

National Drought Management Authority
KWALE COUNTY
DROUGHT EARLY WARNING BULLETIN FOR MAY 2018



A Vision 2030 Flagship Project



MAY 2018 EW FLAG

Drought Status: NORMAL



Shughull za kawaida

Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Mixed Farming	Normal	Stable
Livestock Farming	Normal	Improving
County	Normal	Stable
Biophysical Indicators	Value	Normal Range/Value
VCI	77.59	48
State of Water Sources	5	5
Production indicators	Value	Normal
Crop Condition (maize and legumes)	N/A	N/A
Livestock Body Condition	2 (livestock farming) 2(mixed farming)	2 (livestock farming) 2(mixed farming)
Milk Production (Litres)	6.1	3.6
Livestock Migration Pattern	No migration	No migration
Livestock deaths (from drought)	Zero deaths	Zero deaths
Access Indicators	Value	Normal
Terms of trade	42.5	41.9
Milk Consumption (litres)	1.9	1.6
Return distance to water sources (km)	2.3	2.7
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	9.4	5.3

Drought Situation & EW Phase Classification

Biophysical Indicators

- Higher-than-normal rainfall was received during the month particularly in the first and second dekads.
- The Vegetation Condition Index was significantly above-normal at 77.59.
- 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 for this time of the year.
- Milk production was above-normal.
- No livestock migration was reported during the month.

Access indicators

- The terms of trade, milk consumption and return distances to water sources were all within their seasonal ranges for the month.

Utilization Indicators

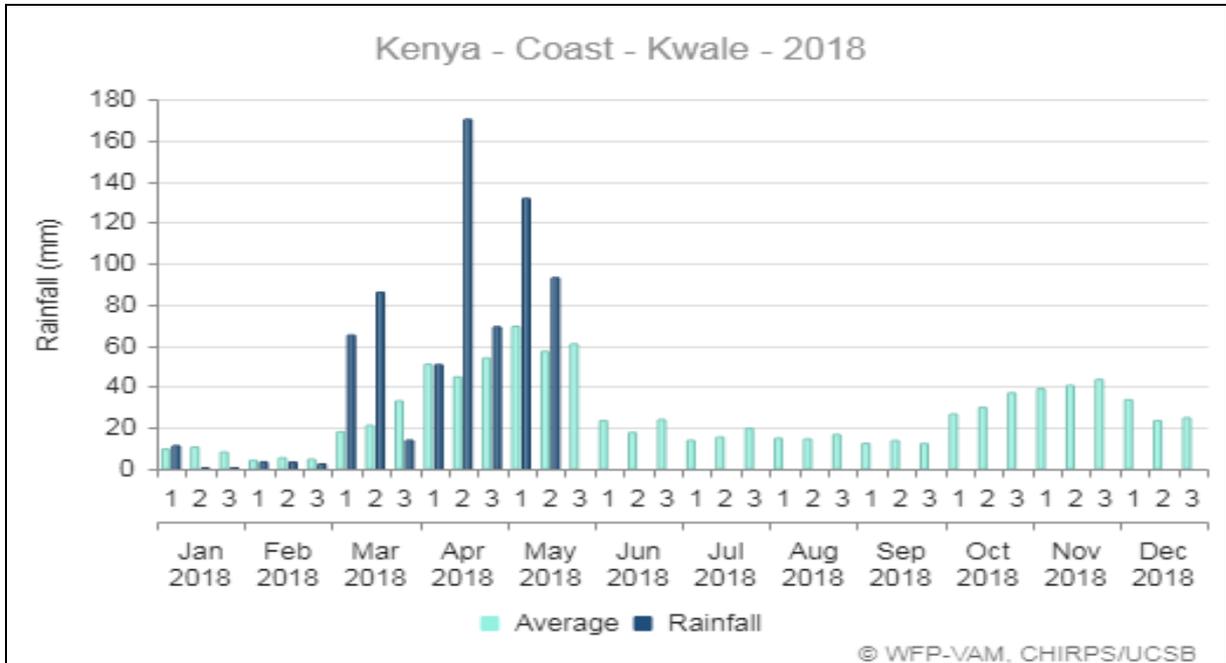
- The proportion of children at risk of malnutrition was above-normal for this time of the year.

Seasonal calendar

<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 long rains season's onset was in the first dekad of March which was normal.
- The amounts received in the first and second dekads were above-normal as shown in the graph below.
- The spatial distribution was fairly even while the temporal distribution was good across both the mixed farming and livestock farming livelihood zones, similar to last month.
- The rains were still on-going in some parts in the county.



2. IMPACTS ON VEGETATION AND WATER

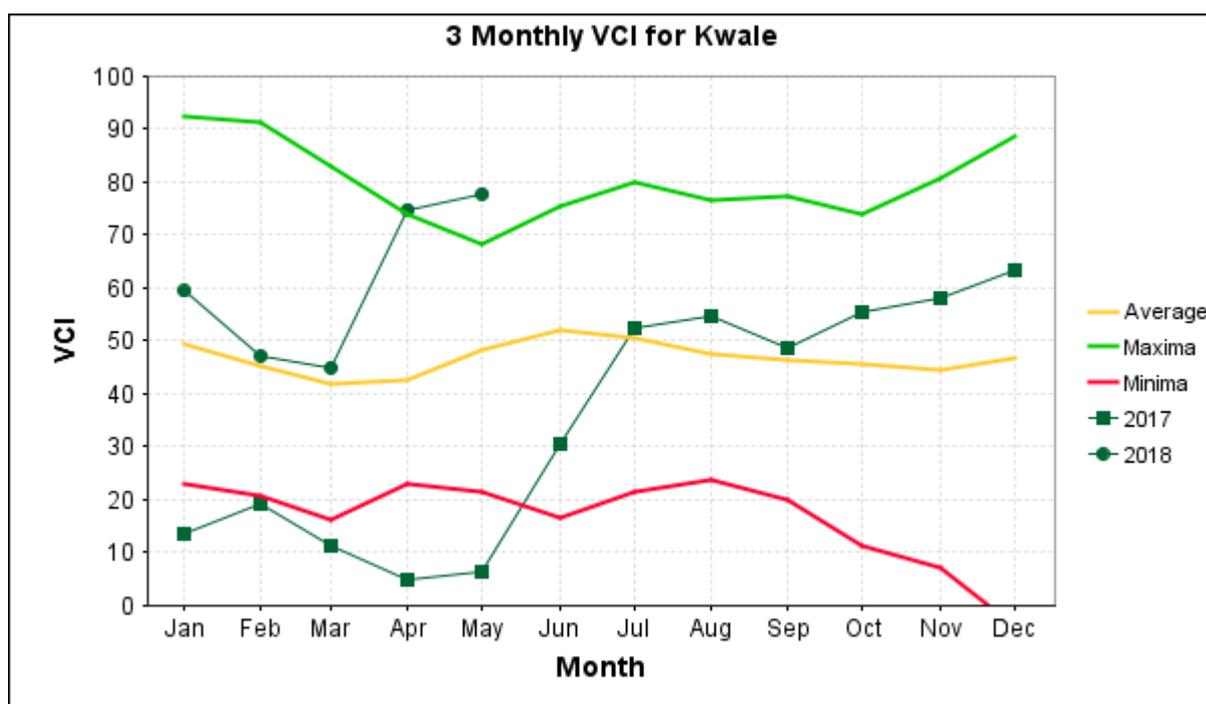
2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

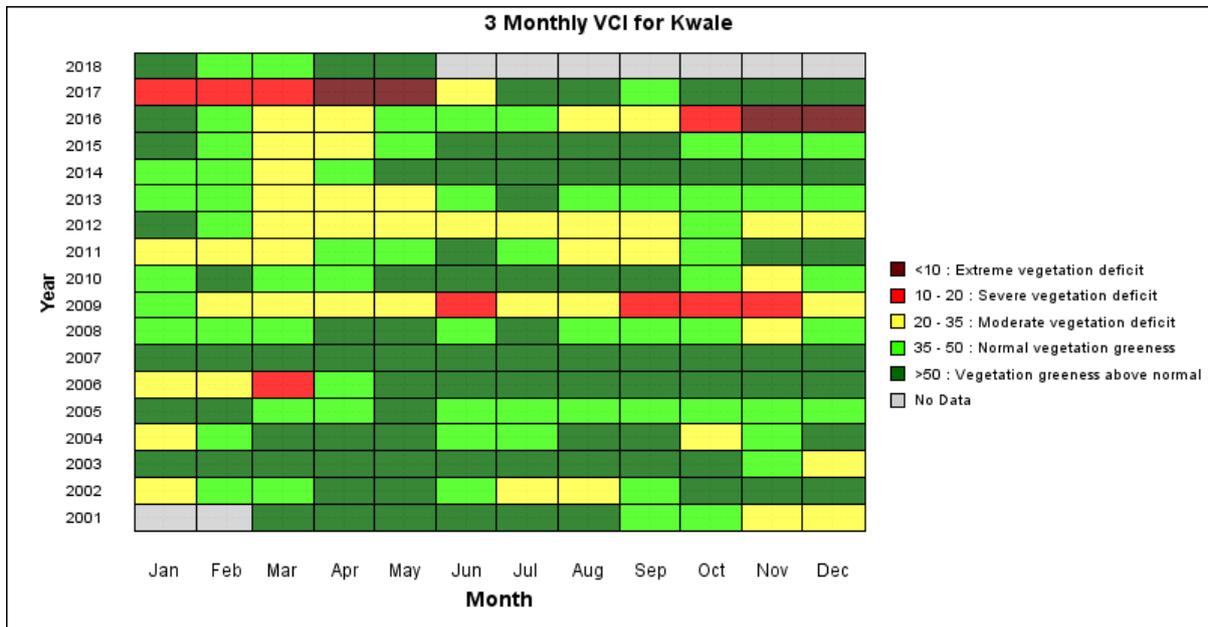
- The county continued to post above-normal vegetation greenness as the VCI during the month of May remained relatively similar to that posted in April as shown in the table below.
- Similarly all sub-counties posted above-normal vegetation greenness for this time of the year.
- Slight improvements were recorded in Kinango and Lunga Lunga sub-counties whose VCI had increased by 5.8 and 10 percent respectively while that of Msambweni sub-county had remained relatively the same. However, there was a decline in the vegetation greenness in Matuga sub-county as its VCI had recorded a 16.4 percent decrease compared with last month.

Sub-county	3-month VCI November 2017	3-month VCI December 2017	3-month VCI January 2018	3-month VCI February 2018	3-month VCI March 2018	3-month VCI April 2018	3-month VCI May 2018
Kinango	57.3	64.81	61.15	47.18	43.13	74.05	78.36
Lunga Lunga	57.67	63.05	57.41	43.91	42.44	80.66	88.64
Matuga	62.16	59.19	58.15	53.64	55.1	70.43	58.94
Msambweni	55.34	54.41	48.26	42.7	49.37	64.18	63.06
Kwale County	57.91	63.18	59.26	47.01	44.8	74.68	77.59

- The current vegetation greenness was significantly above-normal and was actually higher than the highest value ever recorded for this time of the year since 2001 as shown in the graph below.

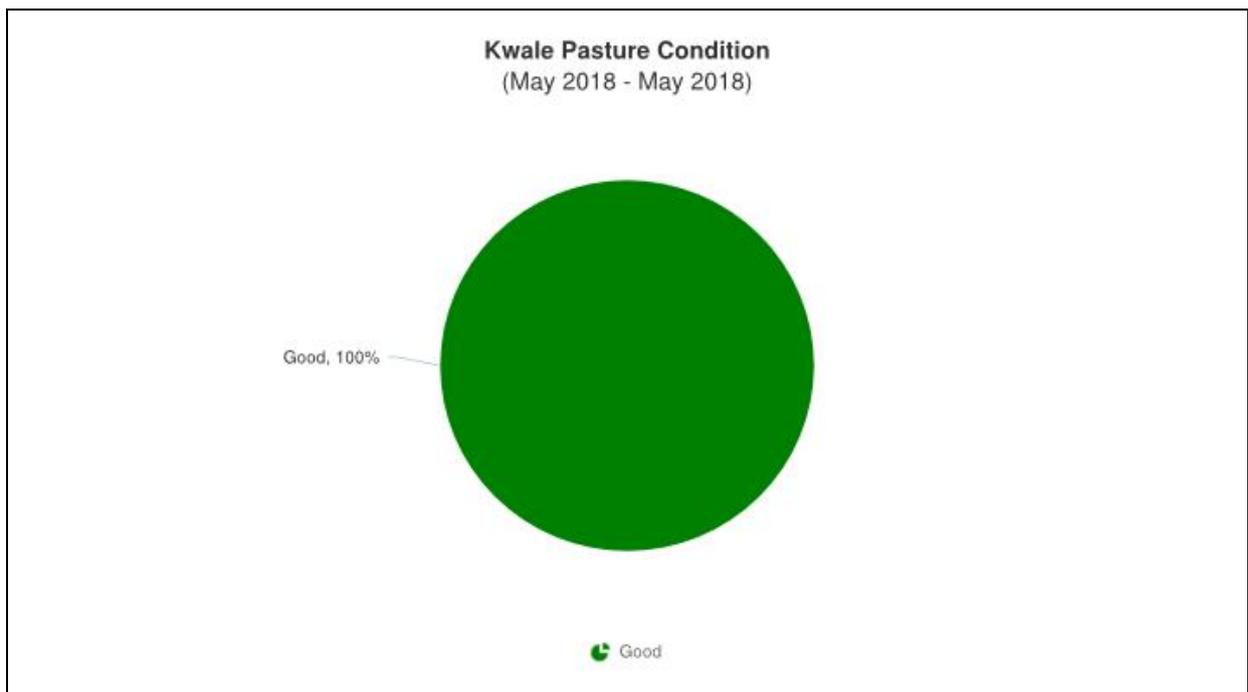


- The matrix below represents the county’s current vegetation condition in comparison to similar times since 2001. The situation had significantly improved particularly when compared with a similar time last year when the county had recorded extreme vegetation deficit.



2.1.2 Pasture

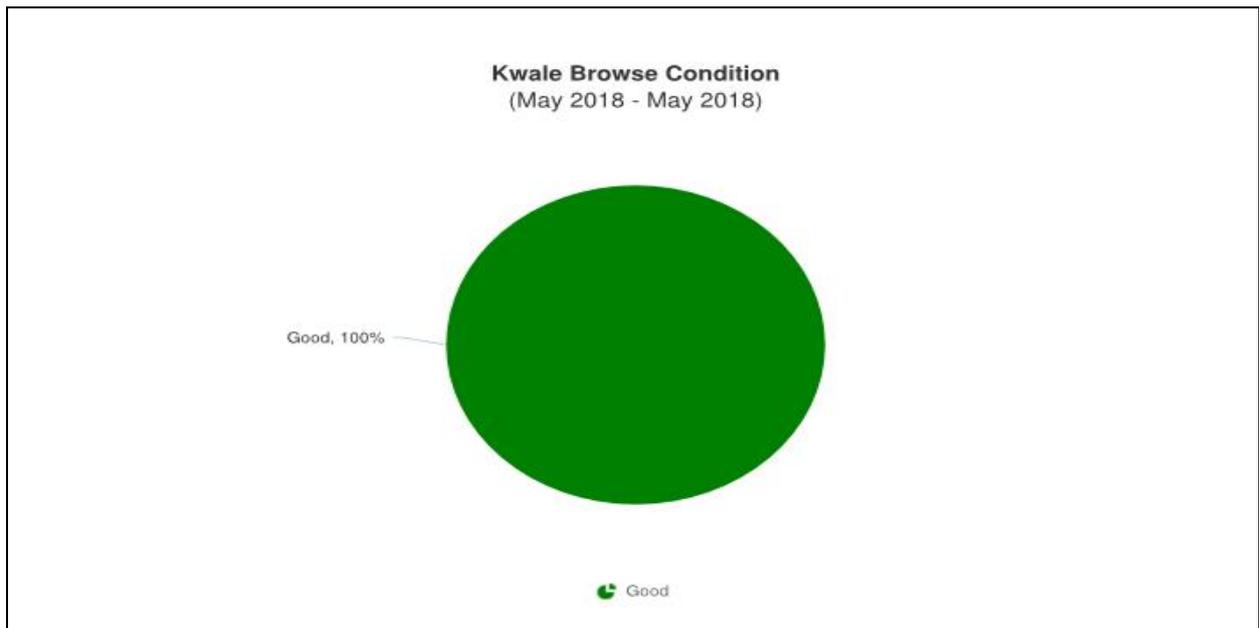
- All households reported good pasture condition which was a significant improvement in pasture availability this month compared to last month when approximately 81.3 percent of them reported a similar condition.
- To further underscore the improved pasture condition, no household reported poor condition this month.
- The current pasture condition in the county is illustrated in the pie-chart below.



- The available pasture is expected to last for six months in the mixed farming livelihood zone and four months in the livestock farming one.
- Both livelihood zones displayed good pasture condition in May.

2.1.3 Browse

- The browse condition also improved this month as all households reported good pasture condition compared to 81.3 percent last month.
- The available browse was projected to last approximately four and six months in the livestock farming and mixed farming livelihood zones respectively.
- The pie-chart below represents the current browse condition in the county.

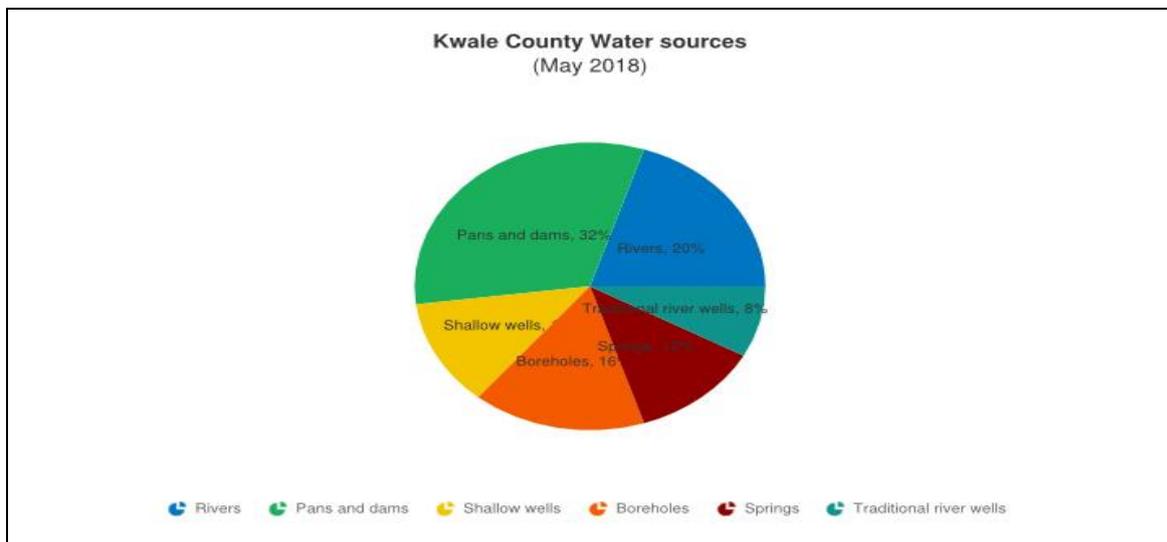


- Browse condition was similar in both livelihood zones as they had both reported good condition.

2.2 WATER RESOURCES

2.2.1 Sources

- Pans, dams, rivers and boreholes were the main sources of water in the county together with other sources, similar to last month as shown in the graph below.

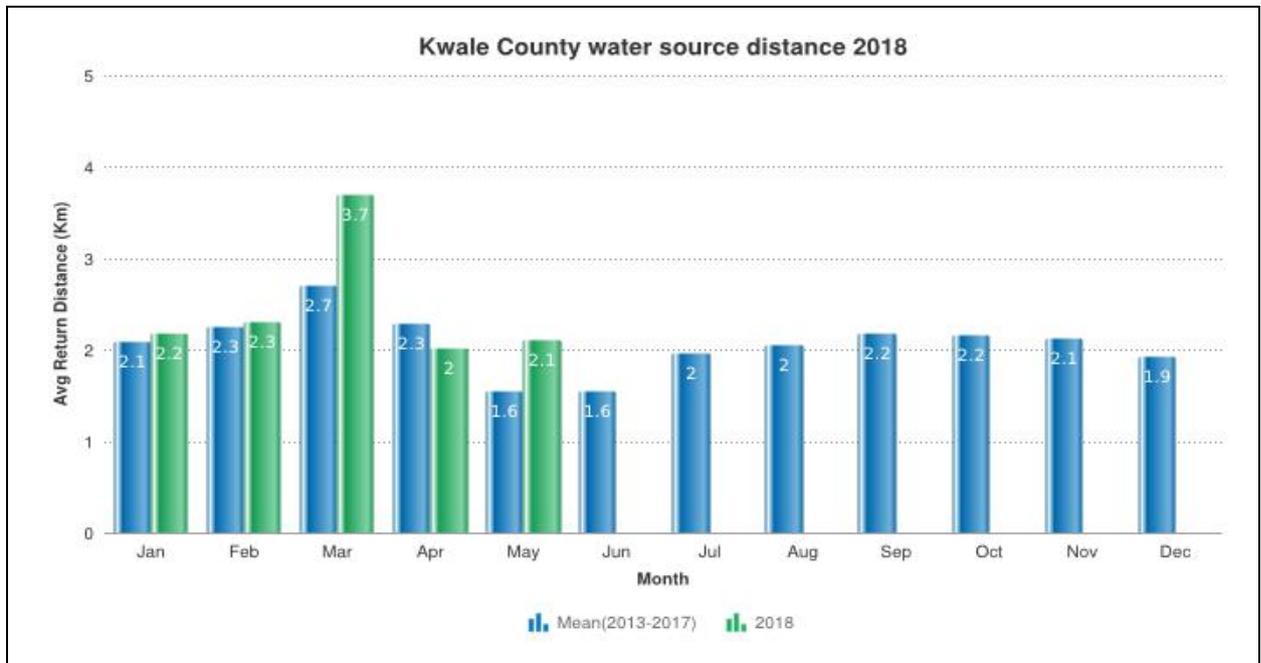


- Households in the livestock farming livelihood zone relied mostly on open water sources as the higher-than-normal rains had recharged them to full capacity in most areas.
- The number of households relying on these open water sources had therefore increased from 21 percent last month to 32 percent in May.
- The other sources of water in the county were relatively permanent and situated in the mixed farming livelihood zone.
- The water availability in the county was therefore normal and categorized at an early warning classification of 5 for the month under review (refer to the table below for the description of the state of water resources).

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

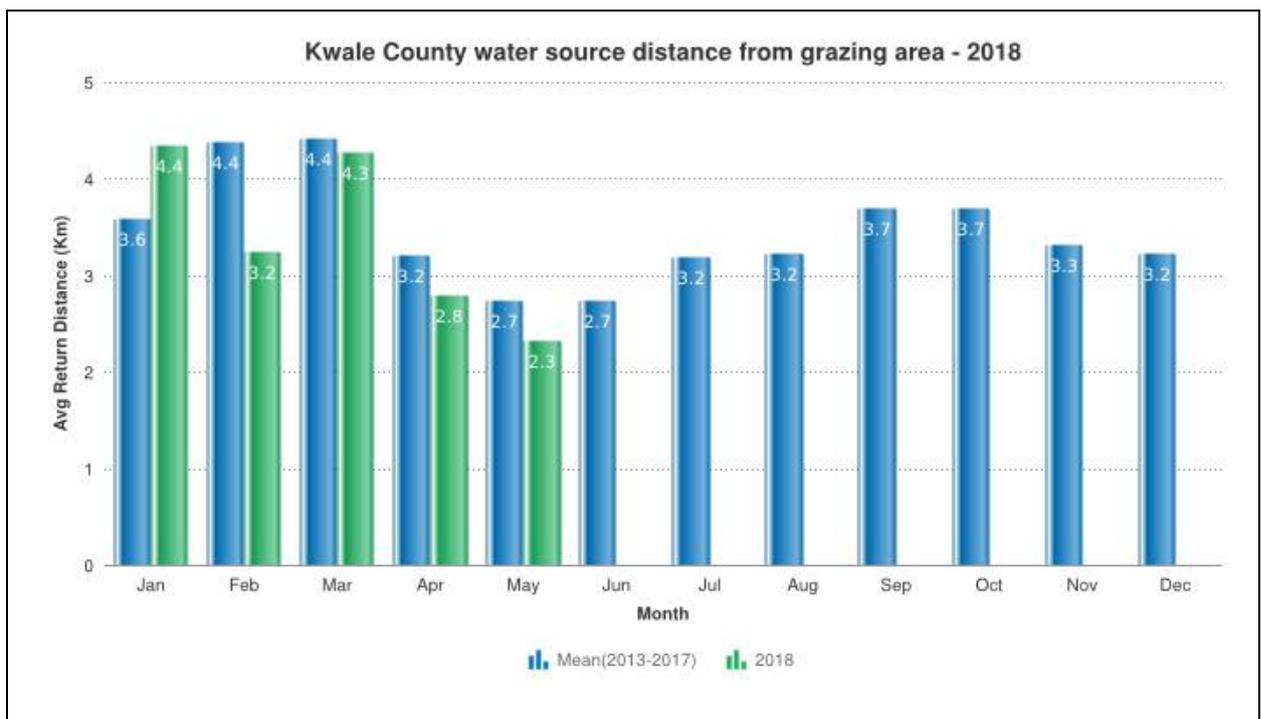
- The average return trekking distance to water sources for domestic use remained fairly the same as last month.



- The distances remained relatively the same at livelihood zone level as the mixed farming livelihood zone recorded a distance of 1.3 km compared with 1.4km last month while the livestock farming one posted 1.7 km compared with 2.1km in April.

2.2.3 Livestock access

- A slight reduction was recorded in the distance to grazing area compared with last month as an average distance of 2.3 km was posted compared to 2.8 km in April.
- The slight reduction may be attributed to increased availability of water near homesteads and rejuvenation of forage due to the on-going rains.
- The return trekking distances were also within the seasonal ranges for this time of the year and is illustrated in the graph below.



- The mixed farming livelihood zone recorded the shortest distance at 1.7 km having reduced slightly from 2.2 km posted in April.
- The longest distance was recorded in the livestock farming livelihood zone at 2.9 km which remained the same as last month.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Livestock body condition continued on an improving trend this month attributed largely to the increased availability of forage and water.
- The condition retained the 'moderate early warning classification' similar to last month for both livelihood zones (See below the early warning classification table for livestock body condition).
- It is projected to be sustained at that level because the rains were still expected to continue ensuring availability of water and forage for livestock.

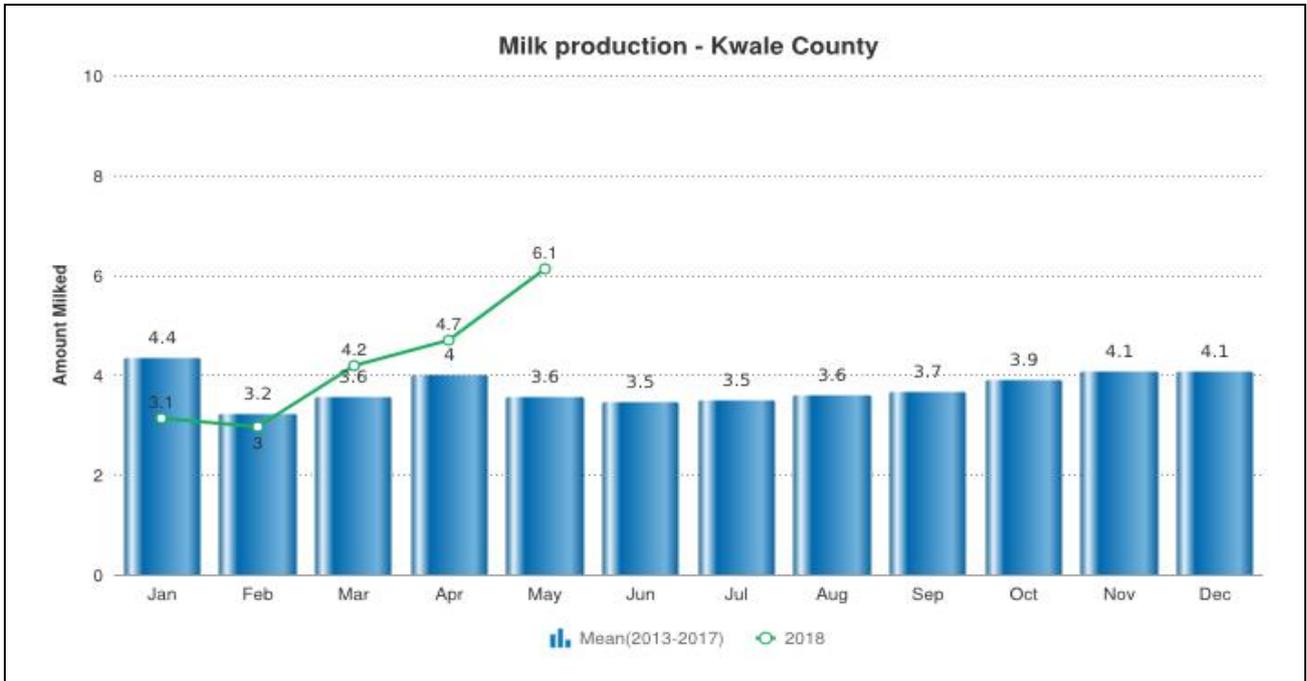
Level	Classification	Characteristics (this describes majority of the herd and not individual isolated Stock)
1	Normal	Very Fat Tail buried and in fat
		Fat, Blocky. Bone over back not visible
		Very Good Smooth with fat over back and tail head
		Good smooth appearance
2	Moderate	Moderate. neither fat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

- There were no livestock diseases relevant to food security reported during the month under review.

3.1.3 Milk Production

- Milk was mainly produced by cows this month similar to last month.
- There was a 30 percent increase in the average milk produced per household this month compared to last month as an average of 6.1 litres was produced in May compared with 4.7 litres in April.
- The average milk production was also above the 2013-2017 LTA as shown in the graph below.
- The improved trend in production could be attributed to reduced stress in accessing water and pasture during the month similar to last month.



3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and condition of food crops

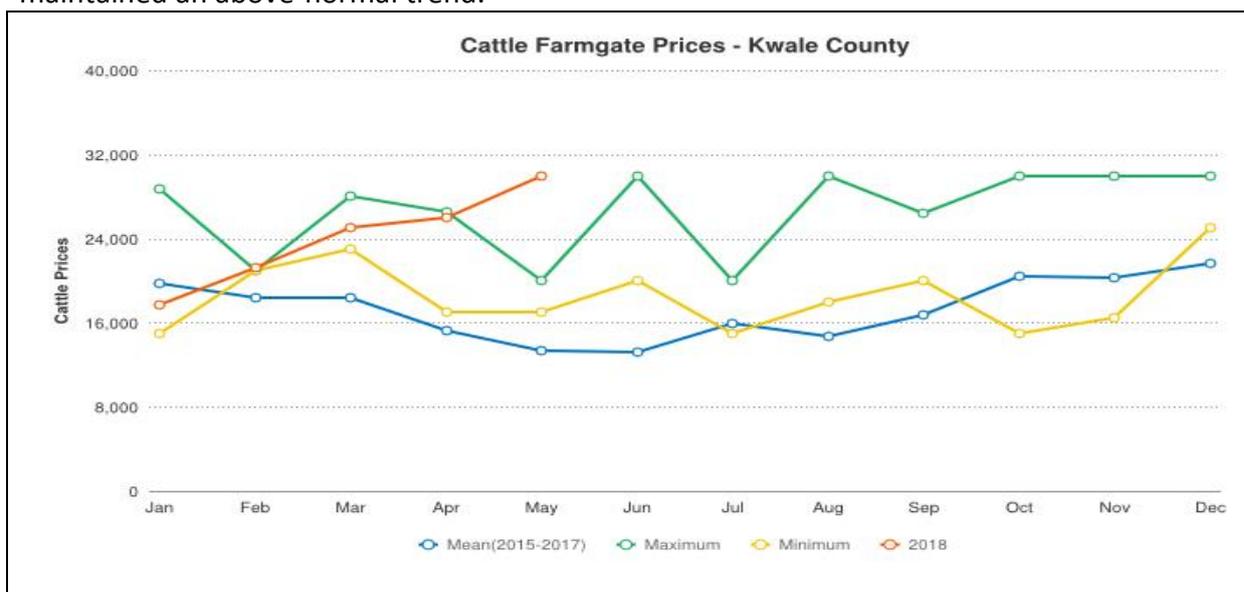
- Households were mostly engaged in weeding during the month under review.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

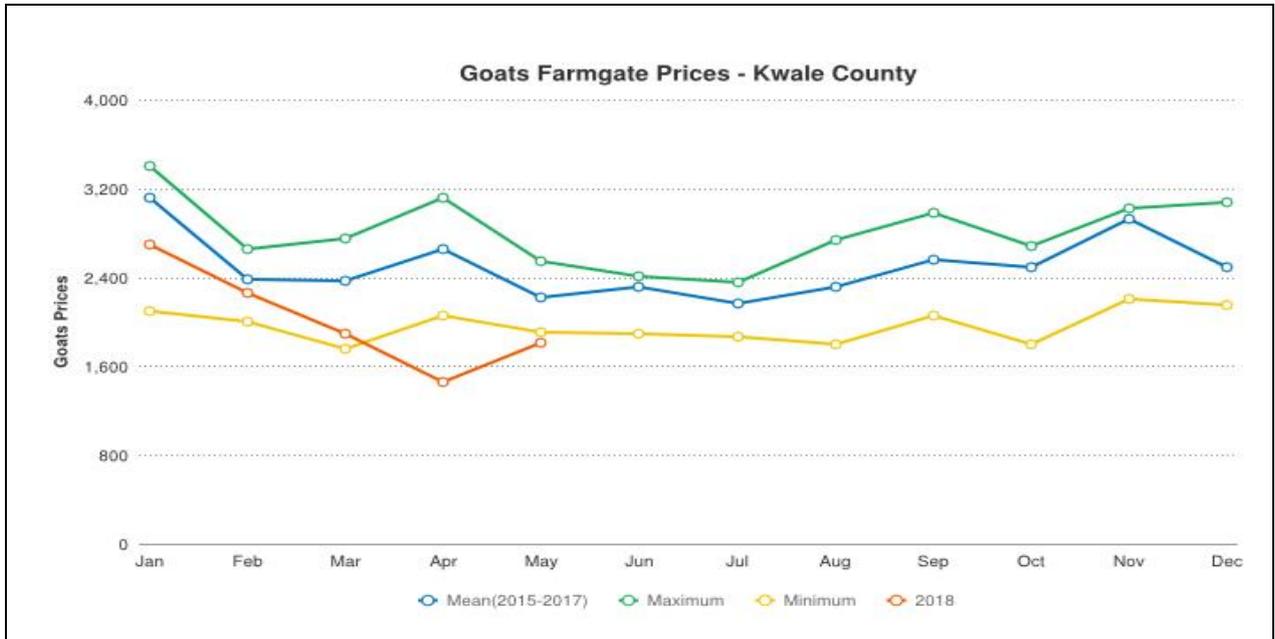
4.1.1 Cattle Prices

- A mature 3-year-old bull was trading at Kshs 30,000 having increased by 13.3 percent from Kshs 26,000 recorded in April.
- The price was also 13.2 percent higher than the 2015-2017 long-term mean of Kshs 26,500 as shown in the graph below.
- The sustained good body condition among cattle could be the reason the price had maintained an above-normal trend.



4.1.2 Goat Prices

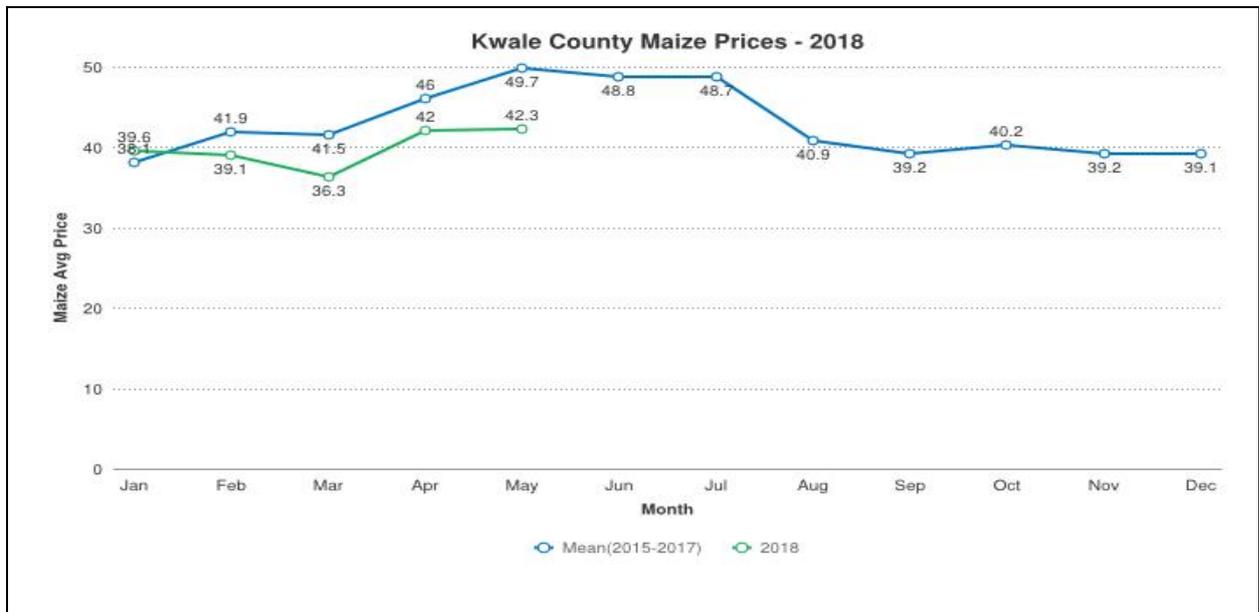
- The average trading price of a medium-sized three-year old goat was Kshs 1,814.3 in May having increased by 25 percent from Kshs 1,449.2 recorded in April.
- The current price was also 18.3 percent lower than the 2015-2017 long-term mean of Kshs 2221.
- The trend in goat prices has been illustrated in the graph below.



4.2 CROP PRICES

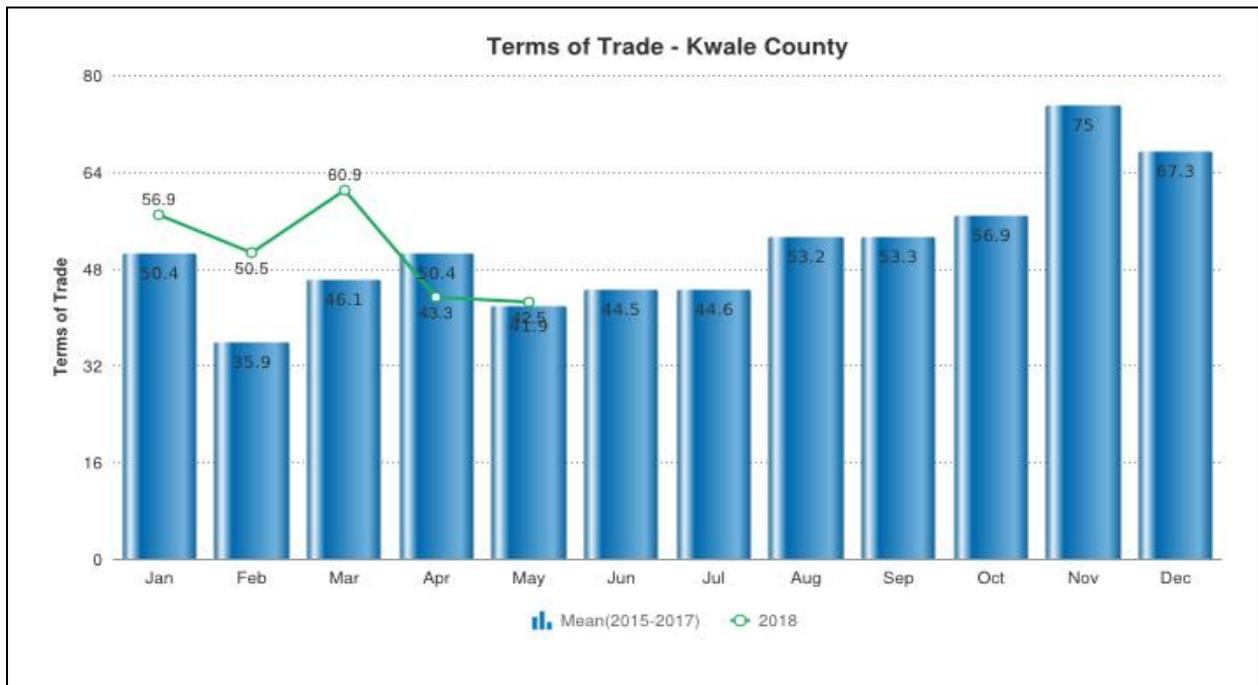
4.2.1 Maize

- The selling price for a kilogram of maize remained stable at Kshs 42.3 and 14.9 percent below the 2015-2017 long-term mean of Kshs 49.7.
- The graph below represents maize price trends in the county as at May 2018.



4.3 TERMS OF TRADE (CASUAL LABOUR VERSUS MAIZE PRICES)

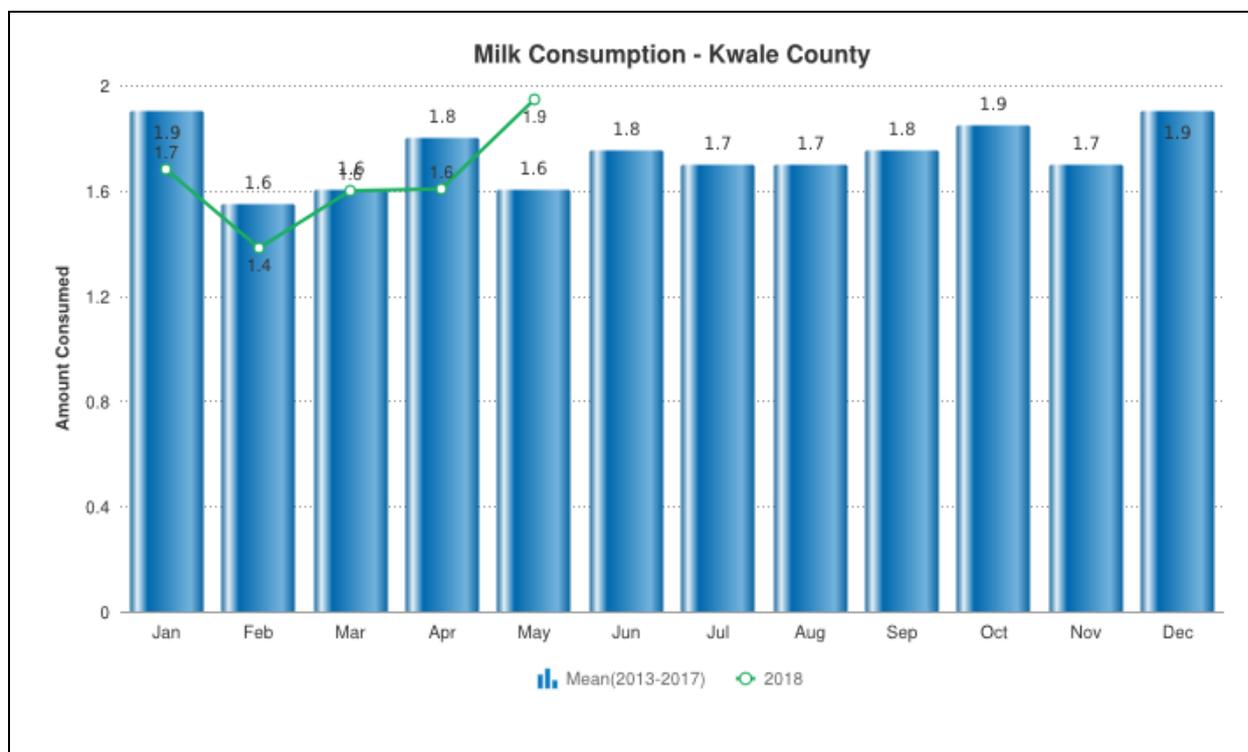
- The terms of trade (TOT) were normal at 42.5 and had also remained similar to those posted last month at 43.3.
- Households could therefore purchase almost the same number of kilograms of maize from the proceeds of casual labour this month as last month and also compared with normal times.
- The implication was that households' purchasing power remained similar to that in May and was also the same as that normally posted at this time of the year.
- The graph below shows the trend in terms of trade in the county.



5.0 FOOD CONSUMPTION AND NUTRITION STATUS

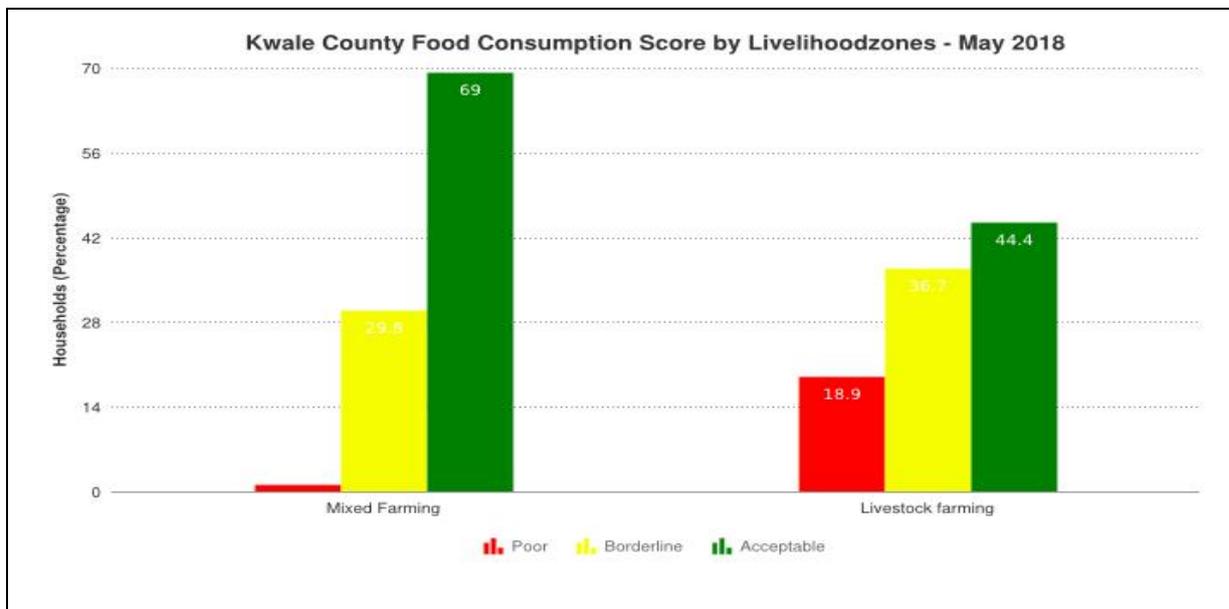
5.1 MILK CONSUMPTION

- Milk consumption at household level increased marginally from an average of 1.6 litres in April to 1.9 litres in May.
- The average consumption was also slightly above the 2013-2017 long-term mean of 1.6 litres.
- The increased consumption was likely to have been prompted by increased production.
- Provided below is a graph of the consumption trends in the county.



5.2 FOOD CONSUMPTION SCORE

- Food consumption trends in the county remained the same as last month since the proportion of households with acceptable consumption was 56.7 percent similar to last month.
- The implication was that there had been no change in the percentage of households who were consuming vegetables and a staple daily, a frequent consumption of oils and pulses and occasionally dairy products, meat and fish.
- Below is a graphical representation of the inter-livelihood zone differences in food consumption in the county.

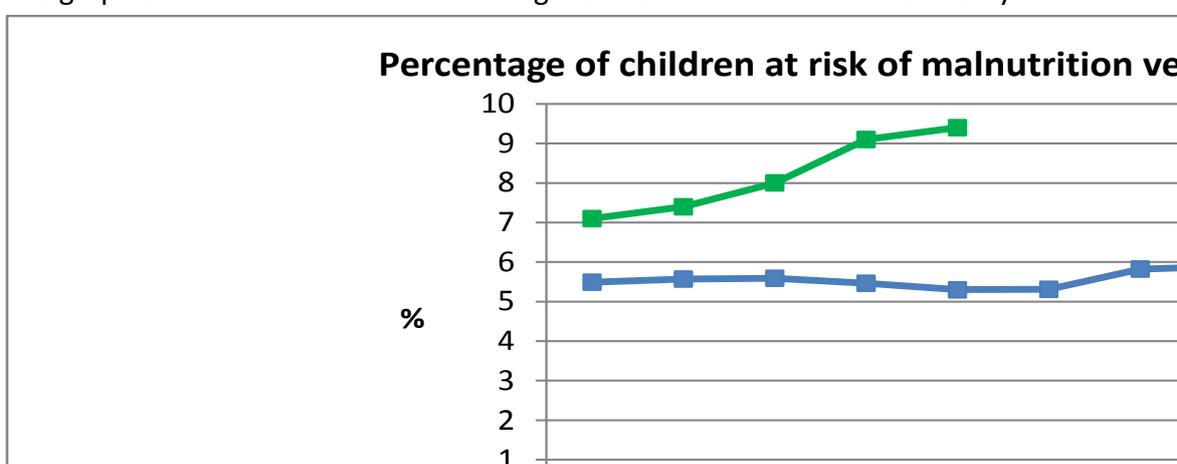


- At sub-county level, food consumption gaps were most severe in Lunga Lunga sub-county where over half of the population had poor food consumption. The rest of the sub-counties posted less than 10 percent of households with similar characteristics.
- At livelihood zone level, minimal changes were recorded in both livelihood zones compared to last month.
- In the mixed farming livelihood zone, approximately 69 percent of households had reported having acceptable food consumption in May compared with 67.8 percent in April while the livestock farming livelihood zone had recorded 44.4 percent compared with 45.6 percent during the same period.
- Therefore, food consumption gaps continued to be more severe in the livestock farming livelihood zone in comparison to the mixed farming livelihood one.

5.3 HEALTH AND NUTRITION STATUS

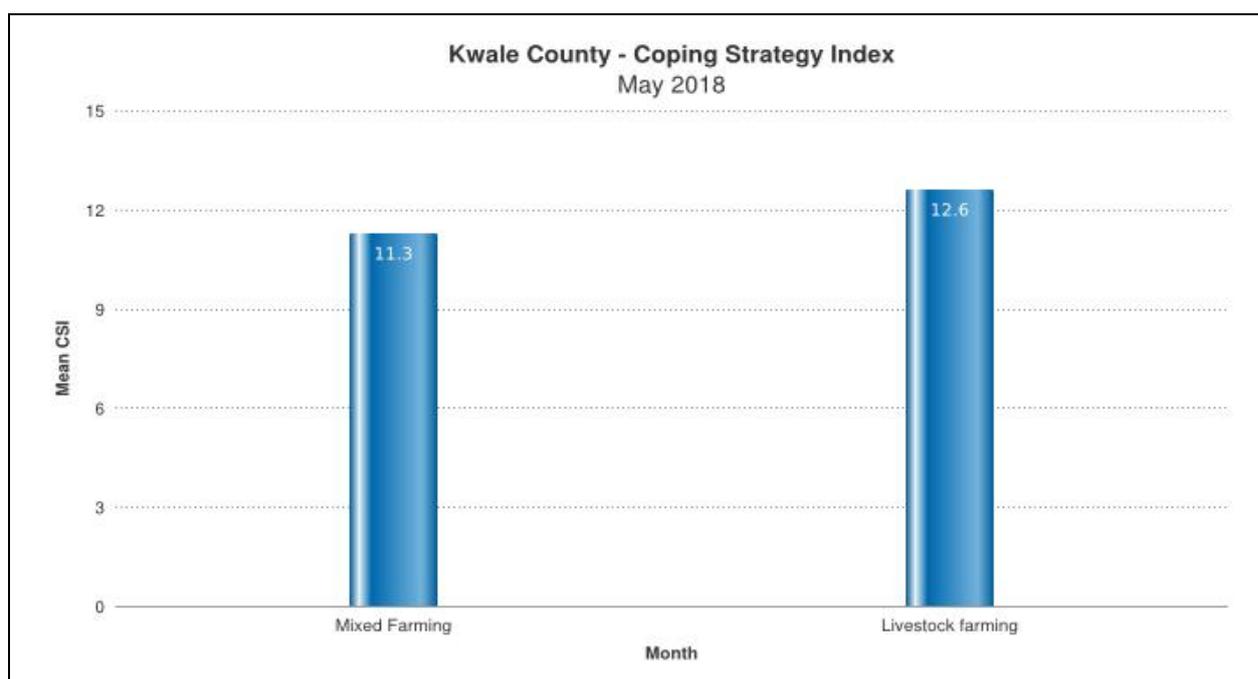
5.3.1 Nutrition Status

- The number of children sampled for the purpose of determining the percentage of children aged below five years who were at risk of malnutrition was 568 females and 639 males.
- This proportion of children at risk remained above-average similar to previous months at 9.4 percent although similar to 9.1 percent posted in April.
- The graph below illustrates the increasing trend of malnutrition in the county.



5.4 COPING STRATEGIES

- The mean coping strategy index (CSI) in the county was 11.94 portraying a stable trend in comparison with last month's index of 10.62.
- There were marginal variations in the coping strategies employed at livelihood zone level as the mixed farming and livestock farming livelihood zones recorded indices of 11.3 and 12.6 respectively, as shown in the graph below.
- In addition, the CSI had increased in both livelihood zones compared to last month as indices of 10 and 11.2 had been posted in the mixed farming and livestock farming livelihood zones respectively in April.
- The slight increases in the CSI were indicative of insignificant increase in employing insurance-based coping strategies both in frequency and severity.



6. CURRENT INTERVENTION MEASURES

6.1 NON-FOOD INTERVENTIONS

○ Agriculture department

The department undertook the following activities in May 2018:

- Surveillance for army worm infestation for 10,000 farmers across the county.
- Tractor ploughing targeting 7,000 farmers in order to increase acreage under crop production.
- Implementation and operationalization of six micro-irrigation sites namely: Moyeni in Kinango ward, Dzihosheni in Puma ward and Mwangaza in Mwavumbo ward. Others include: Umoja in Kubo South ward, Upendo in Waa/Ng'ombeni ward and Kiphingoni in Tsimba/Golini ward.
- A grain store was constructed in Mwambalazi in Kikoneni ward in readiness for the harvest from the long rains season crop.

○ Health and Nutrition department

The department conducted the '*Malezi Bora*' campaign during the month during which the following activities were scaled up:

- Vitamin A supplementation
- Deworming
- Growth monitoring
- Iron and Folic Acid Supplementation (IFAS)
- Nutritional screening and referrals

○ Livestock department

- The department distributed 130 dairy cows in the following wards in the county.

Ward	No of dairy cows
Kasemeni	20
Waa/Ng'ombeni	20
Gombato/Bongwe	20
Vanga	20
Ramisi	16
Tiwi	17
Tsimba/Golini	17

7. EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

- No cases of insecurity, conflict or human displacement were reported during the month under review.

7.2 Migration

- No migration was reported this month.

7.3 FOOD SECURITY PROGNOSIS

In the mixed farming livelihood zone, households still had a few stocks although these were diminishing, which ensured stable food consumption compared with last month. Maize prices also remained below-average and terms of trade were normal due to easy availability of casual labour. Therefore, even poor households could still access some income to purchase food from stores and did not have significant food consumption deficits. On-farm labour was likely to continue being available which is projected to continue providing income for farm families which constitute the majority of the households in the zone. The number and frequency of insurance-based coping strategies was therefore likely to remain the same and so will the nutritional status of children aged below five years.

Households in the livestock farming livelihood had improved access to milk production due to increased availability of forage and water for livestock which had consequently supplemented domestic incomes. Given that maize prices had remained fairly stable amid increased income from livestock production, terms of trade had remained favourable for them too. As livestock production is on an increasing trend and a major source of income in this zone, households were likely to continue accessing some income that will enable them to purchase food, majorly maize and/or maize flour which is the staple food. Terms of trade were therefore likely to continue to be favourable for households in this zone and will ensure food consumption deficits are kept at a minimum. In addition, normal insurance consumption-based coping strategies will continue to be employed and the nutritional status of children aged below five years is projected to be stable.

8. RECOMMENDATIONS

- Upscale nutritional screening to increase referrals for malnutrition cases due to the increasing and above-average trends in malnutrition rates across the county.
- Continue scouting for and monitoring of fall army-worm infestation in order to avert potential crop losses.