

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



A Vision 2030 Flagship Project



SEPTEMBER 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 normal at 48.9
- 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 above normal.
- No livestock migration was reported during the month.

Access indicators

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

Utilization Indicators

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

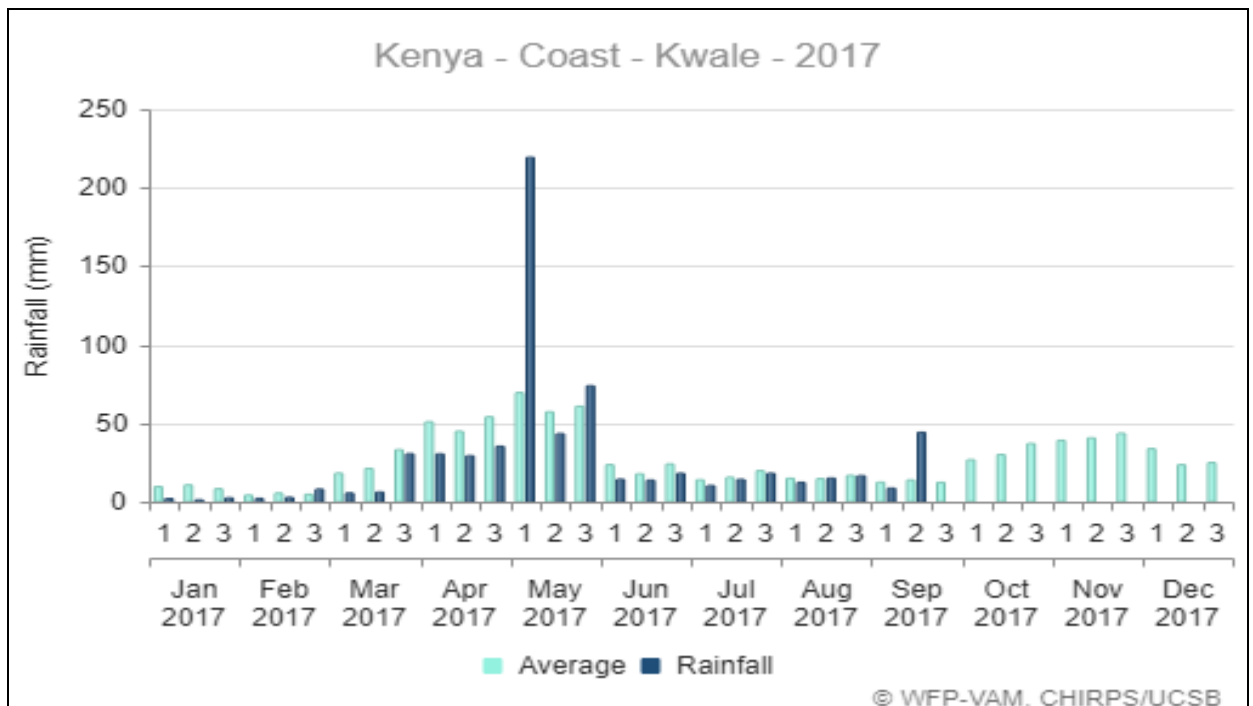
Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Mixed Farming	Normal	Stable
Livestock Farming	Normal	Stable
County	Normal	Stable
Biophysical Indicators	Value	Normal Range/Value
VCI	48.9	48
State of Water Sources	3	5
Production indicators	Value	Normal
Crop Condition (maize and legumes)	Poor	Good
Livestock Body Condition	2	2
Milk Production (Litres)	4	3.3
Livestock Migration Pattern	No migration	No migration
Livestock deaths (from drought)	None	No deaths
Access Indicators	Value	Normal
Milk Consumption (litres)	1.8	1.7
Return distance to water sources (km)	3.1	2.1
Utilization indicators	Value	Normal
Nutrition Status (percentage at risk of malnutrition based on MUAC)	6.8	5.6

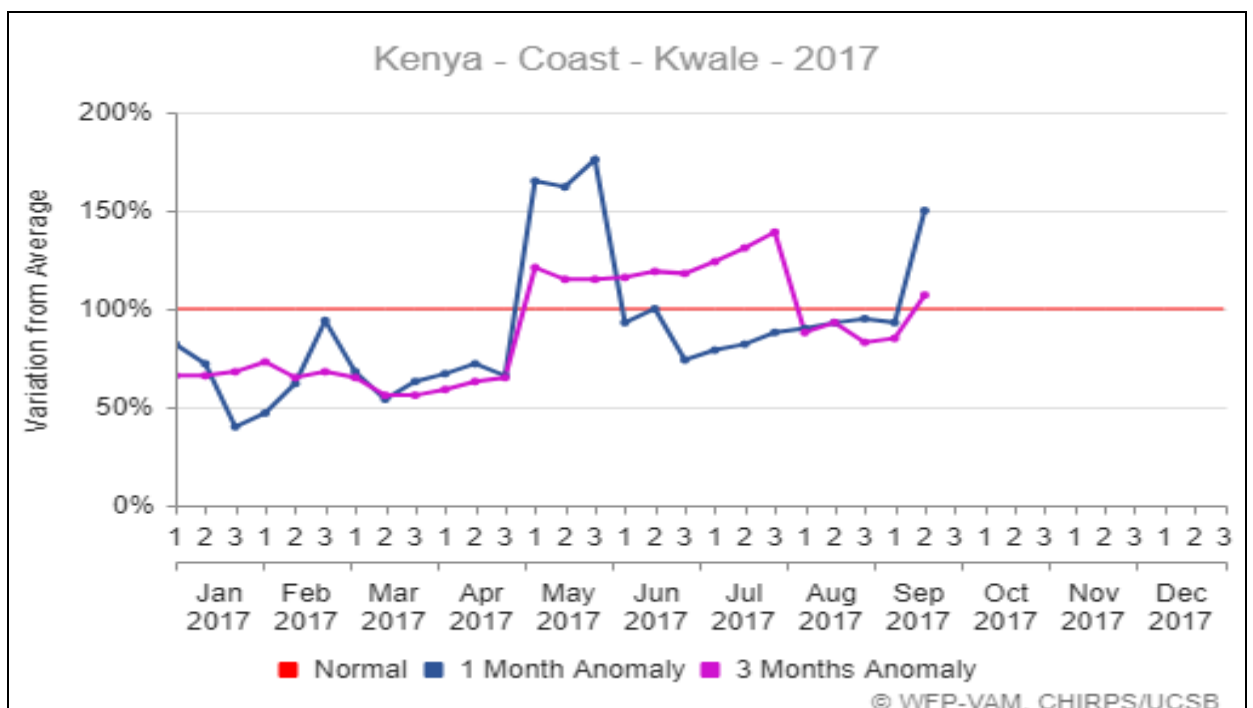
<ul style="list-style-type: none"> Short rains harvests Short dry spell Reduced milk yields Increased household food stocks Land preparation 	<ul style="list-style-type: none"> Planting/weeding Long rains High calving rate Milk yields Increase 	<ul style="list-style-type: none"> Long rains harvests A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

RAINFALL PERFORMANCE

- The county received above normal off-season rains from the second dekad of September as illustrated in the graph below:



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



2.0 IMPACTS ON VEGETATION AND WATER

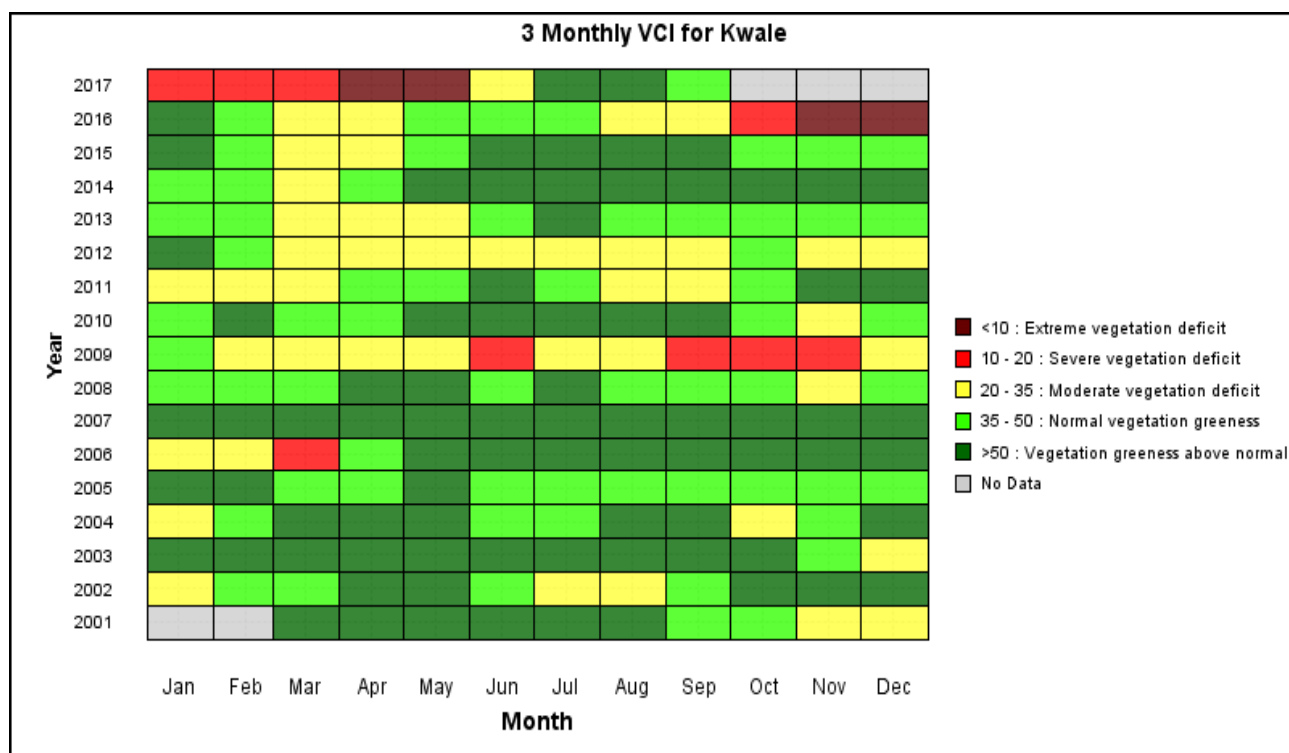
2.1 VEGETATION CONDITION

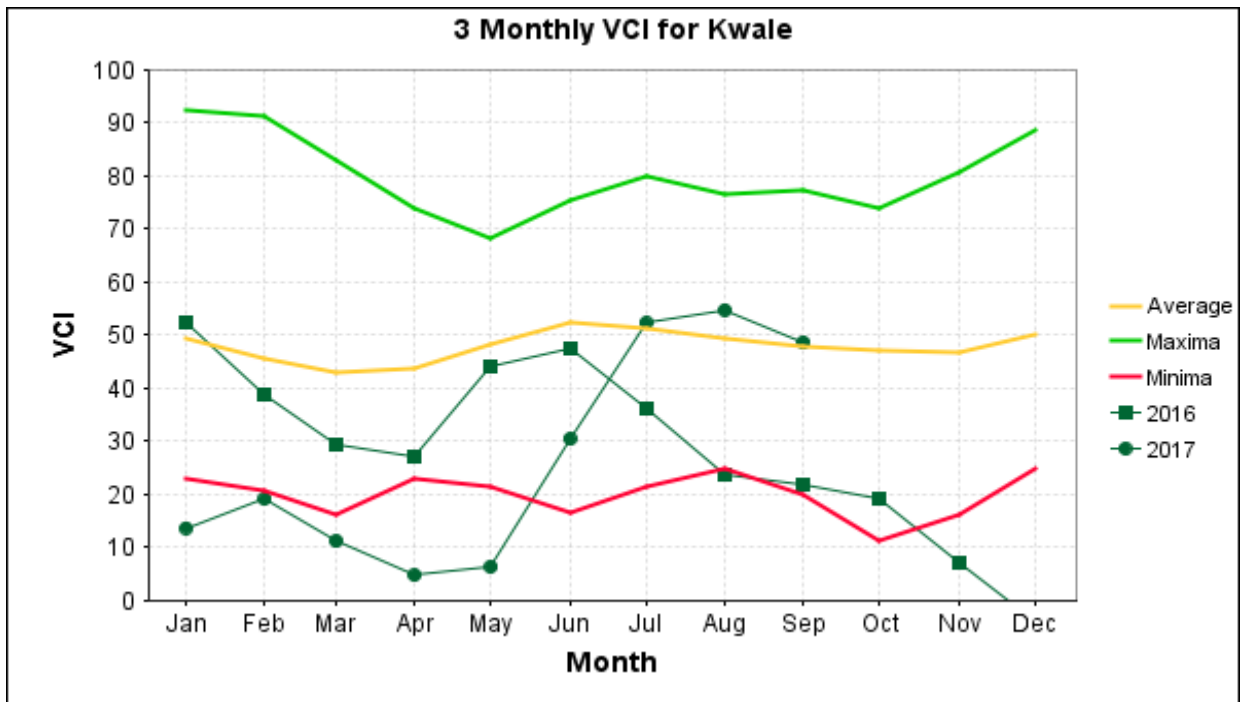
2.1.1 Vegetation Condition Index (VCI)

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

Sub-county	3-month VCI May 2017	3-month VCI June 2017	3-month VCI July 2017	3-month VCI August 2017	3-month VCI September 2017
Kinango	10.63	39.34	60.13	60.36	51.3
Lunga Lunga	-4.06	20.97	49.13	51.73	46.03
Matuga	1.86	11.46	31.93	44.56	47.98
Msambweni	15.1	17.71	24.17	27.04	28.83
Kwale County	6.25	30.34	52.12	54.63	48.9

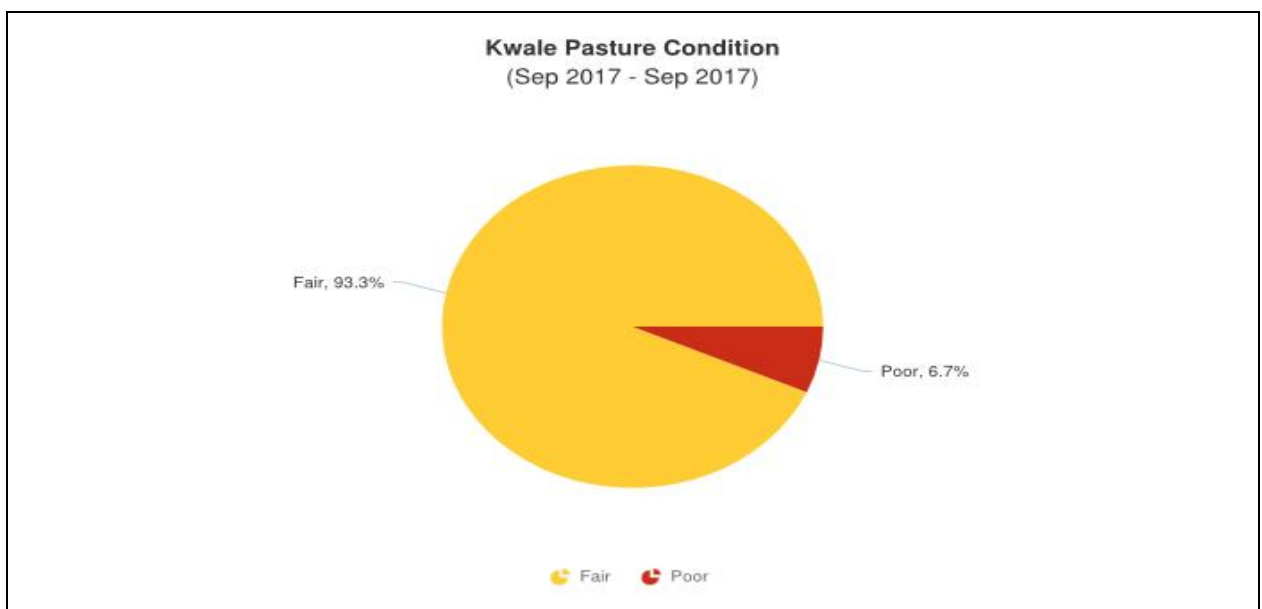
- The county's 3-month VCI was 48.9 which implies it is in the 'normal vegetation greenness' category. This is a slight drop from the previous month's value of 54.63.
- Msambweni sub-county had the lowest 3-month VCI at 27.04 and categorised in the 'moderate vegetation deficit'. Matuga and Lunga Lunga sub-counties VCIs were 47.98 and 46.03 respectively hence grouped in the 'normal vegetation greenness' band while Kinango sub-county was classified in the 'above normal vegetation greenness' category.
- The trend in VCI is shown in the graph and matrix below:



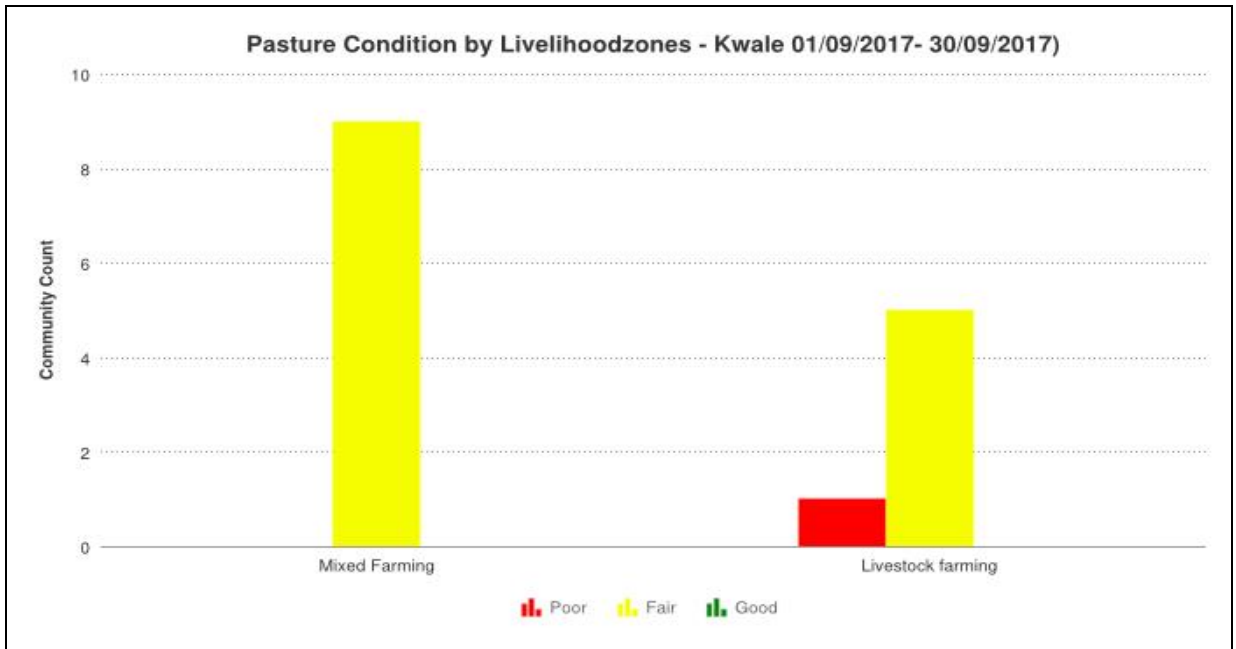


2.1.2 Pasture

- Majority of households (93.3 percent) reported that the pasture condition was fair while the remaining 6.7 percent reported poor pasture condition. No household reported good pasture condition but the situation is expected to improve because of the off-season rains received in the second dekad of the month.
- The pasture condition in the county is explained in the pie-chart below:



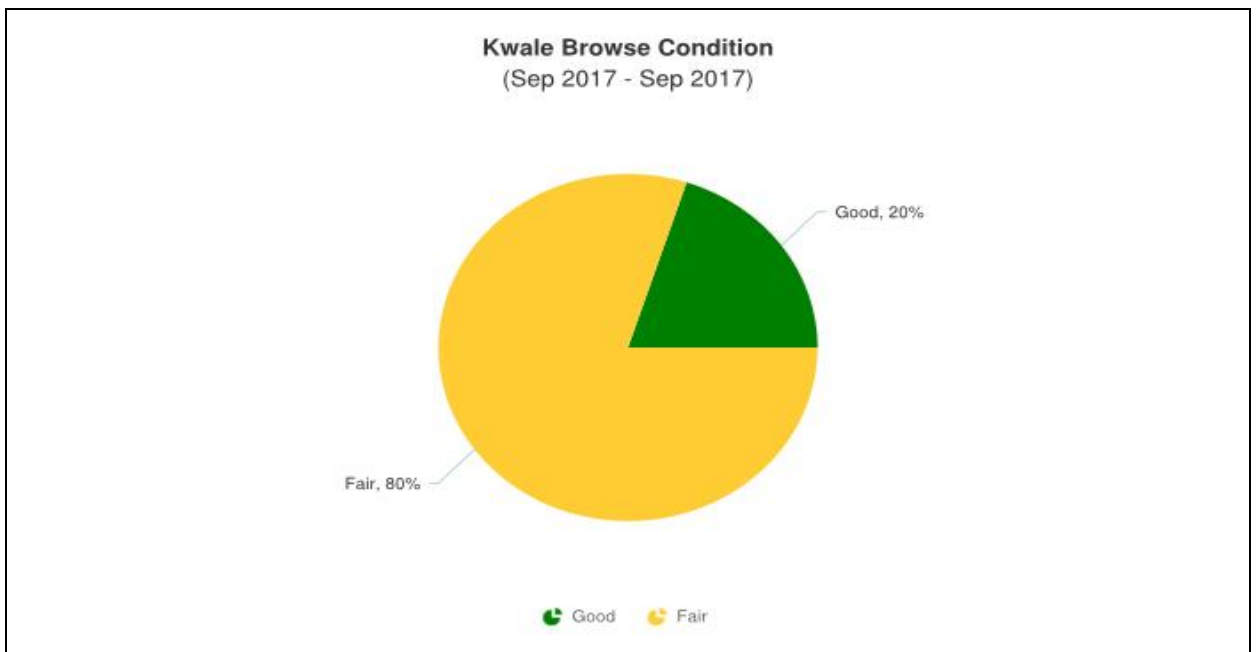
- Pasture condition was better in the mixed farming livelihood zone compared to the livestock farming zone, similar to the previous month as illustrated in the graph below:



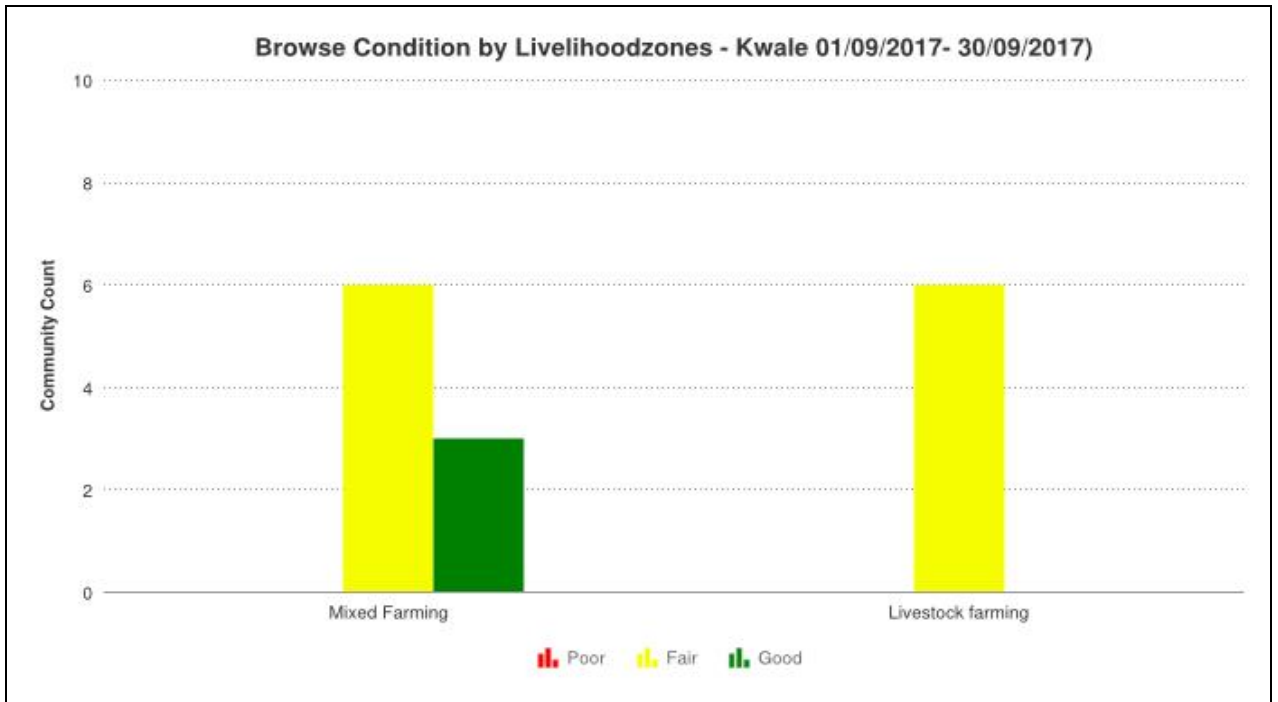
- The available pasture is likely to last for approximately two and three months in the livestock and mixed farming livelihood zones respectively.

2.1.3 Browse

- 80 percent the households interviewed reported that the browse condition was fair and the remaining said it was good.
- The current browse condition in the county is shown in the pie-chart below:



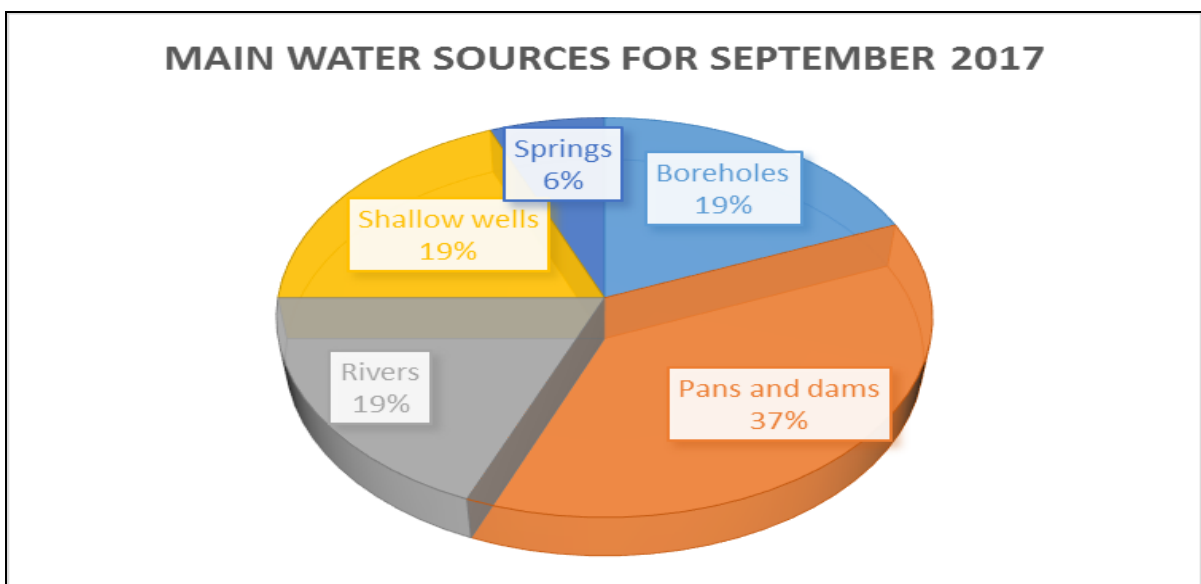
- Browse condition was better in the mixed farming livelihood zone compared to the livestock farming zone as shown in the graph below.
- The available browse is projected to last for approximately four months in the mixed farming livelihood zone and three months in livestock farming livelihood zone.



2.2 WATER RESOURCES

2.2.1 Sources

- Pans and dams were the main sources of water for most inhabitants of the county this reporting month. These pans and dams were likely to supply water for humans and livestock for approximately 4 months.
- Other sources were rivers, shallow wells, boreholes and springs as shown in the pie-chart below:



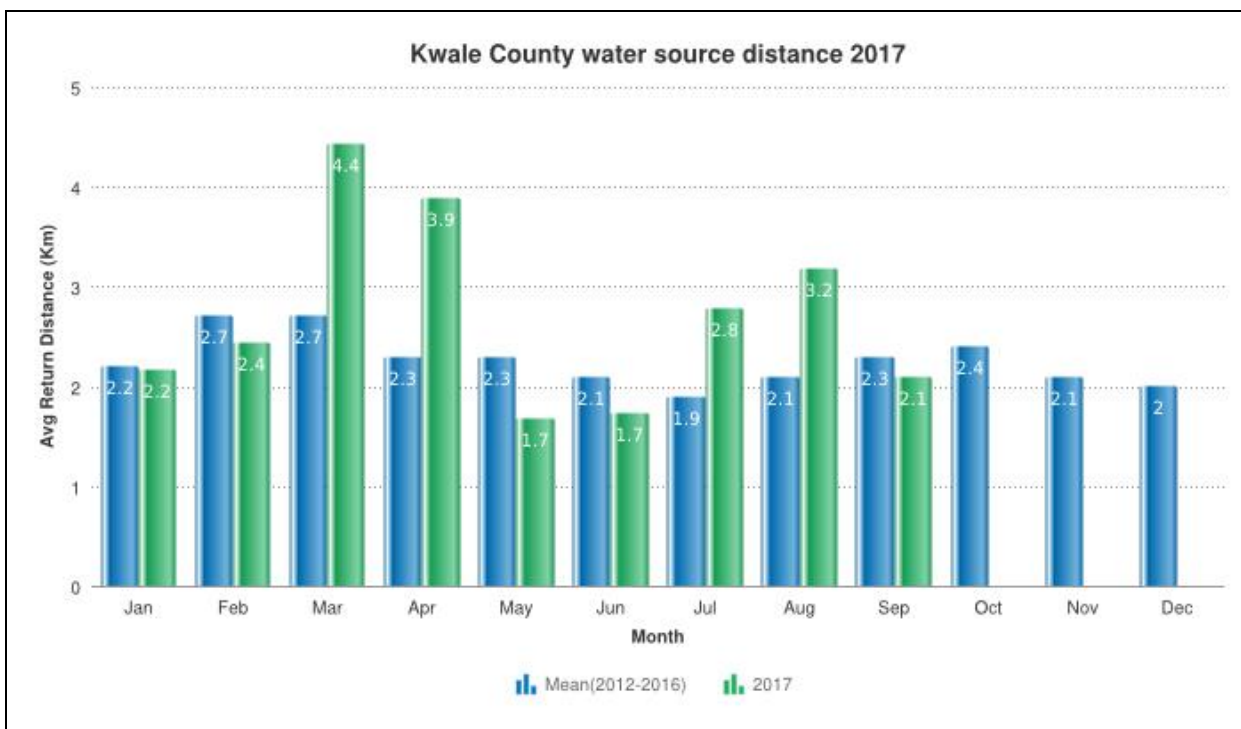
- The general early warning phase classification for the state of water sources is five (5) indicating 'normal' trend for this time of the year (refer to the table below for assessment of

the state of water sources). The situation has improved because of the off season 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 has slightly increased from 2.1 in August to 2.3 km in September. However with the off season rains received from second dekad of the month, the distances are expected to reduce.

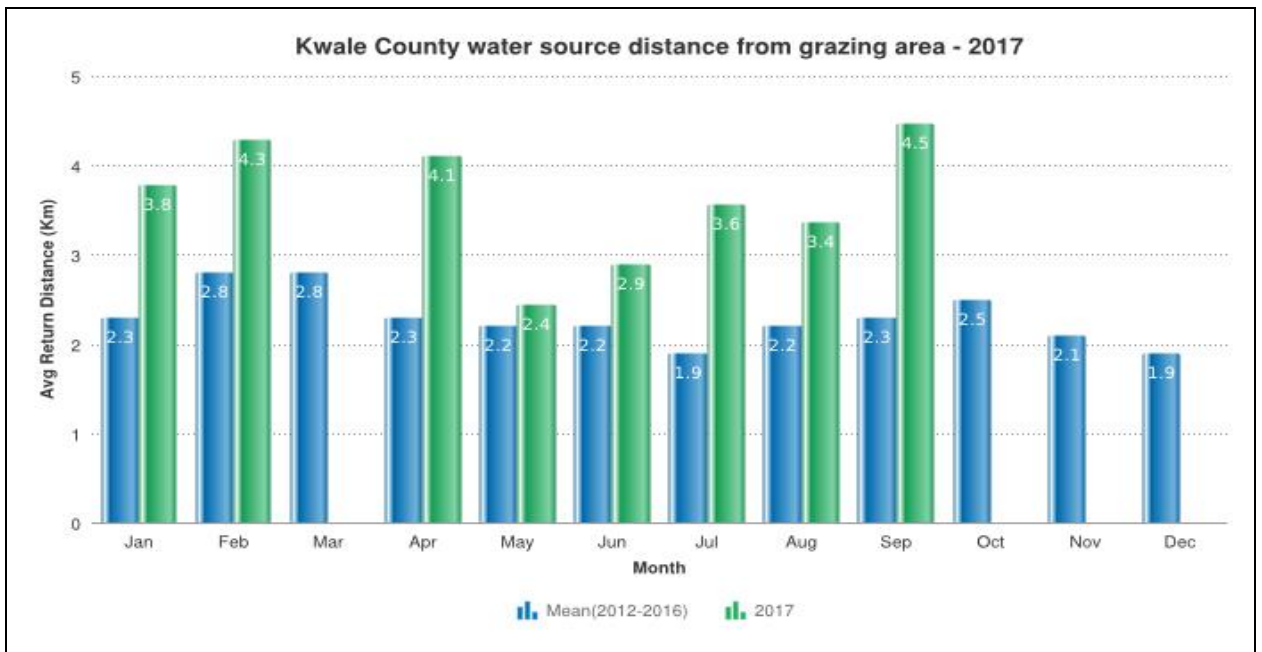


- The distance was 8.6 percent shorter than the long-term mean distance of 2.3 km as illustrated in the graph above.

2.2.3 Livestock access

- The average trekking distance from the main water sources to grazing areas for livestock was 4.5 km, an increment of 32 percent from 3.4km recorded the previous month. This trend is expected to change with the off-season rains enhancing forage regeneration.

- This was 48 percent longer than the long-term distance of 2.3km as shown in the graph below.

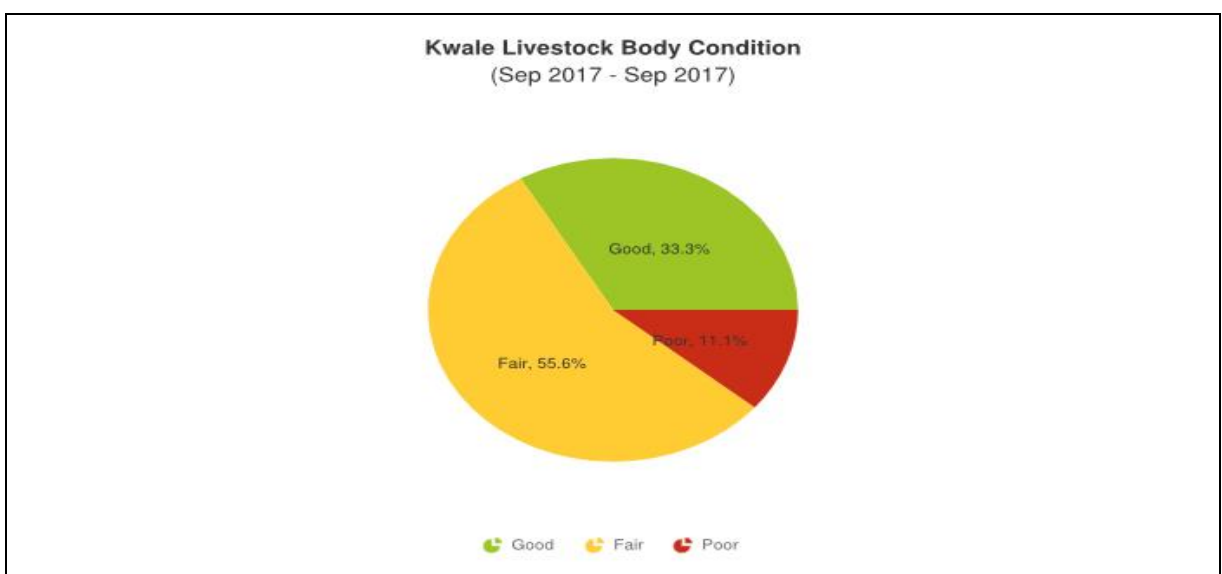


3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- 55.6 percent of households interviewed reported that their livestock had fair body condition, while a third indicated good body condition. The remaining 11.1 percent reported that their livestock had poor body condition.
- The livestock body condition in the county is shown in the pie-chart below:



- 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 by off-season rains.

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

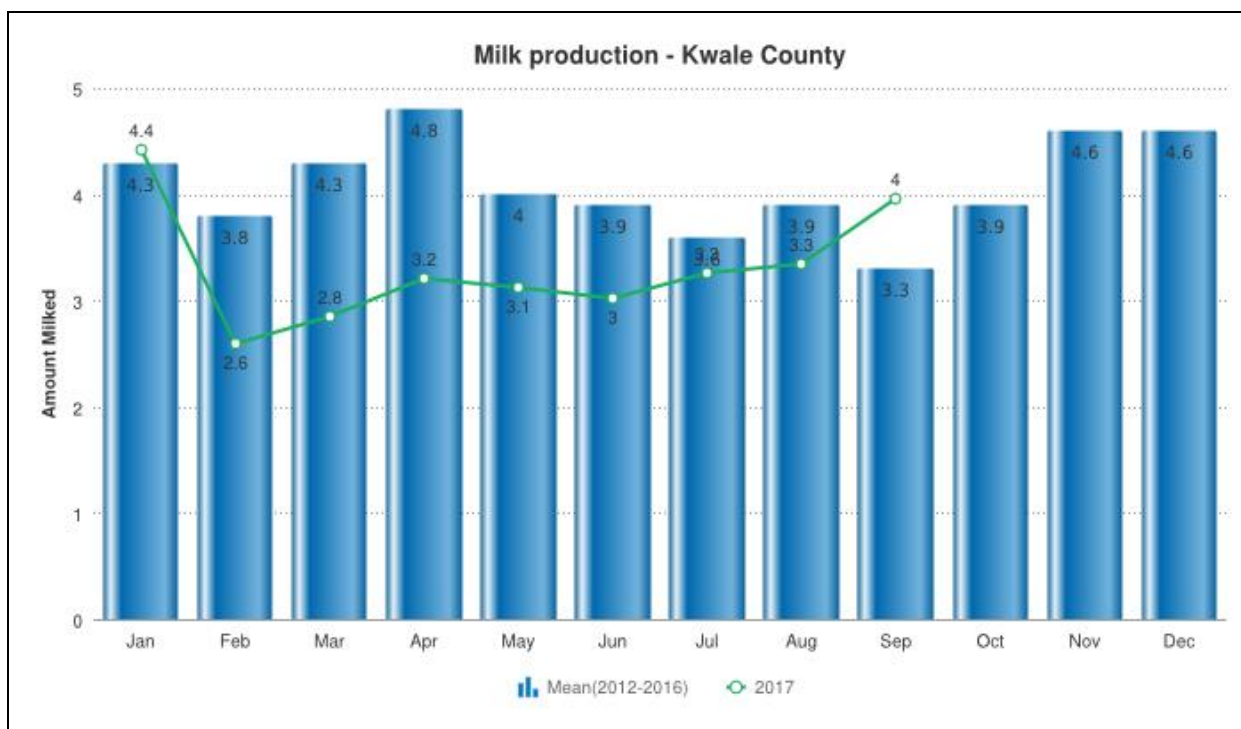
Level	Classification	Characteristics (this describes majority of the herd and not individual isolated Stock)
1	Normal	Very Fat Tail buried and in fat
		Fat, Blocky. Bone over back not visible
		Very Good Smooth with fat over back and tail head
		Good smooth appearance
2	Moderate	Moderate. neither fat 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 September 2017.

3.1.3 Milk Production

- The main producers of milk were cows, similar to the previous months.
- Milk production increased from an average of 3.5 litres in August to 4 litres in September. This is attributed to sufficient pasture for livestock across all livelihood zones.
- The production was 17.5 percent higher than the 2012-2016 long-term amount of 3.3 litres.



3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and condition of food crops

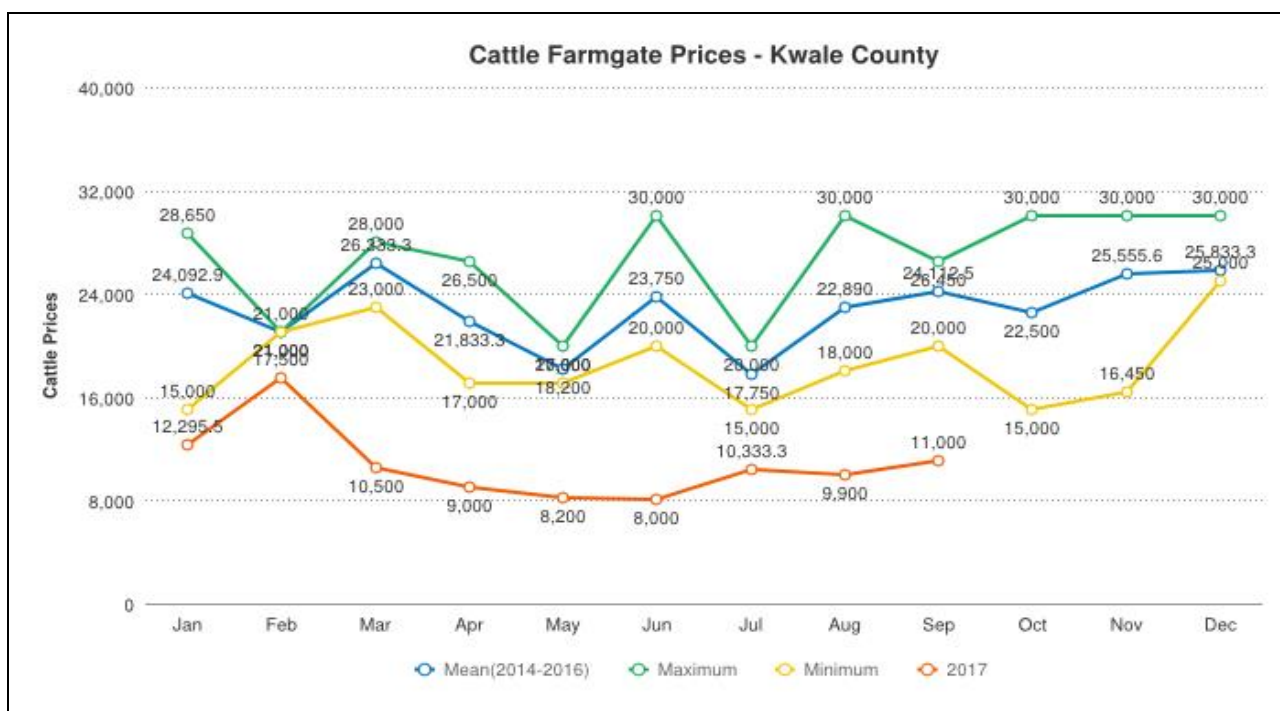
- Farmers have already harvested the yields for last season and currently, planting has started after the off-season rains received in the second and third dekad of the month.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

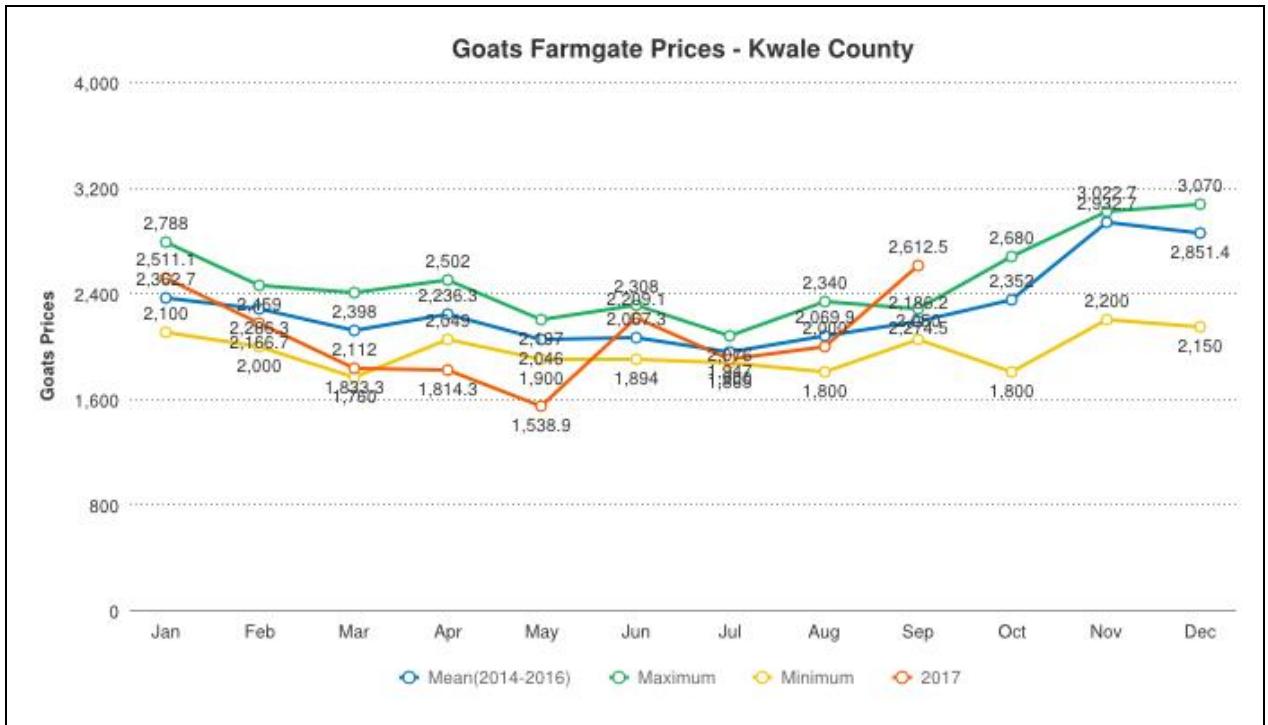
4.1.1 Cattle Prices

- The average price of a three-year old bull at household level increased from Kshs. 9,900 in August to Kshs. 11,000 in this reporting month. This improving trend is attributed to sufficient pasture for cattle hence better livestock body condition and better prices in markets.
- Cattle prices were 54 percent lower than the long-term average price Kshs. 24,112.50 of 2014-2016 as shown in the graph below:



4.1.2 Goat Prices

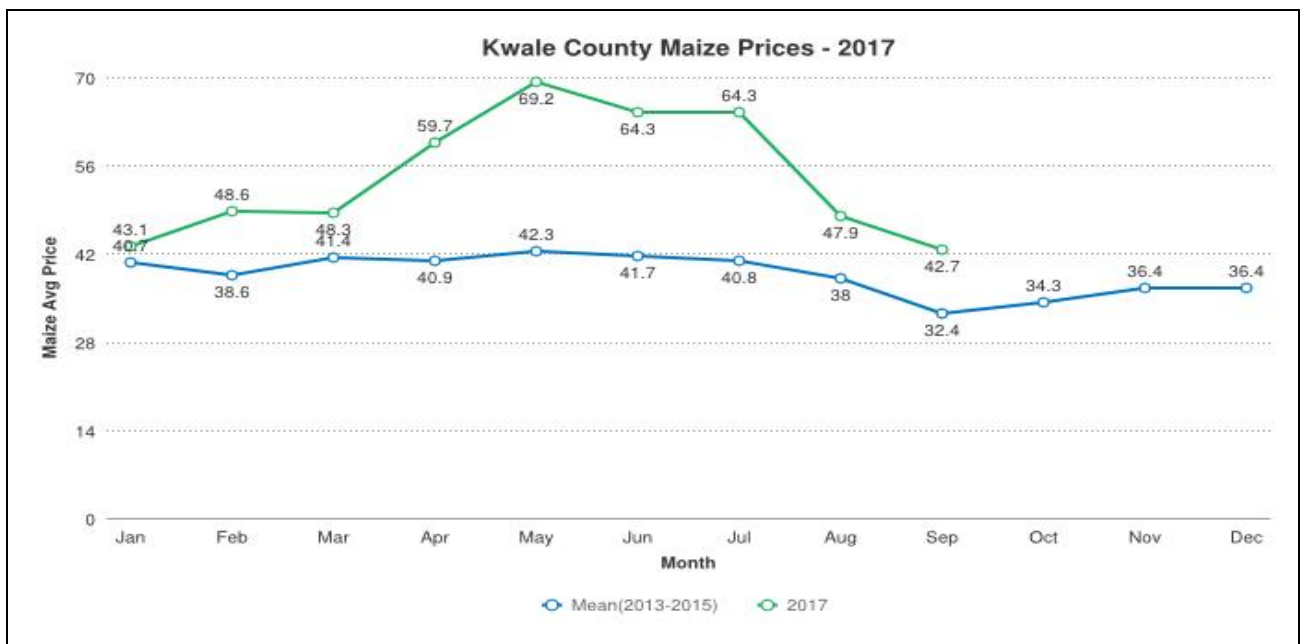
- The average price of a three-year old medium-sized goat also increased significantly from Kshs. 2,000 to Kshs. 2,612.50 recorded in this reporting month.
- The current goat prices were 19.5 percent higher than the long-term average price of Kshs. 2,186.2.



4.2 CROP PRICES

4.2.1 Maize

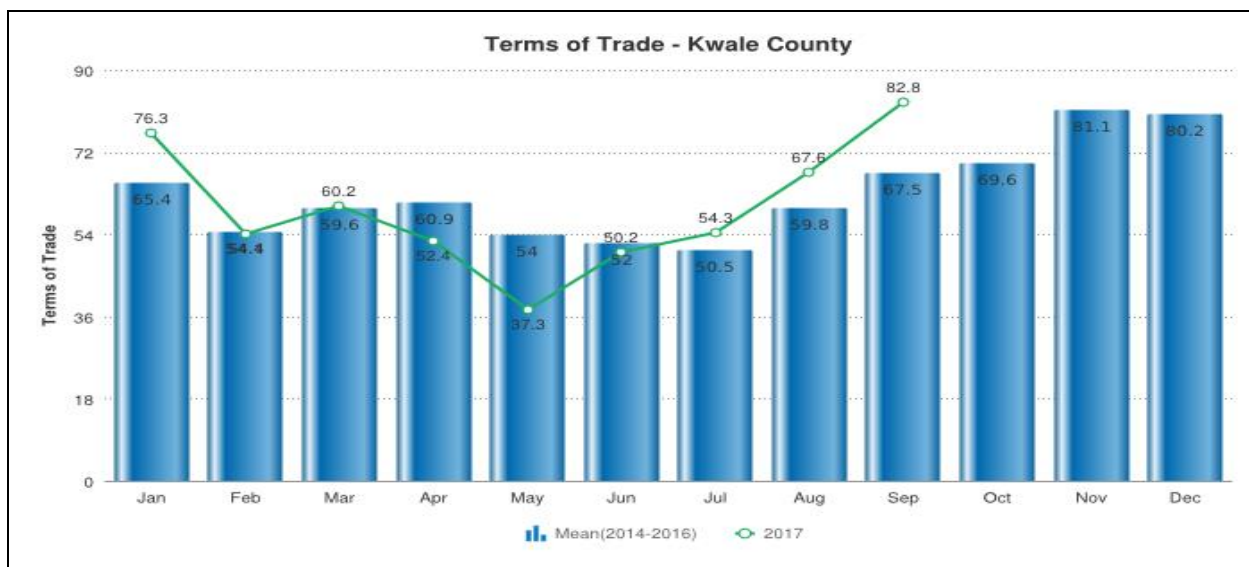
- The price of maize continued to decrease in markets from July when farmers started harvesting and now have stocks to last for almost 2 months. The average market price of maize dropped from Kshs. 47.8 to Kshs. 42.7 recorded this month of September.
- The trend in maize prices in the county is displayed in the graph below:



- The price was 24 percent higher than the 2014-2016 long-term average price of Kshs. 42.7.

4.3 TERMS OF TRADE (CASUAL LABOUR VERSUS MAIZE PRICES)

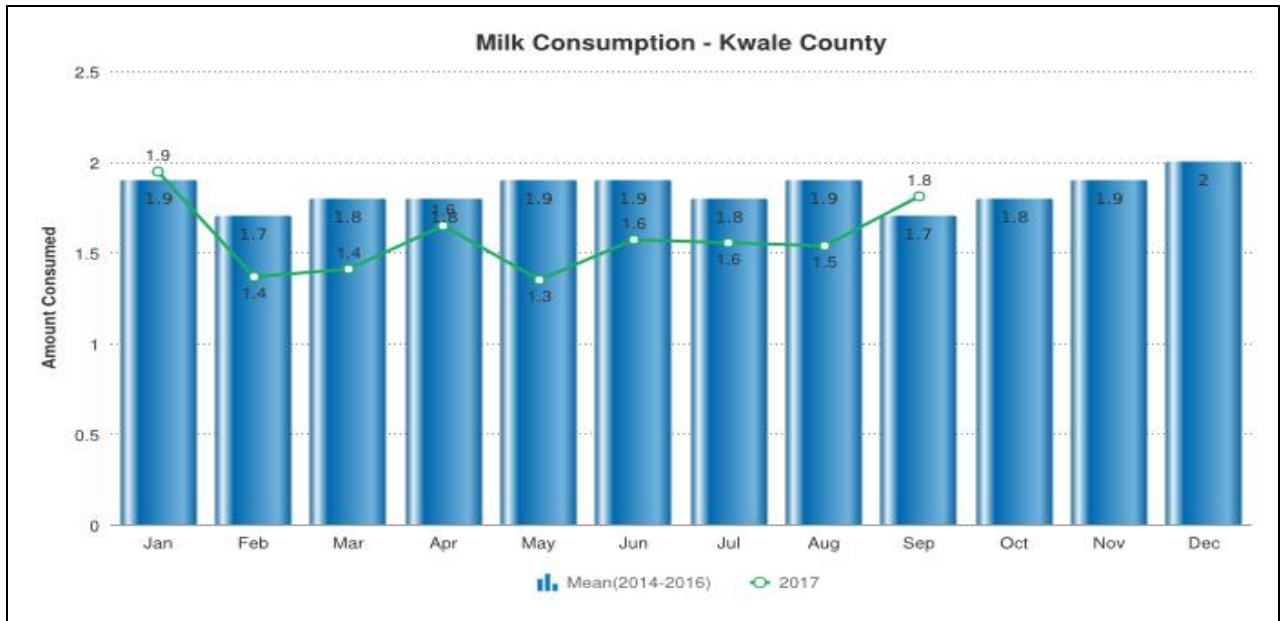
- The purchasing power of households has improved this month as shown by the trend in terms of trade. The terms of trade increased by 21 percent from 67.6 in August to 82.2 percent in September which implies that households can buy an average of 82.2kgs of maize from casual labour proceeds as compared to 67.6 kgs recorded in the previous month.
- This improvement is attributed to more households engaging in casual labour in farms as land preparation and planting commenced during the month. Also the price of maize has significantly reduced because of availability of maize stocks from the long rains harvest.
- The county's terms of trade was 18.5 percent above the 2014-2016 long-term average of 67.5 kgs.
- The trend in 'terms of trade' in the county is illustrated in the graph below:



5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

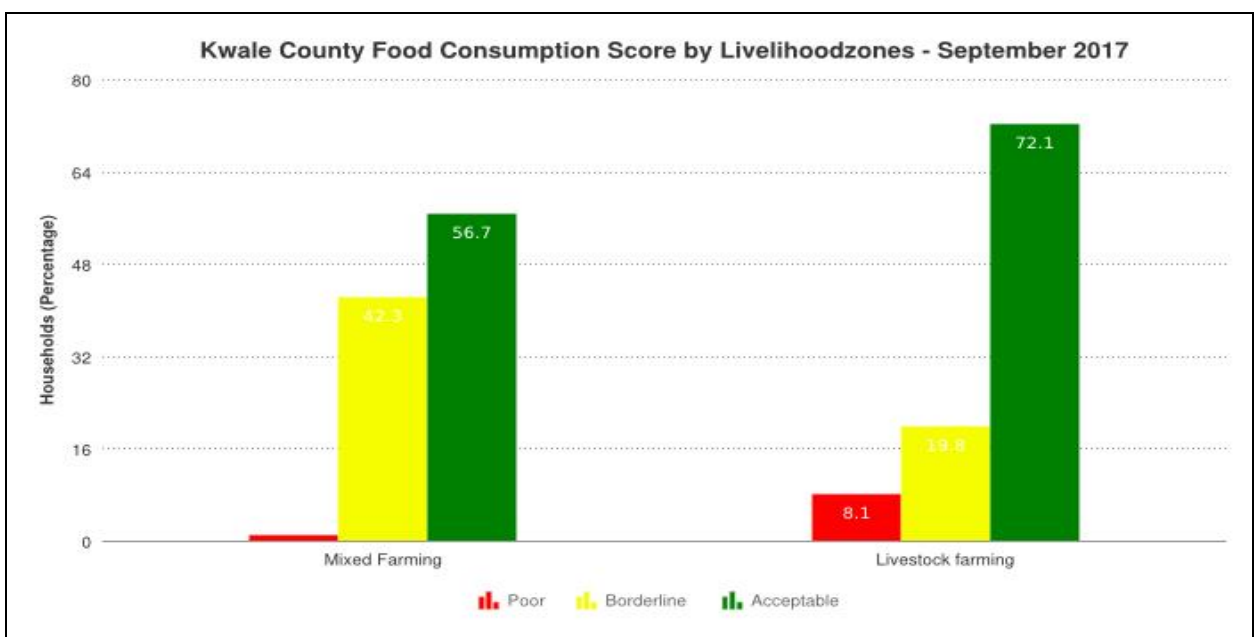
- Milk consumption at household level increased from an average of 1.5 litres in August to 1.8 litres recorded this month.
- The milk consumption trend is shown in the graph below:



- Milk consumption was 5.5 percent more than the 2014-2016 long-term mean amount of 1.7 litres.

5.2 FOOD CONSUMPTION SCORE

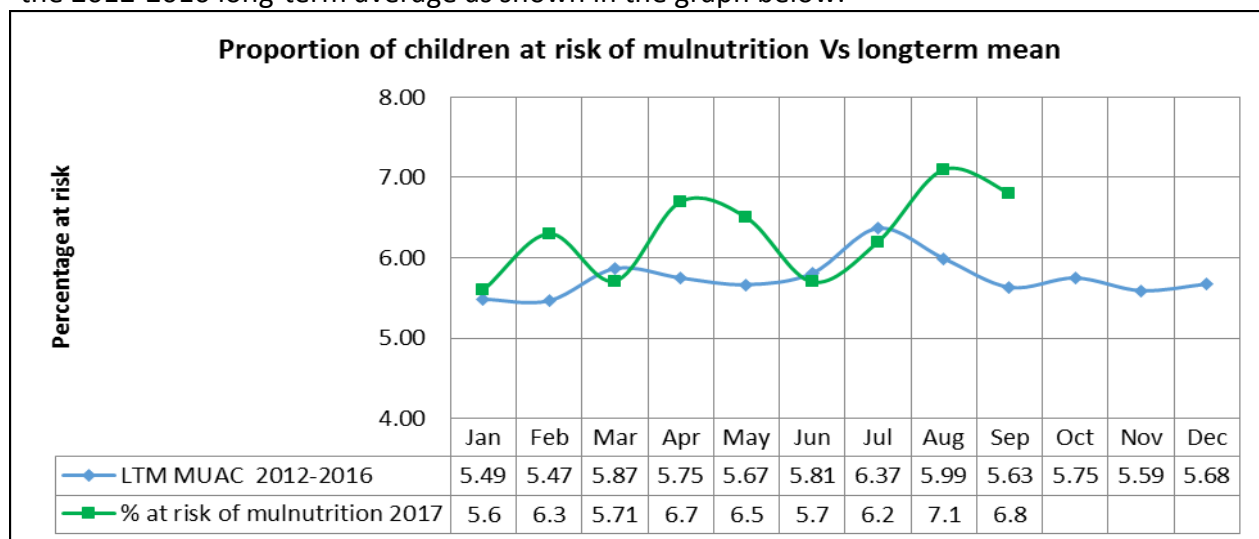
- The proportion of households with a poor food consumption score was 4 percent, which worsened slightly from 3 percent recorded in the previous month. The proportion in the borderline category increased from 28 to 32 percent while those in the acceptable zone reduced from 68 percent to 64 percent.
- 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

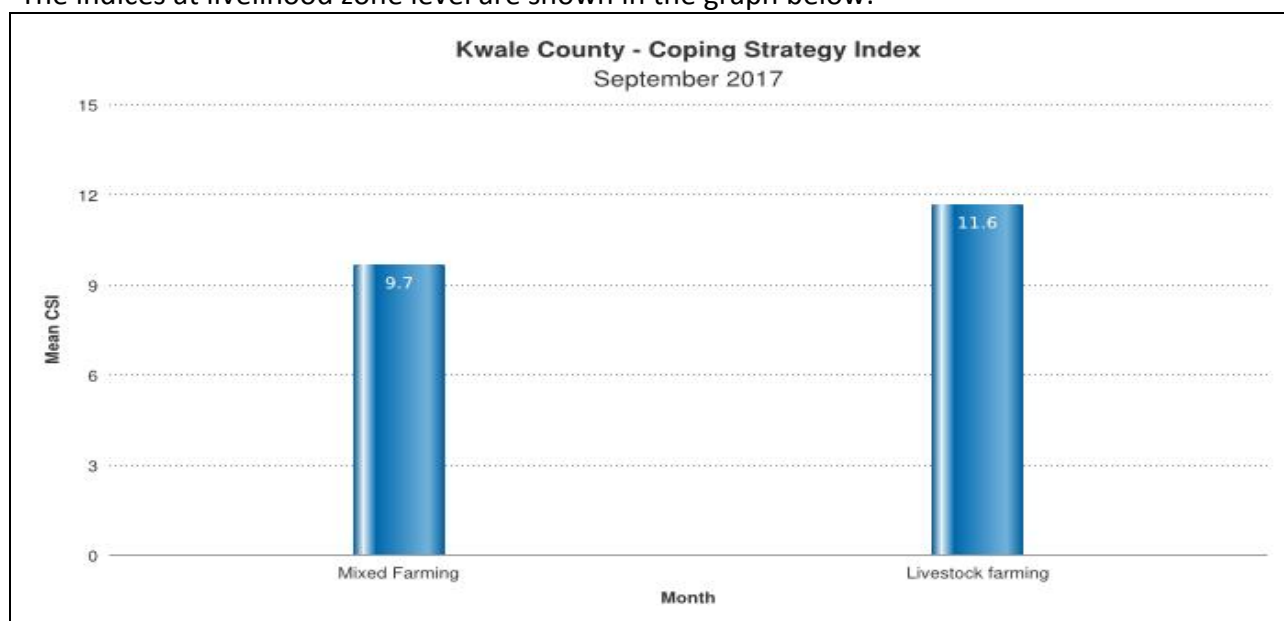
5.3.1 Nutrition Status

- The proportion of children below five years of age at risk of malnutrition based on the MUAC measurement decreased slightly from 7.1 to 6.8 percent in this reporting month. A total of 1,063 children were screened (554 males and 509 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 population that was at risk was 20.8 percent higher than the expected 5.63 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 was 10.6, a slight drop from 11.59 recorded in August. This trend is attributed to availability of food in households hence employing less of the consumption-based coping strategies.
- The mean CSI continued to decrease in the livestock farming livelihood zone from 13.8 to 11.6 while in the mixed farming zone it remained at 9.7.
- The indices at livelihood zone level are shown in the graph below:



- The most commonly employed consumption-based coping mechanisms this month are reliance on less preferred/expensive food and credit purchases.

6.0 CURRENT INTERVENTION MEASURES

6.1 NON-FOOD INTERVENTIONS

- The county department of Agriculture has carried out several sensitization meetings to farmers on army worm control methods.
- NDMA in partnership with the veterinary department has supplied 150 steers to beneficiaries in Kinango sub-county. They will be fattened for approximately 4 months then sold and beneficiaries encouraged to buy Galla goats who are more drought tolerant.
- The State department of Special Programmes in partnership with the World Food Programme has registered 34,483 beneficiaries for the *Chakula kwa jamii* programme. Each beneficiary will receive be Kshs. 2,327 monthly for three months.
- World Food Programme has disbursed a total of Kshs. 16,101,662.98 to 6,685 households who are in the Cash for Asset programme in Kinango Sub County.
- The Veterinary Department is undertaking vaccination against FMD for cattle, deworming and mass treatment of both cattle, sheep and goats. In September, Tsimba Golini and Mkongani wards were targeted and it will progressively be implemented in the entire county.

6.2 FOOD INTERVENTIONS

- The following food items(relief food) were distributed to beneficiaries across the county: 6,800 50-kg bags of maize, 2152 90-kg bags of beans, 2350 50-kg bags of rice, 880 cartons of cooking oil(each carton had 6 2-litre containers) and 490 cartons of fortified food(each carton contained 6 bales).

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

Farmers harvested maize and pulses during the month and the available stock will sustain them for at least 1 month hence reducing over-reliance on expensive sifted maize flour in shops. Availability of forage and water has continued to contribute towards improving livestock production and boosting household incomes. The off-seasons rains received in the month will continue to improve pasture, browse and water for both humans and livestock.

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 that has been forecasted, 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.
- Timely distribution of planting seeds to take advantage of the above average rainfall that is envisaged in the short rains season.
- Continued disease surveillance for both human and livestock.