



A Vision 2030 Flagship Project



**National Drought Management Authority
KILIFI COUNTY
DROUGHT EARLY WARNING BULLETIN FOR AUGUST 2021**

AUGUST EW PHASE	Early Warning Phase Classification		
<div style="background-color: yellow; padding: 10px; text-align: center;"> <p>Drought Status: ALERT</p> <p>Maandalizi ya mapema</p> </div>	LIVELIHOOD ZONE	EW PHASE	TRENDS
	Marginal Mixed Farming	Alert	Deteriorating
	Livestock/Ranching	Alarm	Worsening
	Cash Cropping/Dairy	Alarm	Worsening
	Food Cropping	Alert	Deteriorating
	Mixed Farming zone	Alert	Deteriorating
	County	Alert	Deteriorating

Drought Situation & EW Phase Classification

Biophysical Indicators (Environmental indicators)

- The month under review recorded minimal to no rains compared to the previous month.
- The state of water sources on average ranged between fair to poor across the livelihood zones indicating a below normal situation for this time of the year.
- The county recorded on average moderate drought with some pockets recording poor to depleted pastures condition, a below normal situation for this time of the year.

Socio Economic Indicators (Impact Indicators)

Production indicators

- On average the livestock body condition for all species ranged from fair to poor across the livelihood zone.
- Season's crop still in the farms recorded moisture stress.
- Milk production recorded a decrease during the month under review.

Access indicators

- Average distance to water sources by households and livestock recorded an increase in the month of August compared to the previous month.
- Average livestock prices recorded a decrease for the month under review compared to the previous month.
- Average maize price remained stable compared to the previous month while beans recorded a decrease.
- Terms of Trade remain stable during the month under review compared to the previous month.

Utilization indicators

- The month under review recorded 0.3% cases of children under -five years at risk of malnutrition.

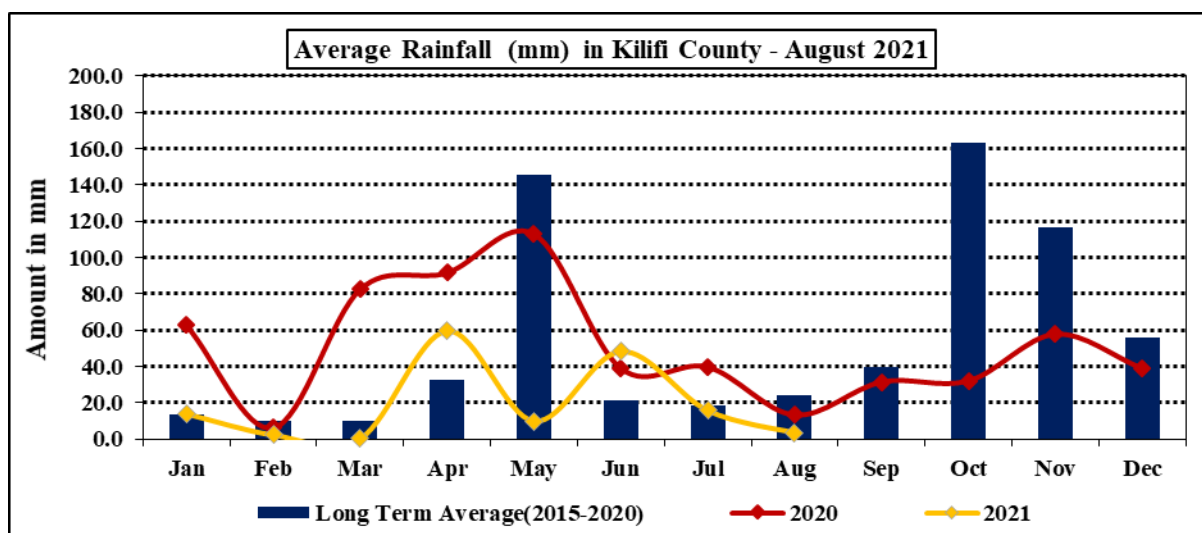
Biophysical Indicators	Value	Normal ranges
Rainfall (Average)	15.8mm	18.90 mm
VCI-3 month	21.19	35-50
Average Forage Condition	Poor	Fair
Production indicators	Value	Normal ranges
Maize Crop Condition	Poor	Good
Livestock Body Condition	Fair-Poor	Good
Milk Production (in liters)	1.7	4.3
Livestock Migration Pattern	inter and out migration	Inter- migration
Livestock Deaths (from Drought)	Suspected cases	None
Access Indicators	Value	Normal ranges
Terms of Trade (ToT)	111.9	86.7
Milk Consumption (in litres)	1.1	1.5
Average Distance to Water Sources (in km)	4.2	5.5
Average Distance to Water Sources from grazing (in km)	5.1	7.6
Utilization indicators	Value	Normal ranges
Nutrition Status, MUAC (% at risk of malnutrition)	0.3	0-3

<ul style="list-style-type: none"> Short rains harvests Short dry spell Reduced milk yields Increased HH Food Stocks Land preparation 	<ul style="list-style-type: none"> Long rains Planting/Weeding High calving Rate Milk yields Increase 	<ul style="list-style-type: none"> Long rains harvests A long dry spell Land preparation Increased HH Food Stocks Kidding (Sept) 	<ul style="list-style-type: none"> Short rains Planting/weeding/pest control/ 								
Dry Season	Long Rains	Dry Cool Season	Short Rains Season								
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

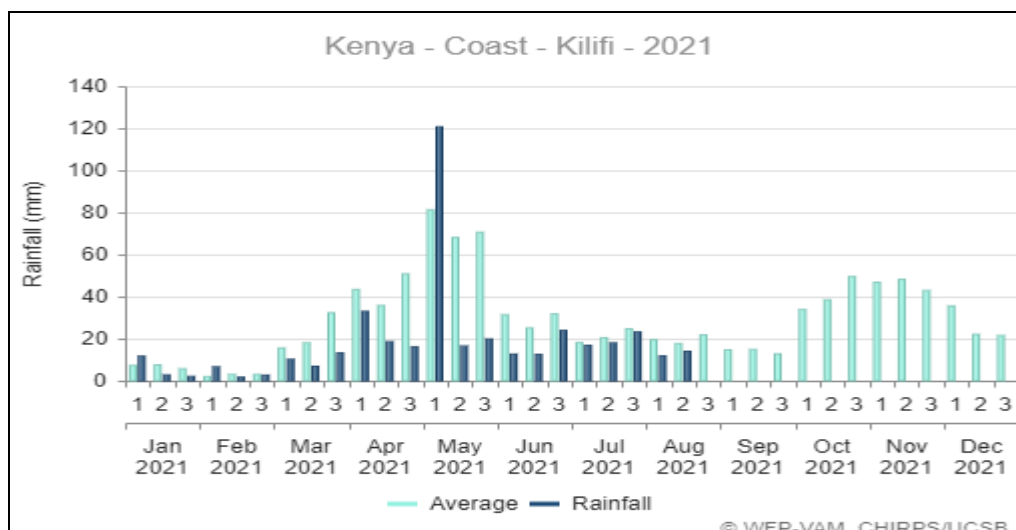
1.0 CLIMATIC CONDITIONS

1.1 Rainfall performance

- The month under review recorded very little to no rains, a decrease of 77.1 percent compared to the previous month.
- The cash and food cropping zone recorded the no amount of rainfall while the Livestock Farming zone recorded the highest of 17.4mm.
- Spatial distribution was uneven as most parts of the Mixed Farming and Marginal Mixed farming zones recorded little showers to zero mm in rainfall.
- The amount recorded during the month under review was 16.4 percent below the long term mean at this time of the year.



- The rainfall amounts recorded across the dekads were below the long term means at this time of the year as per the Rainfall Estimate (RFE) graph below.
- The month of August was generally dry and windy.

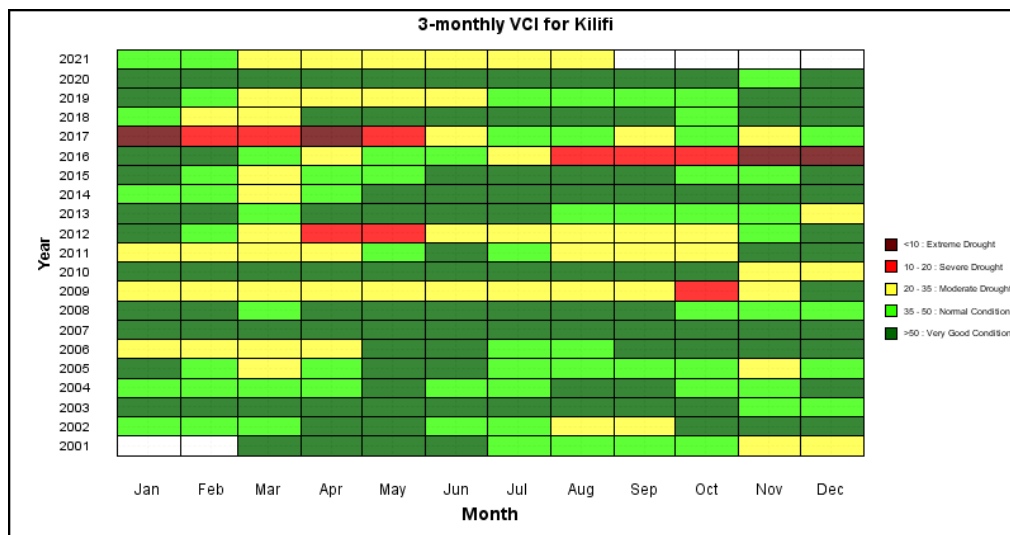


2.0 IMPACT ON VEGETATION

2.1 Vegetation Condition

2.1.1 Vegetation Condition Index [VCI]

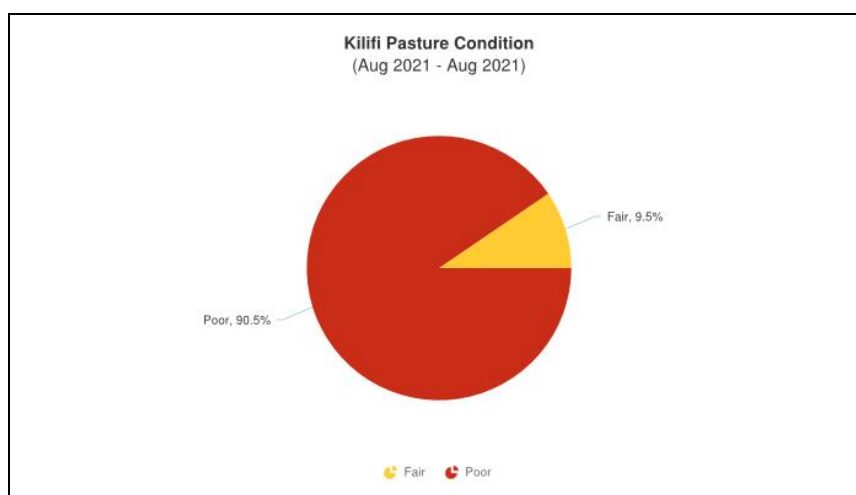
- The Vegetation Condition Index (VCI) compares the current NDVI to the range of values observed in the same period in previous years. The VCI is expressed in % and gives the position of the observed value within extreme values (minimum and maximum) in the previous years.



- On average the county recorded moderate vegetation condition index of 21.19.
- Kaloleni, Ganze, Malindi and Rabai sub counties recorded severe drought condition of 15.23, 17.24, 19.41 and 14.39 respectively which was below for this time of the year.
- The vegetation condition was significantly below normal compared to the previous year.

2.1.2 Pasture

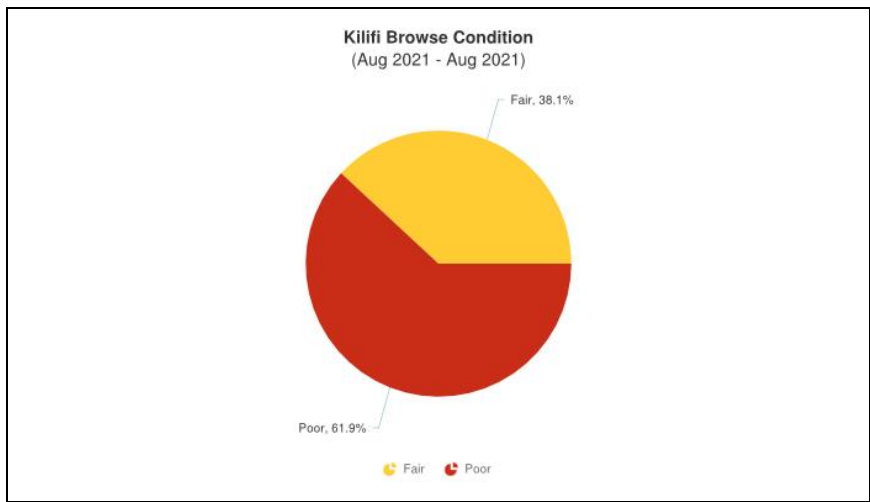
- Pasture condition remained poor to depletion in areas of Ganze, Magarini, Malindi and parts of Kaloleni sub counties.
- Pasture condition expected to continue deteriorating in parts of Ganze, Magarini, Malindi, Kilifi South and Rabai sub counties as the dry spell continued.
- Significant percentage (90.5) of sampled households across the livelihood zones recorded poor pasture condition, with 9.5% recorded fair pasture condition
- Out Migration of livestock to Kwale, no in-migration has been noted.
- On average the current pasture condition was below normal during this time of the year 2021



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2.1.3 Browse

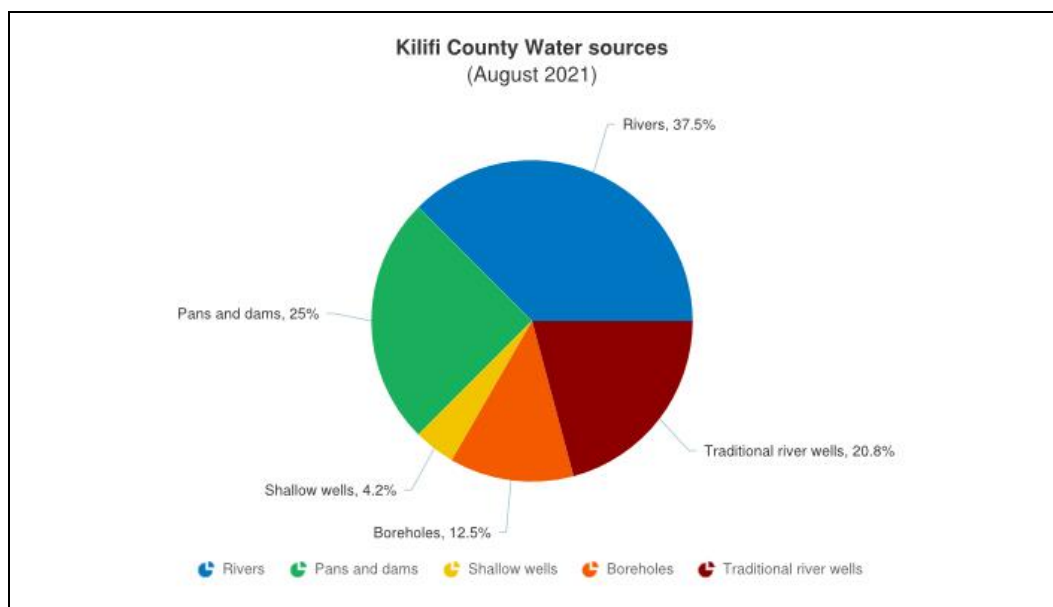
- In the month of August, significant percentage of sampled households across the livelihood zone recorded between fair to poor browse condition.
- Browse condition expected to deteriorate in Kilifi South, Rabai, Magarini, Malindi and Kaloleni sub counties as the dry spell continued.
- Browse condition was below normal at this time of the year.



2.2 Water Resources

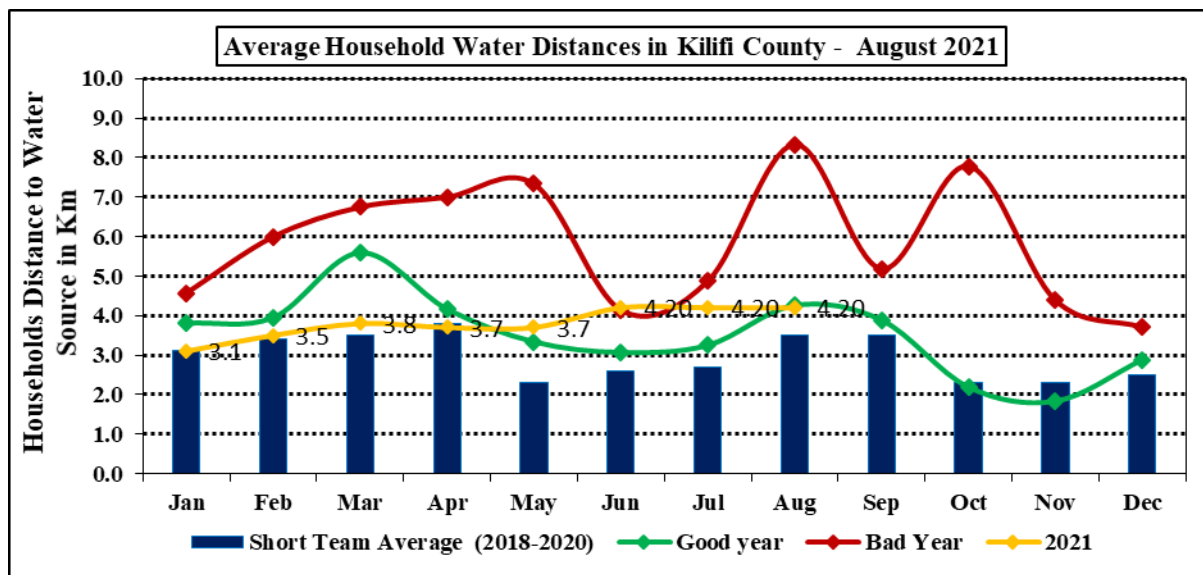
2.2.1 Water Sources

- A larger percentage (37.5) of sampled households depended on Rivers with 25 percent depending on pans & dams and 20.8 percent depended on traditional river wells with a few depending on other sources for water supply in the month of August.
- Rabai, Kilifi South, Ganze, Kaloleni and Magarini sub counties where rains were scarce continued to recorded water stress as the pans and dams remained dry.
- The water condition in the water sources was below normal during this time of the year following poor two conservative rain seasons.



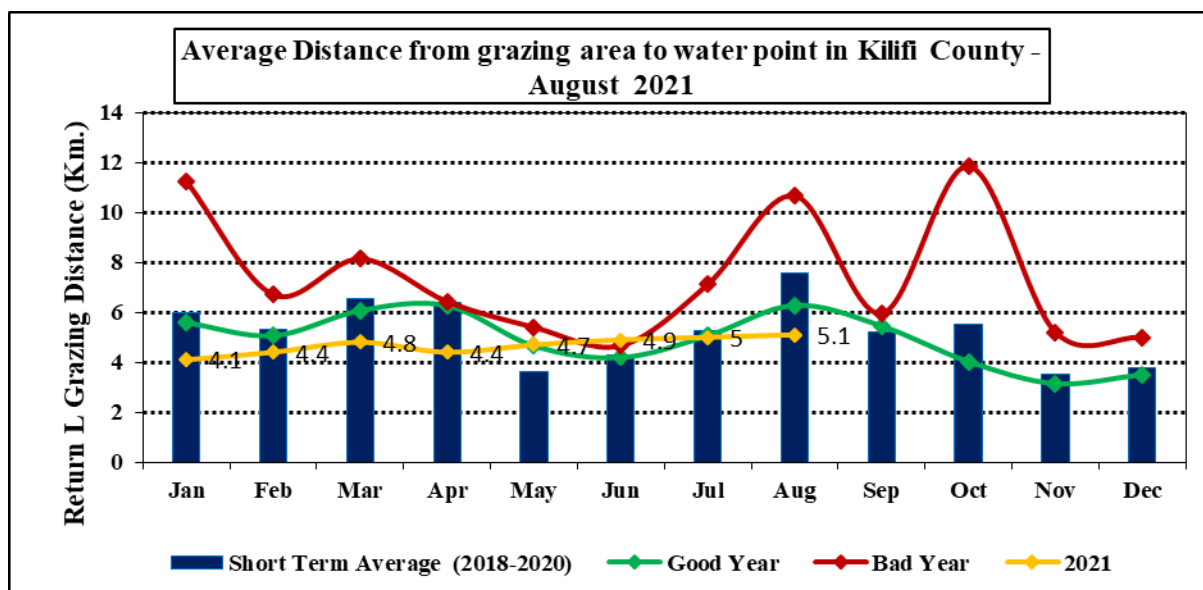
2.2.2 Household water access and utilization

- The average household distance to water sources for the month under review has remained the same as compared to the previous month.
- This can be attributed to poor recharge of the pans and dams in parts of Ganze, Magarini, Kaloleni, Kilifi South Malindi and Rabai sub counties.
- The livestock farming and Marginal Mixed Farming zones recorded the highest average distance of 7 kms.
- The average distance during the month under review was higher compared to the short term average at this time of the year.



2.2.3 Livestock access to water

- The month under review recorded an increase of 2.0 percent in average distance to water sources from 5.0 kms for the previous month to 5.1kms.
- The increase can be attributed to minimal recharge of water pan and intra-migration in search for water and pasture mainly in Ganze, Magarini, Kaloleni and Malindi sub counties.
- The average distance during the month under review was above the short term average at this time of the year.

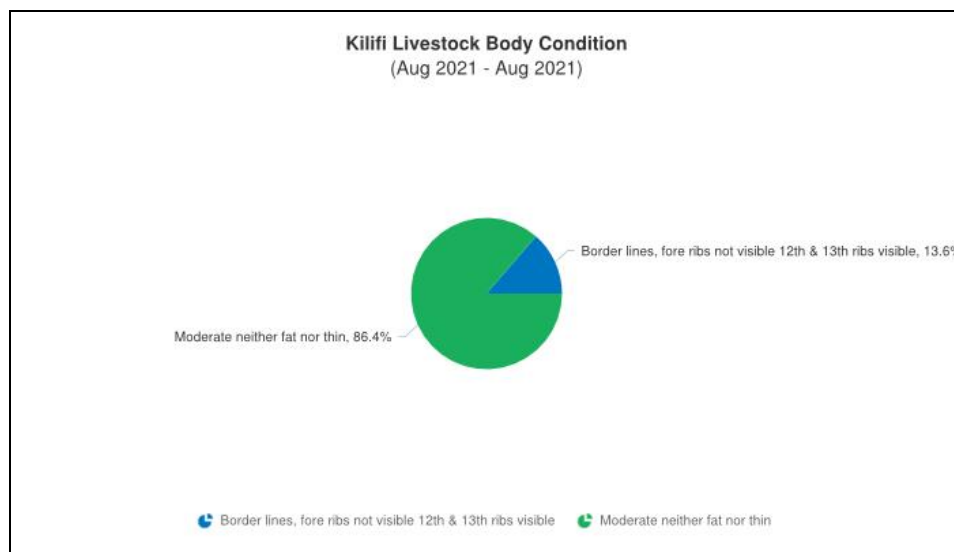


3.0 PRODUCTION

3.1 Livestock Production

3.1.1 Livestock body condition

- Average livestock body condition still ranged between fair to poor as pasture and waters access varied across the livelihood zones.
- On average, 13.6 percent of sampled households recorded borderline fore ribs not visible 12th & 13th ribs visible while 86.4 percent recorded moderate neither fat nor thin body condition. Some parts in Adu ward in Magarini sub county, Sokoke, Bamba in Ganze, Kayafungo in Kaloleni and Jilore in Malindi recorded significantly poor cattle body condition due to pasture and water stress.
- Body condition expected to deteriorate further in some parts of the livestock, cash cropping and Marginal Mixed farming zones.
- Average body condition was below normal at this time of the year.



3.1.2 Livestock disease

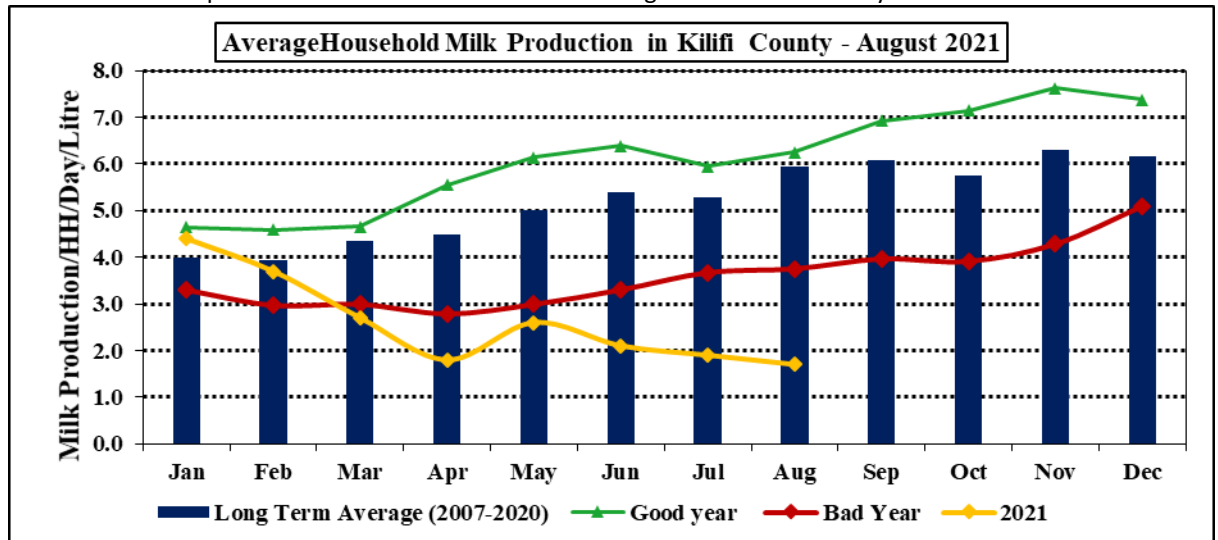
- Cases of NCD and CCPP were reported in some parts of Ganze, Kilifi South and Magarini sub counties.

3.1.3 Livestock Migration.

- Cases of intra-migration of cattle were reported in Ganze and Magarini sub counties in search for pasture and water.
- Out-migration was reported too from Bamba ward in Ganze in search for pasture.
- Also inter-migration from Tana-River was too recorded into livestock farming zones which is expected to increase.

3.1.4 Milk production

- Milk production during the month of August recorded 10.5 percent decrease compared to the previous month 1.9ltrs/hh/day to 1.7 ltrs/hh/day.
- The decrease can be attributed to poor livestock body condition due to water and pasture stress in some parts of the County.
- The production was 60.5 percent lower than the short term average at this time of the year.



3.2 Rain Fed Crop Production

3.2.1 Stage and condition of food crops

- Late planted maize crop was in fair to poor condition in some parts of the food cropping and mixed farming zones with significant Farm Army Worn infestation.
- Most parts where the early planted maize crop dried up, replanting took place in late June and the crop was knee high but recorded moisture stress.
- Cassava crop condition ranged between fair to good in parts of mixed farming, food cropping and cash cropping/dairy zones.
- Fall Army warm infestation was evident in most farms with most farmers who had lost hope on the coming of the rains, never sprayed the crop.

3.2.2. Crop Harvest

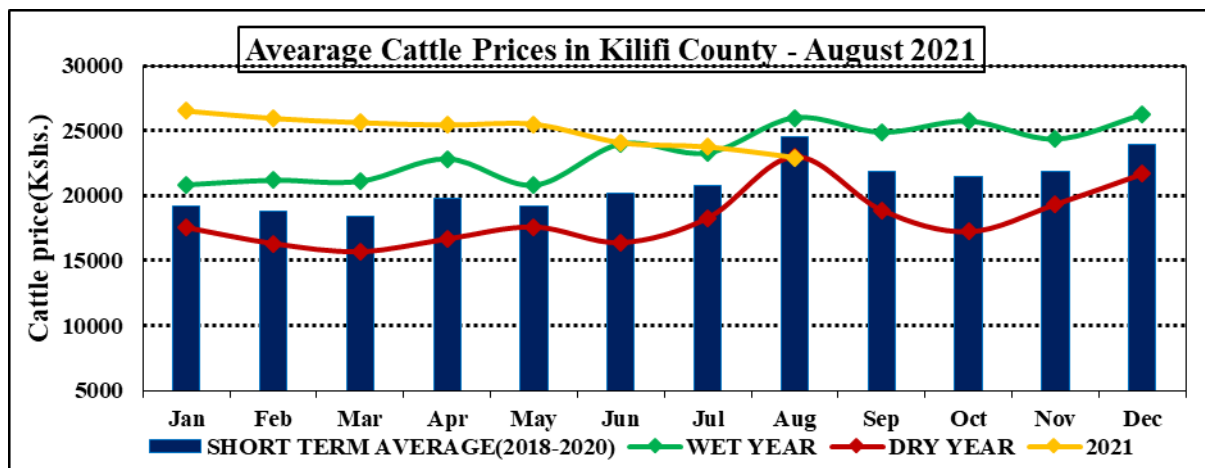
- Cassava, vegetables and mangoes were the main crops harvested during the month under review.

4.0 MARKET PERFORMANCE

4.1. LIVESTOCK MARKET

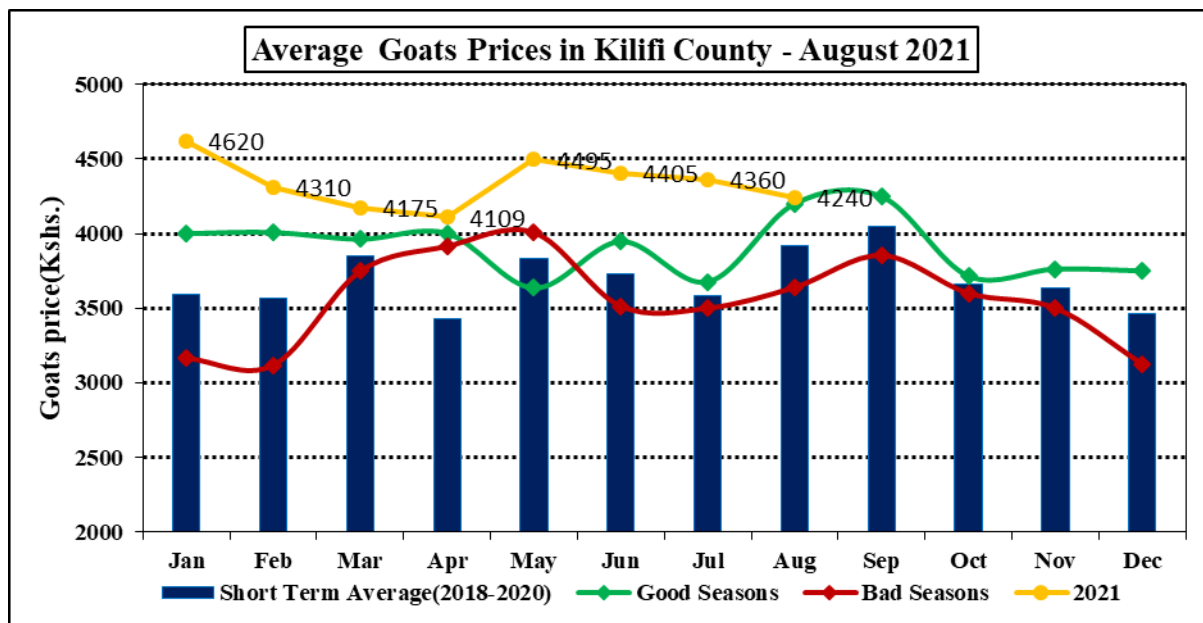
4.1.1 Cattle prices.

- Average price for a 4-year old bull during the month under review recorded a slight decrease of 3.1percent to Ksh 22,450 compared to the previous month which recorded Kshs.23, 174.
- The decrease can be attributed to decrease in livestock body condition due to pasture and water stress in some parts of the livestock farming, cash cropping/dairy and Marginal Mixed Farming zones.
- The price was 6.1 percent above the short term mean at this time of the year.



4.1.2 Goat prices

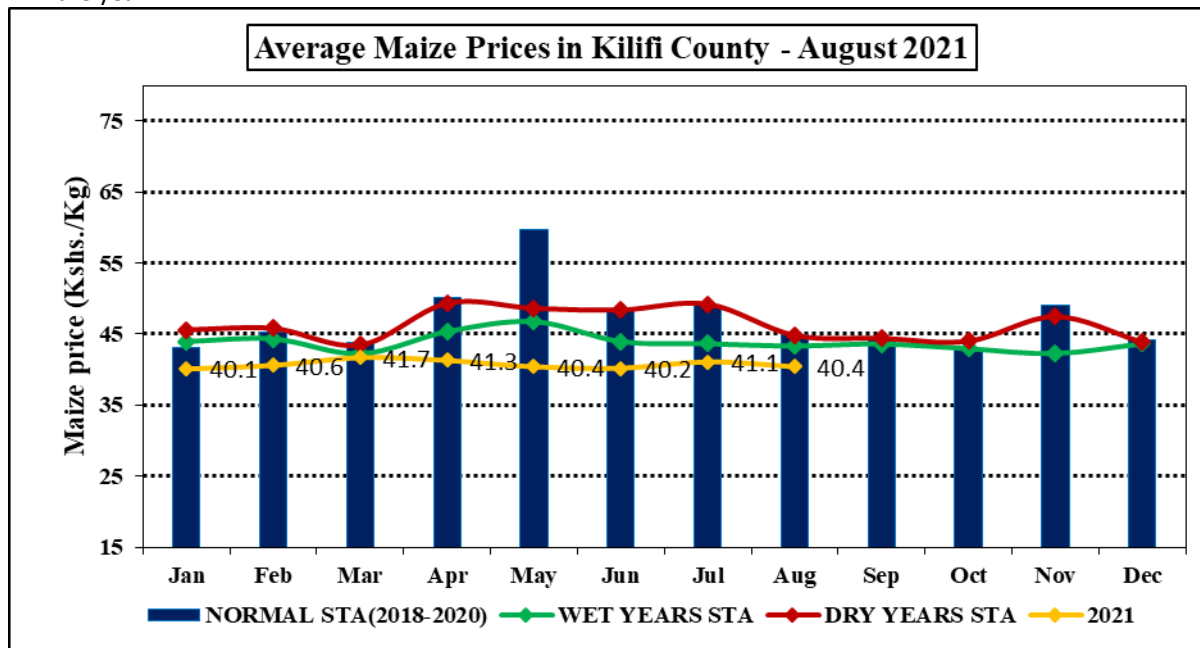
- Average price of a 3-year-old medium sized buck during the month under review recorded a decrease (2.7 percent) of Ksh 4,240 from ksh 4,356 compared to the previous month.
- The decrease can be attributed to high supply in the market due to deteriorating browse and pasture across the livelihood zones. Increased distances have also contributed.
- Poor Body condition of livestock also affected prices.
- The month's average price was 36.2 percent higher than the short term mean at this time of the year



4.2 Crop prices

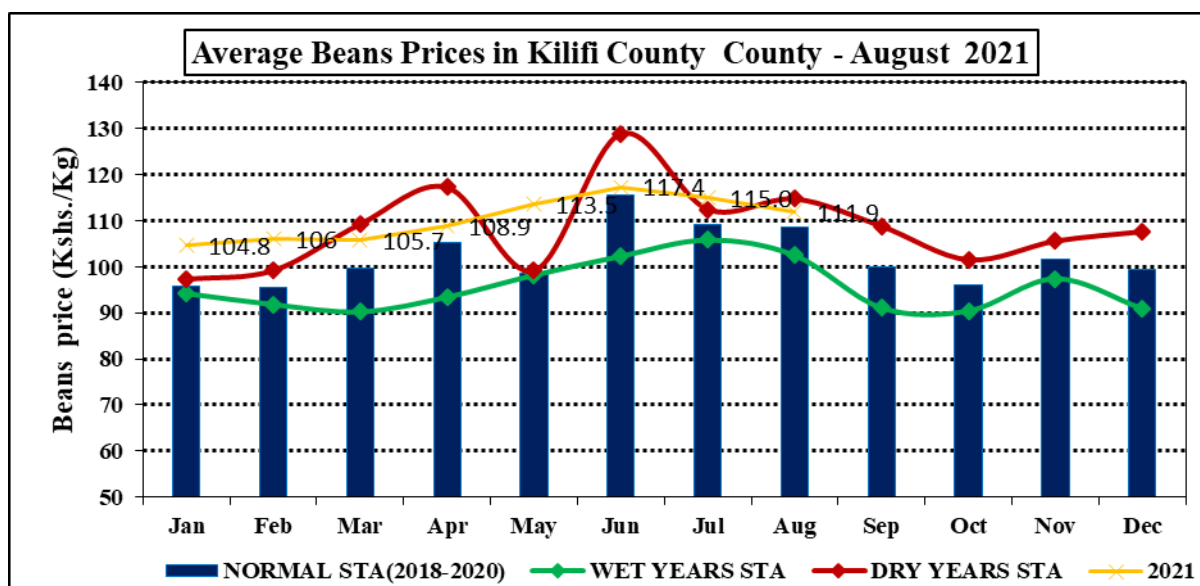
4.2.1 Maize

- The average price of a kilo of maize remained stable at Kshs. 40.4 during the month under review compared to the previous month which recorded Kshs. 40.2.
- The stability can be attributed to preference for sifted maize meal compared to maize which was scarce in the market following poor 2021 long rains season.
- The month's average price was 10.2 percent lower compared to the short term mean at this time of the year.



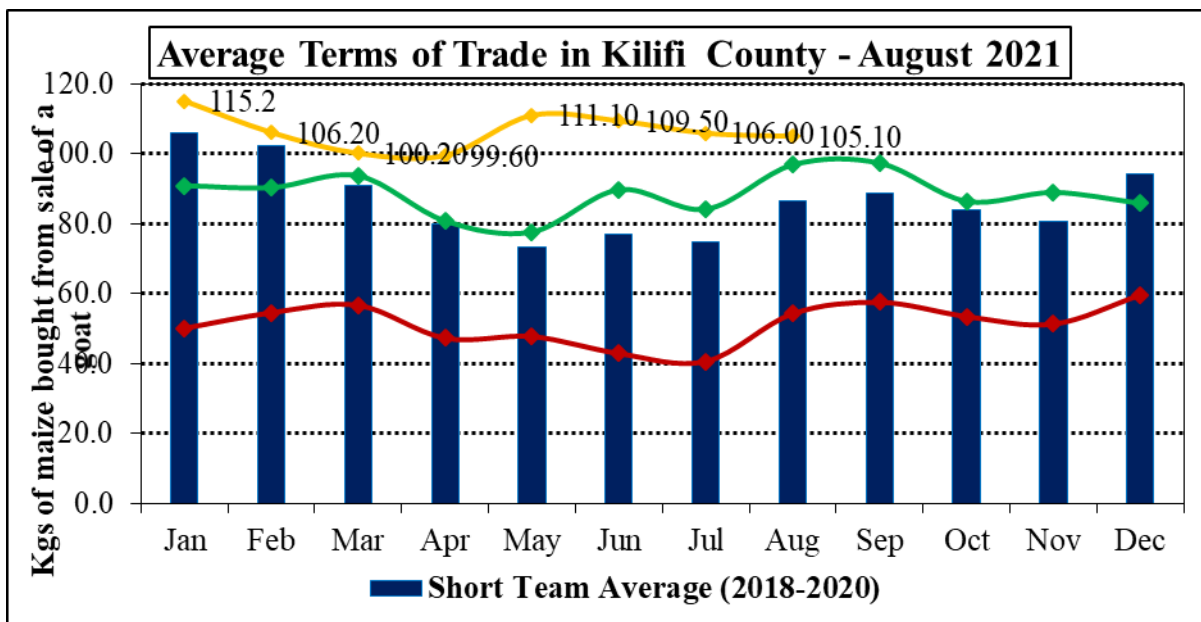
4.2.2 Beans

- The average price of a kilo of beans recorded 1.8 percent decrease from Ksh. 115 recorded in the previous month to Ksh. 111.9 in August.
- The decrease can be attributed to increase in supply from outside the county where the rains were fair. The price is expected to remain high as the long rains harvest remained poor.
- The month's average price/kg was 4.9 percent higher than the short term mean at this time of the year.



4.3 Terms of Trade (ToT)

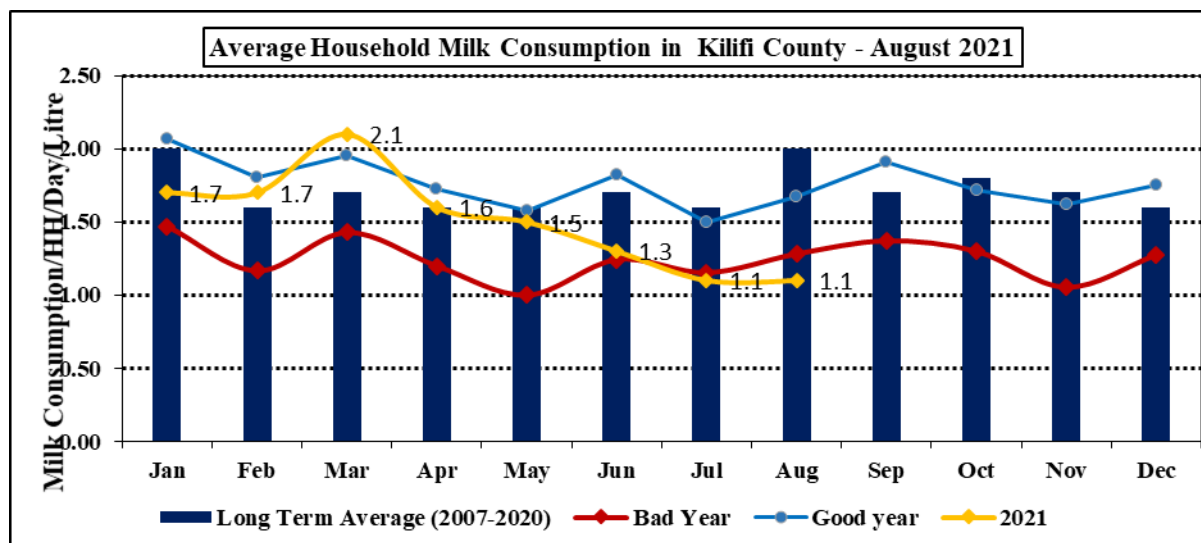
- The month under review recorded remained stable as compared to the previous month.
- The stability can be attributed to stable goat prices as the average maize prices.
- The ToT for the month under review was 21.2 percent higher than the short term average at this time of the year.



5.0 NUTRITION STATUS

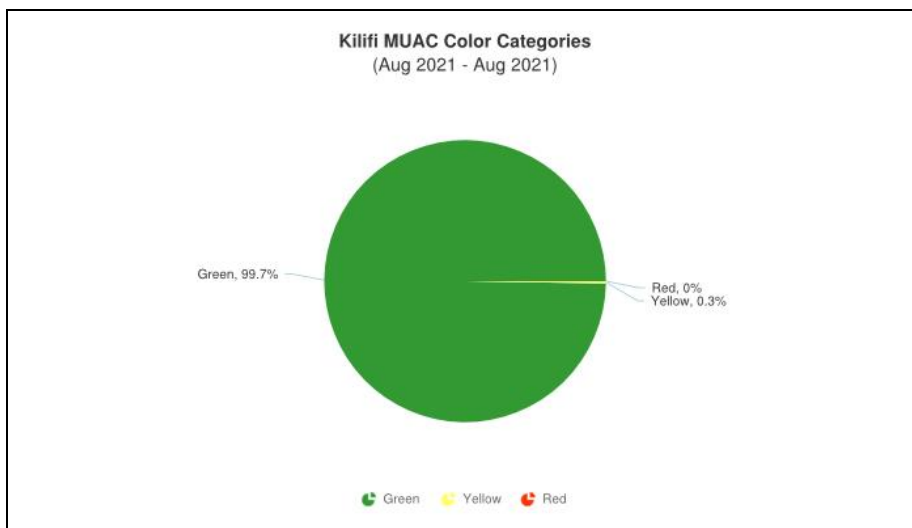
5.1 Milk Consumption

- Milk consumption during the month under review remained the same at 1.1ltrs/hh/day as compared to the previous month.
- Despite the decline in production during the month under review and pasture & water stress in most areas continued to increase, Households has maintained the consumption for lack of better alternatives.
- The current consumption was 26.7 percent compared to Long Term Average at this time of the year.



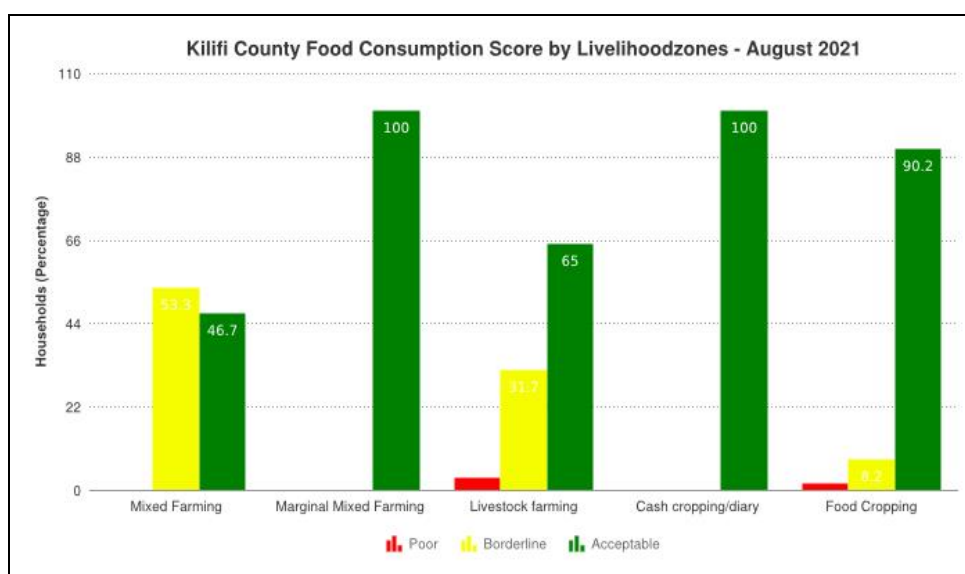
5.2 Health and Nutrition Status

- Households continued to struggle to put food on the table despite a significantly poor season.
- Household going an extra mile to ensure under five years are able to take three meals a day.
- The month of August recorded 0.3 percent of children under- five years at risk of malnutrition but nutrition department continued raise in alarm for hard to reach area where defaulter and malnutrition cases were high.
- This situation is expected to deteriorate in the livestock farming, Marginal Mixed Farming zones of Ganze and Magarini sub counties, cash cropping zone of Rabai sub county, Marginal Mixed Farming Zone of Kaloleni Sub County due to poor season’s contribution to food security.



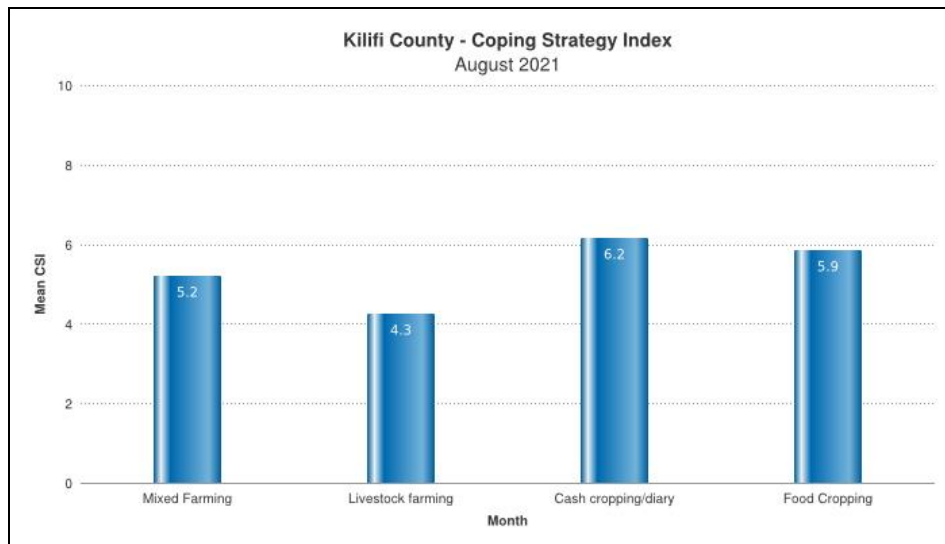
5.2.2 Food Consumption Score

- A high proportion of sampled households, 79.5 percent across livelihood zones recorded acceptable food consumption with 19.1 percent recording borderline food consumption and 1.4 percent recording poor consumption.
- Following poor seasons recorded across the livelihood zones for the last two years, significant percentage of households had shifted to charcoal burning and selling firewood selling to put food on the table at the end of the day.
- The Mixed Farming and livestock farming zones recorded the highest percent of households at borderline with only the livestock farming zone recording households at poor band on food consumption.
- Food consumption expected to decline across the livelihood zones following poor season harvest.



5.3 COPING STRATEGIES

- The month under review recorded an average of 4.51 coping Strategy Index (CSI) with Food cropping zone recording the highest score followed by cash cropping/dairy and livestock farming zones an indication of food shortages in these zones.
- Reduction in the number of meals and portion was the main consumption strategy employed.
- On average the CSI is expected to increase for cash cropping/dairy and livestock farming zones but decrease in other livelihood zones.



6.0 CURRENT ONGOING INTERVENTION MEASURES

6.1 Food- aid

- Supplementary feeding at health facilities by department of nutrition in the Ministry of Health and other relevant partners.
- Food assistance by plan-international.

6.2 Non-food aid

Health Sector

Continuation of routine activities;

- Therapeutic Feeding Programs to manage acute malnutrition (SFP, OTP, ITP) in the entire county
- Baby-Friendly Community Initiative in Ganze, Kaloleni and Magarini sub counties
- Iron Folate Supplementation among Pregnant Women in the entire county
- Capacity building of C/SCHMT on nutrition service delivery business continuity process in the context of COVID-19 in the entire county

Crops Sector

- Implementation of Kcep-CRAL Programme in support for farmers through Voucher-system.
- Community capacity development Sustainable Land Management and coconut farming by NARIGP.
- Community support to Kitchen gardening for improved nutrition by World Vision
- Support to irrigated agriculture by , Coast Development Authority, ADS Pwani and County government of Kilifi
- Commercialization of Cassava Value Addition by ASDSPUstadi Foundation.

Livestock sector

- Distribution of dairy meals and mineral salts by County Government of Kilifi
- Promotion on dairy production by NARIGP and County Government of Kilifi
- Promotion on Poultry farming by ASDSP and Ustadi foundation.
- Disease surveillance by county government-veterinary services department.
- Training farmer groups on various livestock enterprises by County Government of Kilifi.

Water Sector

- Water trucking to areas worst hit with waters scarcity in Ganze and Magarini sub counties by the county water department.

Social protection sector.

- Cash transfer by world vision, Kenya Red Cross, CHEPS, and County government

EMERGING ISSUES

- Human-Wildlife conflicts in areas of Ganze, Kaloleni and Magarini sub counties over water resource.
- Significantly below normal long rains harvest, worst in many years.

7.1 FOOD SECURITY PROGNOSIS

- Kilifi County household food security continued decreasing following poor performance of the last two seasons.
- Significantly below normal harvest was recorded during the 2021 long rains due to poor temporal and uneven spatial distribution across the livelihood zones.
- Food prices expected to remain high as most households depended on the market for food supply.
- Due to a poor season, pasture regeneration the cattle body condition expected to continue declining due to pasture stress.
- Average distance to water sources by both livestock and households expected to increase as more pans and dams continued to dry up.

8. RECOMMENDATIONS

Livestock Sector

- Activation of commercial off take as pasture scarcity continued in Bamba, Sokoke and Jaibuni wards in Ganze Sub County, Adu, Gongoni and Magarini wards in Magarini sub county, Jilore in Malindi Sub County and Rabai Sub County.
- Feed supplementation for vulnerable livestock in Jilore, Sokoke, Jaribuni, Ganze, Adu, Mwawesa, Bamba, Kayafungo and Mwanamwinga wards.
- Ecto – and Endo parasite control as inter and intra migration cases continued to be reported in Magarini and Ganze sub counties.
- Farmer’s capacity development on pasture production in areas which continued for the next season.
- Rehabilitation of Strategic water pans-Shomella, Ndigiria, Kayafungo, Kwa Buni, Mrya Chakwe.
- Vaccination against CCPP in Ganze, Magarini and Kaloleni Sub Counties.

Water Sector

- Rehabilitation of strategic water pans and earth dams which are currently dry – Shomella, Mrya Chakwe, Kadzifitseni and Kayafungo by water department and other partners.
- Water trucking to areas in Ganze, Kaloleni and Magarini sub counties recording water stress (Kamale, Palakuni, Vitsapuni, Mwawesa, Midoina, Gede, Ndigiria, Marereni, Msumarini, Boraimani, Bofu, Gotani, Tsangatsini and Ndatani) by water department and other partners.

Health Sector

- Support for health and nutritional outreaches across Ganze, Magarini, Kaloleni, parts of Malindi and Kilifi south sub counties.
- Close monitoring of cases of malnutrition at household level by nutrition department and other relevant partners.
- Capacity building of caregivers on Family MUAC across the Early Warning sites
- Defaulter tracing for nutritional monitoring

Crops Sector

- Community sensitization on irrigated agriculture as the rain-fed agriculture continued to perform poorly.
- Damming of water along river Sabaki for household and livestock use, food and fodder production.
- Revival and Expansion of irrigation schemes for crops and fodder production.

Coordination

- Initiate cash-transfers to most vulnerable household across the livelihood zones
- Close monitoring of drought situation in the county.
- Ensure coordinated effort in response by partners as some parts of the county continued to record food, water and pasture stress.