitation of Marere-Mkongani pipeline	Mkongani	1200	CGK	6m	6M	6 month
	Mtsangatamu community pipeline extension	Mtsangatamu	250	CGK	6m	3M	3 month
	Drilling and equipping of kiuzini bh.	Kiuzini-kinondo	350	CGK	6m	6m	3months
Livestock farmimg livelihood zone	Desiltation & expansion of bengo water pan	Dzombo	2500	CGK	12.5m	14.5m	
	Kilibasi dam water distribution network	Mackinnon	25,000	CGK	-	-	24/25
	Expansion of existing water pipelines	Samburu	15,000	CGK	150m	50m	6months

	Construction of more small dams and water pans	Samburu	50000	CGK and Partners	200m	50m	6months

Health and nutrition Recommended Interventions

Sub County/Ward	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources
County	Conduct Nutrition assessment and integrated outreaches for malnutrition cases to the most affected areas in all children below 5 years (Mass screenings and outreaches)	COUNTY	143,519	MOH, PARTNERS	3,000,000	0
County	Scale up Zinc Supplementation	Kwale	N/A	MOH	309,184	
County	Scale up Management of Acute Malnutrition (IMAM) through training of HCWs.	Kwale	160	MOH/PARTNERS	1,600,000	0
County	Training on Baby Friendly community initiative	Kwale	160	MOH/PARTNERS	4,000,000	0

Education Recommended Interventions

Sub-county	Ward	Intervention	Level of school (Pre-primary/primary/Junior School/Secondary)	No. of schools	No. of targeted beneficiaries	Proposed Implementers	Required Resources Kshs	Available Resources Kshs	Resource Gap Kshs	Timeframe
Matuga	All	School Meals	Pre-Primary, Primary, Jss, Sec	204	34126	GOK, WFP, CGK	36m	Nil	36m	Termly
Matuga		Water Tanks	Pri And Jss	30	34126	WELL WISHERS	5m	Nil	5m	Once
Matuga		Bursaries	Sec	18	13977	GOK, WFP, CGK	200m	Gok, Subsidy	200 m	Yearly
Matuga		Sanitary Towels	Sec	18	10521	GOK, CGK, WELL WISHERS	526,000	Nil	526, 000	Throughout
Msambweni	All	Bursaries	Secondary	37	4930	CGK, MOE	150 m	Gok Subsidy	150 M	Yearly
Lungalunga		The Government To Disburse Capitation To Schools For Meal Program	Primary And Secondary	117	N/A	County, National government and well wishers	1,000,000,000	None	None	Feb – March 2024
Shimba Hills	Kubo South	School Meals	Pre-Primary	99	2324	Cgk	35m	Nil	nil	Termly
Shimba Hills	Mkongani	Water Tanks	Primary/Junior Secondary	50		WFP,MOE	4m	Nil		Once
Shimba Hills		Bursaries	Secondary	18	5429	GOK,CGK	200m	Gok subsidy		Yearly
Kinango	Kinango		Primary	84	23866					