

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



A Vision 2030 Flagship Project



JUNE 2017 EW FLAG



Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Mixed Farming	Alert	Stable
Livestock Farming	Alert	Improving
County	Alert	Improving
Biophysical Indicators	Value	Normal Range/Value
VCI	30.4	48
State of Water Sources	5	5
Production indicators	Value	Normal
Crop Condition (maize and legumes)	Poor	Good
Livestock Body Condition	2	2
Milk Production (Litres)	3	3.9
Livestock Migration Pattern	No migration	No migration
Livestock deaths (from drought)	None	No deaths
Access Indicators	Value	Normal
Milk Consumption (litres)	1.6	1.9
Return distance to water sources (km)	1.7	2.1
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	5.7	5.81

Drought Situation & EW Phase Classification

Biophysical Indicators

- Below-normal rainfall was received in both livelihood zones.
- The Vegetation Condition Index was below normal at 30.34.
- 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 below normal.
- No livestock migration was reported during the month.

Access indicators

- Milk consumption was below normal.
- Return distances to water sources were lower than normal.

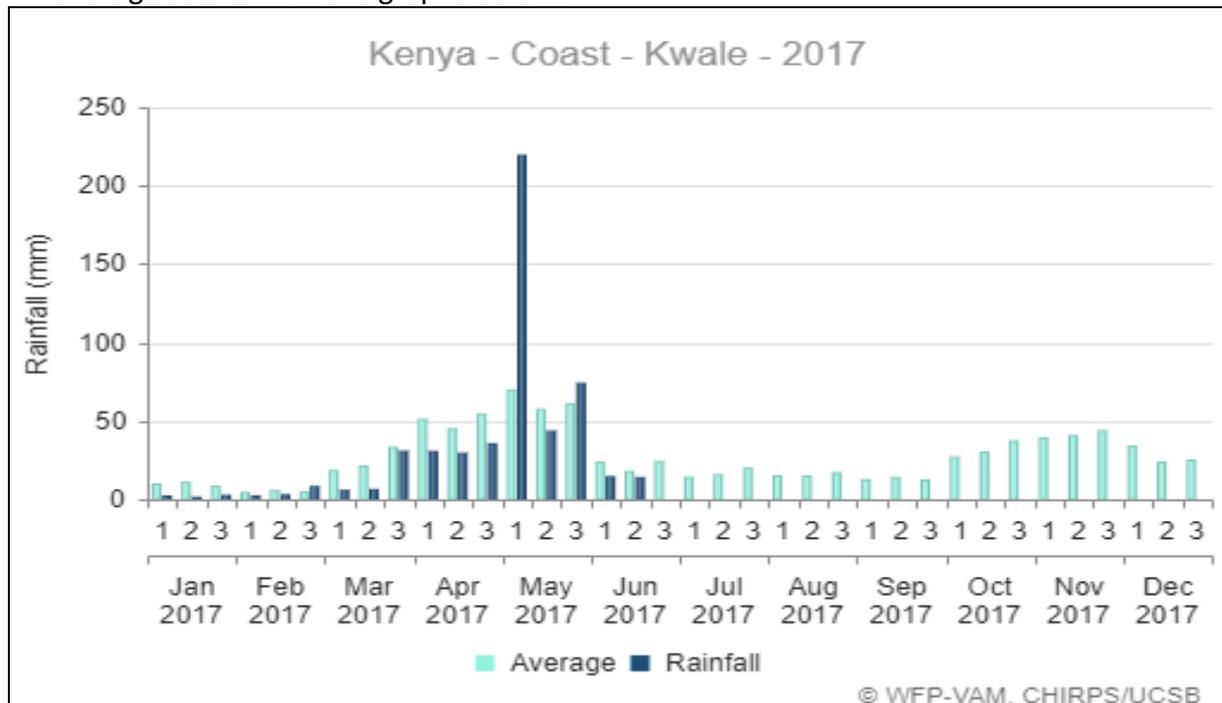
Utilization Indicators

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

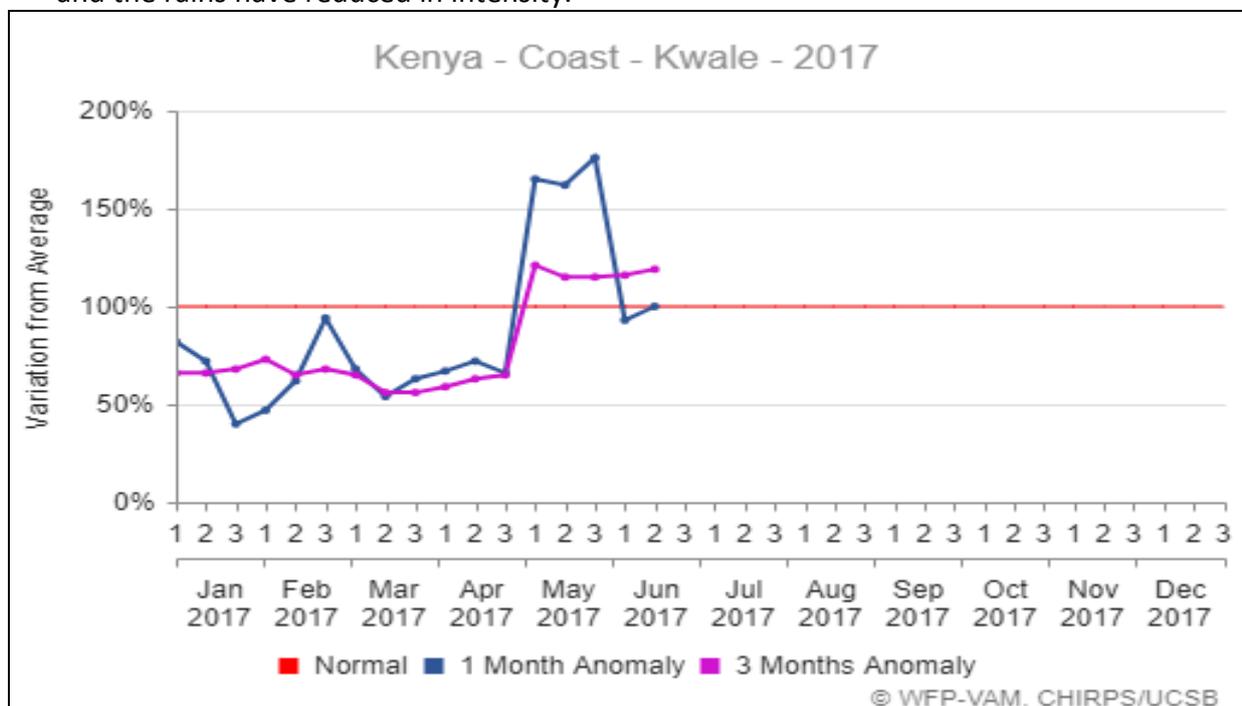
<ul style="list-style-type: none"> Short rains harvests Short dry spell Reduced milk yields Increased household food stocks Land preparation 	<ul style="list-style-type: none"> Planting/weeding Long rains High calving rate Milk yields Increase 	<ul style="list-style-type: none"> Long rains harvests A 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

1.1 RAINFALL PERFORMANCE

- The onset of the long rain season was in the last week of March.
- The county received below normal rainfall amounts in June compared to the long-term average as shown in the graphs below:



- The temporal distribution was poor as rains were only received in the first and second dekads while no rains were received in the third dekad. The spatial distribution was quite uneven and the rains have reduced in intensity.



2.0 IMPACTS ON VEGETATION AND WATER

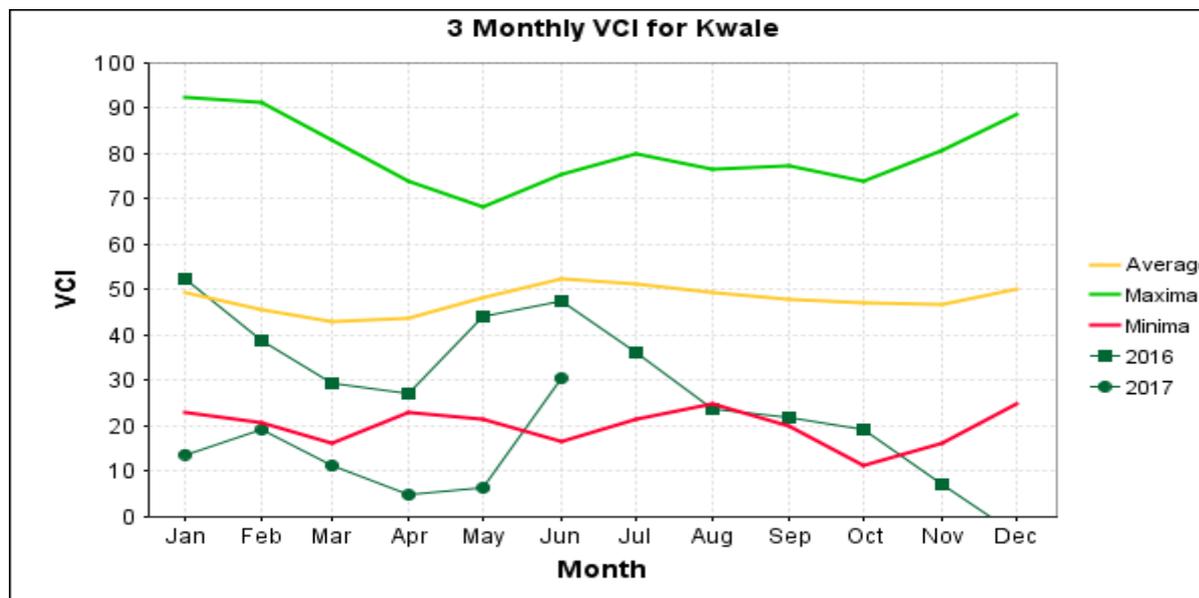
2.1 VEGETATION CONDITION

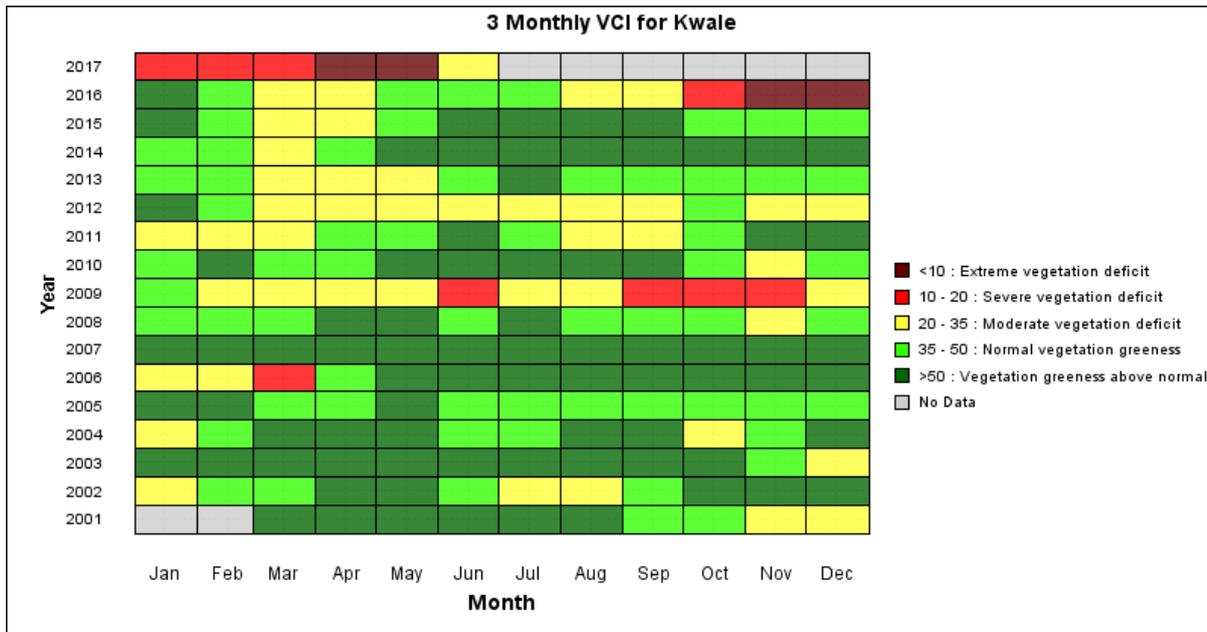
2.1.1 Vegetation Condition Index (VCI)

- The vegetation condition in the county improved significantly as a result of the rains received in the last three months. This improvement is exhibited in the increase in the value of VCI in the county as shown in the table below.

County/ Sub-county	3-month VCI Feb 2017	3-month VCI March 2017	3-month VCI April 2017	3-month VCI May 2017	3-month VCI June 2017
Kwale County	19.03	11.04	4.63	6.25	30.34
Kinango	18.11	11.13	5.75	10.63	39.34
Lunga Lunga	16.27	6.42	-2.4	-4.06	20.97
Matuga	26.94	16.98	8.96	1.86	11.46
Msambweni	22.72	16.76	13.92	15.1	17.71

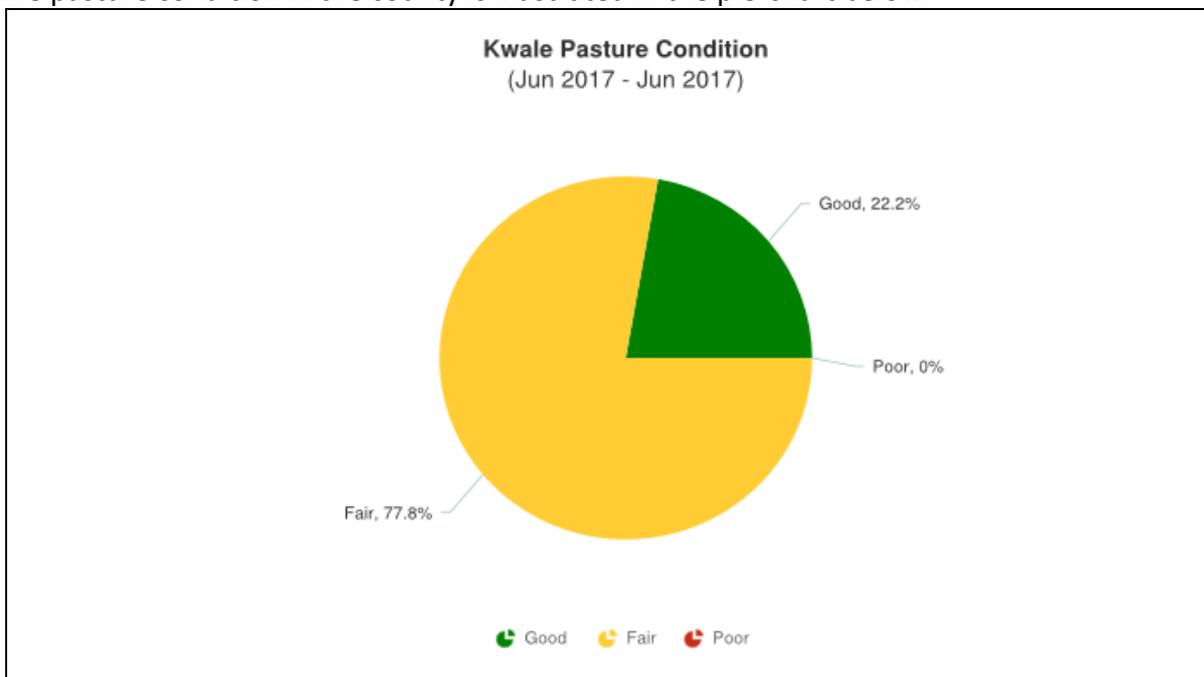
- The county is classified in the 'moderate vegetation deficit' category which is an improvement from the previous month situation.
- Matuga and Msambweni sub-counties were classified in the 'severe vegetation deficit' band while Lunga Lunga sub-county was in the moderate vegetation deficit category and Kinango sub-county was in the 'normal vegetation' greenness band.
- Notably, all the four sub-counties recorded an improvement in VCI as shown the table above.
- The trend in VCI is shown in the graph and matrix below.



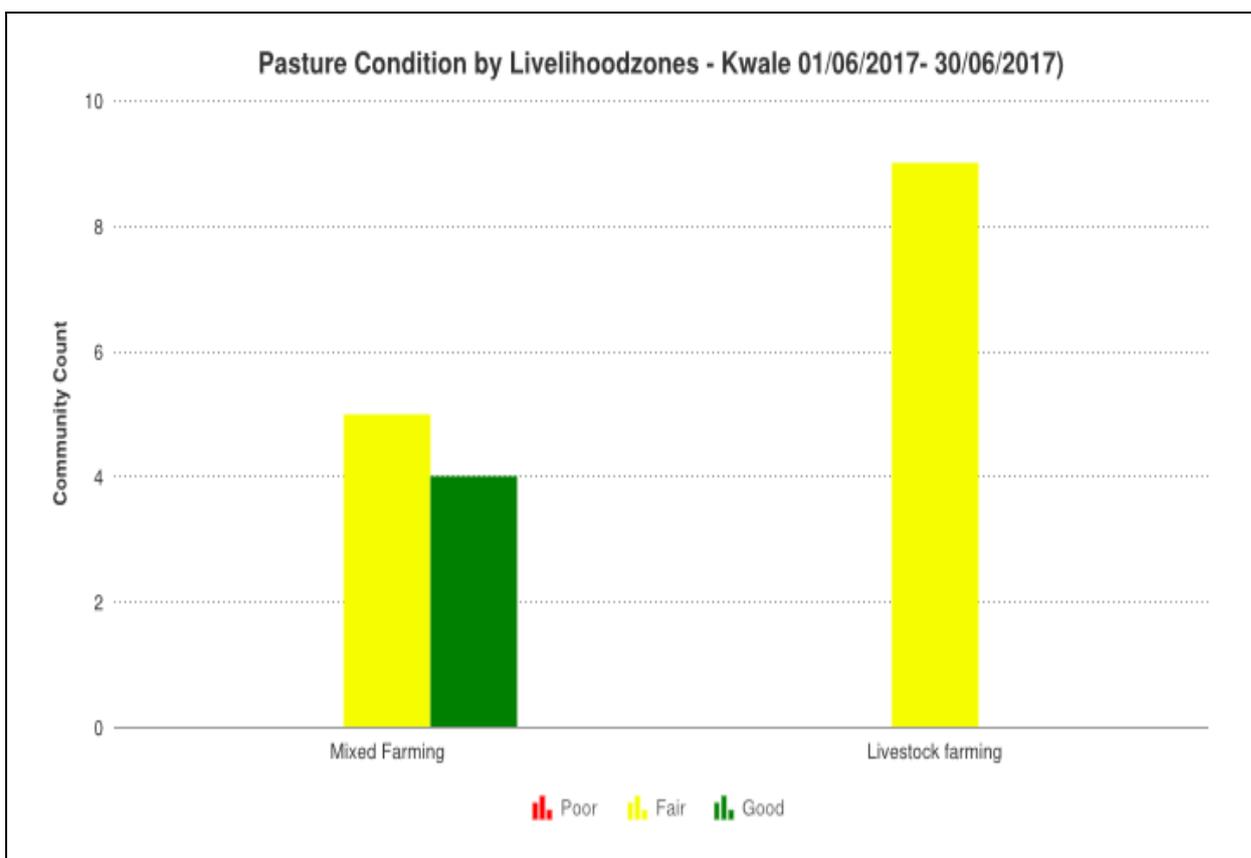


2.1.2 Pasture

- 22.2 percent of the households reported good pasture condition while the majority (77.8 percent) reported that the pasture condition was fair. No household had report poor pasture condition similar to the previous month. This is attributed to the rains received in the last few weeks which has rejuvenated pasture.
- The pasture condition in the county is illustrated in the pie-chart below.

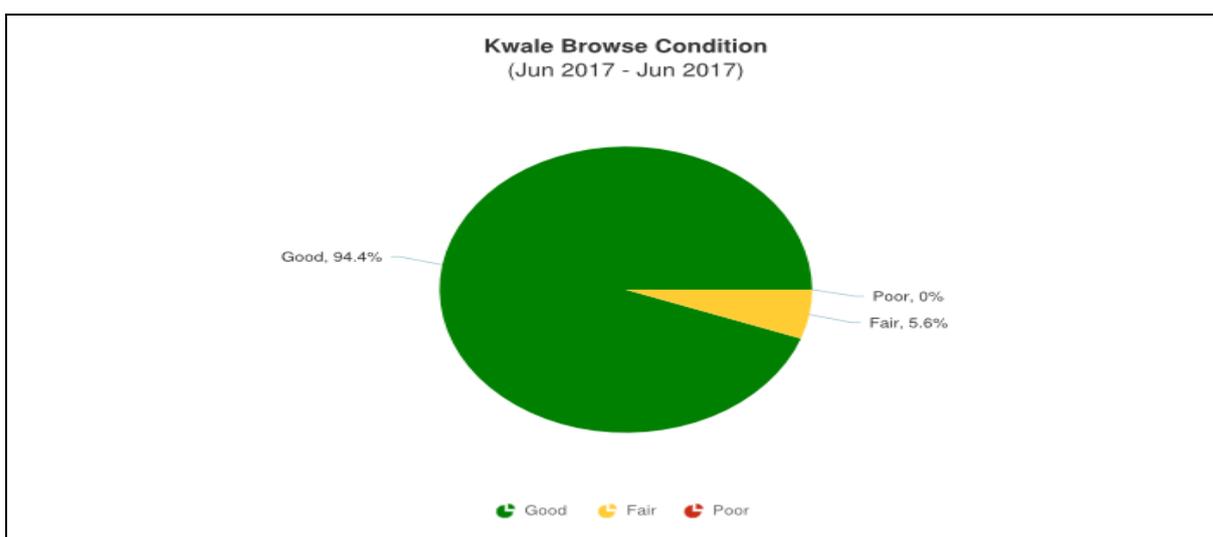


- Pasture condition was better in the mixed farming livelihood zone compared to the livestock farming one similar to the previous month.
- The available pasture was likely to last approximately five months in the mixed farming and three months in the livestock farming livelihood zones. The pasture condition at livelihood zone level is illustrated in the graph below:

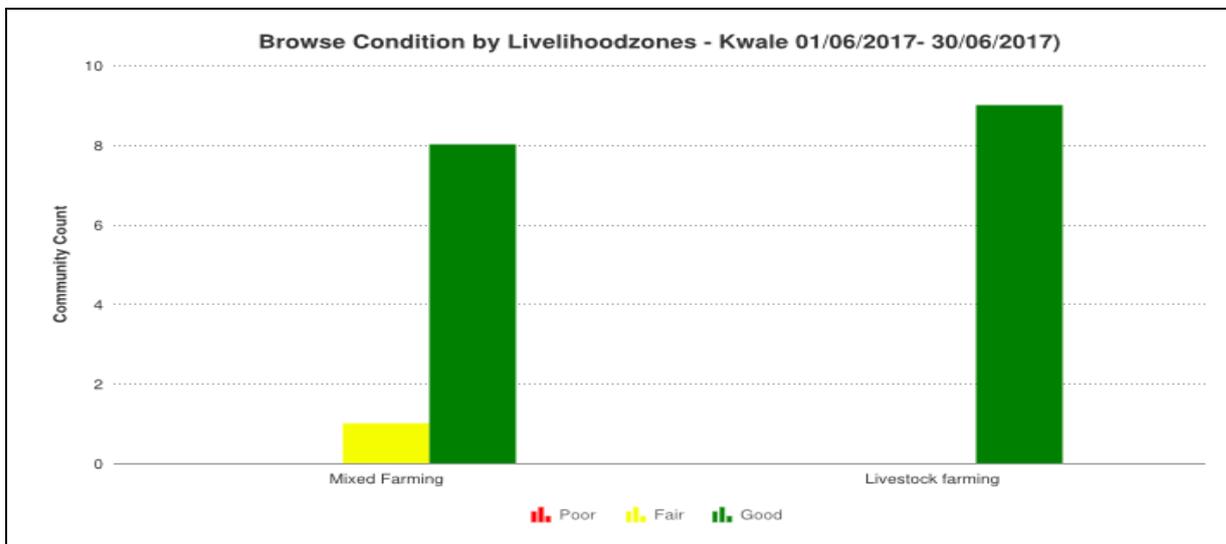


2.1.3 Browse

- A majority of households (94.4 percent) reported that the browse condition was good just like the previous month.
- Browse availability had significantly improved due to the on-going rains.
- The current browse condition in the county is shown in the pie-chart below:



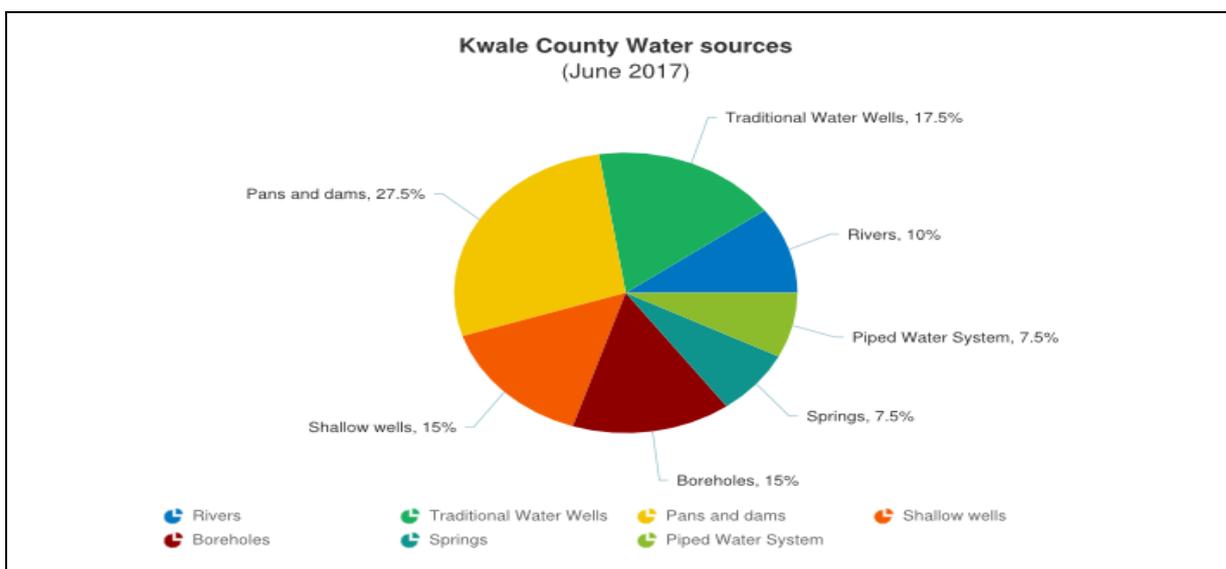
- Browse condition was better in the livestock farming livelihood zone compared to the mixed farming one as shown in the graph below the same as the previous month.
- The available browse was projected to last for approximately six months in the mixed farming livelihood zones and four months in livestock farming livelihood zones.



2.2 WATER RESOURCES

2.2.1 Sources

- The main water sources for the month are water pans and dams, shallow wells, traditional water wells and boreholes similar to the previous month.
- The sources currently in use are the normal ones for this time of the year.
- Others sources include rivers, piped water system and springs as shown in the pie-chart below.

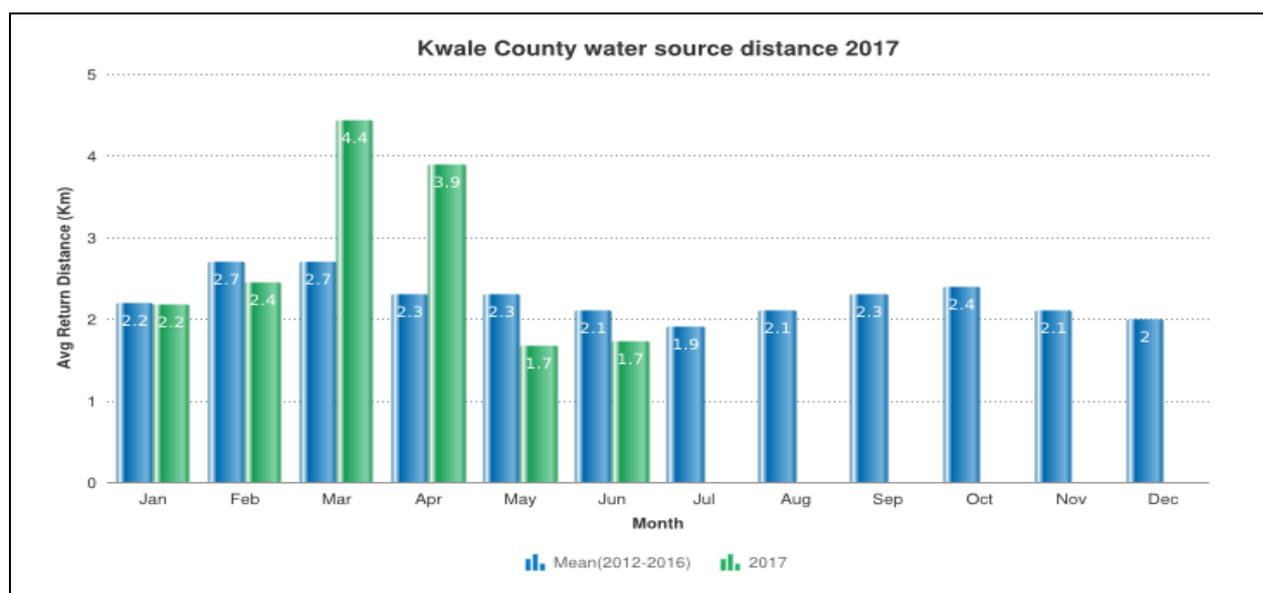


- The open water sources (water pans and dams) which is the most reliable in the livestock farming livelihood zone are over 70 percent full with the water available likely to last for approximately 4 months. The water pipeline supplying water from Marere springs to Kinango town and its environs which had been washed away by floods in May has been repaired and normal supply had resumed.
- The general early warning phase classification for the state of water sources is five (5) indicating 'normal' for this time of the year (refer to the table below for assessment of the state of water sources). This is attributed to good rains which has recharged all the water sources.

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

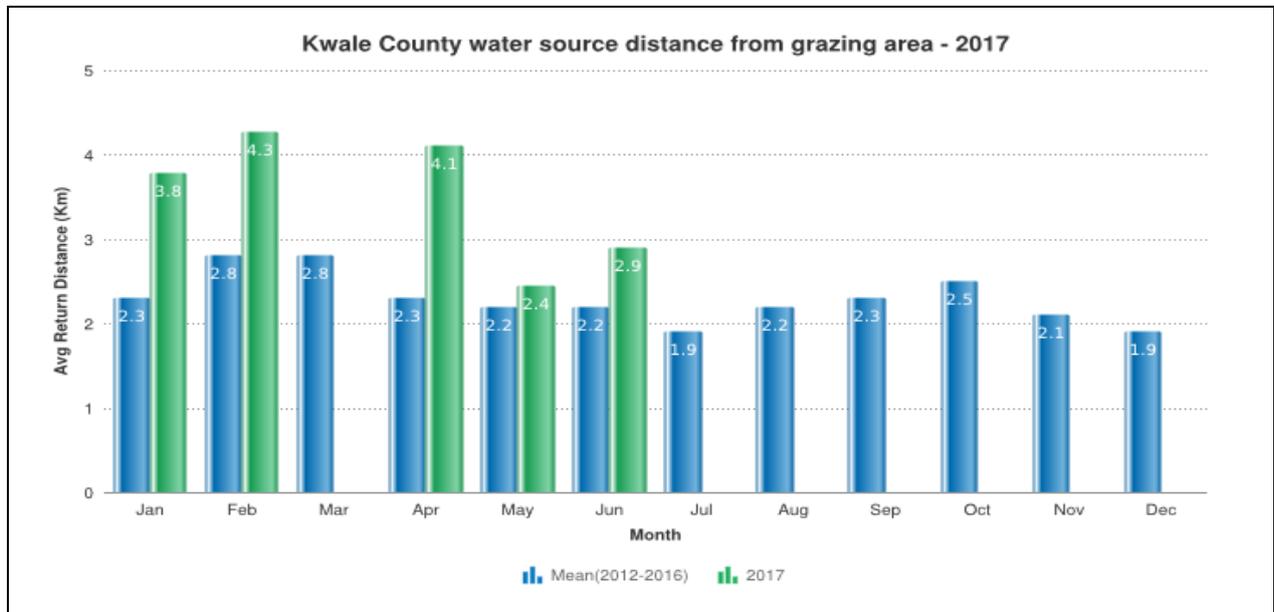
2.2.2 Household access and utilization

- The average return distance from water sources by households was recorded at 1.7km similar to the previous month. The county had received substantial rains this reporting month and the previous month which had recharged most major sources.
- The distance was 19 percent lower than the long-term distance of 2.1 km as illustrated in the graph below.



2.2.3 Livestock access

- The average trekking distance from the main water sources to the grazing areas for livestock was 2.9km which was a slight increase from 2.4km recorded in May.
- The distance was normal for this time of the year as shown in the graph below.

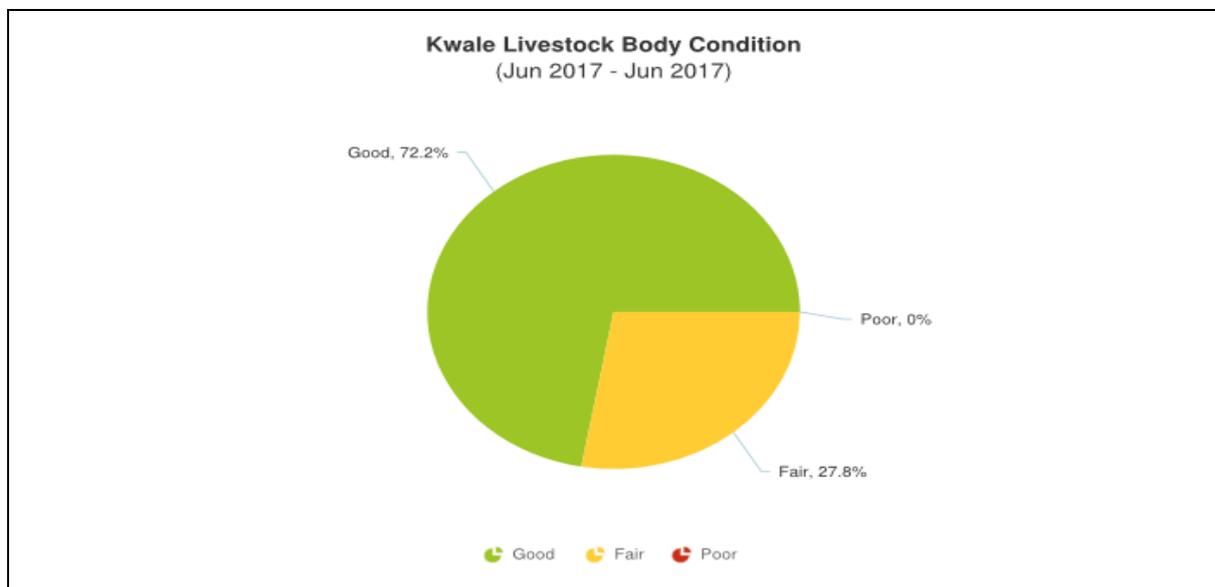


3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- A majority of households (72.2 percent) had reported good livestock body condition, quite similar to the previous month’s 83.3 percent.
- The livestock body condition in the county is summarized in the pie-chart below.



- The early warning classification for livestock is 2, indicating moderate, neither fat nor thin and is likely to continue improving since forage is projected to last for 5 months.

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

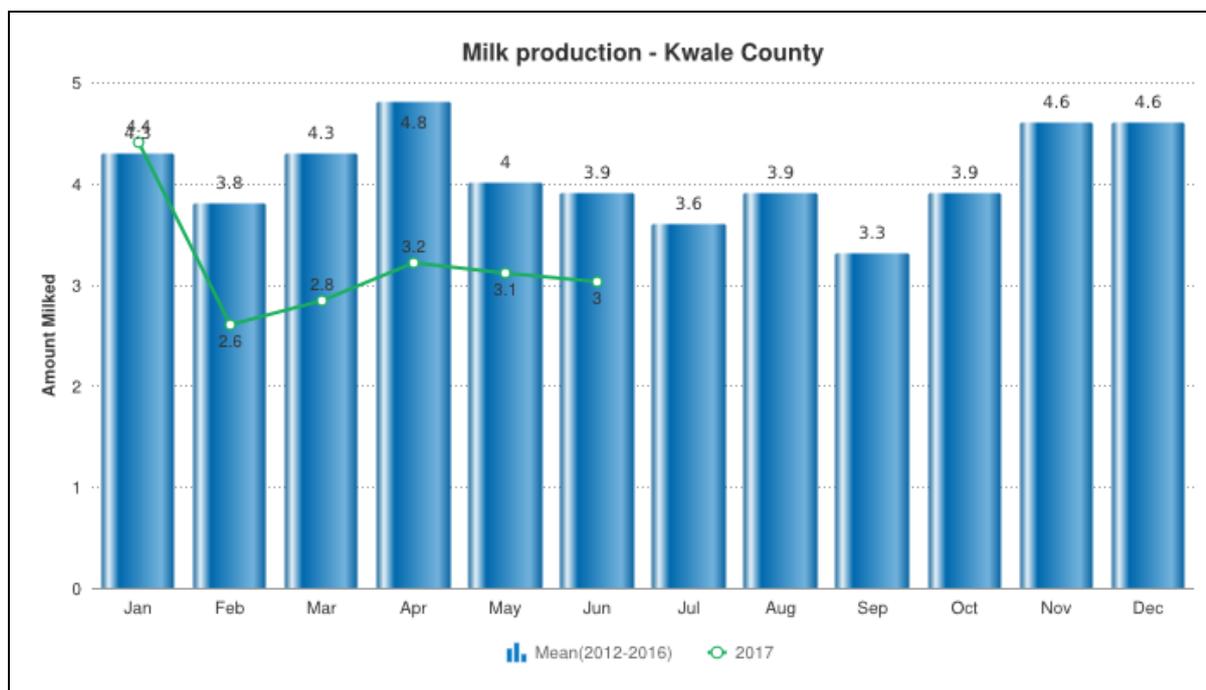
Level	Classification	Characteristics (this describes majority of the herd and not individual isolated Stock)
1	Normal	Very Fat Tail buried and in fat
		Fat, Blocky. Bone over back not visible
		Very Good Smooth with fat over back and tail head
		Good smooth appearance
2	Moderate	Moderate. neither fat 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 diseases that would affect food security recorded in the county this reporting month.

3.1.3 Milk Production

- Cows were the main producers of milk this month similar to the previous month.
- Milk production in the county was averaged at 3 litres similar to the previous month amount of 3.1 litres.
- The production was 23 percent lower than the 2012-2016 long-term value of 3.9 litres.
- The lower-than-normal production may be attributed to the slow recovery in herd size due to the debilitating impacts of the past short rain season's drought.



3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and condition of food crops

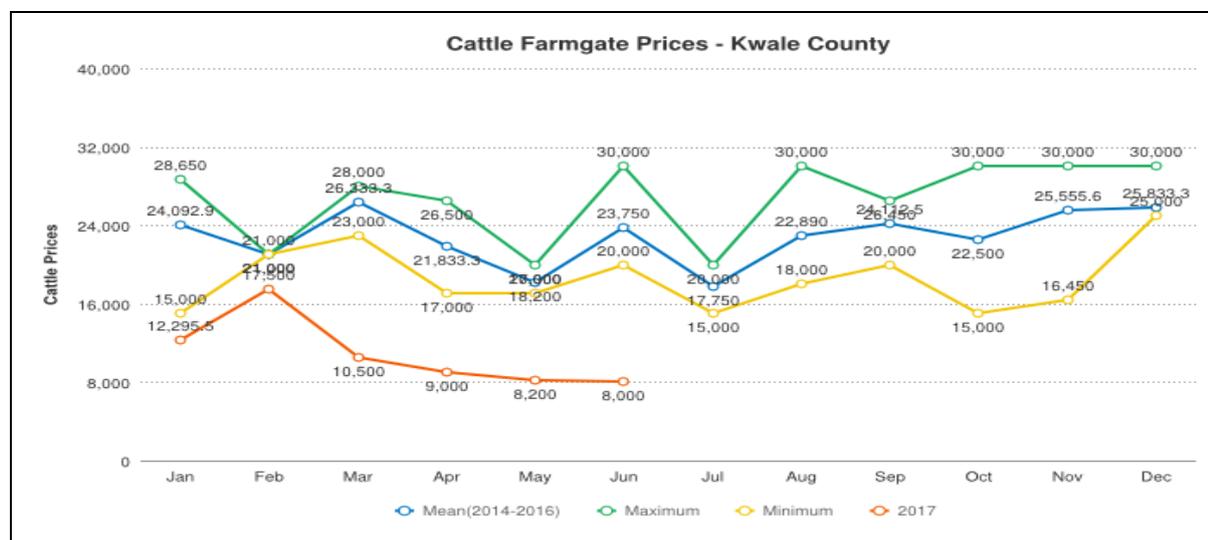
- Most of the maize in the mixed farming livelihood zone is at the cob-formation stage while in the livestock farming livelihood zone it is in the tasselling stage. However, many farms across the county have been infested by fall army worms which has destroyed hundreds of acres of maize plantations. Because of this infestation, most maize crops are in poor condition and the expected harvest is likely to be cut down by over 50 percent.
- Pulses on the other hand are approaching podding stage and are in good condition.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices

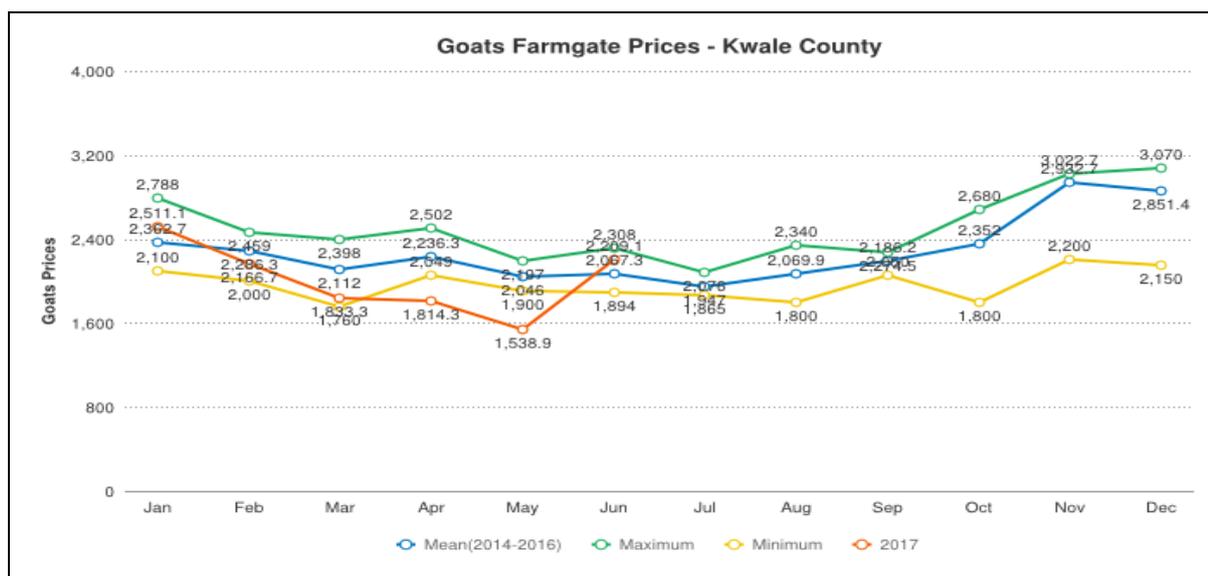
- The average trading price of a three-year old bull was Kshs. 8,000, a slight decreased from Kshs. 8,200 posted in May.
- The reason for the below-normal prices despite the improved body could be that cattle are slowly recovering from the drought and also the high cost of food prices. Many livestock farmers want to sell their livestock so that they can buy food which is not readily available in the shops and the commodity prices are high.
- Cattle prices were 30 percent lower than the long-term average 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 was Kshs. 2,209.10, a 30 percent increase from Kshs. 1,538.9 recorded.
- The current goat prices were 6.9 percent high than the expected price of Kshs. 2,067 in the 2014-2016 long-term average.

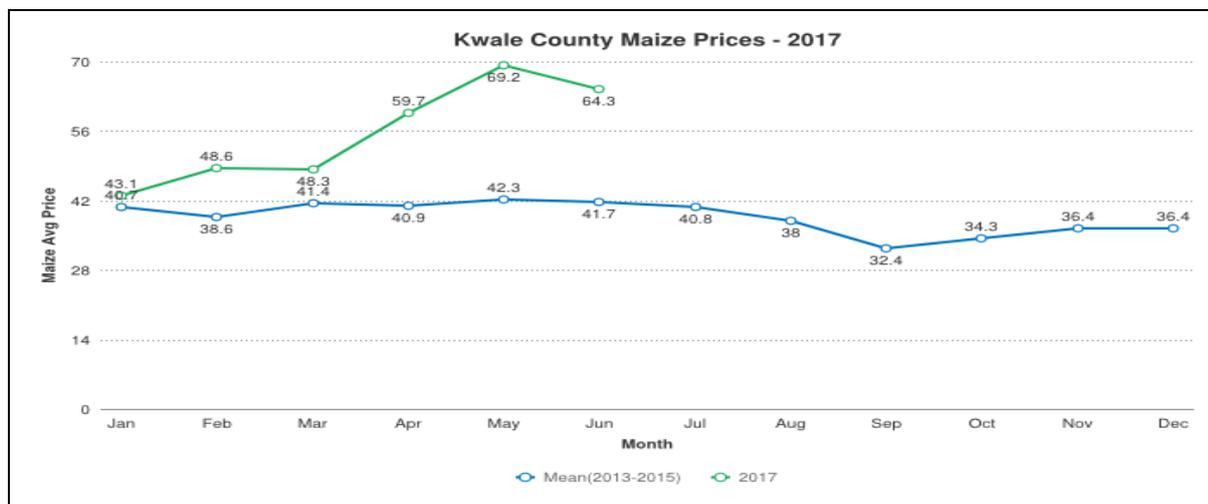
- The prices was the second highest since January 2017 and the trend is shown in the graph below.



4.2 CROP PRICES

4.2.1 Maize

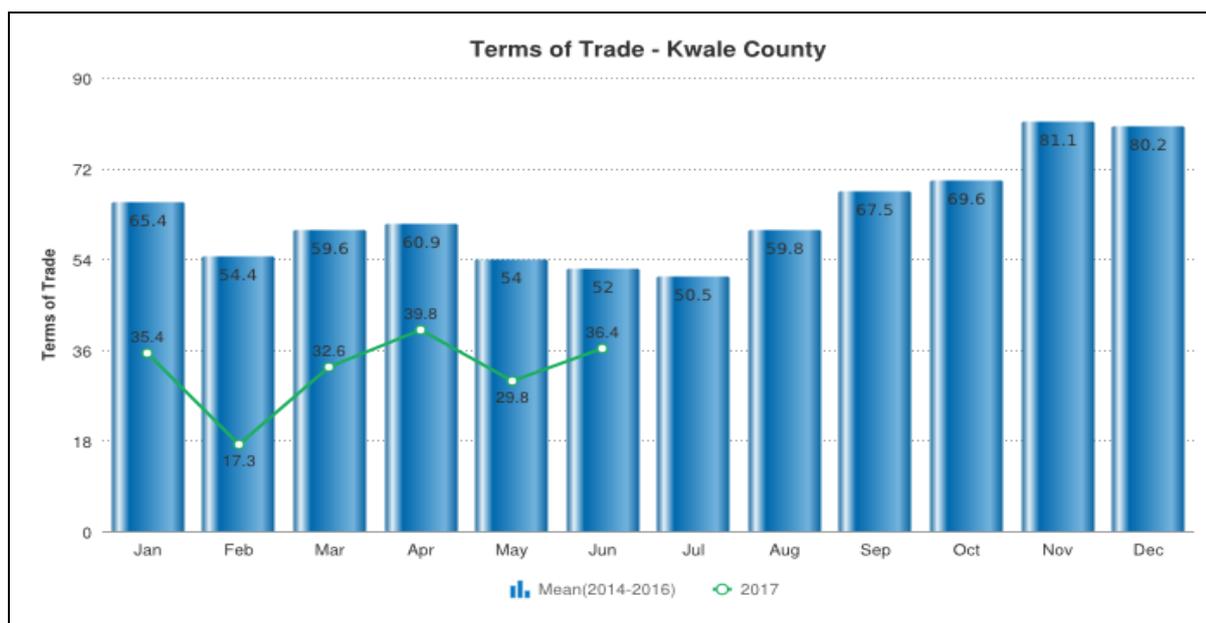
- A kilogram of maize was trading at an average of Kshs. 64.3, 7.1 percent drop from Kshs. 69.2 recorded the previous month. The trend in prices is shown in the graph below:



- The above-normal trend in price continued this month as a 54.2 percent increase above the 2013-2016 long-term average price of Kshs. 41.7 was recorded.

4.3 TERMS OF TRADE (CASUAL LABOUR VERSUS MAIZE PRICES)

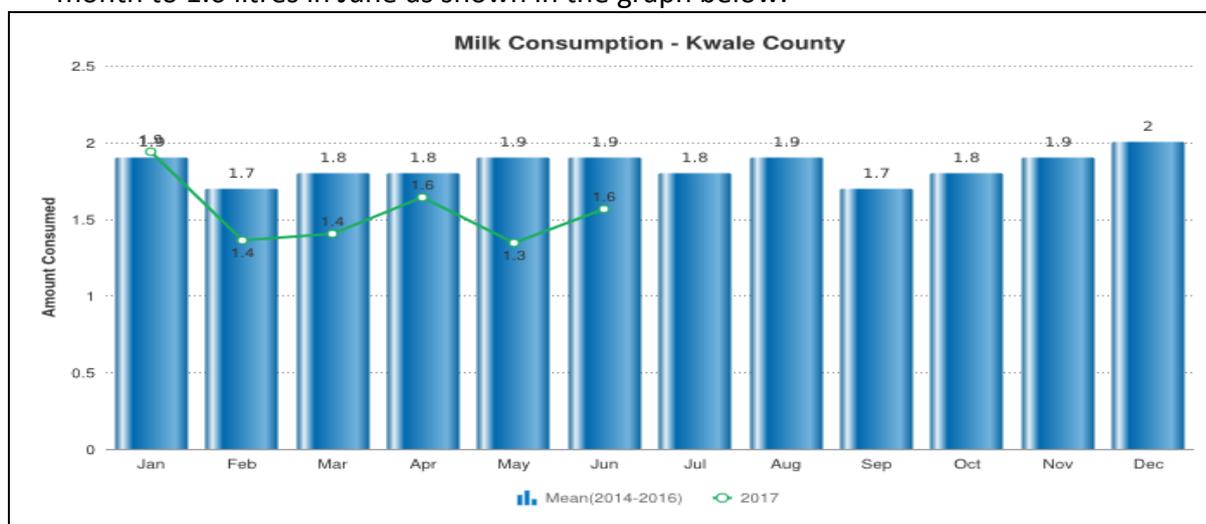
- The purchasing power of households increased this month by a 22.1 percent margin as they could purchase 36.4 kilograms of maize in June compared to 29.8 kilograms the previous month from the proceeds of casual labour.
- The increase in the terms of trade may be attributed to the fact that some households could engage in casual labour in farms. Also the availability of government subsidized maize flour eased pressure on demand of scarce maize and sifted maize flour in local markets.
- The county's terms of trade were 30 percent below the expected 52 kilograms of maize in the 2014-2016 long-term average.
- The trend in terms of trade in the county is provided in the figure below.



5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

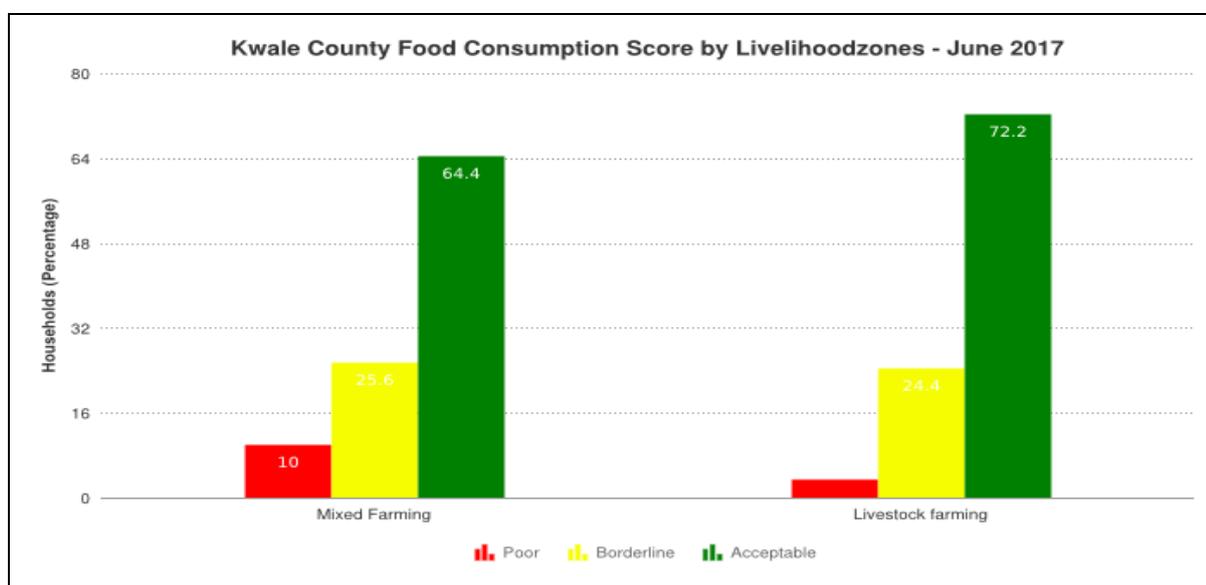
- The average milk consumption at household level increased from 1.3 litres the previous month to 1.6 litres in June as shown in the graph below.



- Milk consumption was lower than normal by 15.8 percent compared to the 2014-2016 long-term average of 1.9 litres.
- The reduction is attributed to the increase in the sale of milk at household level in order to counter high food commodity prices and bridge food consumption gaps.

5.2 FOOD CONSUMPTION SCORE

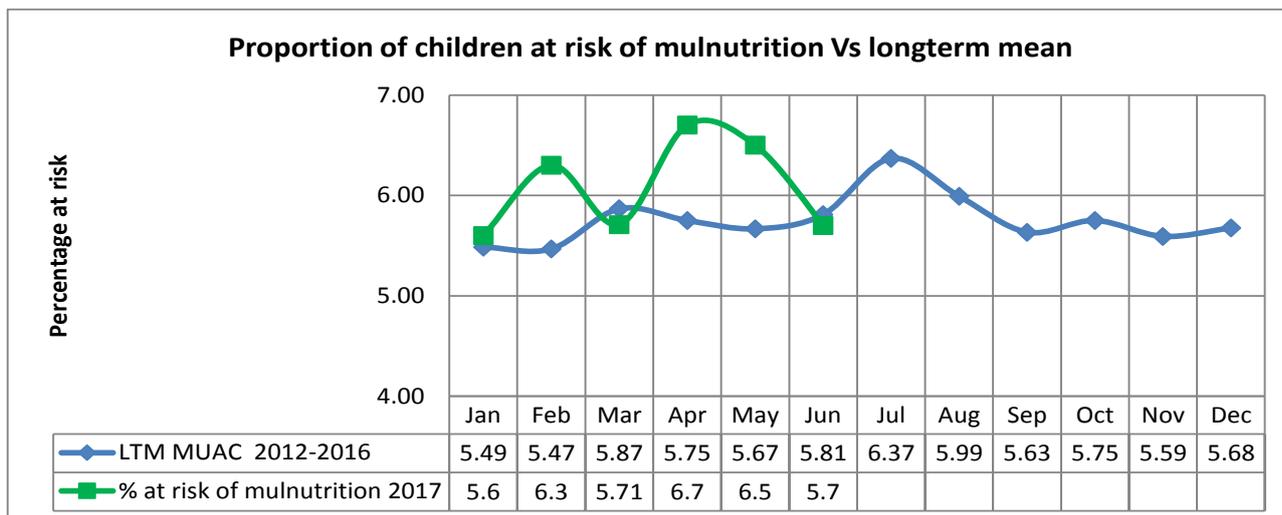
- Food consumption varied slightly from the previous month as households with an acceptable score reduced by 13.1 percent from 48 percent last month to 41.7 percent in May.
- The recorded food consumption gaps could be attributed to above-average food commodity prices, reduced income from casual labour which is a major source of income in the county and reduced milk consumption as milk was sold for income.
- The reduction in the population with an acceptable score implied that fewer households were consuming at least a staple and vegetables on a daily basis complemented by a frequent consumption of pulses and oil compared to last month.
- The food consumption situation at livelihood zone level is summarized in the graph below.



5.3 HEALTH AND NUTRITION STATUS

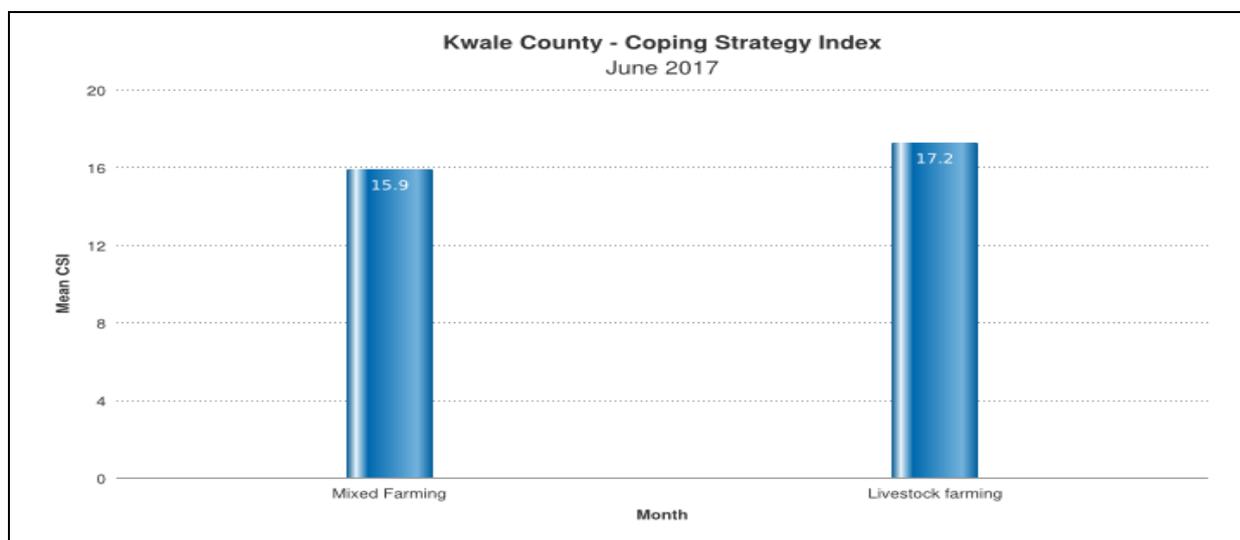
5.3.1 Nutrition Status

- The proportion of children at risk of malnutrition decreased from 6.5 percent to 5.7 percent in June 2017 as shown in the graph below.
- The current population at risk was slightly lower than the expected 5.81 percent in the 2012-2016 long-term average.



5.4 COPING STRATEGIES

- The coping strategy index (CSI) for the month averaged 16.56, quite comparable to 16.63 recorded in May 2017. This implies that the consumption-based coping strategies were employed more frequently similar to the previous month. This further implies that households were finding it more difficult to access food similar to last month.
- The trend at livelihood zone level in the mixed farming it decreased slightly from 16.9 to 15.9 while in the livestock farming it increased from 16.3 and 17.2
- The indices at livelihood zone level are shown below:



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

6.0 CURRENT INTERVENTION MEASURES

6.1 NON-FOOD INTERVENTIONS

- NDMA through funds from the National Drought Contingency Fund (NDCF) carried out the distribution of livestock feeds as shown in the table below:

Ward	Livestock feeds (kilograms)		
	Urea Molasses Mineral Blocks (UMMB)	Drought meal	Hay
Kasemeni	2125	4700	5790
Mwavumbo	2125	4,700	5,790

- The targeting exercise for the unconditional cash transfer program by government through WFP, KRCS and NDMA dubbed '*Chakula Kwa Jamii*' was done during the month with beneficiaries expected to receive their cash for May in the course of June.
- Monitoring of the cash for assets (asset creation) programme in Kinango sub-county was done by NDMA, KRCS and WFP during the month.
- Distribution of dairy goats to 110 beneficiaries and dairy cows.

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 rains that were received in May till the second dekad of June recharged most open and ground water sources. This has significantly improved water accessibility and availability and therefore less stress in the distance walked by humans and livestock to access water. Because of forage availability, livestock production is likely to improve and consequently its prices in markets boosting household incomes. Higher-than-normal food commodity prices are still being reported especially the sifted maize flour and it is sometimes unavailable in local shops. This has affected the food consumption patterns of most households. The fall army worms' invasion in maize farms across the county is likely to reduce the expected harvest to upto 50 percent thereby greatly affecting food stocks at household level. There were various on-going humanitarian food and non-food interventions which were serving as a safety net for vulnerable households. Therefore the food security situation is expected to worsen and proper interventions should be put in place.

8.0 RECOMMENDATIONS

- Provision of pesticides to farmers to tackle the fall army worm invasion which has destroyed hundreds of acres of maize plantations.
- Accelerate the processing of the cash set aside for the unconditional cash transfer to curb the current food insecurity situation.
- Close monitoring of the rainfall performance as the season has experienced extreme conditions such as long dry spell and flooding which may impact negatively on crop production.