



A Vision 2030 Flagship Project



**National Drought Management Authority  
Kilifi County  
Drought Early Warning Bulletin for November 2020**

**NOVEMBER EW PHASE**



**Early Warning Phase Classification**

LIVELIHOOD ZONE	EW PHASE	TRENDS
Marginal Mixed farming	Normal	Deteriorating
Livestock/Ranching	Normal	Deteriorating
Cash Cropping/Dairy	Normal	Deteriorating
Food Cropping	Normal	Deteriorating
<b>COUNTY</b>	<b>Normal</b>	Deteriorating

**Biophysical Indicators (Environmental indicators)**

- The month under review recorded some rains below the long term mean.
- The state of water sources ranged from fair to good across the livelihood zones.
- Average distance to water sources by households and livestock recorded some decrease compared to the previous month.
- On average the county recorded normal Vegetation condition with a score of 44.4.

Biophysical Indicators	Value	Normal
Average Rainfall (mm)	57.8	71.8
VCI	44.4	35-50
<b>Production indicators</b>	<b>Value</b>	<b>Normal ranges</b>
Livestock Migration Pattern	No migration	No Migration
Livestock Body Conditions	6	6-8
Milk Production Ltr/hh/day	4.5	4.3
Crop condition	Fair	Good
<b>Access Indicators</b>	<b>Value</b>	<b>Normal</b>
Terms of Trade (ToT)	107.7	84.1
Milk Consumption (% range)	1.8	1.4
Average Water Distance for Households (Km)	2.4	2.8
Average Grazing-Water point Distance (Km)	3.5	3.5
<b>Utilization indicators</b>	<b>Colour</b>	<b>Normal ranges</b>
Nutrition Status, MUAC (% at risk of malnutrition)	Green 99.7% and yellow 0.3%	Green

**Socio Economic Indicators (Impact Indicators)**

**Production indicators**

- On average the livestock body condition ranged from fair to good for all species across the livelihood zone.
- Average milk production in November was above the short term mean at this time of the year.
- Cassava crop in good condition across the livelihood zones with some areas recording moisture stress for the maize crop.

**Access indicators**

- Average cattle price recorded some decrease while average goat price remained stable during the month under review.
- Average price of maize and beans recorded a slight decrease in the month of November.
- Terms of Trade recorded an increase for the month under review compared to the previous month.

**Utilization indicators**

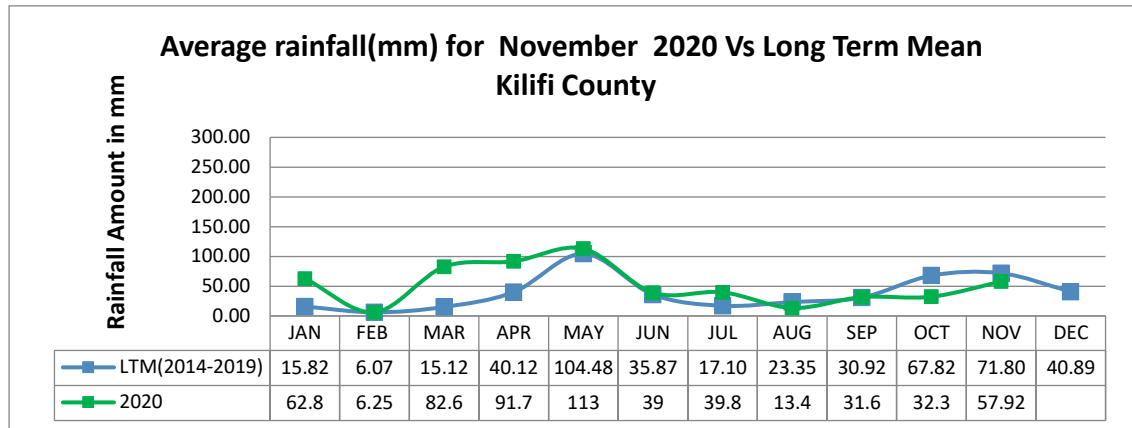
- Nutritional status of the under-fives remained stable compared to previous month.

Short rains harvests Short dry spell Reduced milk yields Increased HH Food Stocks Land preparation			Long rains Planting/Weeding High calving Rate Milk yields Increase			Long rains harvests A long dry spell Land preparation Increased HH Food Stocks Kidding (Sept)			Short rains Planting/weeding/pest control/		
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

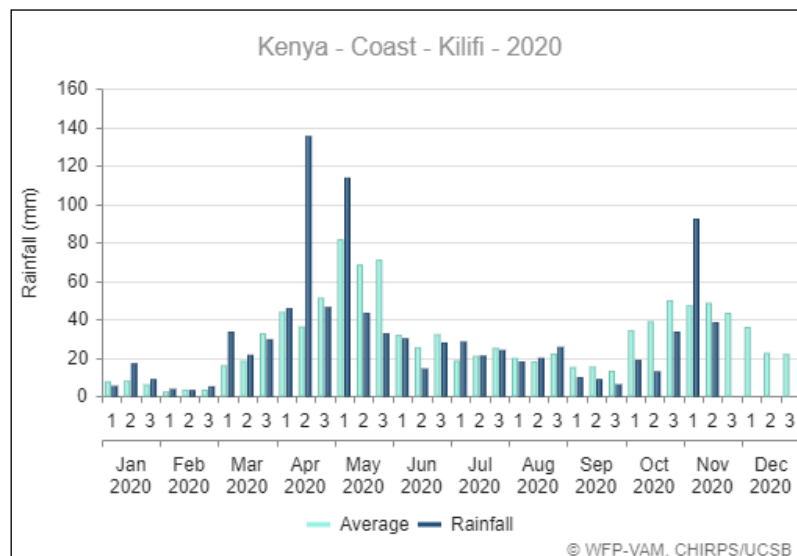
## 1.0 CLIMATIC CONDITIONS

### 1.1 Rainfall performance

- The month of November recorded 79.3 percent increase in amount of rainfall compared to the previous month.
- The current amount was 19.3 percent below the long term mean at this time of the year.



- The first Dekad of November Rainfall Estimates (RFE) was above long term mean with the second dekad of November recording a decrease and below the long term mean.



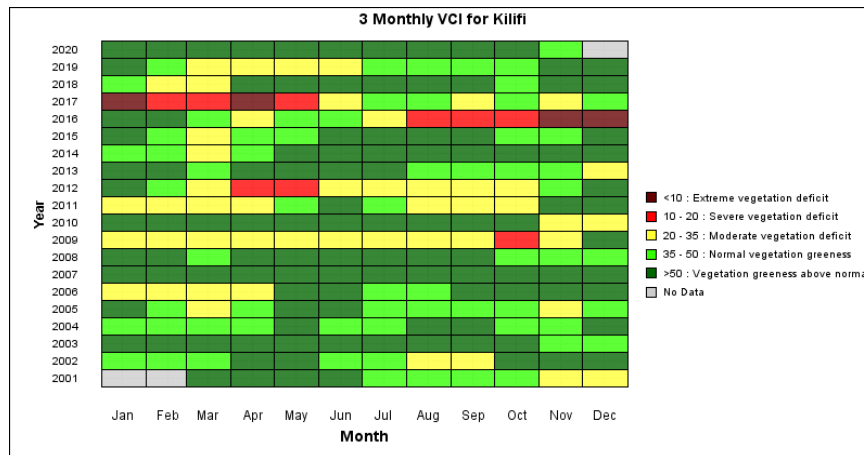
## 2.0 IMPACT ON VEGETATION

### 2.1 Vegetation Condition

#### 2.1.1 Vegetation Condition Index [VCI]

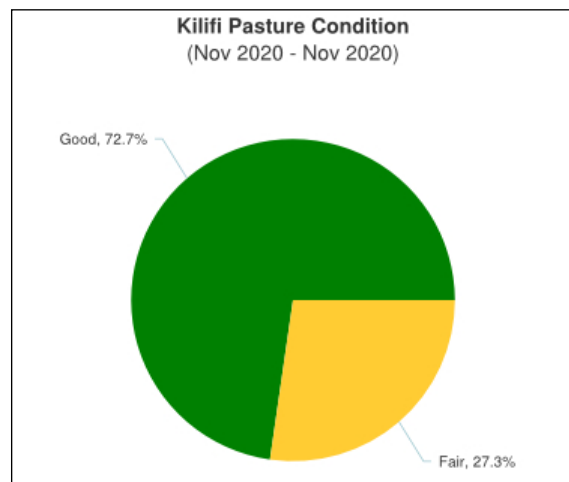
The Vegetation Condition Index (VCI) compares the current NDVI to the range of values observed in the same period in previous years. The VCI is expressed in % and gives an idea where the observed value is situated between the extreme values (minimum and maximum) in the previous years.

- The county continued to record an average of normal vegetation greenness during the month under review following the ongoing showers across the livelihood zones.
- The 3M- VCI for the county was 44.4 indicating normal vegetation greenness lower than the 2019 vegetation greenness for the month of November.



#### 2.1.2 Pasture

- Sampled areas in November recorded 72.7 and 27.3 percent good and fair pasture condition respectively with livestock farming and Marginal Mixed zones recording a significant decline in quality and quantity.
- Current condition recorded an improvement compared to the previous month.
- Pasture regeneration expected to continue as showers continues across the livelihood zones due to ongoing short rains.
- Pasture condition was normal during this time of the year.

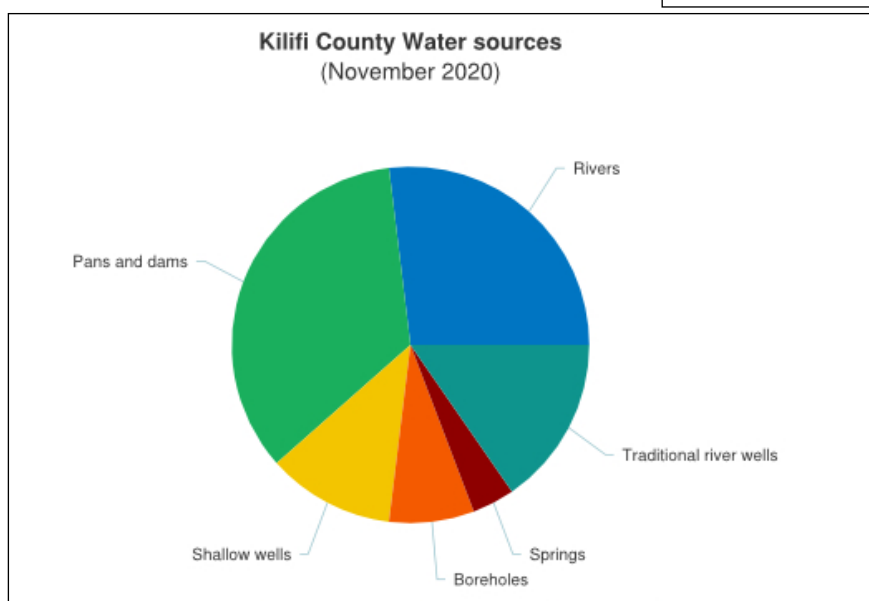
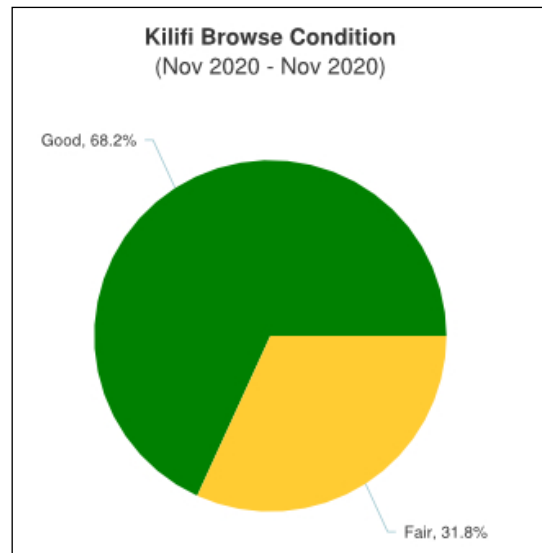


#### 2.1.3 Browse

- The month of November recorded 68.2 and 31.8 percent good and fair browse condition respectively across the livelihood zones.
- Browse regeneration expected as the rains and showers continued across the livelihood zones despite significant variation across the zones.
- Browse condition was normal at this time of the year.

## 2.2 Water Resources

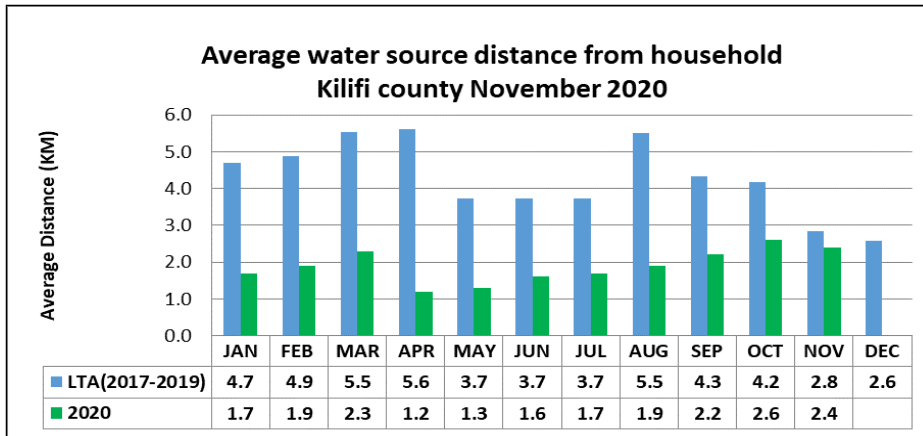
### 2.2.1 Water Sources



- A high percent of sampled households depended on pans and dams, Rivers and traditional river wells.
- Water sources were normal during this time of the year.

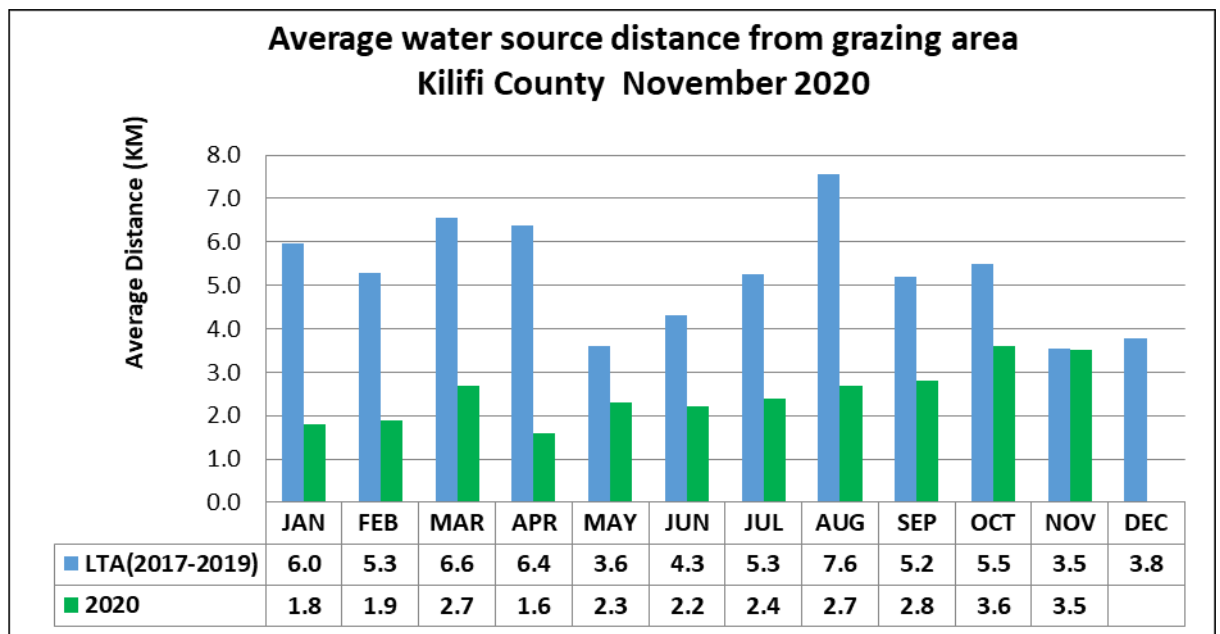
### 2.2.2 Household water access and utilization

- Average distance to water sources recorded a slight decrease compared to the previous month.
- The slight decrease can be attributed to recharge of near household pans from minimal rains received.
- The average distance during the month under review was 14.3 percent lower compared to the long-term mean at this time of the year.



### 2.2.3 Livestock access to water

- The month under review recorded a decrease in distance to water sources compared to the previous month.
- The decrease can be attributed to some recharge of surface water sources near households.
- The average distance was the same 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

- The month of November recorded good livestock body condition for all species.
- Body condition was normal at this time of the year due to minimal stress in access to water, pasture and browse.
- Good livestock body condition expected to prevail as access to water and pasture remained low.

### **3.1.2 Livestock disease**

- No major livestock diseases were reported during the month under review.

### **3.1.3 Livestock Migration.**

- No cases of migration were reported in the county.

### **3.1.4 Milk production**

- Milk production in November recorded an increase compared to the previous month at 4.5 ltrs/hh/day from 4.3 ltrs/hh/day.
- The increase can be attributed to good livestock body condition.
- The production was 12 percent above 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 and cassava were the main crops in the farms. Maize in most farms was at knee high stage and in some areas recording moisture stress for the maize crop
- Some farmers were still planting optimistic that the rains/showers will continue.

### **3.2.2. Crop Harvest**

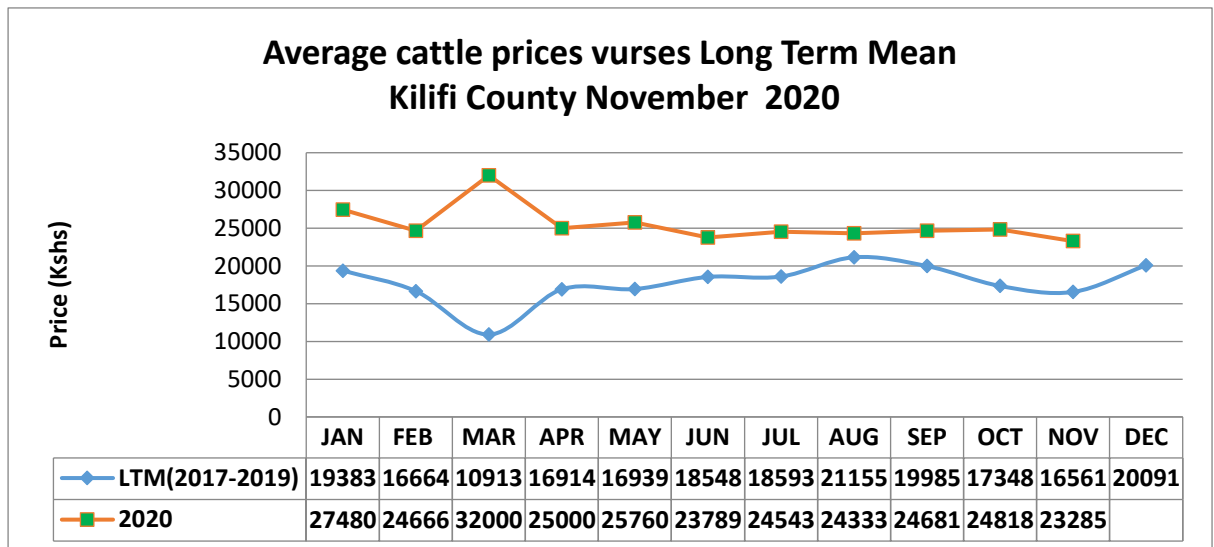
- Cassava was the main crop harvested during the month of November.
- Some areas in Kilifi South sub county recorded harvest of vegetables, amaranth, tomatoes and okra.

## 4.0 MARKET PERFORMANCE

### 4.1. LIVESTOCK FARM GATE

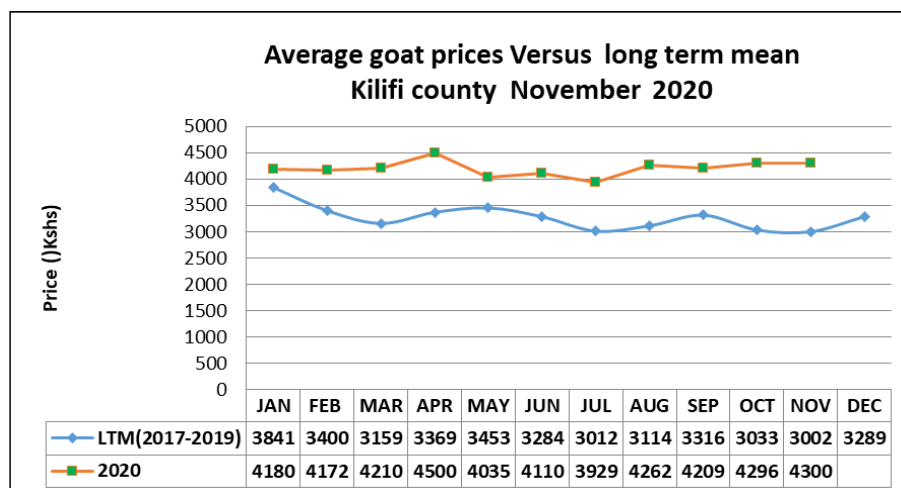
#### 4.1.1 Cattle prices.

- Average price for a 4-year old bull recorded slight decrease at Ksh. 23,285 compared to the previous month price of Ksh. 24,818.
- The slight decrease can be attributed to increase in supply as parents searched for school fees following reopening of schools.
- The current average price was 40 percent higher than the short term mean at this time of the year.



#### 4.1.2 Goat prices

- Average goat price of a 3-year-old medium sized buck during the month under review remained stable at Ksh 4,300 compared to previous month at Ksh 4,296.
- This can be attributed to stability in supply and demand
- The current average price was 43 percent higher compared to the short term mean at this time of the year.

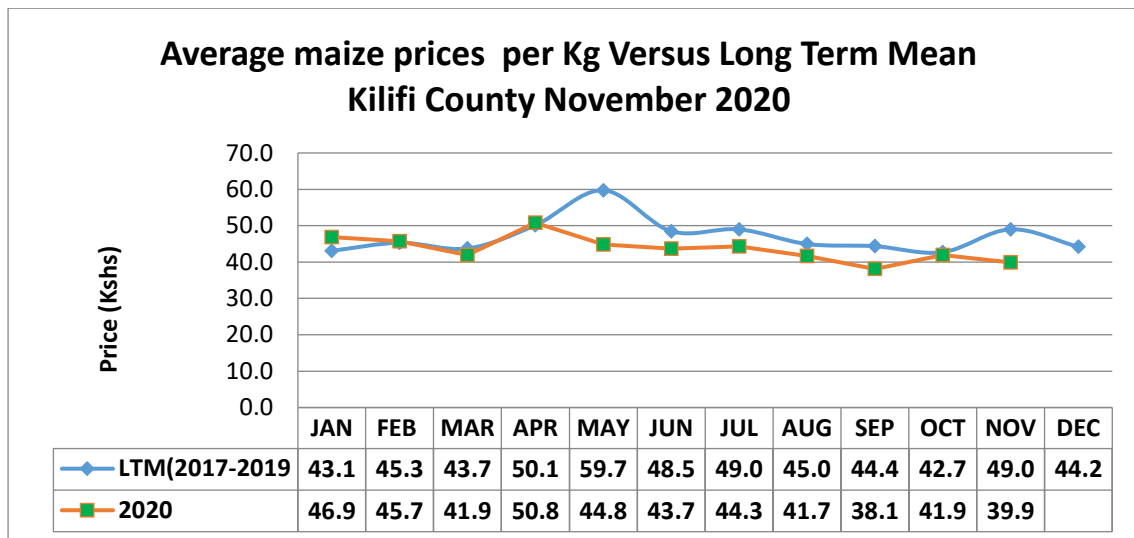




## 4.2 Crop prices

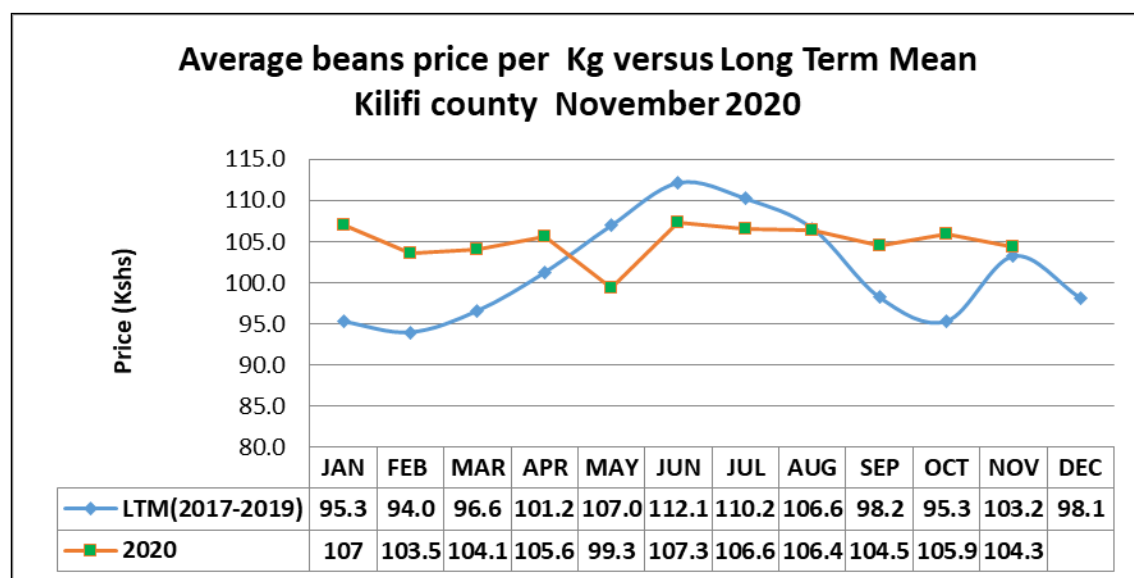
### 4.2.1 Maize

- The average price of a kilo of maize recorded a 4.7 percent decrease in November compared to the previous month to Ksh 39.90 from Ksh 41.90
- The decrease can be attributed to decrease in demand for maize as most households preferred sifted maize meal.
- The current average maize price was 18.6 percent higher compared to the long term mean at this time of the year.



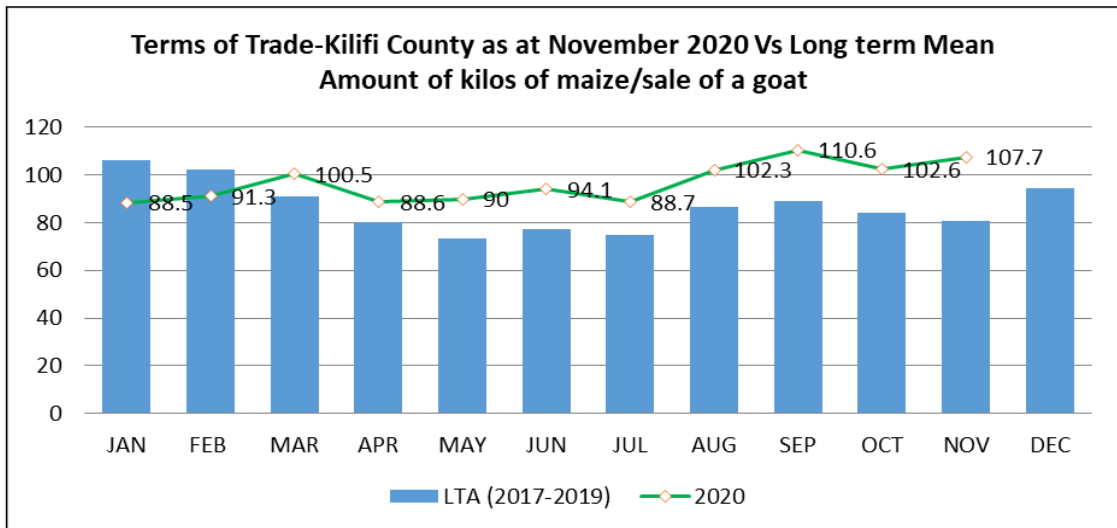
### 4.2.2 Beans

- The average price of a kilo of beans recorded minimal decrease compared to the previous month.
- The decrease can be attributed to availability of beans at the market with some household still having green grams and cowpeas.
- The current average price/kg was slightly higher than the long term mean.



#### 4.3 Terms of Trade (ToT)

- Terms of Trade (ToT) during the month under review were 107.7 kilos of maize/sale of one goat recorded an increase as compared to the previous month which was 102.6 kilos of maize/sale of one goat
- The increase can be attributed to a decrease in average price of maize compared to the previous month and slight decrease in average price of goats.
- ToT for the month under review were higher than the long term mean at this time of the year.



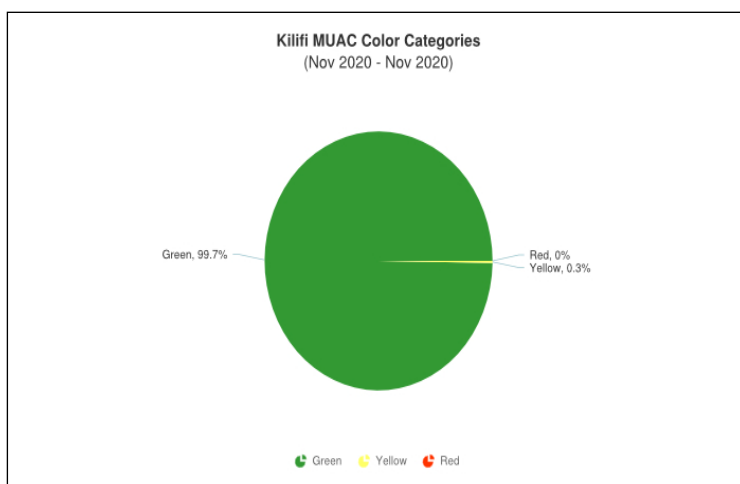
#### 5.0 NUTRITION STATUS

##### 5.1 Milk Consumption

- Milk consumption remained stable at 1.8ltrs/hh/day for the month of November compared to the previous month and the same as short term mean at this time of the year.

##### 5.2 Health and Nutrition Status

- The month of November recorded a decrease in the number of sampled children at risk of malnutrition compared to the previous month.

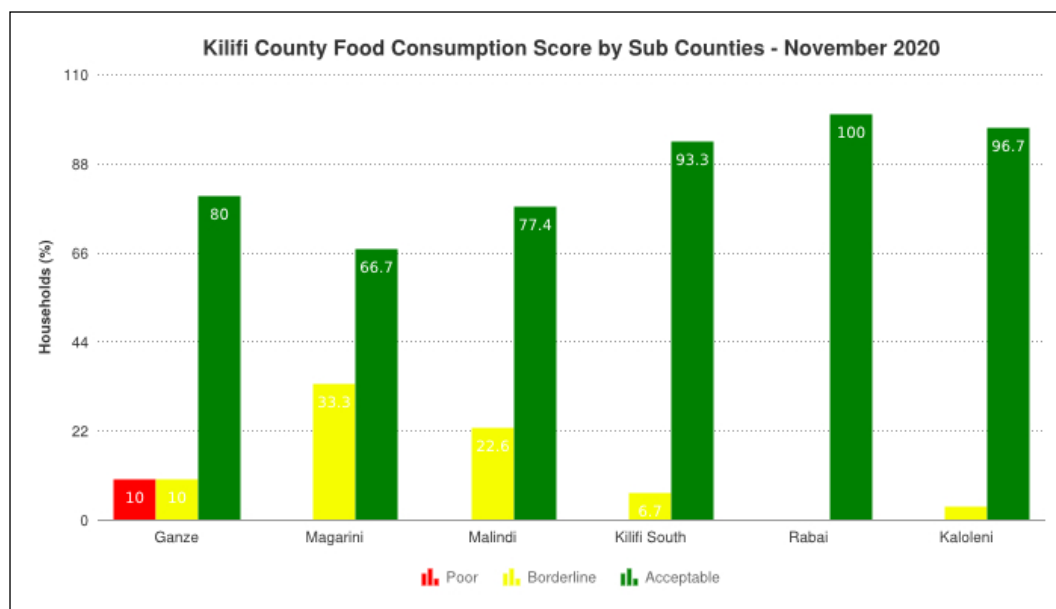


*Note: (MUAC less than 110mm (11.0cm), RED COLOUR, indicates Severe Acute Malnutrition (SAM), MUAC of between 110mm (11.0cm) and 125mm (12.5cm), RED COLOUR indicates Moderate Acute Malnutrition (MAM), MUAC of between 125mm (12.5cm) and 135mm (13.5cm), YELLOW COLOUR, indicates that the child is at risk for acute malnutrition while MUAC over 135mm (13.5cm), GREEN COLOUR, indicates that the child is well nourished.)*

- The month of November recorded 0.3 percent of the sampled children at risk of malnutrition (<135mm) with 0 percent at Moderate Acute Malnutrition.
- The percent at risk expected to increase as households depleted their long rains harvest stocks and forecasted poor short rains harvest.

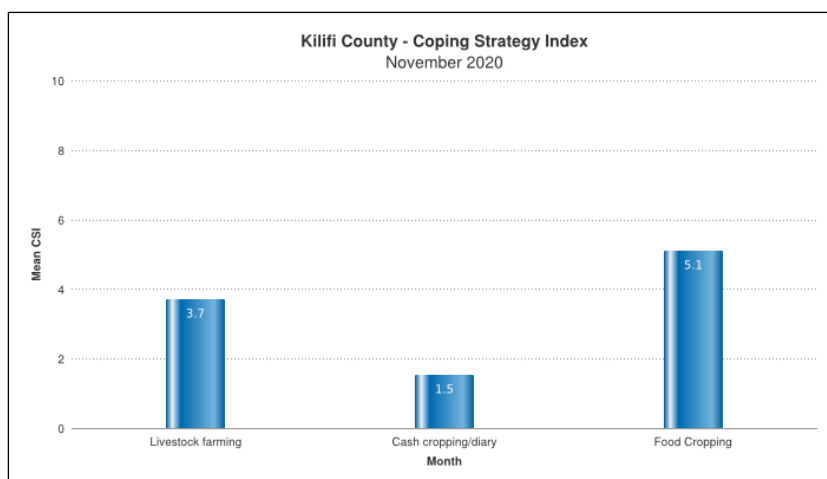
### 5.2.2 Food Consumption Score

- A high proportion of sampled households (86 percent) across livelihood zones recorded acceptable food consumption with 12 percent recording boardeline food consumption and 2 percent recording poor consumption.
- The livestock farming zone recorded the high percent of households at boarderline and poor food consumption.
- Food consumption expected to decline as households depleted their long rains harvest stocks.



### 5.3 COPING STRATEGIES

- The month of November recorded an average of 2.7 Coping Strategy Index (CSI) with the Food cropping zone recording the highest score which is an increase an indication of arise in food shortage.
- An increase in CSI expected as households depleted their food stocks.



## 6.0 CURRENT ONGOING INTERVENTION MEASURES

### 6.1 Food- aid

- Supplementary feeding at health facilities by Ministry of Health.

### 6.2 Non-food aid

#### Health Sector

- Training of health care workers on Baby Friendly Community Initiative (BFCl) package
- Family MUAC screening at household level by caregivers
- Vitamin A supplementation and De-worming for children 6-59 months by County Government of Kilifi and UNICEF.
- Therapeutic Feeding Programs to manage acute malnutrition (SFP, OTP, ITP) County Government of Kilifi and UNICEF.

#### Agriculture Sector

- Community capacity development on coconut farming value chain by NARGIP.
- Training and capacity building of farmers in crop husbandry across the county.

#### Livestock sector

- Promotion on local chicken production and apiculture by NARGIP.
- Promotion of meat goat production in Bamba and Adu wards by NDMA
- Disease surveillance by county government-veterinary services department.

#### Water Sector

- Water pipelines extension across the county CGK and IRK
- Boreholes drilling and Equipping in Marafa, Garashi, Junju and Rabai areas by County Government of Kilifi and ADS Pwani.
- Site Handing over of Mbomboni water pan excavation by NDMA.

## EMERGING ISSUES

- Poor and unevenly distributed short rains recorded across the livelihood zones.
- Fear for locust invasion from Taita Taveta County where they were reported in mid-November.

## 7.1 FOOD SECURITY PROGNOSIS

- Following delayed and minimal 2020 short rains experienced in October and November, this is an indication of poor season's crop performance.

- Food prices expected to remain stable as supply in the market from other regions remained stable.
- Pasture browse condition expected to remain stable following showers expected in the month of December.
- Livestock body condition expected to recorded minimal decline as pasture, browse and water continued to recorded minimal access stress.
- Milk production expected to remain stable following minimal pasture and water stress across the livelihood zones which exclusion the livestock farming zone.
- Households' food security expected to record a decline as household continued to record depleted stocks and a shift to depend on the market.

## **8. RECOMMENDATIONS**

### **Livestock Sector**

- Community capacity development on pasture establishment and conservation.
- Support livelihood diversification
- Support value addition.

### **Water Sector**

- Community capacity development on water harvesting.
- Support pipeline extension to institutions.
- Construction and rehabilitation of critical water pans and earth dams - Mrya Chakwe, Kayafungo, Mbomboni and Ndigiria.

### **Heath Sector**

- Support to moderate malnutrition treatment and screening
- Support to micro-nutrient supplementation program.
- Support Community sensitization on COVID 19 protocols.

### **Agriculture Sector**

- Close monitoring on short rains season's crops performance.
- Community capacity development on crop production in a changing climate.

### **Coordination**

- Support Community sensitization on Climate Change adaptation