

National Drought Management Authority


Kilifi County

Drought Early Warning Bulletin for November 2019



A Vision 2030 Flagship Project



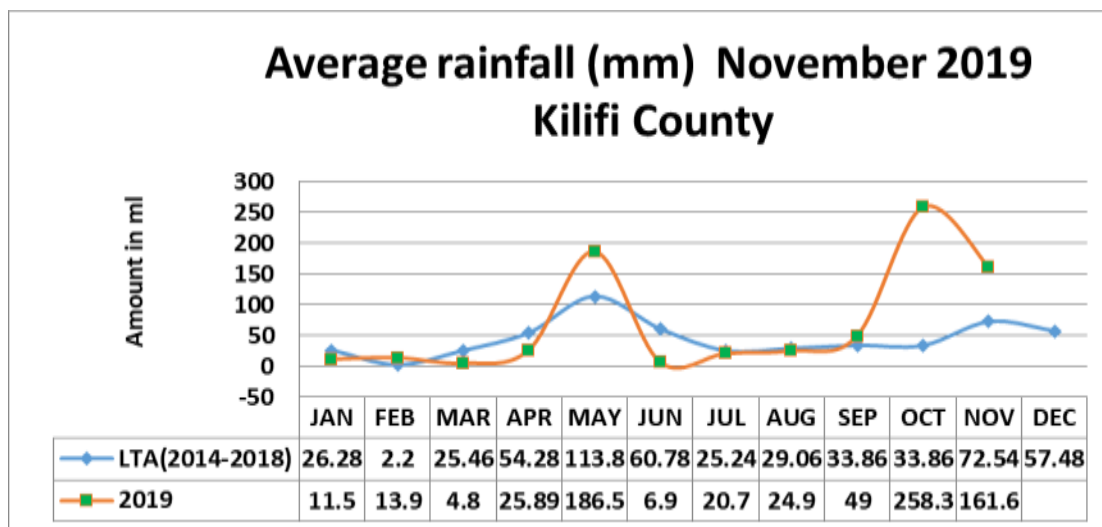
NOVEMBER EW PHASE	Early Warning Phase Classification		
	LIVELIHOOD ZONE	EW PHASE	TRENDS
	Marginal Mixed farming	Normal	stable
	Livestock/Ranching	Normal	stable
	Cash Cropping/Dairy	Normal	stable
	Food Cropping	Normal	stable
<p>Biophysical Indicators (Environmental indicators)</p> <ul style="list-style-type: none"> The month of November 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 improves due to recharge of surface water sources. <p>Socio Economic Indicators (Impact Indicators)</p> <p>Production indicators</p> <ul style="list-style-type: none"> Short rains crops weeding and spraying were the main activities during the month of November. Livestock body condition was good across the zones in November. Milk production recorded an increase compared to the previous month <p>Access indicators</p> <ul style="list-style-type: none"> For the month of November, milk consumption remained stable. Average distances to the water sources for households remained stable while for livestock recorded minimal decrease. 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 November <p>Utilization indicators</p> <ul style="list-style-type: none"> On average the proportion of children at risk of malnutrition remained stable 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)	161.6	34
	VCI	66.91	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	4.2
	Crop condition	Flowering /grain filling	Flowering /grain filling
	Access Indicators	Value	Normal
	Terms of Trade (ToT)	86.8	75
	Milk Consumption (% range)	1.6	2
	Average Water Distance for Households (Km)	1.6	≤2
Average Grazing-Water point Distance (Km)	1.8	≤ 4.3	
Utilization indicators	Value	Normal ranges	
Nutrition Status, MUAC (% at risk of malnutrition)	2.95	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

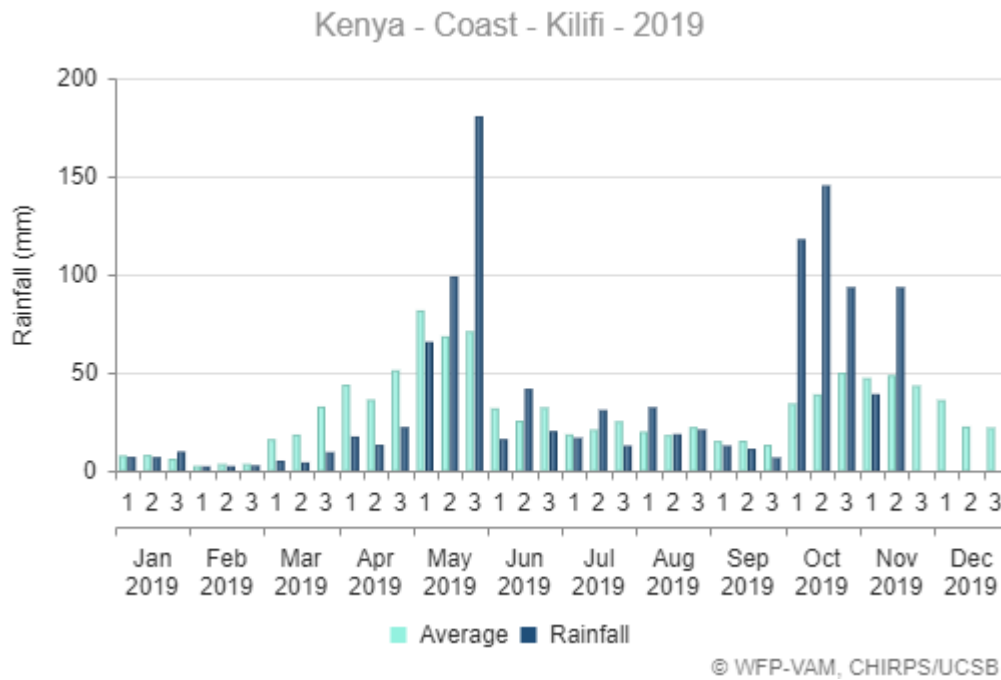
1.0 CLIMATIC CONDITIONS

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 livestock farming zones recorded the highest average amount of 235.5mm, followed by the cash crop /dairy farming zones which recorded an average of 213.3mm while the Marginal Mixed farming recorded the lowest amount of 45.6mm.
- Some areas in the Mixed and livestock livelihood zones recorded water logging and crop farm floods leading to crop damages.
- The amount recorded in November was significantly higher compared to the long term mean at this time of the year.



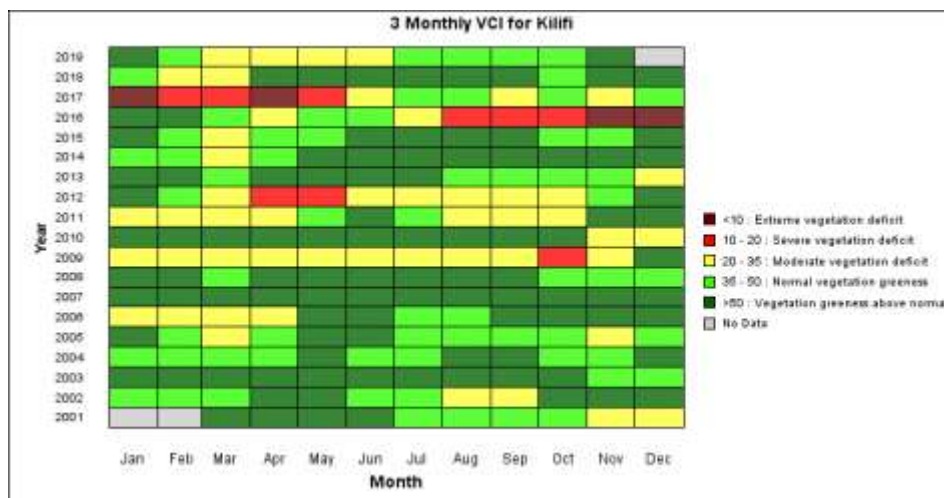
- Slightly below normal rains were recorded in the first dekad of November with 2nd dekad recording above long term mean rains at this time of the year.
- Across the livelihood zones, farmers were reporting above normal rains at this time of the year.

2.0 IMPACT ON VEGETATION

2.1 Vegetation Condition

2.1.1 Vegetation Condition Index [VCI]

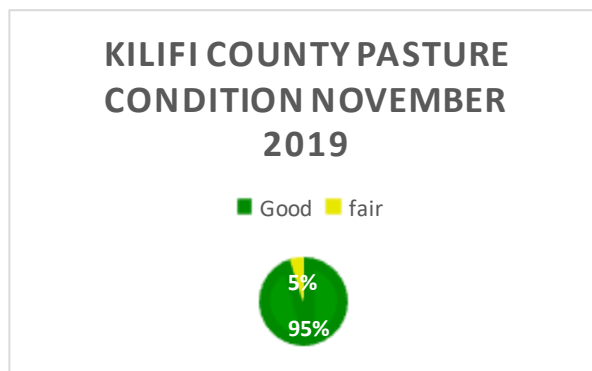
- The Vegetation Condition Index (VCI) compares the current NDVI to the range of values observed in the same period in previous years. The VCI is expressed in % and gives an idea where the observed value is situated between the extreme values (minimum and maximum) in the previous years.



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

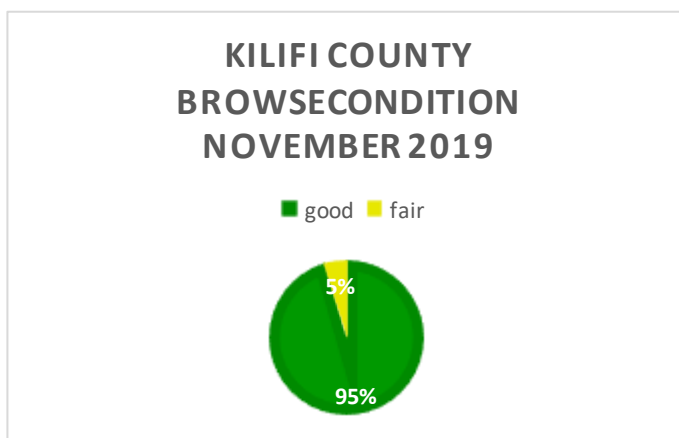
2.1.2 Pasture

- Pasture condition across all livelihood zones recorded an improvement in quality and quantity during the month under review with 95 percent of sampled households reporting good condition and 5 % reporting fair pasture 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

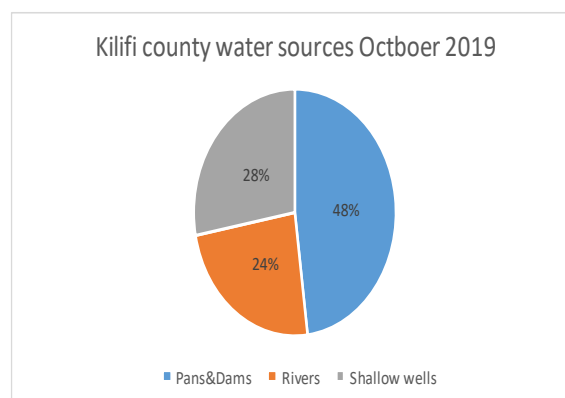
- Browse condition recorded an improvement in quality and quantity during the month under review compared to the previous month as the rains continued.
- A significant percentage (95) of sampled households recorded good condition with only 5 percent recording fair condition.
- The condition expected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



2.1 Water Resources

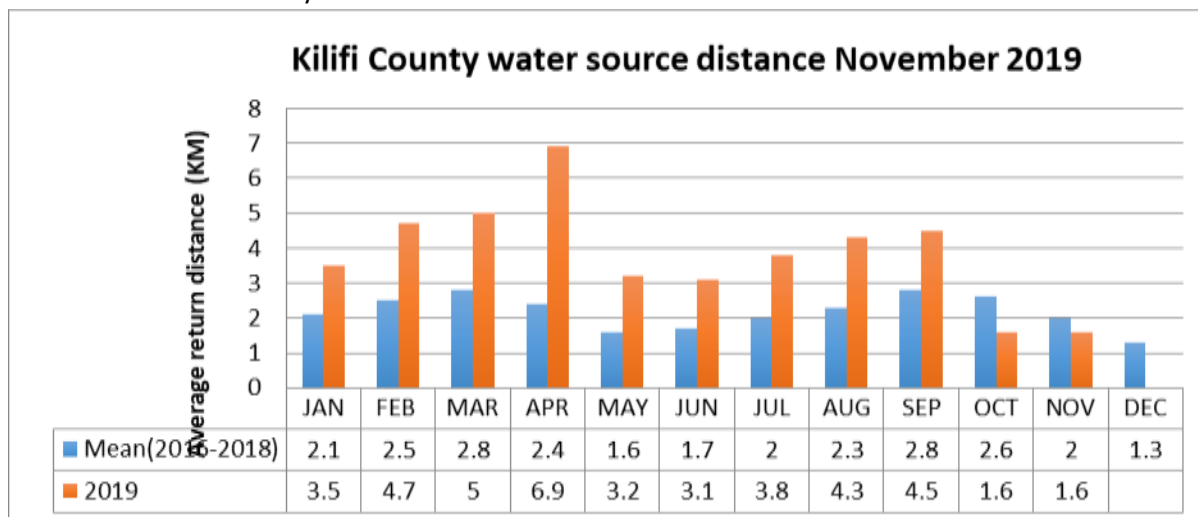
2.2.1 Sources

- The main water sources for domestic and livestock use during the month under review were pans and dams at 48%, rivers at 24% and pipeline. Other Sources were Shallow wells.
- 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.



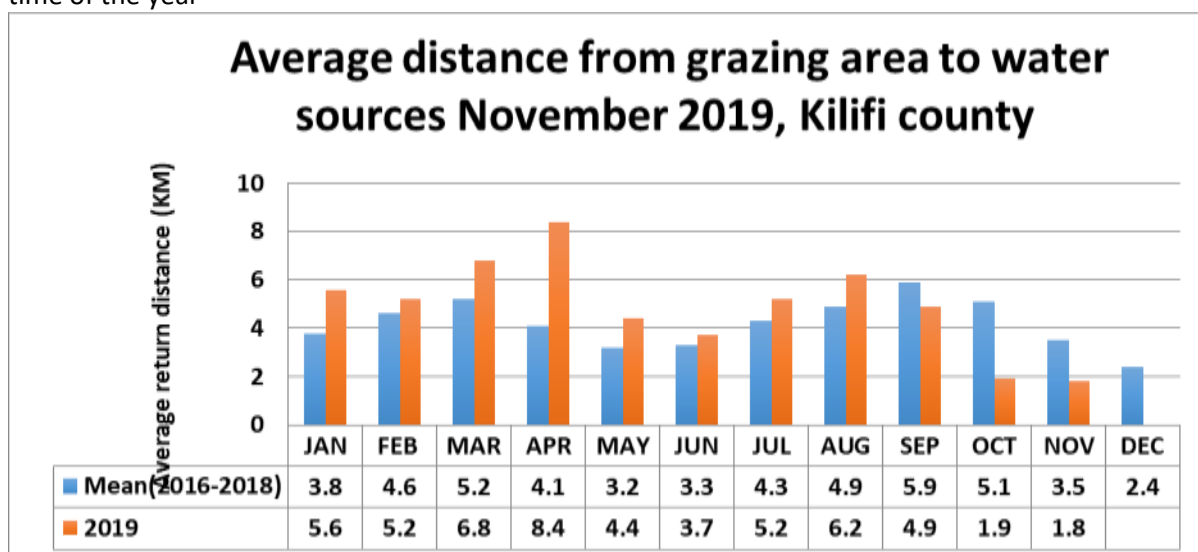
2.2.2 Household water access and utilization

- Households’ average distance to water sources as remained stable 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 20 percent lower than 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 recorded recorded minimal (5 percent) decrease in November as compared to the previous month.
- The decrease in average distance can be attributed to recharge of pans and dams across the livelihood zones
- The current average distance was 48 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 November the average body condition for cattle and was good due to availability of water and pasture
- Goats' body condition too remained good due to availability of browse.
- Body condition at this time of the year recorded an improving trend.

3.1.2 Livestock disease

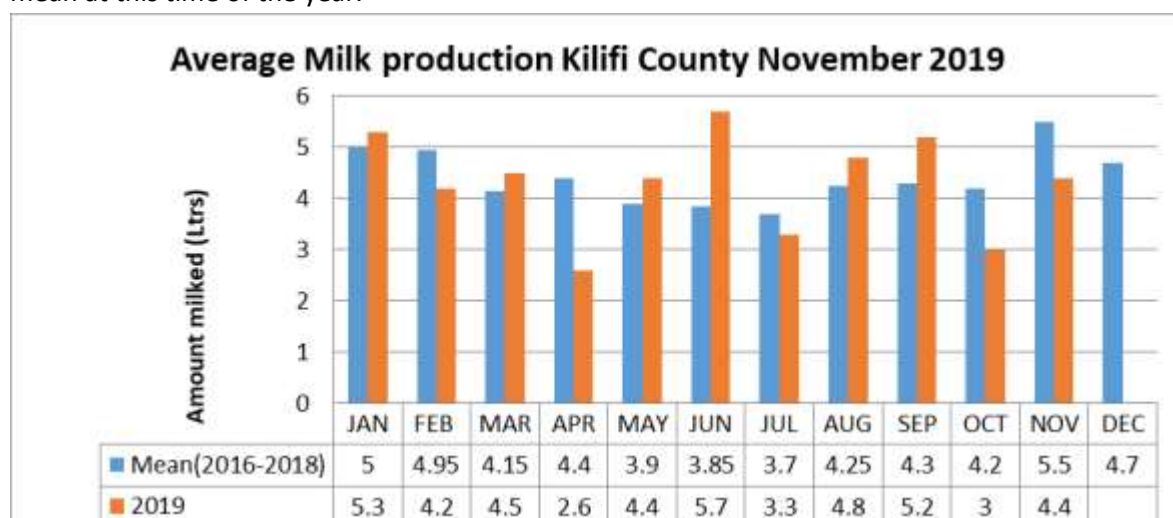
- Diseases which were reported during the month of November were Foot and Mouth Disease (FMD), worms' infestation with increased cases of diarrhea, ECF, Lumpy skin disease, RVF.
- Cases of CCPP were too reported.

3.1.3 Livestock Migration.

- No Migration reported during the month of November.

3.1.4 Milk production

- The average household milk production/household/day during the month under review recorded an increase compared to the previous month.
- The increase can be attributed to good pasture in all livelihood zones.
- The average milk production during the month was 20 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 with cowpeas and green grams.
- On average the maize crop was at flowering and graining filling stage.
- The maize crop condition was below normal in areas of mixed and livestock farming zones due to heavy rains and had caused water logging and flooding.

3.2.2. Crop Harvest

- Harvest of mangoes and water melons were recorded in the mixed farming zone and marginal mixed farming zone respectively.

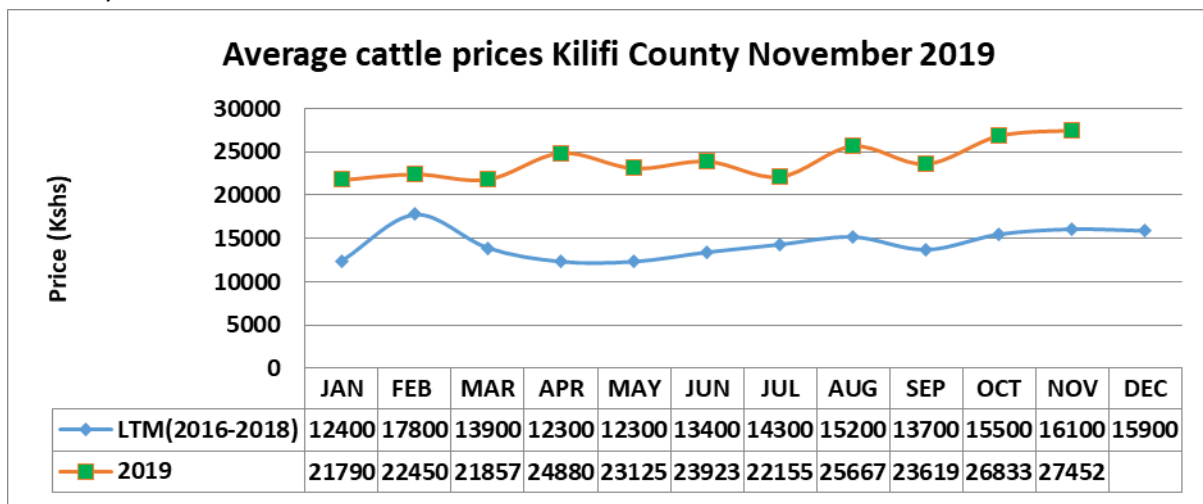
- Harvesting of vegetables too recorded an increase compared to the previous month as their supply in the market indicated.

4.0 MARKET PERFORMANCE

4.1. LIVESTOCK MARKET

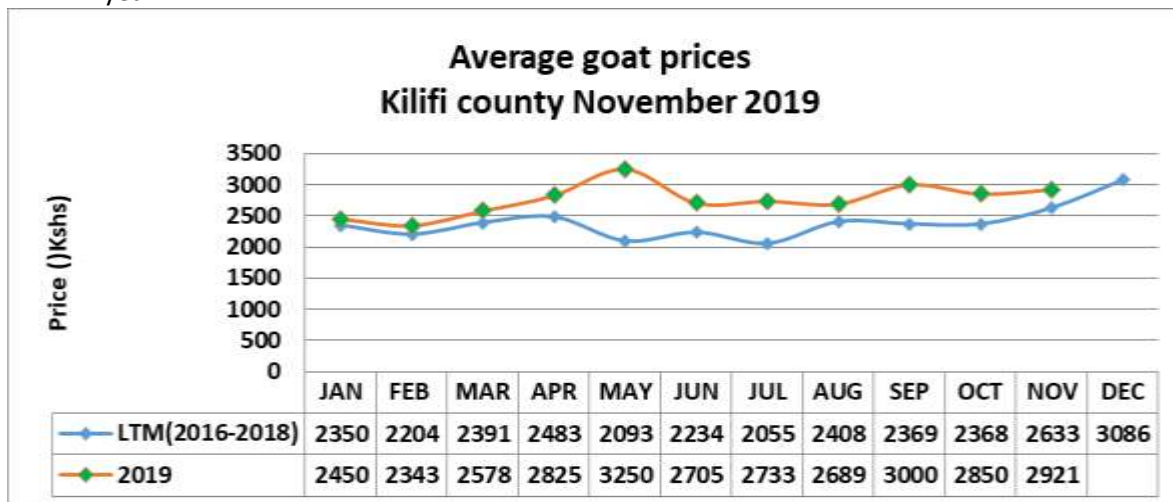
4.1.1 Cattle prices.

- The average price for a 4-year bull during the month under review recorded minimal increase compared to previous month.
- The increase can be attributed to improved body conditions and decreased supply in the market as water and pasture stress decreased.
- The highest average market price was recorded in the livestock zone of Magarini sub county at Kshs 33000 while the lowest in the food cropping Zone of Kilifi South Sub County at Kshs 20000.
- The current average price was 70 percent higher than the long term mean at this time of the year.



4.1.2 Goat prices

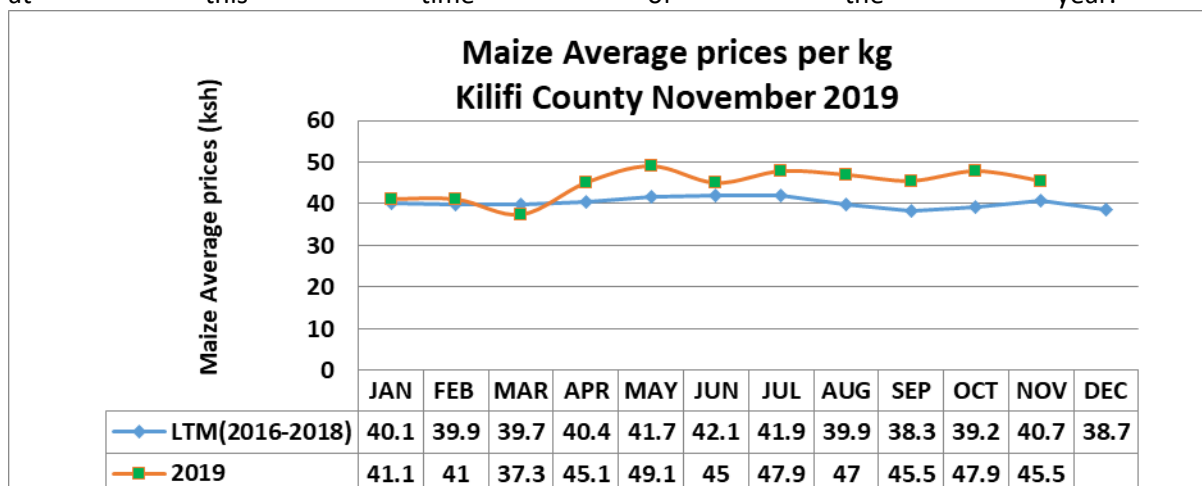
- The average price of a 3-year-old medium size buck during the month under review recorded minimal increase compared to the previous month.
- The price increase can be attributed an increase in supply in the market for food purchase whose prices remained high.
- The highest average price was recorded in the Mixed farming zone of Kakuyuni in Malindi sub county at Kshs 3500 while the lowest average price was recorded in the livestock farming zone of Magarini sub county at Kshs 2500.
- The current average price was 11 percent higher than the long term mean at this time of the year.



4.2 Crop prices

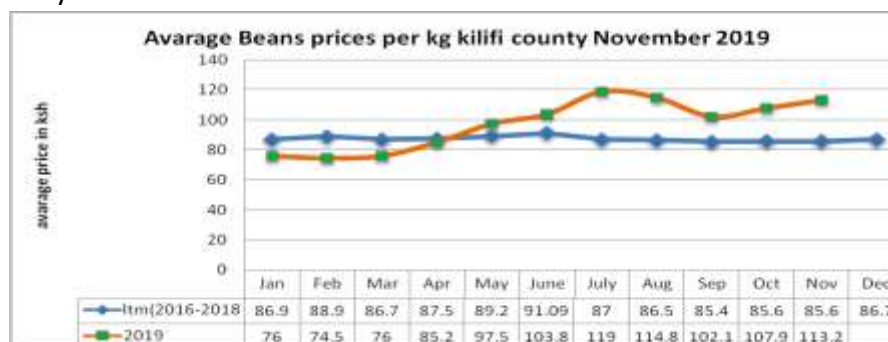
4.2.1 Maize

- The average maize price per kilo recorded minimal decrease during the month under review as compared to the previous month.
- The highest average price of Kshs 52 was recorded in livestock farming zone of Adu in Magarini Sub County while the Mixed Farming zone in Kakuyuni recorded the lowest price of Kshs41
- The average maize price during the month was 12 percent higher than the long term mean at this time of the year.

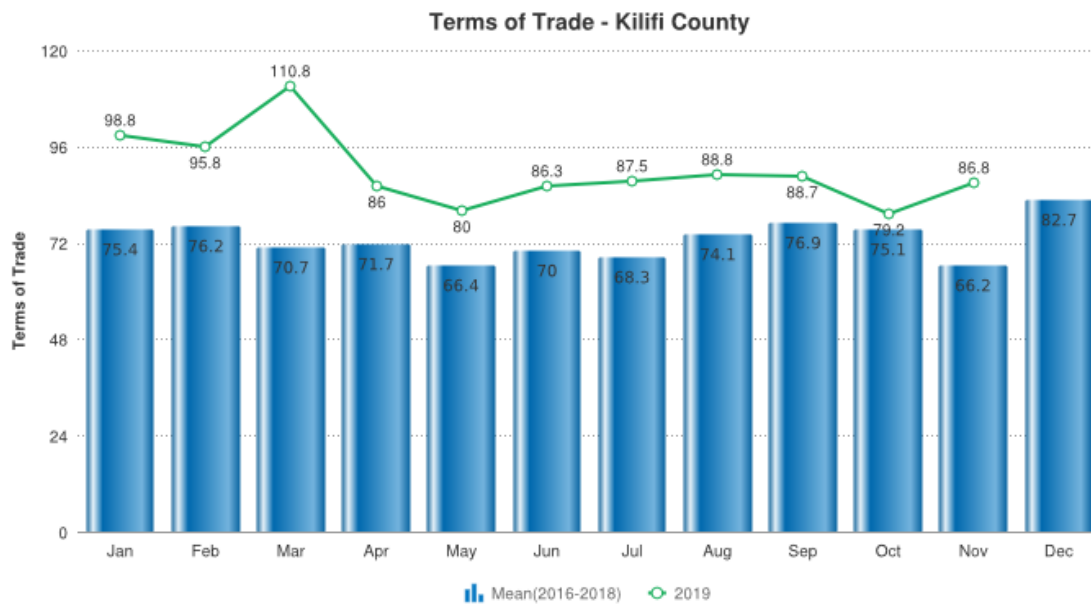


4.2.2 Beans

- The average selling price for a kilo of beans recorded an increase of 5% in the month under review compared to the previous month.
- The increase in average price can be attributed to low supply in the market.
- The highest average beans prices were recorded in the Marginal Mixed farming zone of Kaloleni sub county at Kshs 123 and lowest in the Mixed farming zone of Kakuyuni ward in Malindi sub county at Kshs 100.
- The current average price was 24 percent higher than the long-term mean at this time of the year.



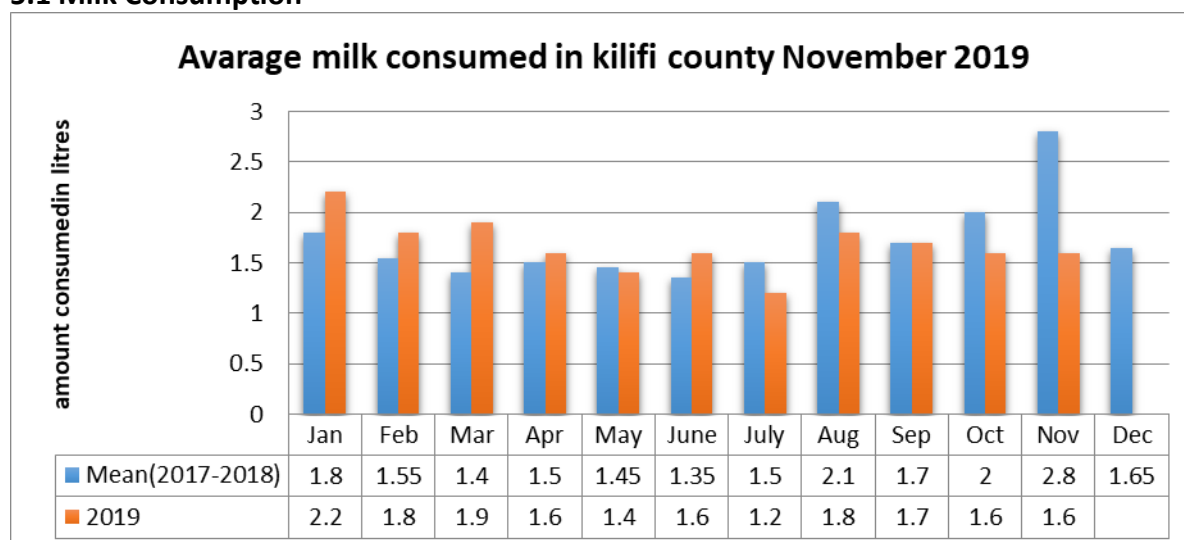
4.3 Terms of Trade (TOT)



- The Terms of Trade (ToT) during the month under review recorded an increase compared to the previous month.
- The increase in ToT can be attributed minimal increase in goat and maize price recording a decrease.
- The average ToT were 15.5 percent lower than the long term mean at this time of the year.

5.0 NUTRITION STATUS

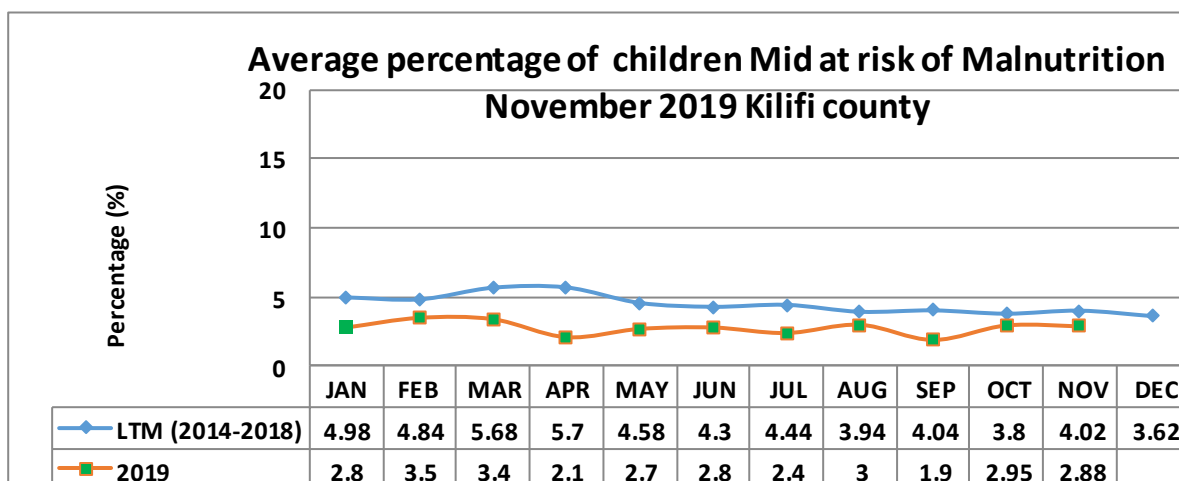
5.1 Milk Consumption



- The average milk consumption per household per day as remained stable during the month under review compared to the previous month.
- The stability can be attributed to households selling milk for purchase of other food for household consumption.
- The current average milk consumption was 43 percent lower than the LTA at this time of the year.

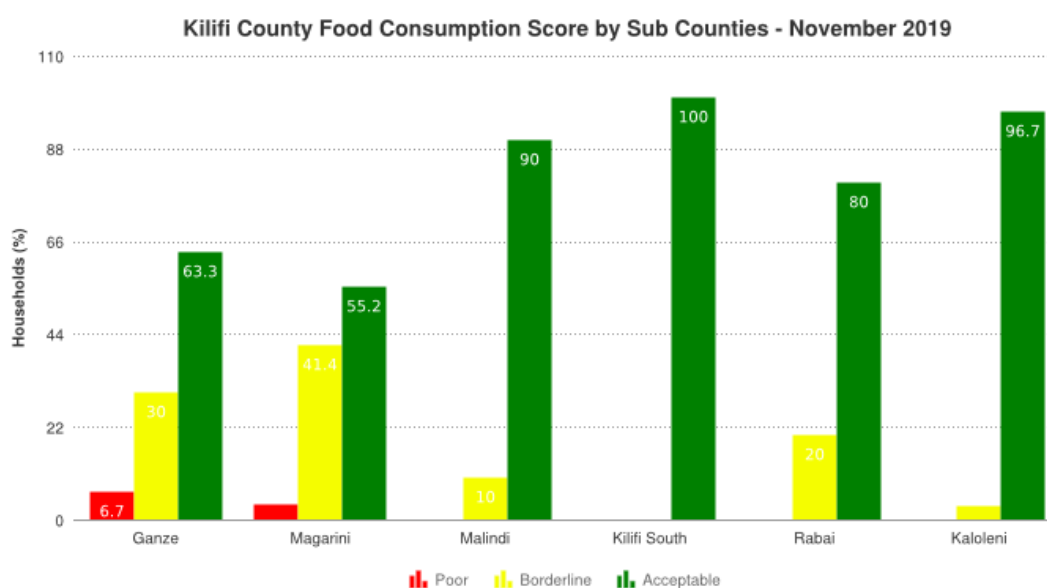
5.2 Health and Nutrition Status

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 remained stable compared to the previous month.
- The stability can be attributed to minimal change in household food security in November compared to the previous month.
- The average for the month under review was 28 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.

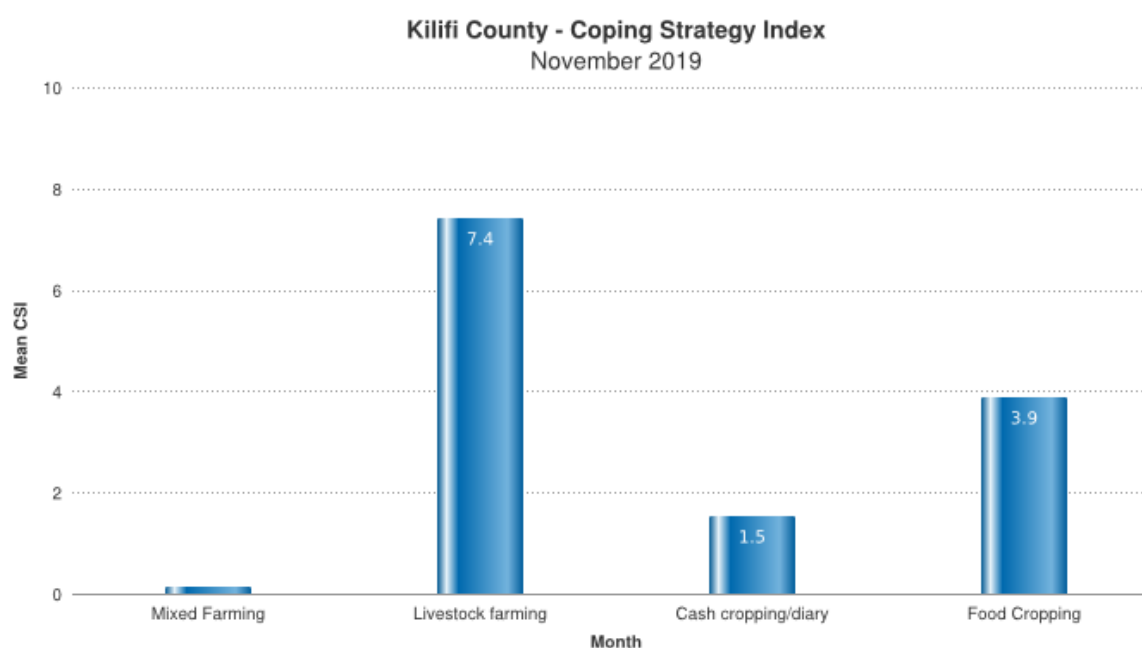
5.2.2 Food Consumption Score



- The livestock farming zone of Ganze and Magarini sub counties recorded households with poor food consumption and high number at boarderline.

5.3 COPING STRATEGIES

5.3.1 Coping Strategy Index (CSI)



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

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)
- Finishing of 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

- Farms Flooding reported in Mixed, Livestock farming zones of Malindi, Ganze and Magarini sub counties respectively following heavy rains in these areas.
- Water logged farms and flooding in Ganze, Malindi and Magarini sub counties.
- Ndigiria water pan water loss due to outlet damags.
- Increased cases of livestock diseases Foot and Mouth disease, ECF, FMD, Lumpy skin disease, RVF.

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

Livestock Sector

- Community capacity development on fodder conservation for the dry spell and Early Warning
- 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 investment

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
- Drought Early Warning Field Monitors refresher Training
- County and ward Contingency Planning and simulation
- Community capacity building on Drought Early Warning System
- Support for 2020 Drought Early Warning household selection.