

National Drought Management Authority


Kilifi County

Drought Early Warning Bulletin for December 2019



A Vision 2030 Flagship Project



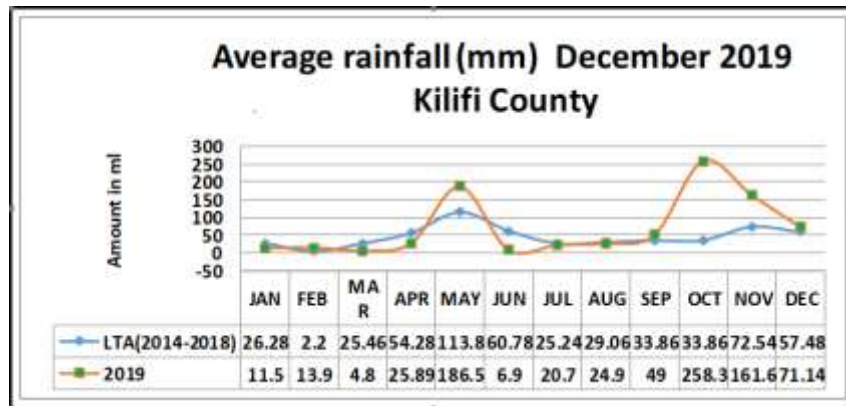
DECEMBER EW PHASE	Early Warning Phase Classification		
<p>Drought Status: NORMAL</p>  <p>Shughuli za kawaida</p>	LIVELIHOOD ZONE	EW PHASE	TRENDS
	Marginal Mixed farming	Normal	stable
	Livestock/Ranching	Normal	stable
	Cash Cropping/Dairy	Normal	stable
	Food Cropping	Normal	stable
<p>Biophysical Indicators (Environmental indicators)</p> <ul style="list-style-type: none"> The month of December recorded high amount of rains above long term mean at this time of the year. Vegetation condition continued to record an improvement across the livelihood zones. The state of water sources continued to improve due to recharge of surface water sources. <p>Socio Economic Indicators (Impact Indicators)</p> <p>Production indicators</p> <ul style="list-style-type: none"> Weeding and spraying were the main cropping activities during the month under review Livestock body condition was good across the zones. Milk production recorded a decrease compared to the previous month <p>Access indicators</p> <ul style="list-style-type: none"> Milk consumption recorded a slight decrease. Average distances to the water sources for households recorded minimal decrease while for livestock remained stable. Average food price remained high and expected to remain high till next good crop harvest. Terms of Trade recorded an increase in the month of December. <p>Utilization indicators</p> <ul style="list-style-type: none"> On average the proportion of children at risk of malnutrition showed an improvement compared to the previous month. Households' food consumption ranged between poor and acceptable with some parts of the county recording a high number at borderline. 	COUNTY	Normal	stable
	Biophysical Indicators	Value	Normal
	Average Rainfall (mm)	71.14	34
	VCI	82.73	35-50
	Production indicators	Value	Normal ranges
	Livestock Migration Pattern	No Migration	No migration
	Livestock Body Conditions	7	6-8
	Milk Production Ltr/hh/day	4	4.2
	Crop condition	Flowering /grain filling	Flowering /grain filling
	Access Indicators	Value	Normal
	Terms of Trade (ToT)	86.9	75
	Milk Consumption (% range)	1.2	2
	Average Water Distance for Households (Km)	1.3	≤2
	Average Grazing-Water point Distance (Km)	1.8	≤ 4.3
	Utilization indicators	Value	Normal ranges
Nutrition Status, MUAC (% at risk of malnutrition)	2.31	4.02	

<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/ 								
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

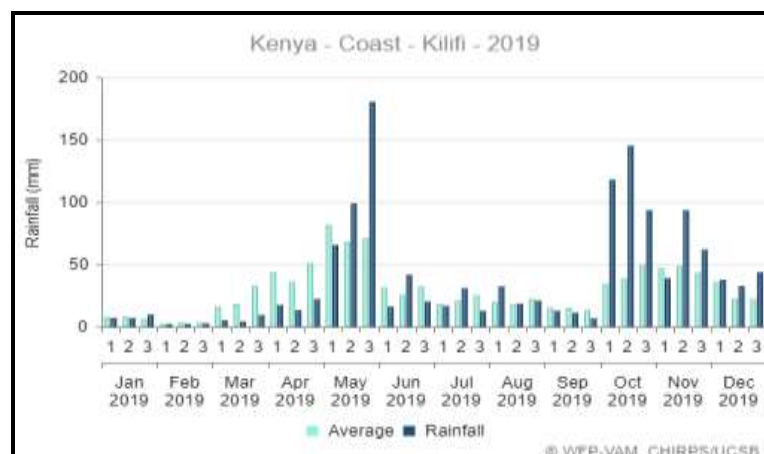
1.0 CLIMATIC CONDITIONS

1.1 Rainfall performance.

- The rains started early than forecasted for OND season with October and November recording more rains than normal.



- The month under review recorded some decrease in average amount compared to the previous month.
- Spatial distribution was uneven as the mixed farming zones recorded the highest average amount of 146.4mm, followed by the cash crop /dairy farming zones, which recorded an average of 118.4mm while the Marginal Mixed farming recorded the lowest amount of 4.6mm.
- Some areas in the Mixed farming and livestock livelihood zones recorded water logging leading to crop damages.
- The amount recorded in December was significantly higher compared to the long-term mean at this time of the year.



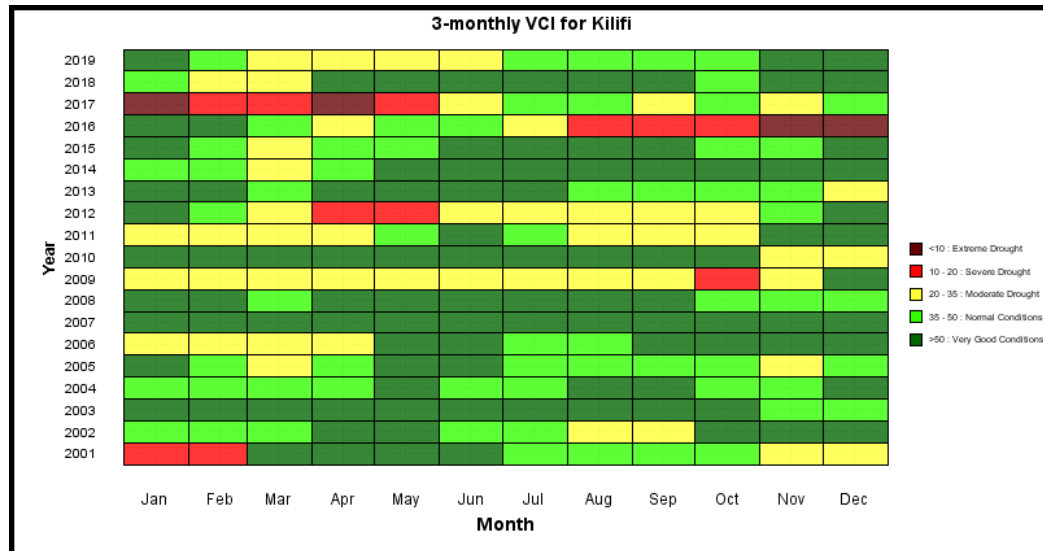
- Slightly above normal rains were recorded in the first dekad of December with 2nd dekad recording above long term mean rains at this time of the year.

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 an idea where the observed value is situated between the extreme values (minimum and maximum) in the previous years.



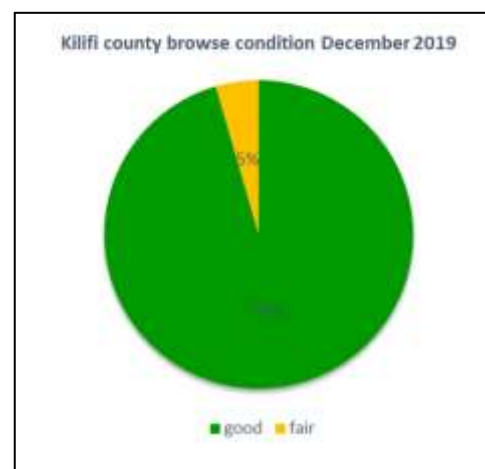
- Most areas across the county recorded an average of normal vegetation in the month of December.

2.1.2 Pasture

- Pasture condition across all livelihood zones recorded an improvement in quality and quantity during the month under review with all the sampled households reporting good condition.
- Pasture improvement was due to the current ongoing rains.
- Condition expected to improve as the rains continued.
- Pasture condition was below long term mean for this time of the year due to water logging in some parts of the county.

2.1.3 Browse

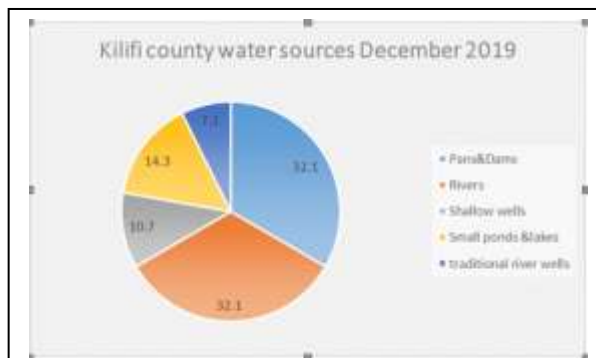
- Browse condition recorded an improvement in quality and quantity during the month under review compared to the previous month as the rains continued.
- A significant percentage (95) of sampled households recorded good condition with only 5 percent recording fair condition.
- The condition expected to improve further as the rains continued.
- Browse condition was slightly below normal at this time of the year.



2.1 Water Resources

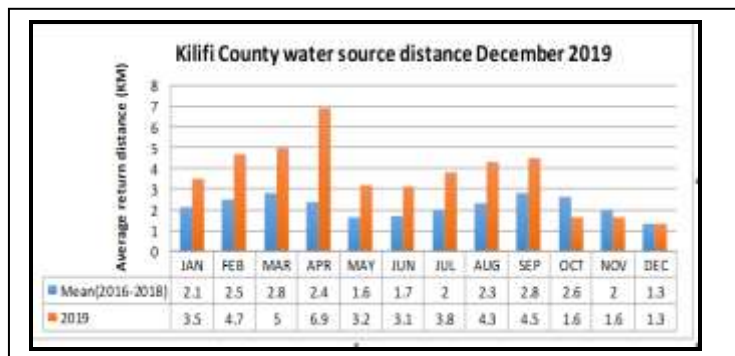
2.2.1 Water Sources

- The main water sources for domestic and livestock use during the month under review were pans and dams at 33%, rivers at 33%, shallow wells at 11%, Small lakes and ponds at 15% and traditional river wells at 8%. The status of water sources above normal following overflowing of pans and dams compared to the long-term mean at this time of the year.



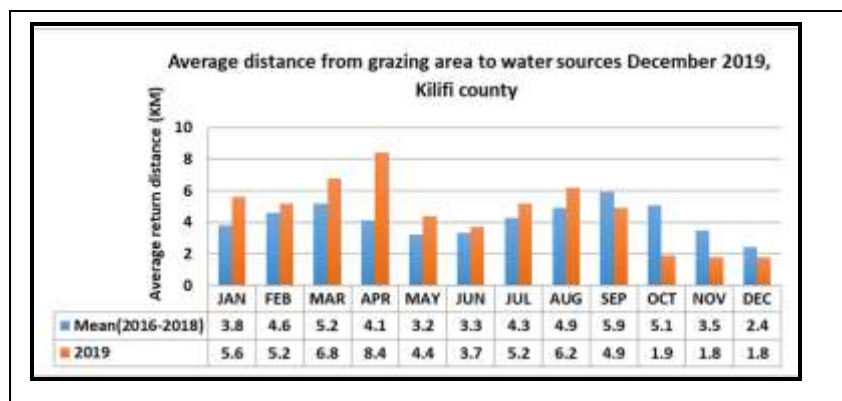
2.2.2 Household water access and utilization

- Households' average distance to water sources recorded a decrease during the month under review compared to the previous month.
- The highest average distance was recorded in Marginal Mixed farming zone at 2.3km.
- The stability in average distance can be attributed to the recharge of pans and dams which were the main sources which recorded good recharge since October.
- The average distance during the month under review was normal to the long-term mean at this time of the year.



2.2.3 Livestock access to water

- The average trekking distance from grazing area to water sources remained stable compared to the previous month.
- The average distance can be attributed to recharge of pans and dams across the livelihood zones
- The current average distance was 25 percent lower compared to the long-term mean at this time of the year



3.0 PRODUCTION

3.1 Livestock Production

3.1.1 Livestock body condition

- In the month of December the average body condition for both cattle and goats was good due to availability of water, pasture and browse.
- Body condition at this time of the year recorded an improving trend.

3.1.2 Livestock disease

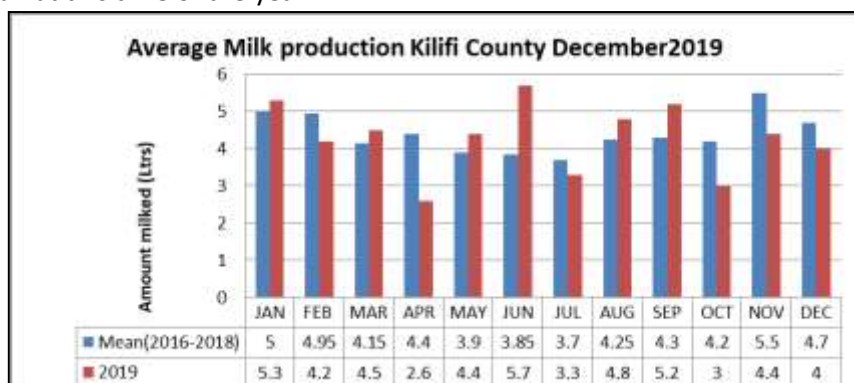
- The diseases which were reported during the month of December were Foot and Mouth Disease (FMD), worms' infestation with increased cases of diarrhea, ECF, Lumpy skin disease, RVF.
- Cases of CCPV were also reported.

3.1.3 Livestock Migration.

- No Migration reported during the month.

3.1.4 Milk production

- The average household milk production/household/day during the month under review recorded a decrease compared to the previous month.
- The average milk production during the month was 15 percent lower compared to the long-term mean at this time of the year.



3.2 Rain Fed Crop Production

3.2.1 Stage and condition of food crops

- Maize was the main crop planted with few areas planting cowpeas and green grams.
- On average the maize crop was at flowering and grain filling stage.
- The maize crop condition was below normal in areas of mixed farming and livestock farming zones due to heavy rains that had caused water logging.

3.2.2. Crop Harvest

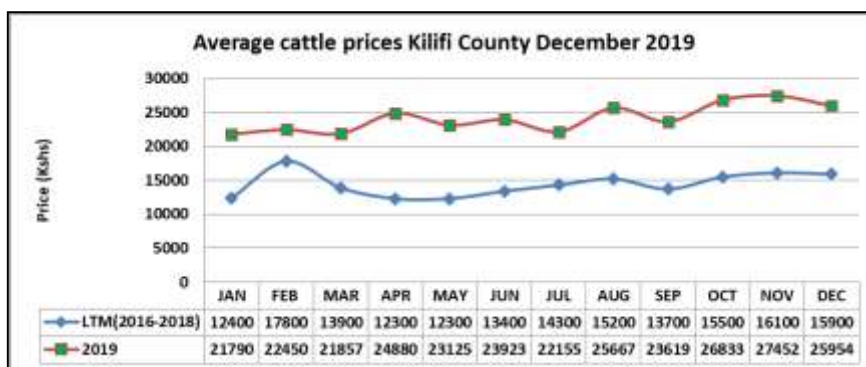
- Harvest of mangoes and water melons were recorded in the mixed farming zone and marginal mixed farming zone respectively.
- Harvesting of vegetables recorded an increase compared to the previous month due rain fed vegetable production.

4.0 MARKET PERFORMANCE

4.1. LIVESTOCK MARKET

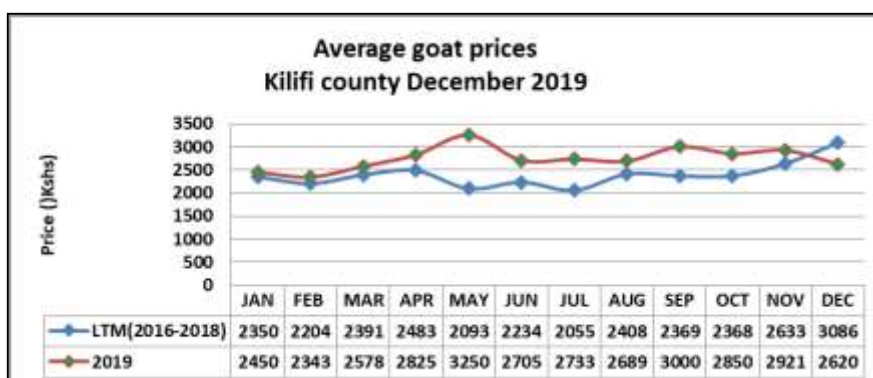
4.1.1 Cattle prices.

- The average price for a 4-year bull during the month under review recorded minimal decrease compared to previous month.
- The decrease can be attributed to improved body conditions and increase supply in the markets.
- The highest average market price was recorded in the marginal mixed farming zone of Kaloleni sub county at Kshs 34,200 while the lowest in the livestock farming Zone of Ganze Sub County at Kshs 18,167
- The current average price was 63 percent higher than the long term mean at this time of the year.



4.1.2 Goat prices

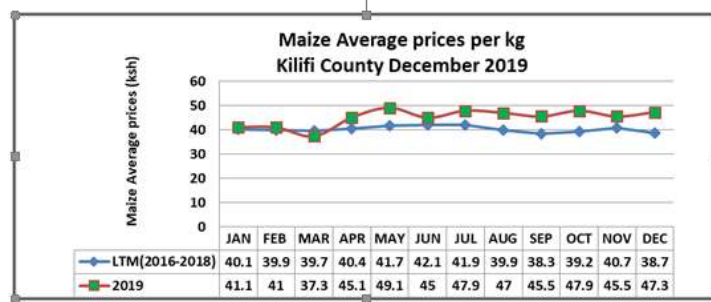
- The average price of a 3-year-old medium size buck during the month under review recorded minimal decrease compared to the previous month.
- The price decrease can be attributed an increase in supply in the market for food purchase whose prices remained high.
- The highest average price was recorded in the livestock farming zone of Bamba in Ganze Sub County at Kshs 2637 while the lowest average price was recorded in the livestock farming Zone of Magarini Sub County at Kshs 2500.
- The current average price was 15 percent higher than the long term mean at this time of the year.



4.2 Crop prices

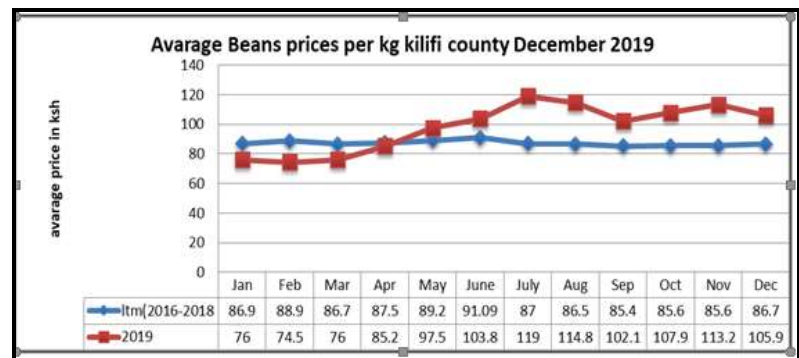
4.2.1 Maize

- The average maize price per kilo recorded minimal increase during the month under review as compared to the previous month.
- The highest average price of Kshs 50 was recorded in livestock farming zone of Bamba in Ganze Sub County while the Mixed Farming zone in Kakuyuni recorded the lowest price of Ksh 45
- The average maize price during the month was 22 percent higher than the long term mean at this time of the year.



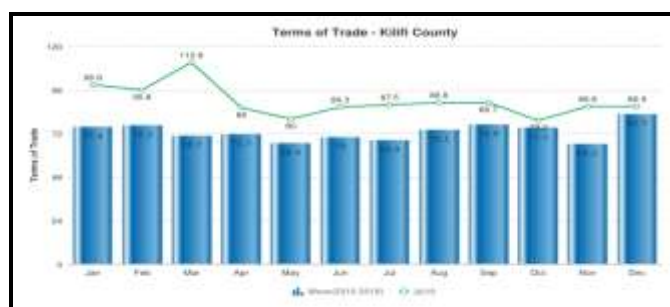
4.2.2 Beans

- The average selling price for a kilo of beans recorded a decrease of 6% in the month under review compared to the previous month.
- The decrease in average price can be attributed to high supply in the market.
- The highest average beans prices were recorded in the Marginal Mixed farming zone of Kaloleni sub county at Kshs 116 and lowest in the livestock farming zone of Bamba ward in Ganze sub county at 95
- The current average price was 24 percent higher than the long-term mean at this time of the year.



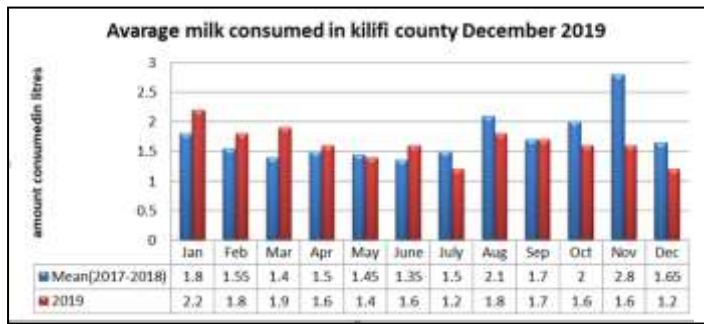
4.3 Terms of Trade (TOT)

- The Terms of Trade (ToT) during the month under review recorded a minimal increase compared to the previous month.
- The increase in ToT can be attributed minimal decrease in goat and maize price.
- The average ToT were 5 percent higher than the long term mean at this time of the year.



5.0 NUTRITION STATUS

5.1 Milk Consumption

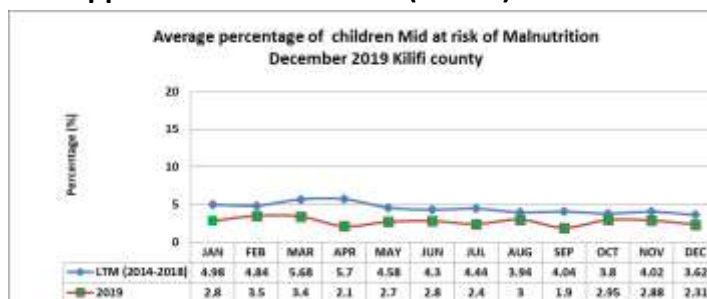


- The average milk consumption per household per day recorded a decrease during the month under review compared to the previous month.
- The decrease can be attributed to households selling milk for purchase of other food items.
- The current average milk consumption was 27 percent lower

than the LTA at this time of the year.

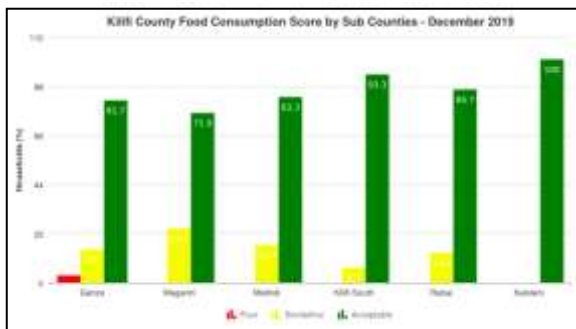
5.2 Health and Nutrition Status

5.2.1 Mid Upper Arm Circumstance (MUAC)



- The proportion of children at risk of malnutrition aged five years and below with cut offs of 125-134 mm improved compared to the previous month.
- The improvement can be attributed to minimal change in household food security in December compared to the previous month.
- The average for the month under review was 36 percent lower than the LTA at this time of the year and this can be attributed to increased intervention addressing cases of malnutrition by different stakeholders.

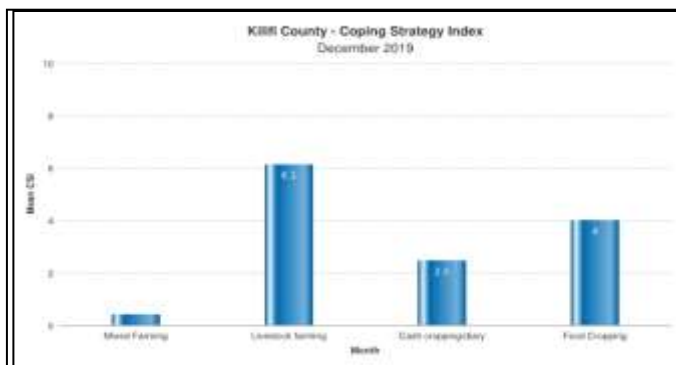
5.2.2 Food Consumption Score



- The livestock farming zone of Ganze sub county recorded households with poor food consumption and Magarini high number at borderline.
- These can be attributed to minimal cropping activities undertaken in this area.

5.3 COPING STRATEGIES

5.3.1 Coping Strategy Index (CSI)



implying high household food shortages as the zone was yet to recover from previous drought.

- The average Coping Strategy Index (CSI) remained stable compared to the previous month an indication that there was minimal change if any in household food security and thus same coping mechanisms used.
- The livestock farming zone recorded highest score

6.0 CURRENT ONGOING INTERVENTION MEASURES

6.1 Food- aid

- Supplementary feeding program by the health sector.

6.2 Non-food aid

Routine Health Sector interventions

- Integrated Medical outreaches across the county by MoH and other partners.
- Micronutrient powder supplementation across the health facilities.
- Polio campaigns targeting the under-fives by health sector across the county
- Family MUAC project by UNICEF under the health sector in Magarini and Ganze sub counties.

Livestock sector

- Community awareness creation on Poultry, dairy value chains under National Agricultural and Rural Inclusive Growth Project (NARIGP)
- Renovation of livestock handling structures that were under construction.
- Dairy cattle distribution (RABAI, MALINDI & MAGARINI)
- Capacity building on pasture (GANZE)

Agriculture Sector

- Farm inputs provision vouchers system by KCEP CRAL to some selected farmers.

Water Sector

- Construction of water pan (GANZE)

7.0 EMERGING ISSUES

No emerging issues.

7.1 FOOD SECURITY PROGNOSIS

- Pasture and browse condition continued to record improvement as the rains continued and expected to last for an average of four months
- Due to ongoing rains across all livelihood zones, most water pans and dams have recorded full capacity recharge and water expected to last for 3-4months.
- Food prices continued to remain high thus low household food security till the next good harvest.
- Following significant recharge of surface water sources which are being used by high proportion of the population, average distance for both household and livestock expected to remain low.
- Following above normal rains which has led to flooding and water logging, below normal harvest expected.

8. RECOMMENDATIONS

Water Sector

- Community and institution sensitization on rain water harvesting e.g. roof-top, dams and high capacity pans
- Excavation of Dams in Ganze, Kaloleni and Magarini sub counties
- Drilling of Boreholes in Jaribuni ward for irrigation
- Sensitization on water safety at community level

Livestock Sector

- Community capacity development on hay harvesting and conservation.
- Upscale in Livestock vaccination against CCPP, Heart Water, trypanosomiasis, East Coast Fever (ECF), Foot and Mouth Disease (FMD), worms, RVF CCPP and disease surveillance.
- Support Livestock Resilient investments

Health Sector

- Upscale the Integrated medical outreaches and active case finding in Ganze and Magarini and Kaloleni sub counties.
- Provision of water treatment chemicals in Ganze, Kaloleni and Magarini sub counties.

Agriculture Sector

- Community sensitization on rain water harvesting technologies
- Community capacity development on Climate Change Adaptation for resilience building
- Community sensitization on crop pest control.
- Provision of farm inputs to farmers along River Sabaki whose farms are flooded for planting after floods.

Education Sector

- Installation of water harvesting structure in schools to boost water access and reduce time wasted by learners in search for water.

Coordination

- Close monitoring of the season's performance as some areas continued to recorded water logging and flooding.
- Frequent monitoring of household food security despite the much rains.
- Spear-head investment in rain-water harvesting as more water drained into the ocean thus a waste.
- Community capacity building on Community Managed Disaster Risk Reduction
- County and ward Contingency Planning and simulation
- Community capacity building on Drought Early Warning System