

**National Drought Management Authority**  
**KWALE COUNTY**  
**DROUGHT EARLY WARNING BULLETIN FOR OCTOBER 2017**



A Vision 2030 Flagship Project



**OCTOBER 2017 EW FLAG**

**Drought Status: NORMAL**



**Shughull za kawaida**

**Drought Situation & EW Phase Classification**

**Biophysical Indicators**

- Above-normal rainfall was received in both livelihood zones.
- The Vegetation Condition Index was above normal at 55.36
- The state of water sources was normal for this time of the year.

**Socio Economic Indicators (Impact Indicators)**

**Production indicators**

- Livestock body condition was normal at this time of the year.
- Milk production was normal.
- No livestock migration was reported during the month.

**Access indicators**

- Milk consumption was slightly above normal.
- Return distances to water sources were normal.

**Utilization Indicators**

- The proportion of children at risk of malnutrition was above normal for this time of the year.

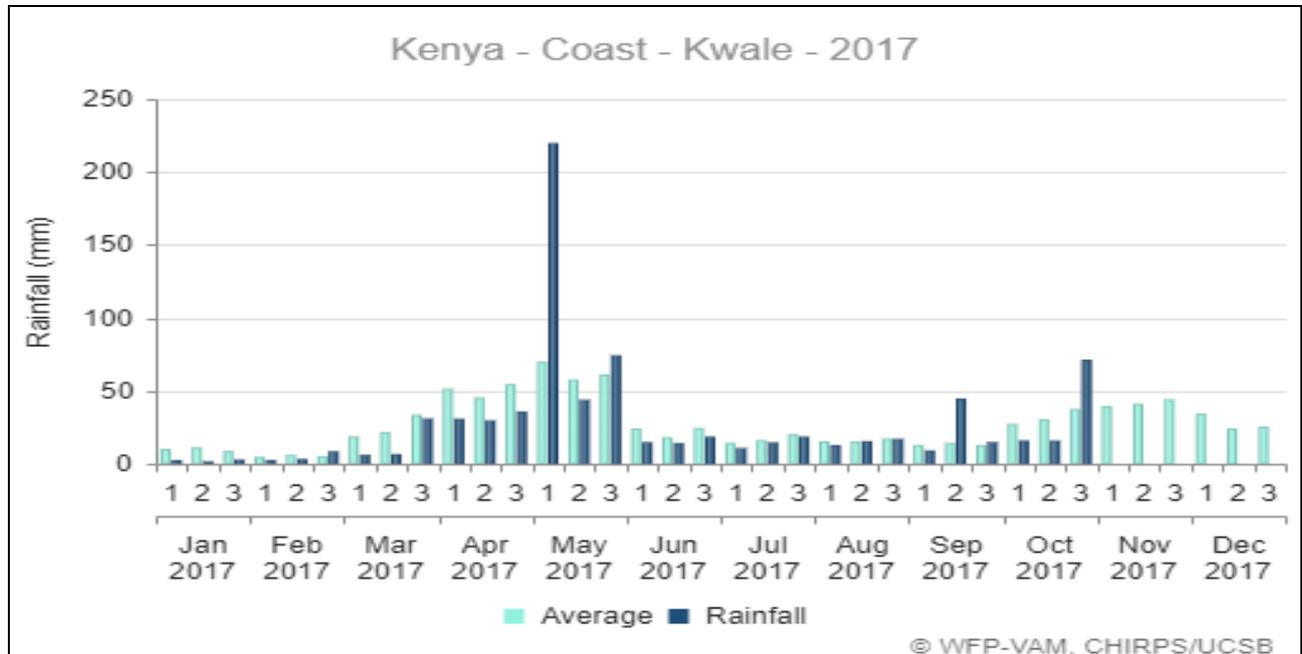
**Early Warning (EW) Phase Classification**

Livelihood Zone	Phase	Trend
Mixed Farming	Normal	Stable
Livestock Farming	Normal	Stable
County	Normal	Stable
Biophysical Indicators	Value	Normal Range/Value
VCI	55.36	47
State of Water Sources	4	5
Production indicators	Value	Normal
Crop Condition (maize and legumes)	Good	Good
Livestock Body Condition	2	1
Milk Production (Litres)	3.9	3.9
Livestock Migration Pattern	No migration	No migration
Livestock deaths (from drought)	None	No deaths
Access Indicators	Value	Normal
Milk Consumption (litres)	1.9	1.8
Return distance to water sources (km)	2.4	2.4
Utilization indicators	Value	Normal
Nutrition Status (percentage at risk of malnutrition based on MUAC)	6.8	5.75

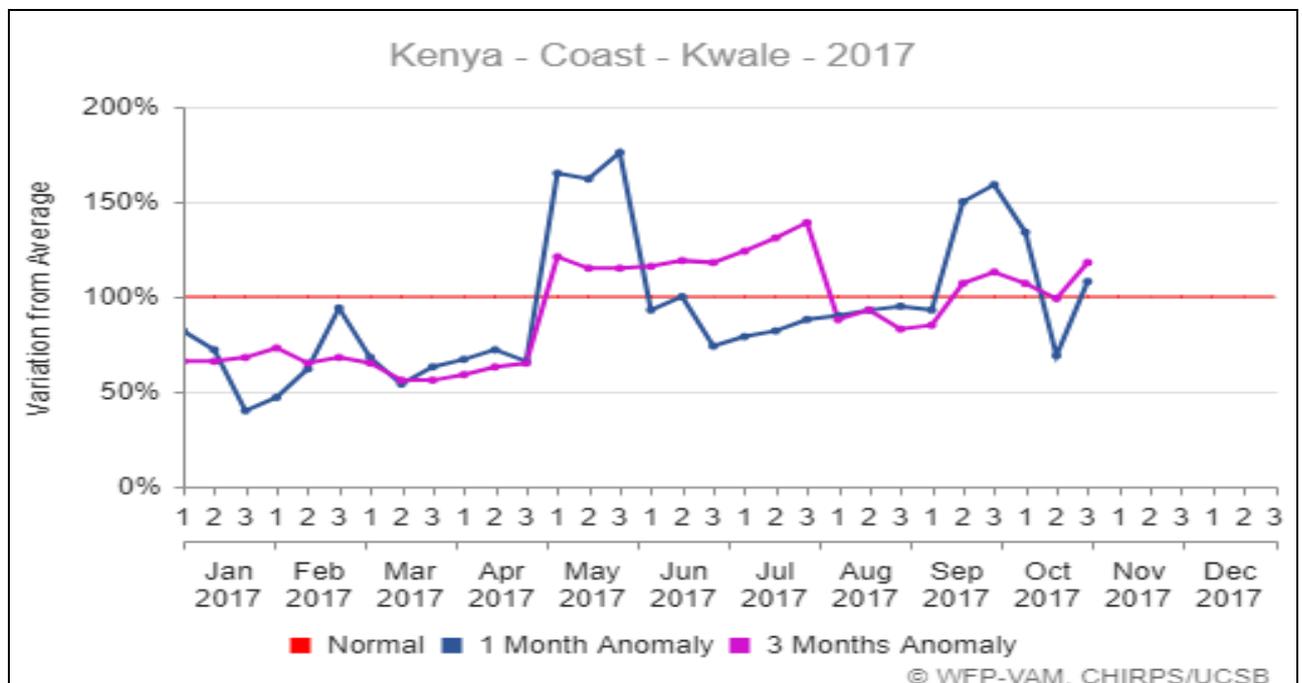
<ul style="list-style-type: none"> <li>Short rains harvests</li> <li>Short dry spell</li> <li>Reduced milk yields</li> <li>Increased household food stocks</li> <li>Land preparation</li> </ul>	<ul style="list-style-type: none"> <li>Planting/weeding</li> <li>Long rains</li> <li>High calving rate</li> <li>Milk yields Increase</li> </ul>	<ul style="list-style-type: none"> <li>Long rains harvests</li> <li>A long dry spell</li> <li>Land preparation</li> <li>Increased household food stocks</li> <li>Kidding (Sept)</li> </ul>	<ul style="list-style-type: none"> <li>Short rains</li> <li>Planting/weeding</li> </ul>								
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

## RAINFALL PERFORMANCE

- Onset of the short rains season was on 23th of October (third dekad), however the county had been receiving off-season rainfall from 18<sup>th</sup> of September.
- An average of 33.7mm of rainfall was received in the month with the third dekad receiving the highest amount of 70.7mm. The rains were above normal as indicated in the graph below:



- The temporal and spatial distribution of the rains was good across the county.



## 2.0 IMPACTS ON VEGETATION AND WATER

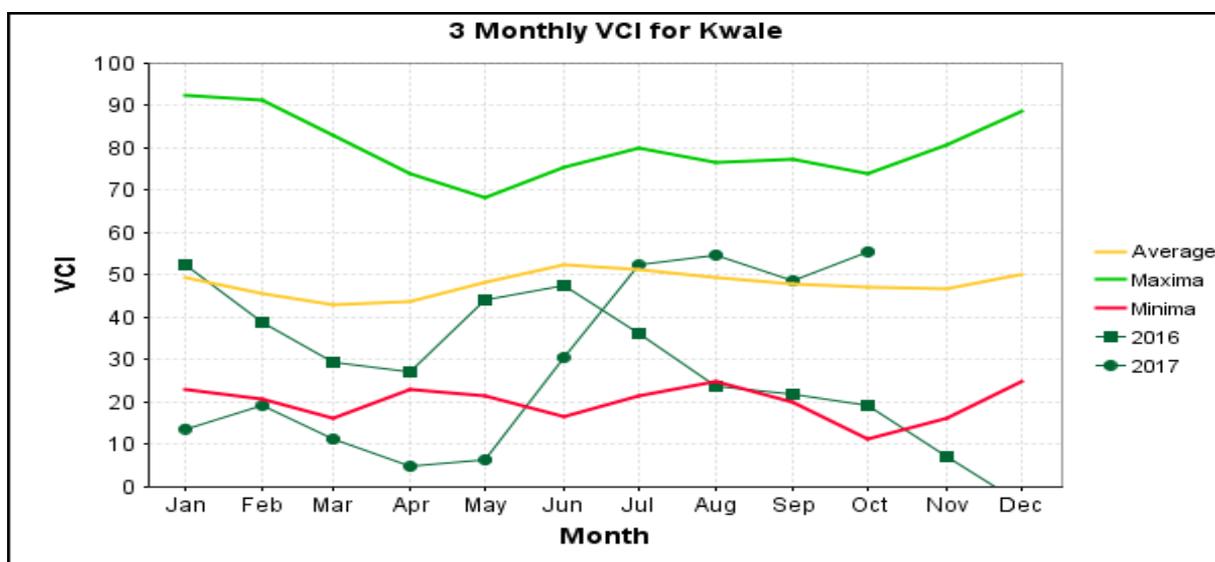
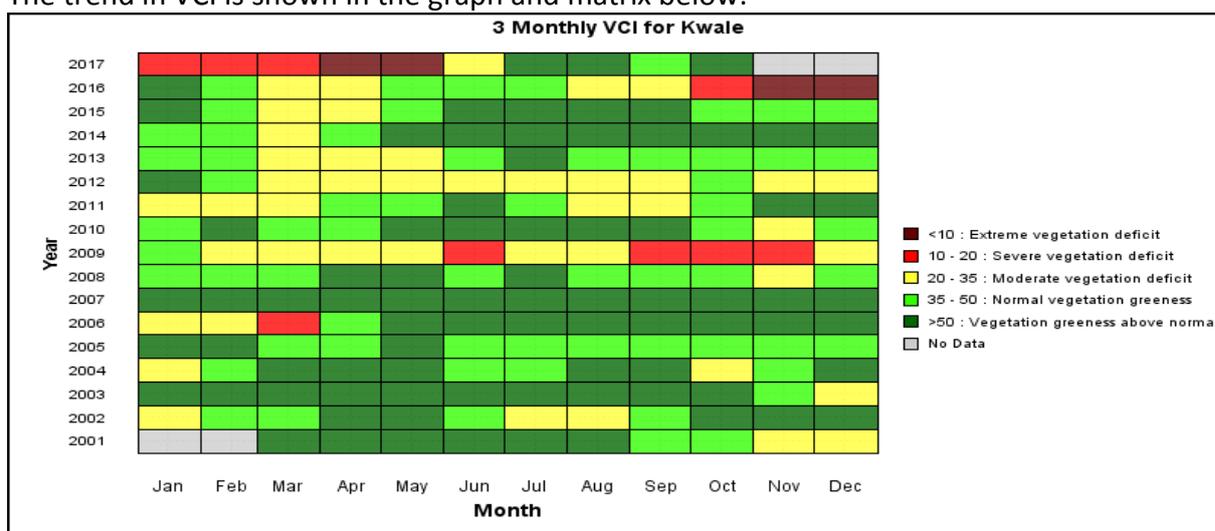
### 2.1 VEGETATION CONDITION

#### 2.1.1 Vegetation Condition Index (VCI)

- The vegetation condition in the county is shown in the table below:

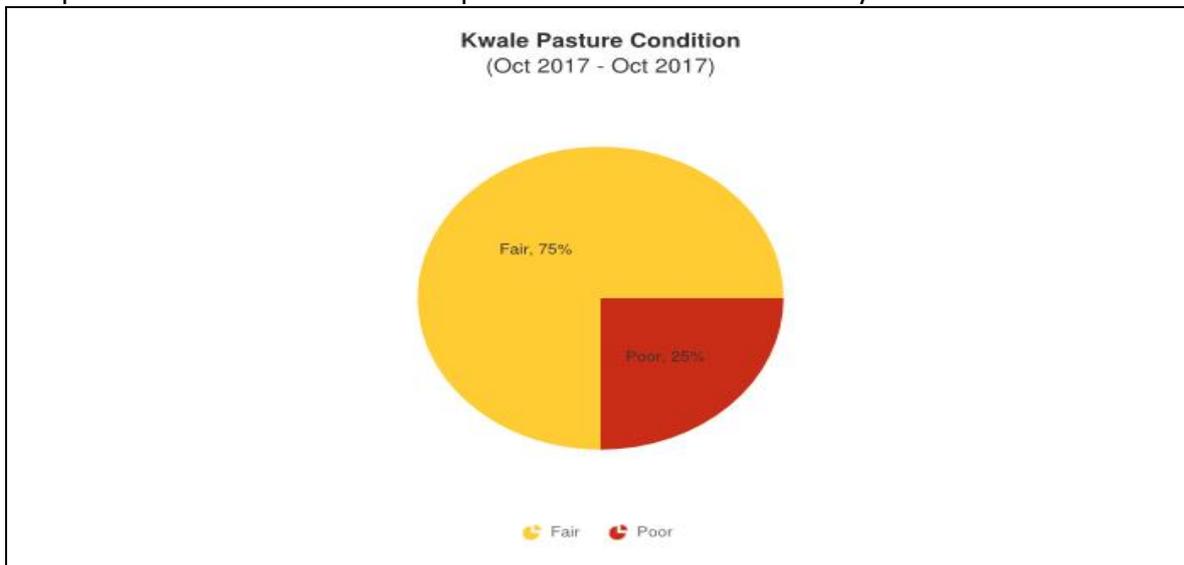
Sub-county	3-month VCI June 2017	3-month VCI July 2017	3-month VCI August 2017	3-month VCI September 2017	3-month VCI October 2017
Kinango	39.34	60.13	60.36	51.3	55.36
Lunga Lunga	20.97	49.13	51.73	46.03	52.32
Matuga	11.46	31.93	44.56	47.98	62.1
Msambweni	17.71	24.17	27.04	28.83	51.14
<b>Kwale County</b>	<b>30.34</b>	<b>52.12</b>	<b>54.63</b>	<b>48.9</b>	<b>55.36</b>

- The 3-month VCI for the county was 55.36 indicating it's in the above normal vegetation greenness category.
- All the four sub-counties had their 3-month VCI above 50 and were therefore classified to be in the above normal vegetable greenness band.
- The trend in VCI is shown in the graph and matrix below:

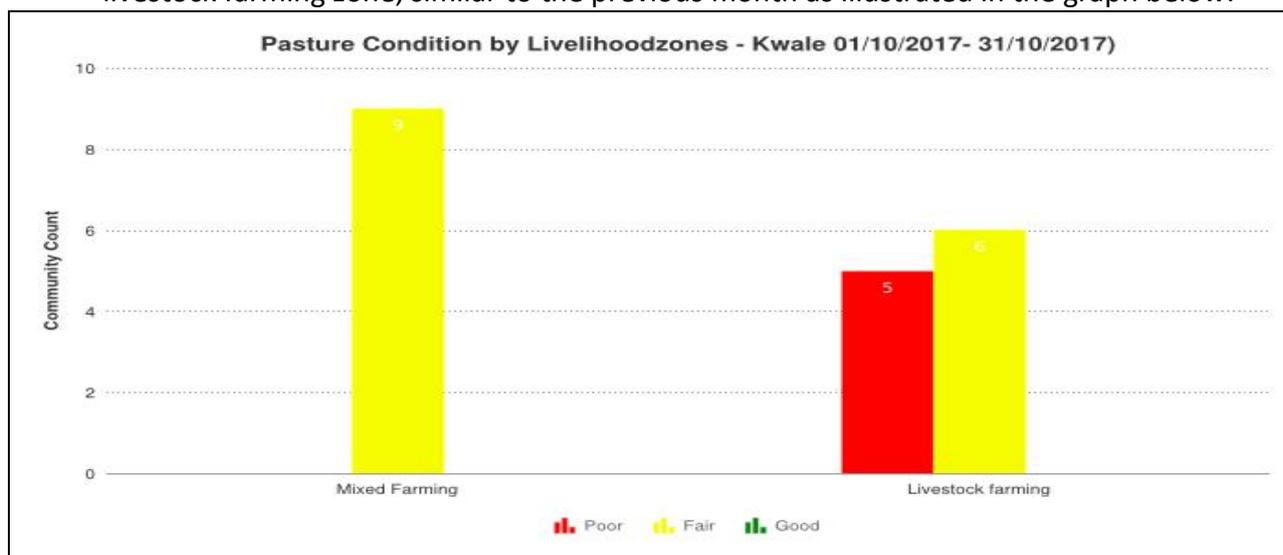


### 2.1.2 Pasture

- Three quarters of the households (75 percent) reported that the pasture condition was fair while the remaining quarter reported poor pasture condition. The condition is improving because of the onset of the short rains.
- The pie-chart below illustrates the pasture condition in the county:



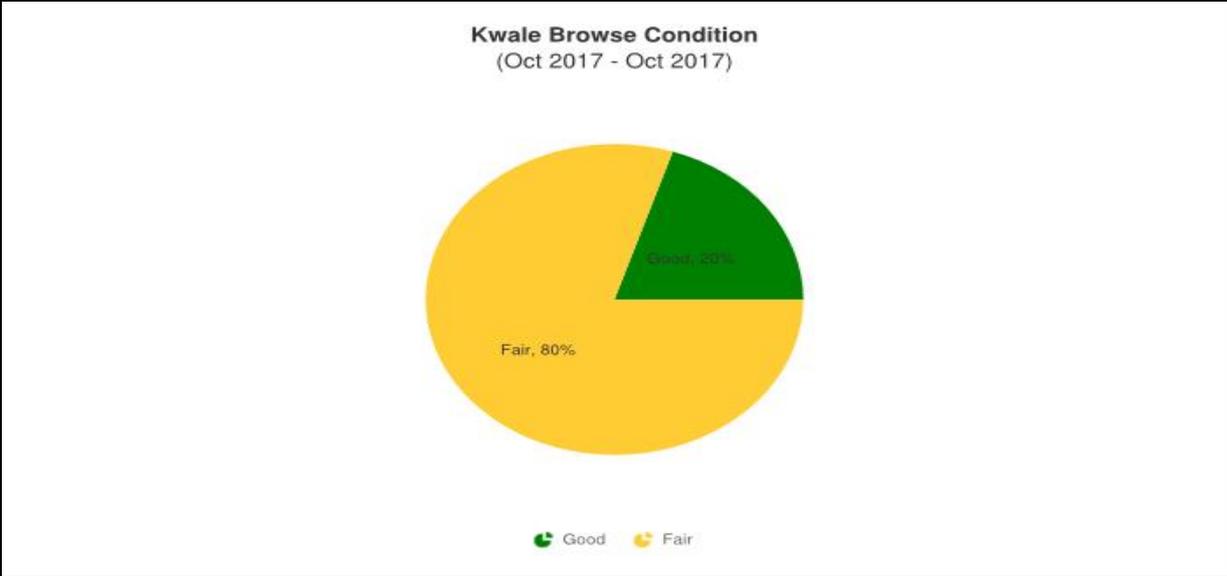
- Pasture condition was better in the mixed farming livelihood zone compared to the livestock farming zone, similar to the previous month as illustrated in the graph below:



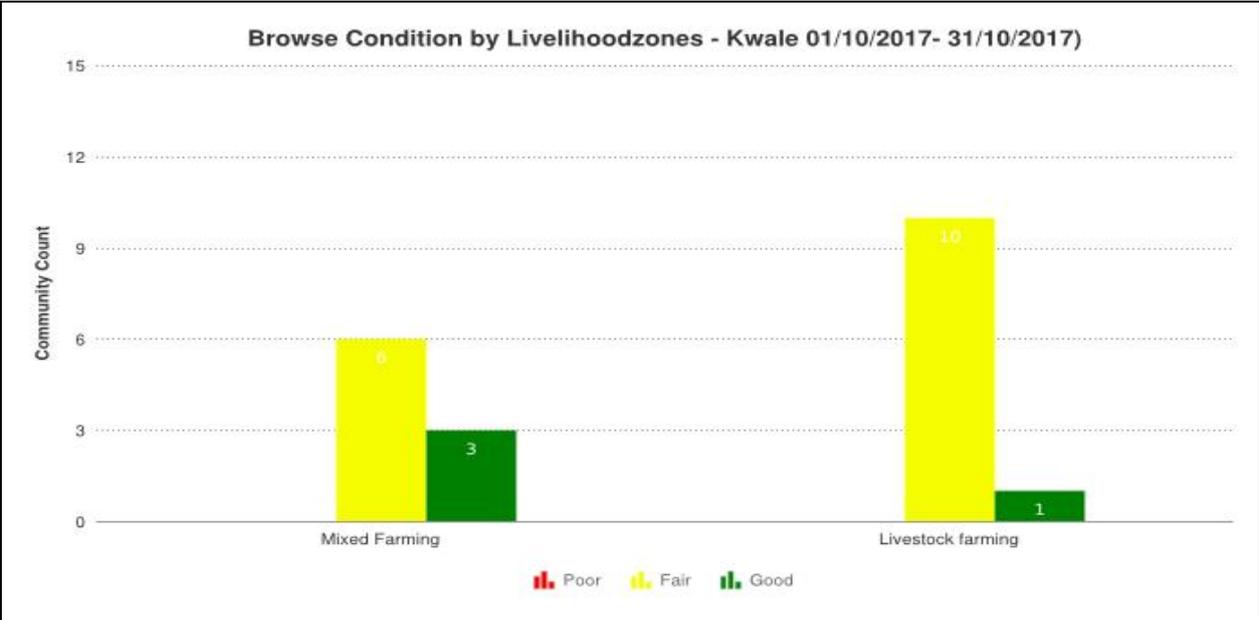
- With the onset of the short rains the pasture condition is expected to improve in both quality and quantity.

### 2.1.3 Browse

- Majority of the households interviewed (80 percent) reported that the browse condition was fair while the remaining 20 percent said it was good.
- The pie-chart below summarises the current browse condition in the county:



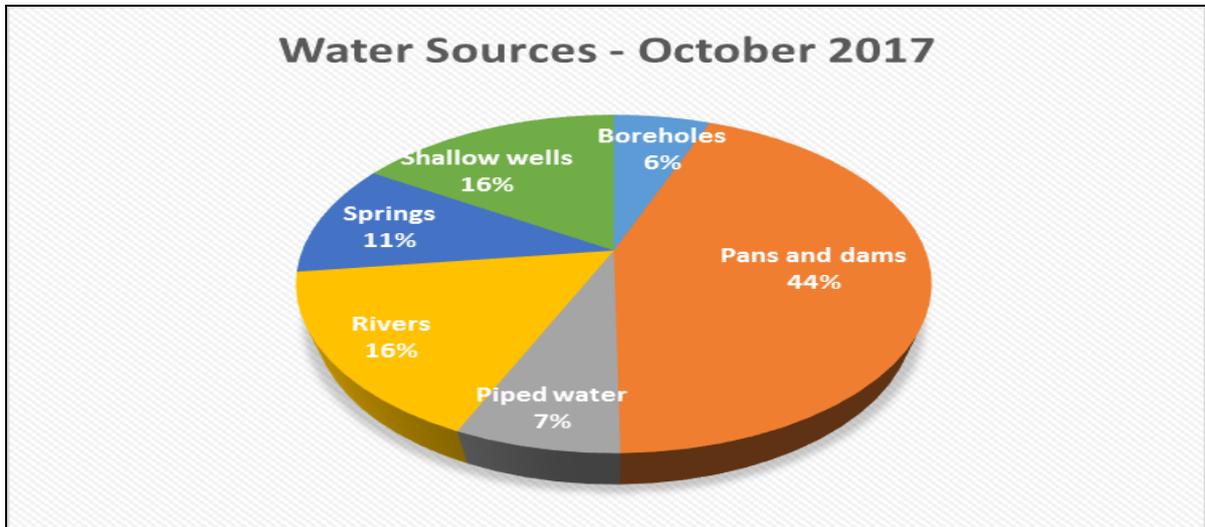
- Browse condition was better in the livestock farming livelihood zone compared to the mixed farming zone as shown in the graph below.
- With the onset of the short rains the browse condition is expected to improve in both quality and quantity.



**2.2 WATER RESOURCES**

**2.2.1 Sources**

- Pans and dams, rivers, and shallow wells were the main sources of water for most inhabitants of the county this reporting month. Most water sources have been recharged by the on-going rains. Pans and dams which are main sources of water in the livestock farming zones are likely to last for approximately 4 months.
- Other sources were springs, boreholes and piped water as shown in the pie-chart below:

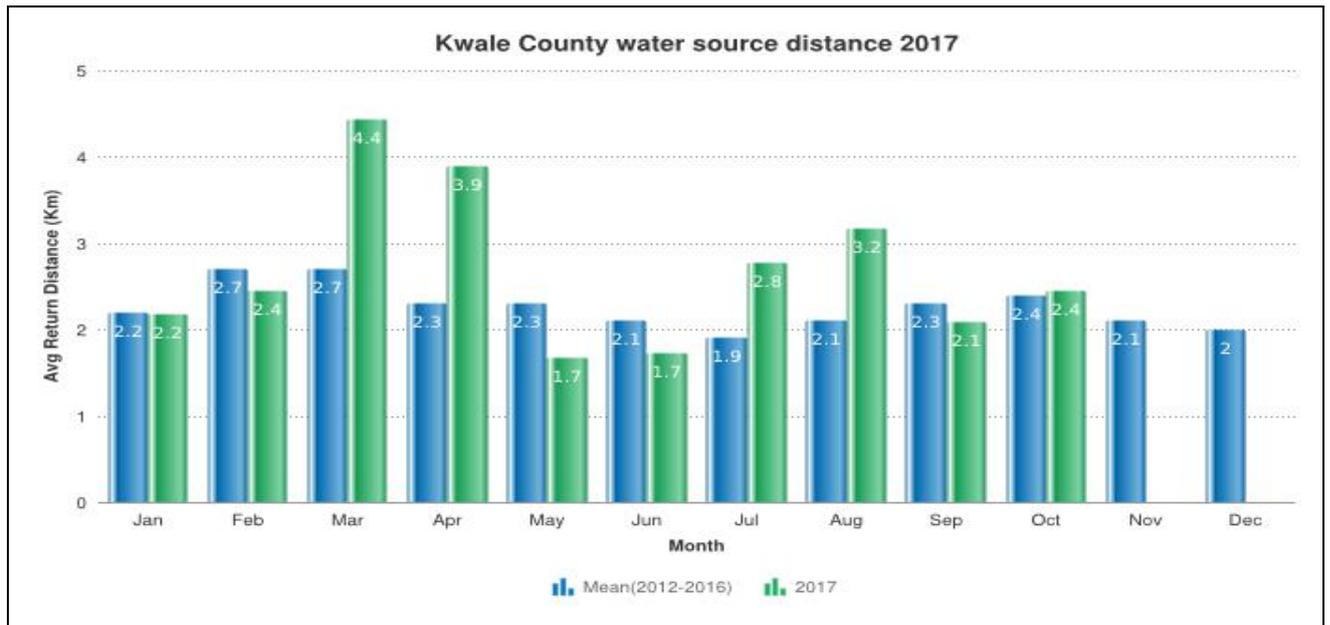


- The general early warning phase classification for the state of water sources in the county is five (5) indicating 'normal' trend for this time of the year (refer to the table below for assessment of the state of water sources). The situation has improved because of the onset of the short rains being received in county.

INDEX	STATE OF WATER SOURCE	DESCRIPTION
1	EMERGENCY SITUATION	All main water sources have dried up; only few boreholes still yielding significant amounts
2	STRONGLY INADEQUATE	Surface water sources have dried up while the underground water sources are yielding very little amounts of water. Breakages of boreholes contribute to worsen the situation. Acute water shortage in many areas within the livelihood
3	INADEQUATE	Surface water sources have dried up while the underground water sources are yielding modest amounts of water. Concentration of livestock around few water points contribute to spread communicable diseases and to degradation of rangeland
4	DECLINING	The water availability is below normal for the period
5	NORMAL	The water availability is normal for the period
6	GOOD	The water availability is above normal for the period

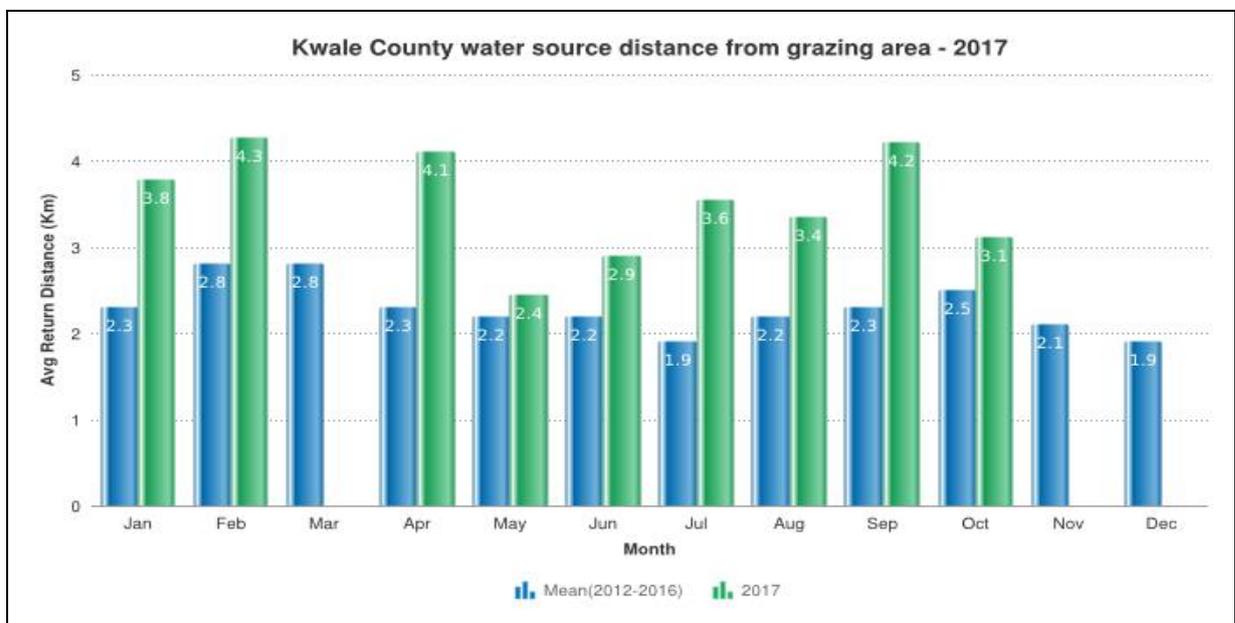
#### 2.2.2 Household access and utilization

- The average return distance from water sources by households was 2.4km and normal for this time of the year. The distances are expected to reduce with the onset of the short rains.



### 2.2.3 Livestock access

- The average trekking distance from the main water sources to grazing areas for livestock has reduced from 4.2km recorded the previous month to 3.1 km in October. This is attributed to the rains which have improved the forage condition.
- Despite the significant decrease in distances, 3.1km recorded was 24 percent longer than the 2.5km long-term mean distance. The trend in the grazing distances in the county is shown in the graph below:

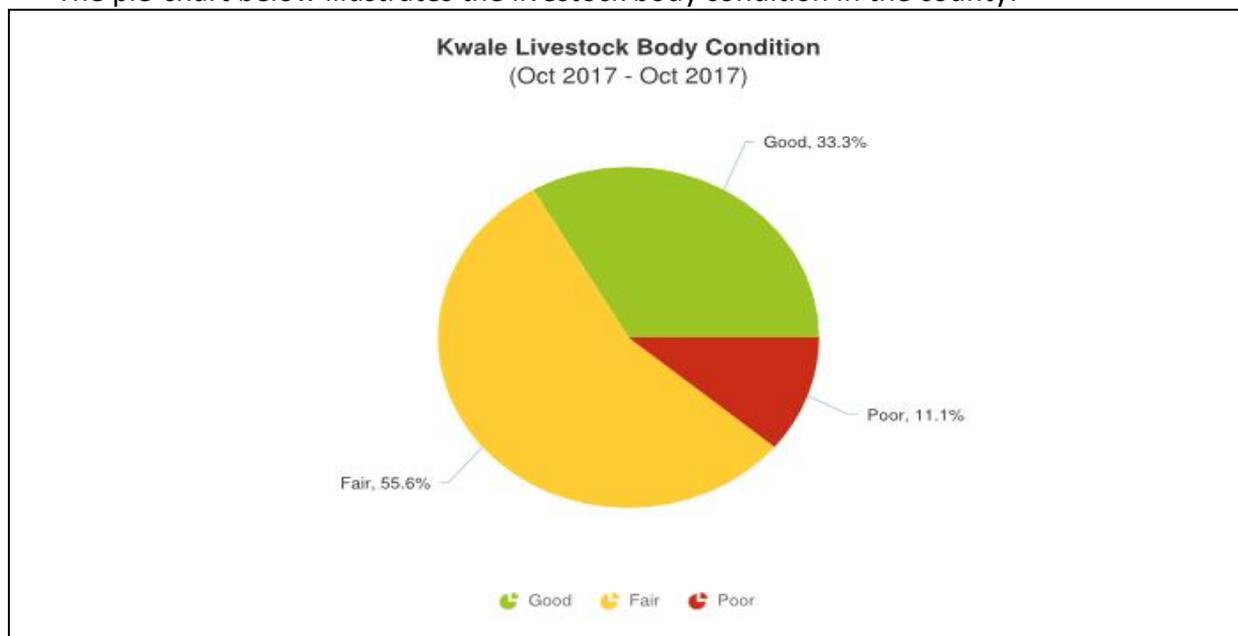


### 3.0 PRODUCTION INDICATORS

#### 3.1 LIVESTOCK PRODUCTION

##### 3.1.1 Livestock Body Condition

- More than a half of the households (55.6 percent) interviewed reported that their livestock had fair body condition, while 33.3 percent indicated good body condition. The remaining 11.1 percent reported that their livestock had poor body condition.
- The pie-chart below illustrates the livestock body condition in the county:



- The early warning classification for the livestock body condition is 2, indicating moderate, neither fat nor thin, and is likely to improve with forage regeneration enhanced the onset of the short rains.

The table below shows the classification of body condition for livestock:

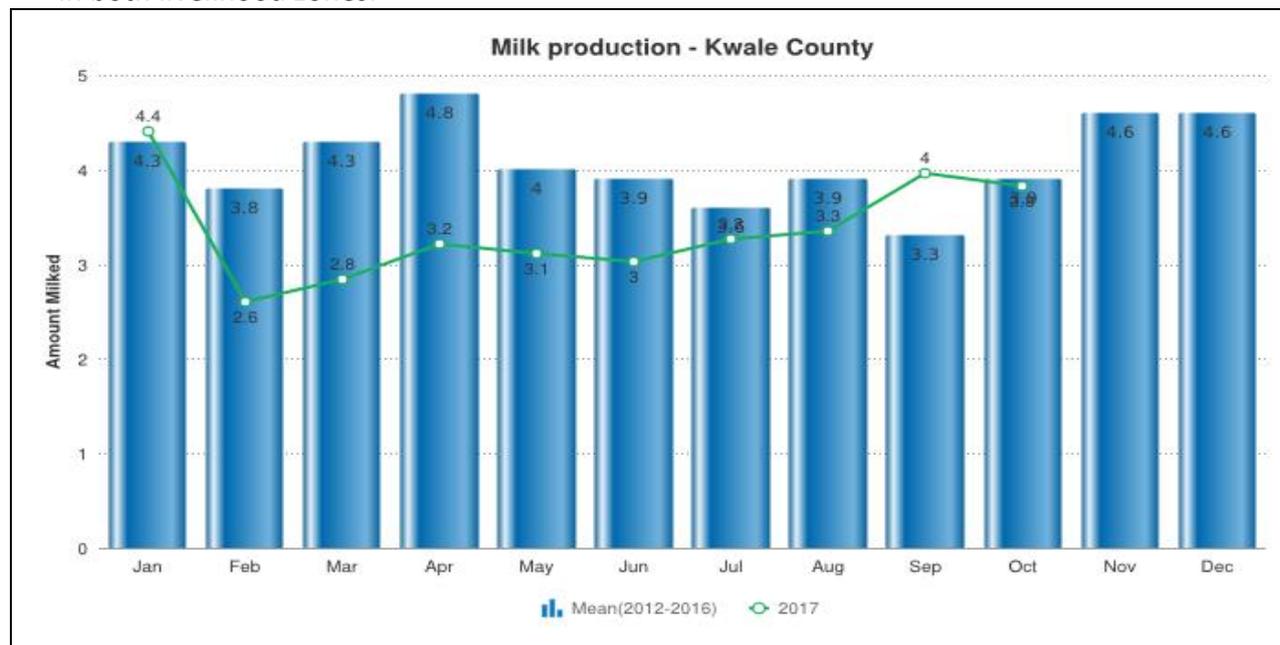
Level	Classification	Characteristics (this describes majority of the herd and not individual isolated Stock)
1	Normal	Very Fat Tail buried and in fat
		Fat, Blocky. Bone over back not visible
		Very Good Smooth with fat over back and tail head
		Good smooth appearance
2	Moderate	Moderate. neither fat nor thin
3	Stressed	Borderline fore-ribs not visible. 12th & 13th ribs visible
4	Critical	Thin fore ribs visible
5	Emaciated	Very thin no fat, bones visible
		Emaciated, little muscle left

##### 3.1.2 Livestock Diseases

- No livestock disease outbreak was reported in the county in the month of October 2017.

### 3.1.3 Milk Production

- The main producers of milk were cows, similar to the previous months.
- The average household milk production was 3.9 litres and normal for this time of the year.
- This normal milk production is attributed to improvement in quality and quantity of pasture in both livelihood zones.



## 3.2 RAIN-FED CROP PRODUCTION

### 3.2.1 Stage and condition of food crops

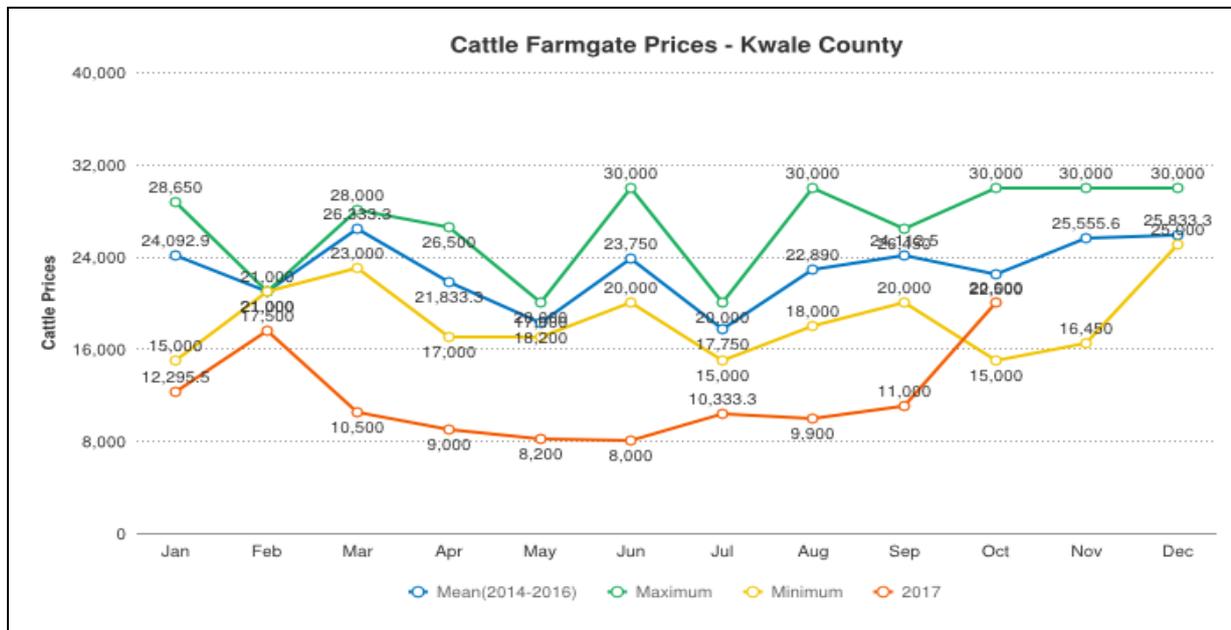
- Planting is on-going in most parts of the county as the short rain season has set in.

## 4.0 MARKET PERFORMANCE

### 4.1 LIVESTOCK MARKETING

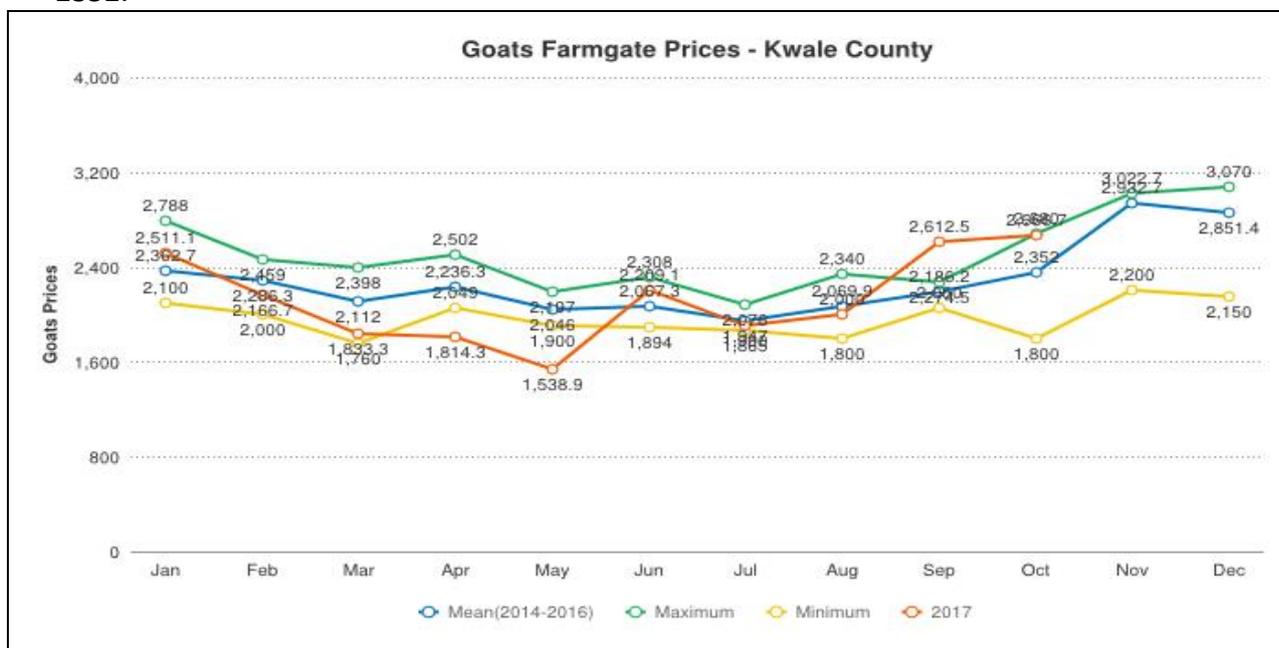
#### 4.1.1 Cattle Prices

- The average price of a three-year old bull at household level increased significantly from Kshs.11,000 reported the previous month to Kshs. 20,000 in this month. This positive trend is attributed to improving livestock body condition as a result of pasture availability hence they are attracting better prices in markets.
- Cattle prices were 11 percent lower than the long-term average price Kshs. 22,500 of 2014-2016 as shown in the graph below:



#### 4.1.2 Goat Prices

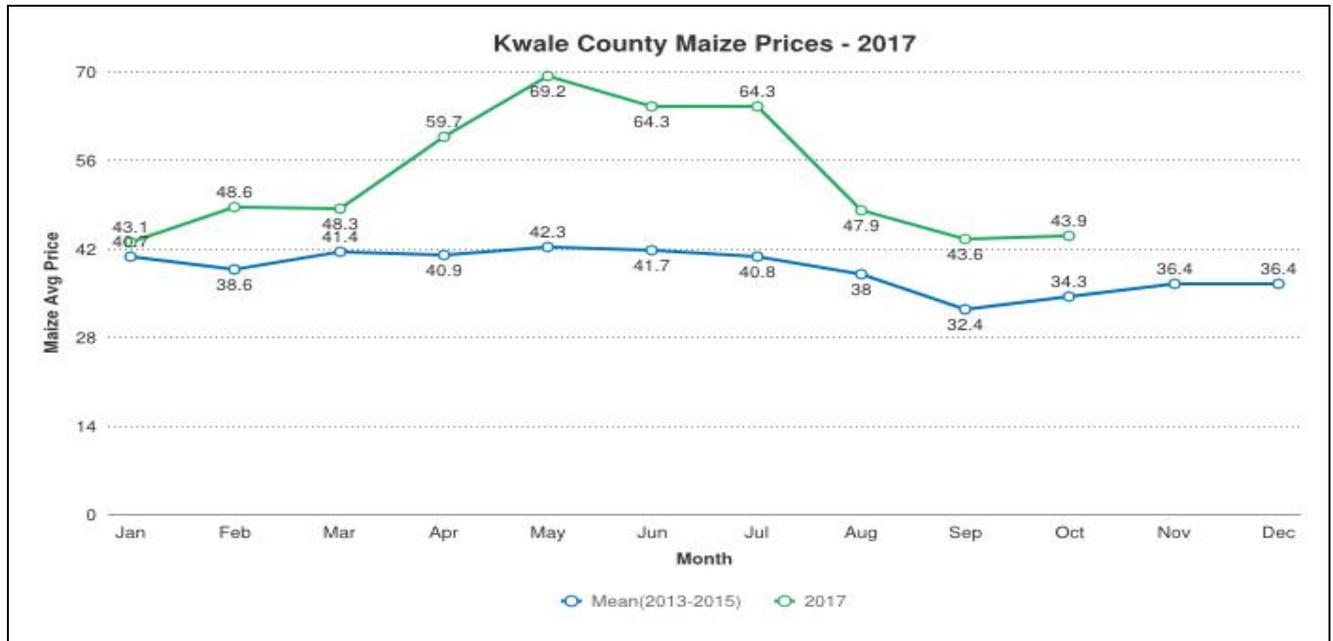
- The average price of a three-year old medium-sized goat also increased from Kshs. 2,612.50 to Kshs. 2,666.70 recorded in this reporting month.
- The current goat prices were 13.4 percent higher than the long-term average price of Kshs. 2352.



## 4.2 CROP PRICES

### 4.2.1 Maize

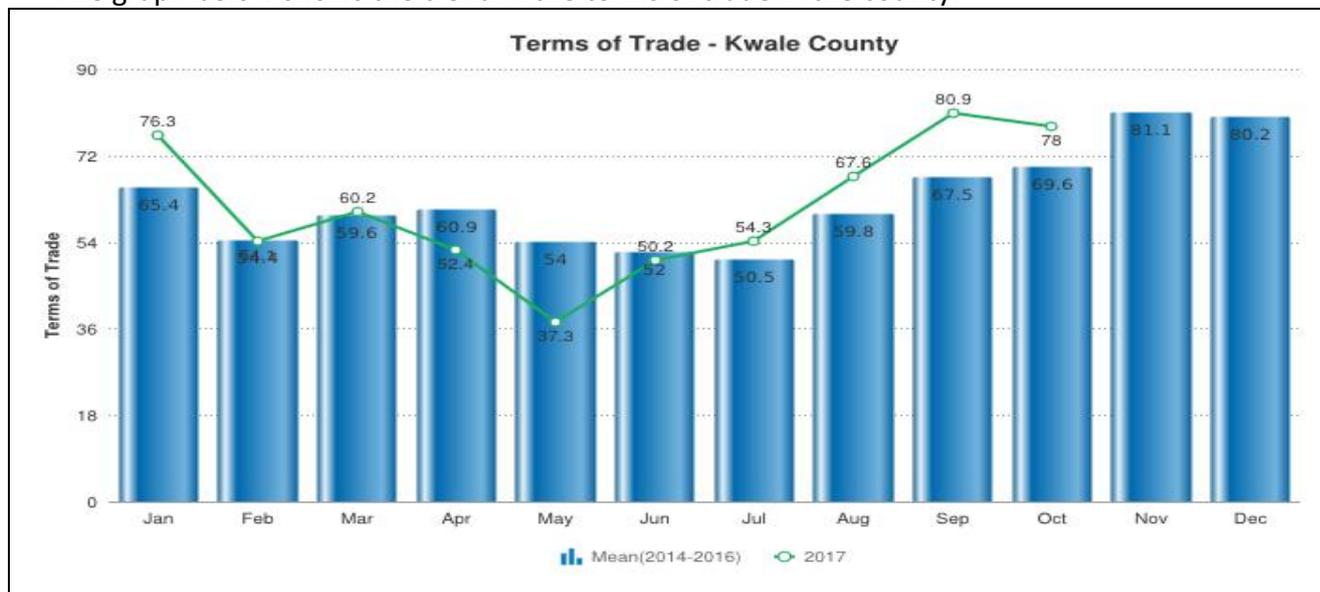
- The average market price of a kilogram of maize was Kshs. 43.90 similar to the previous month.
- However, the prices are likely to increase due to termination of the government subsidy program on maize on 31<sup>st</sup> of October 2017.
- The trend in maize prices in the county is displayed in the graph below:



- The price was 22 percent higher than the 2014-2016 long-term average price of Kshs. 34.3.

### 4.3 TERMS OF TRADE (CASUAL LABOUR VERSUS MAIZE PRICES)

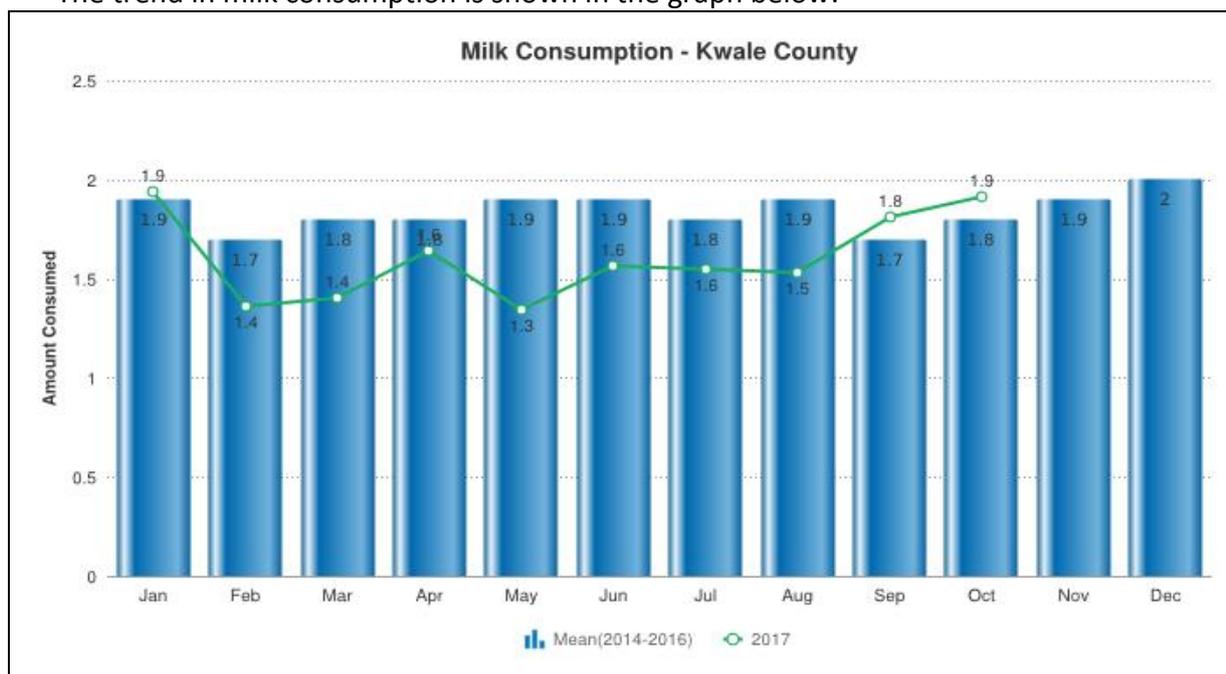
- The terms of trade was 78, a slight decrease from 80.9 recorded in September. The higher than normal term of trade is attributed to more households engaging in casual labour in farms as land preparation and planting continued and also price of maize has significantly reduced from Kshs. 69.20 to Kshs. 43.20 presently because of availability of maize stocks from the long rains harvest.
- The county's terms of trade was 12.1 percent above the 2014-2016 long-term average of 69.6.
- The graph below shows the trend in the terms of trade in the county:



## 5.0 FOOD CONSUMPTION AND NUTRITION STATUS

### 5.1 MILK CONSUMPTION

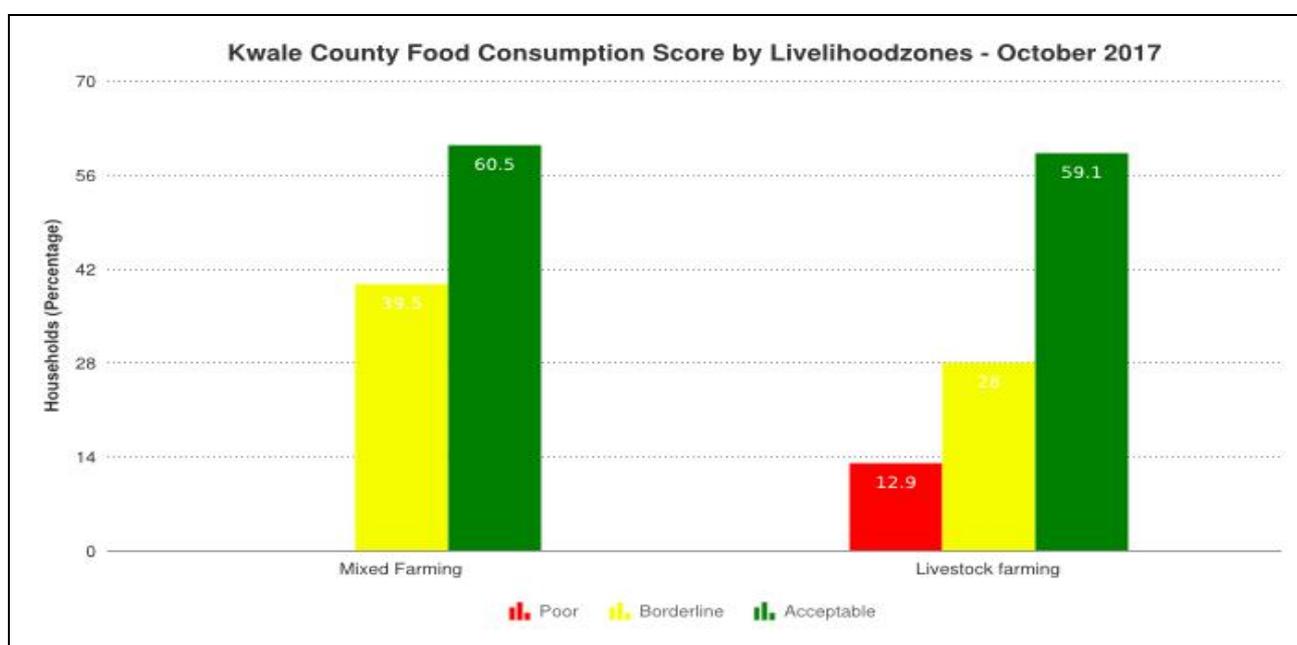
- The average milk consumption at household level increased from 1.8 litres to 1.9 litres in October. This is attributed to availability of milk as a result of cows having sufficient pasture.
- The trend in milk consumption is shown in the graph below:



- Milk consumption was 5.5 percent more than the 2014-2016 long-term mean amount of 1.8 litres.

## 5.2 FOOD CONSUMPTION SCORE

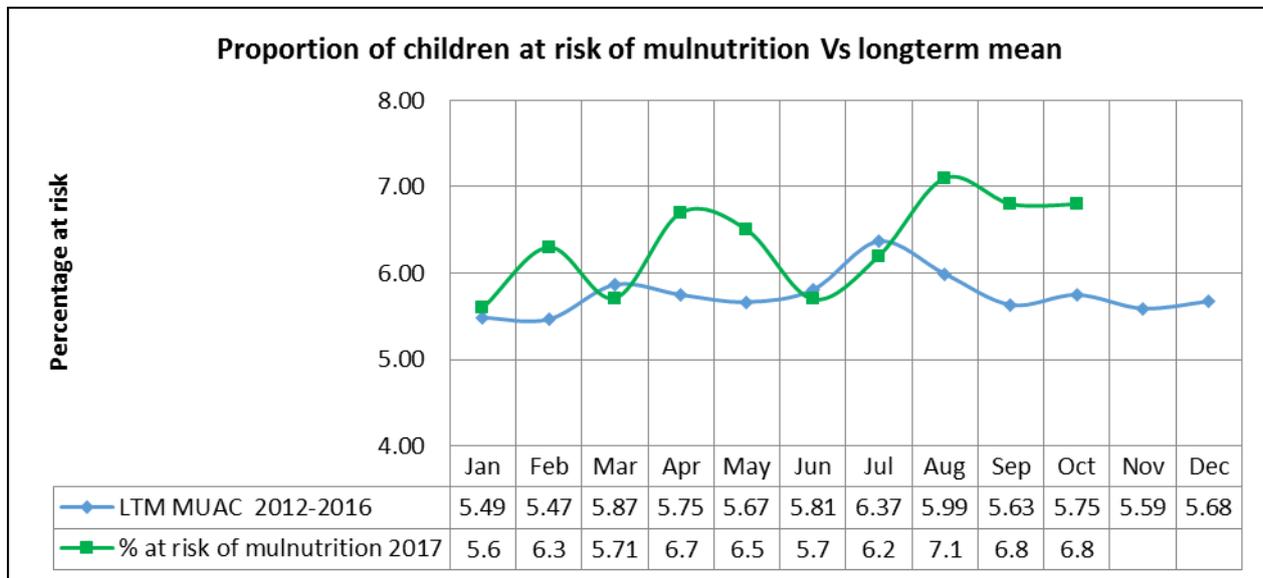
- The proportion of households with a poor food consumption score was 6.7 percent, compared to 4 percent recorded in the previous month. The proportion in the borderline category also increased from 32 to 33.5 percent while those in the acceptable zone reduced from 64 percent to 59.8 percent. There was no household in the mixed farming zone which had a poor food consumption score.
- The proportion of households with acceptable food consumption score in both livelihood zones was over 50 percent in both households. This implies that majority of households were consuming staples and vegetables every day, frequently accompanied by oil and pulses and occasionally meat, fish and dairy.
- The food consumption situation at livelihood zone level is shown in the graph below:



## 5.3 HEALTH AND NUTRITION STATUS

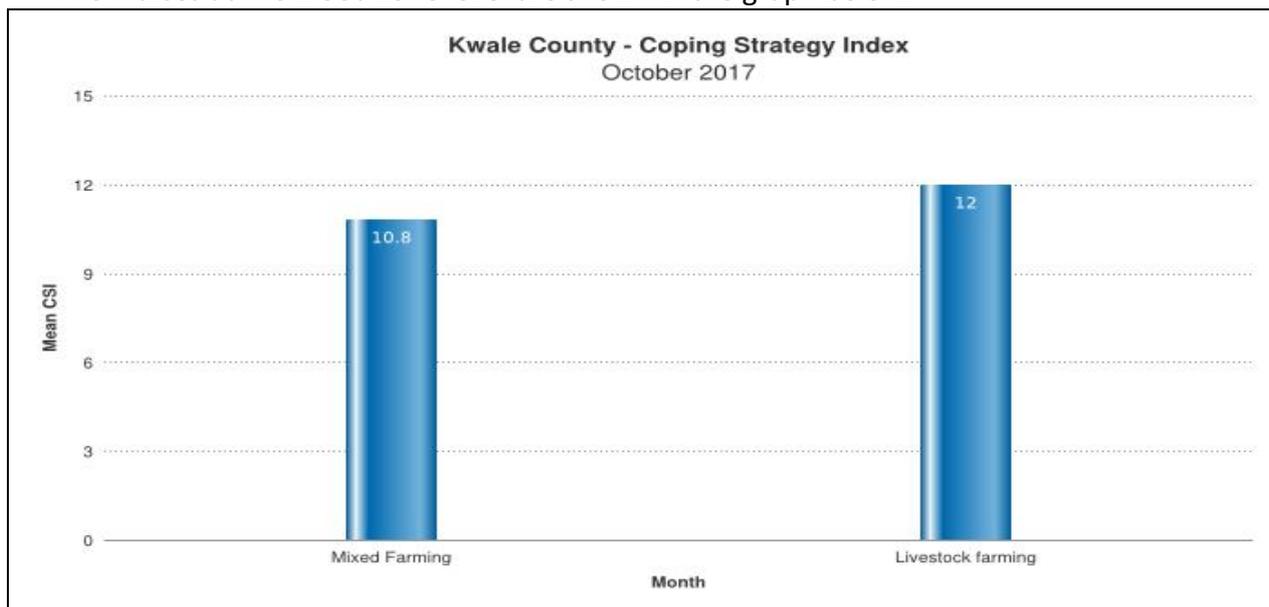
### 5.3.1 Nutrition Status

- The proportion of children below five years of age at risk of malnutrition based on the MUAC measurement was 6.8 percent similar to the previous month. A total of 1,079 children were screened (575 males and 504 females). This higher than normal trend in malnutrition may be attributed to increase in incidences of malaria and diarrhoea cases and, the on-going nurses strike in public health facilities.
- The proportion at risk was 18.2 percent higher than the expected 5.75 percent in the 2012-2016 long-term average as shown in the graph below:



## 5.4 COPING STRATEGIES

- The mean coping strategy index (CSI) for the month increased from 10.6 to 11.44 in October. The mean CSI for livestock farming livelihood zone decreased from 13.8 to 12 while in the mixed farming zone it increased slightly from 9.7 to 10.8.
- The indices at livelihood zone level are shown in the graph below:



- The most commonly employed coping mechanisms this month included reliance on less preferred and/or less expensive food, reduction of the number and/or portion size of meals and credit purchases.

## **6.0 CURRENT INTERVENTION MEASURES**

### **6.1 NON-FOOD INTERVENTIONS**

- Through the cash for asset program which is implemented by the Kenya Red Cross Society and funded by World Food Programme, 6,722 households in Kinango sub-county received a total of Kshs. 16,266,871.41
- The Veterinary Department is continuing with the mass vaccination against FMD for cattle, deworming and mass treatment of both cattle, sheep and goats across the county. In this reporting month, Kinango and Lunga Lunga sub-counties were targeted.
- The water department carried out extension of a pipeline which sources water from a borehole in the outskirts of Lukore to serve residents within the township.

## **7.0 EMERGING ISSUES**

### **7.1 Insecurity/Conflict/Human Displacement**

- No cases of insecurity, conflict or human displacement were reported this month.

### **7.2 Migration**

- No migration was reported the month.

### **7.3 FOOD SECURITY PROGNOSIS**

The short rains season has commenced with a high likelihood of above-normal performance. Therefore, there is a likelihood of enhanced production in both livestock and crops. Livestock body condition is improving as pasture and browse will be rejuvenated increasing milk production and boosting market prices, collectively improving household incomes. Crops are also likely to do well which will further increase access and availability of food at household level. As a result, malnutrition levels are likely to reduce as dietary diversity improves. Households are therefore likely to engage less severe coping strategies less frequently as food consumption gaps reduce. The food security situation is therefore likely to remain stable in the county. However, there is a likelihood of the occurrence of human and livestock disease out-breaks as a result of above normal rainfall, coupled with crop destruction and flooding which could compromise the envisaged improvement in both livestock and crop production.

## **8.0 RECOMMENDATIONS**

- Support fodder production and conservation.
- Support rainwater harvesting in public facilities and individual homes
- Timely distribution of planting seeds to take advantage of the above average rainfall that is envisaged in the short rains reason.
- Surveillance to prevent resurgence of fall army worm
- Enhanced promotion of mechanized agriculture for improved crop production
- Promotion of early maturing drought tolerant crops and traditional high value crops.