

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



A Vision 2030 Flagship Project



JUNE 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	Stable
County	Normal	Stable
Biophysical Indicators	Value	Normal Range/Value
VCI	75.96	52
State of Water Sources	5	5
Production indicators	Value	Normal
Crop Condition (maize and legumes)	Good	Good
Livestock Body Condition	2 (livestock farming) 2(mixed farming)	2 (livestock farming) 2(mixed farming)
Milk Production (Litres)	5.9	3.5
Livestock Migration Pattern	No migration	No migration
Livestock deaths (from drought)	Zero deaths	Zero deaths
Access Indicators	Value	Normal
Terms of trade	45.7	44.5
Milk Consumption (litres)	2.0	1.8
Return distance to water sources (km)	2.4	1.6
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	8.3	5.3

Drought Situation & EW Phase Classification

Biophysical Indicators

- Normal rainfall was received during the month of June in the first and second dekads.
- The Vegetation Condition Index was significantly above-normal at 75.96.
- 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 and milk consumption were well within their seasonal ranges for the month. However, the return distances to water sources for households were slightly higher-than-normal for this time of the year.

Utilization Indicators

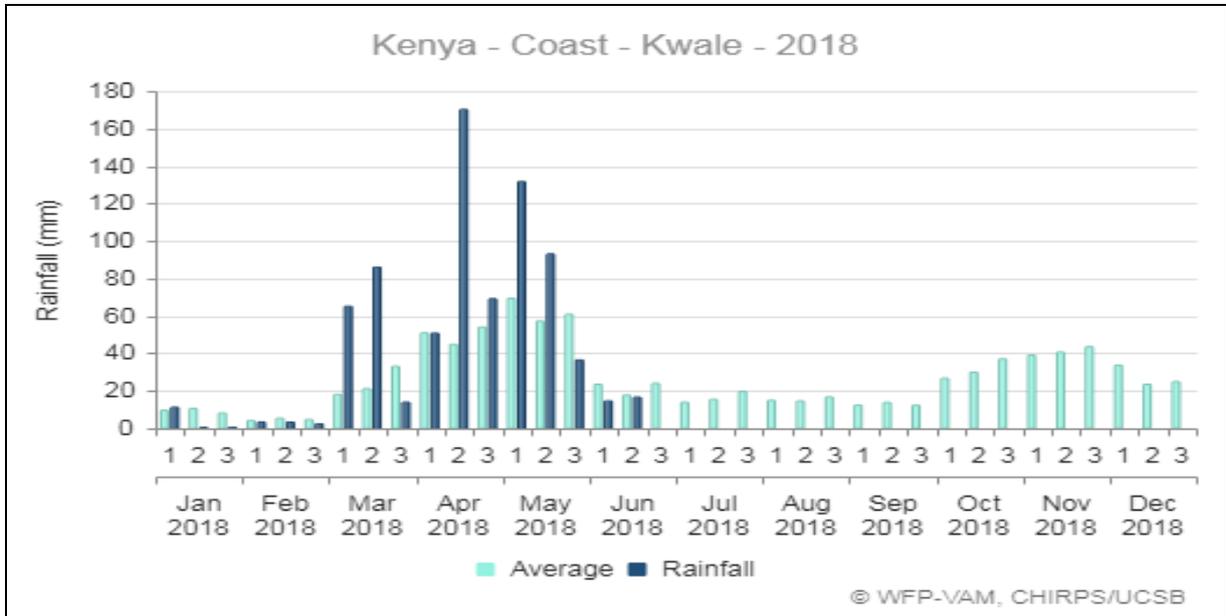
- The proportion of children at risk of malnutrition was above-normal for this time of the year.

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

- During the first and second dekads of June, the amount of rainfall received was normal as illustrated in the graph below.
- The rainfall distribution was fairly even in space and fair in time in both the livestock and mixed farming livelihood zones.
- A few parts of the county were still experiencing some rainfall.



2. IMPACTS ON VEGETATION AND WATER

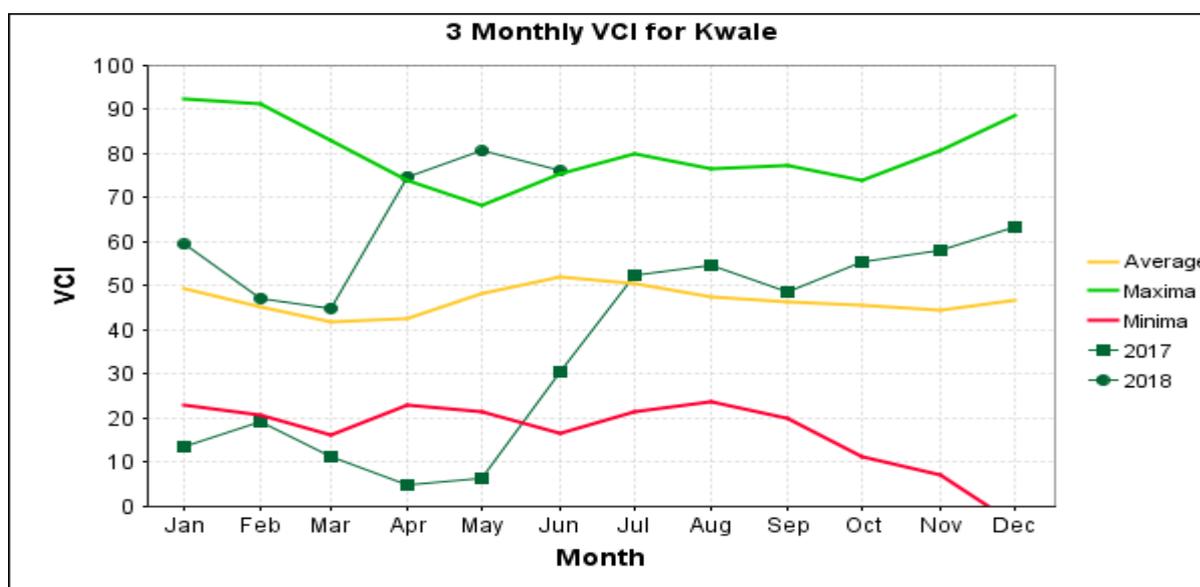
2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

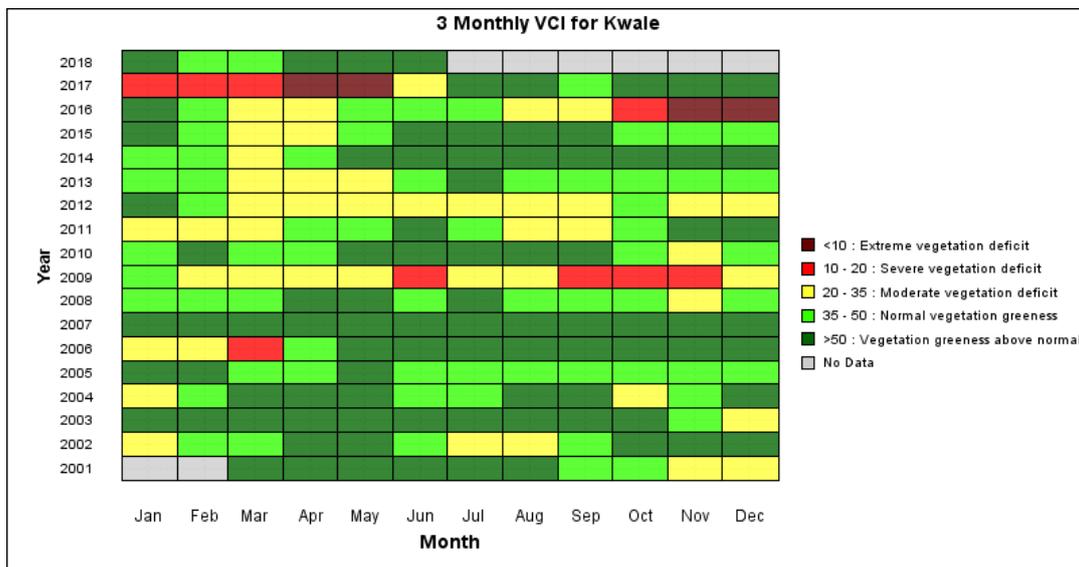
- The county maintained an above-normal vegetation greenness this month similar to last month as the VCI classified it in that band.
- However, there was a slight reduction of vegetation greenness by 5.5 percent in the county from an index of 80.42 in May to 75.96 in June attributable to the decrease in rainfall amounts compared with previous months.
- All four sub-counties also recorded above-normal greenness this month as all of them posted indices above 50 as shown in the table below that also includes the county's aggregate VCI.

Sub-county/County	3-month VCI May 2018	3-month VCI June 2018
Kinango	81.57	75.93
Lunga Lunga	88.26	82
Matuga	67.85	70.81
Msambweni	61.09	60.23
Kwale County	80.42	75.96

- Vegetation condition in the mixed farming livelihood zone (comprising mainly of Matuga and Msambweni sub-counties) remained fairly stable as implied in the slight reductions in the VCI in the table above.
- However, there were higher decreases in the same index in the livestock farming livelihood zone (comprising mainly Kinango and Lunga Lunga sub-counties) which both registered an approximate seven percent decrease; indicative of a decline in vegetation greenness compared with last month.
- Of importance to note is that the current month's VCI coincided with the highest value ever recorded since 2001 in the county, further underscoring the fact that the current vegetation conditions were better than expected for this time of the year (see graph below).

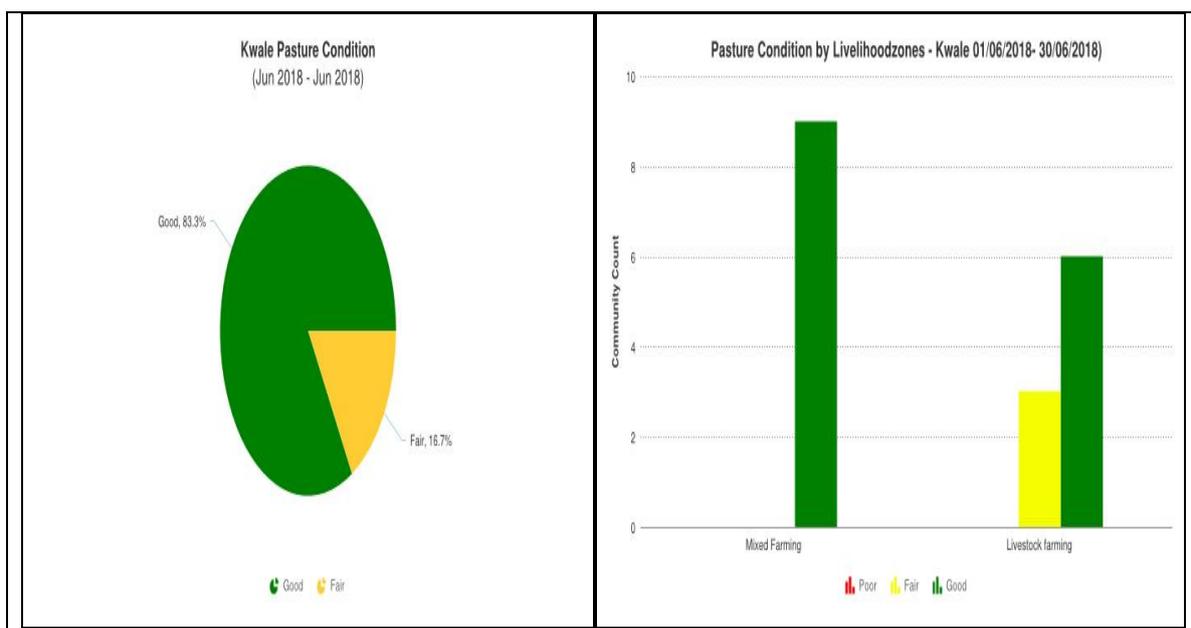


- Below is a matrix showing the county's current vegetation condition and that dating back to 2001.
- It shows that the current condition is also better than a similar time last year when the county was categorized in the moderate vegetation deficit band.



2.1.2 Pasture

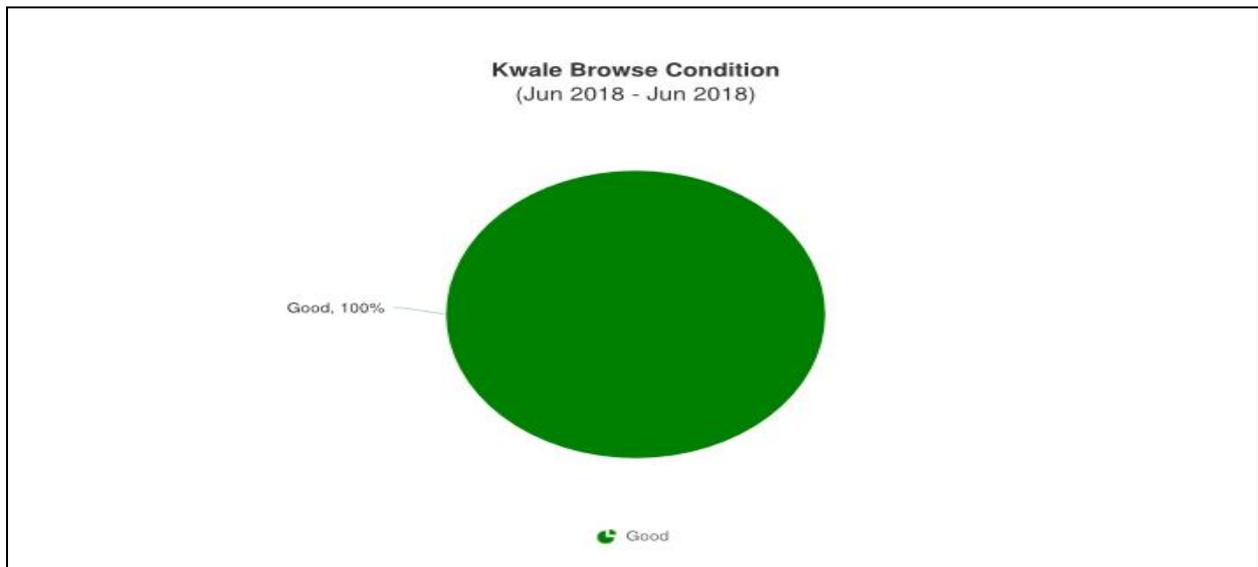
- There was a slight reduction in pasture availability this month as 83.3 percent of households reported having good pasture condition this month compared with all (100%) households last month.
- The reduction in pasture availability was mainly in the livestock farming livelihood zone as approximately 16.7 percent of the households reported fair pasture condition compared with nil in May.
- However, the condition remained the same in the mixed farming livelihood zone compared with last month.
- The pie-chart and graph below show the pasture condition at county and livelihood zone levels.



- The projected duration the available pasture is expected to last is six and four months in the mixed farming and livestock farming livelihood zones respectively.

2.1.3 Browse

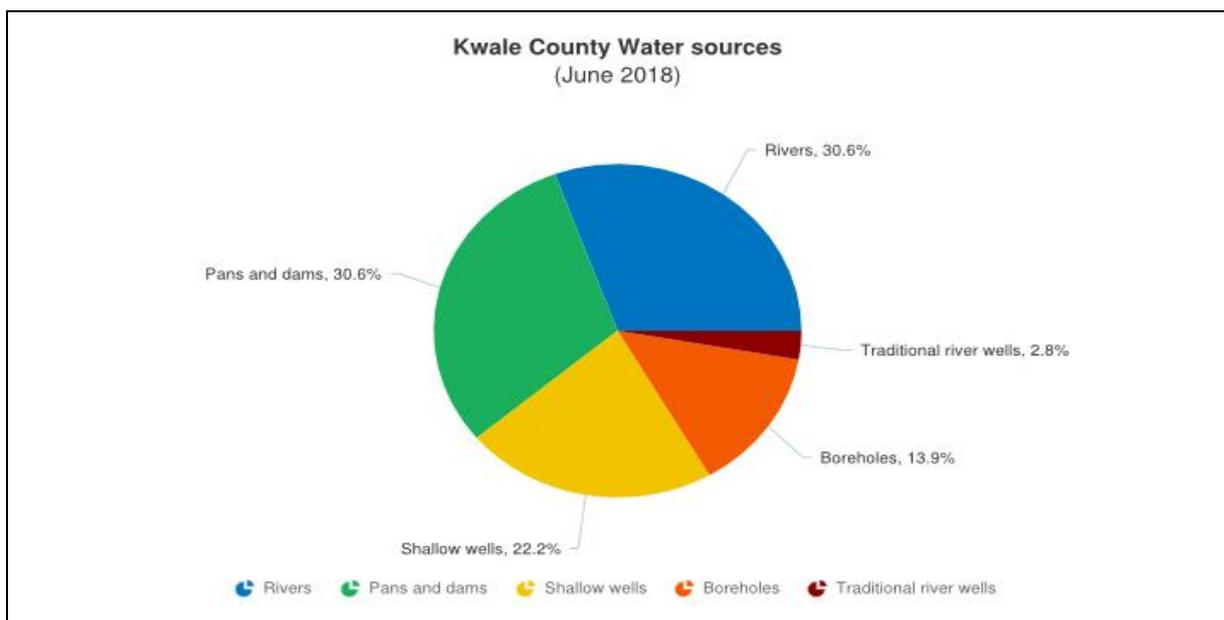
- Good browse condition continued to be sustained this month as all sampled households reported it as good similar to last month.
- The situation was similar across both the livestock farming and mixed farming livelihood zones with the available amounts projected to last approximately four and six months in the respective zones.
- The pie-chart below represents the current browse condition in the county.



2.2 WATER RESOURCES

2.2.1 Sources

- Pans, dams, shallow wells, rivers and boreholes were the main sources of water in the county as was the case last month as shown in the graph below.

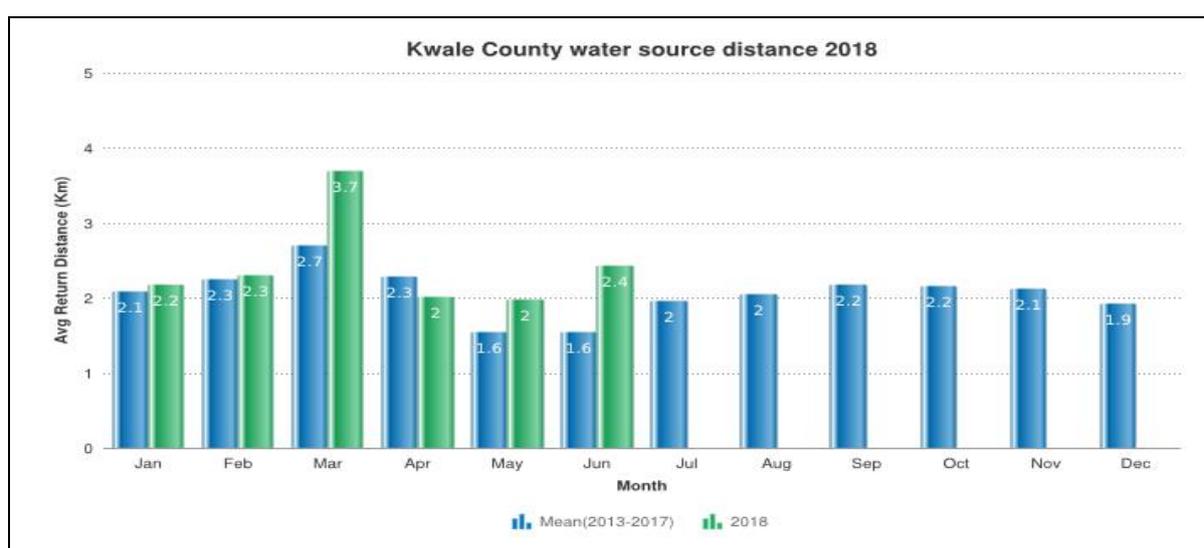


- In the livestock farming livelihood zone, households relied mainly on open water sources such as rivers, pans and dams which was normal.
- The proportion relying on these sources had remained relatively similar to last month with the sources likely to continue holding water for approximately three months until the onset of the short rains season.
- The implication was therefore that household access to water was likely to remain stable through to September.
- Households in the mixed farming livelihood zone continued to rely on permanent water sources which was normal.
- The early warning classification for the county remained 5 similar to last month implying that water availability was as expected for this time of the year (see below for 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

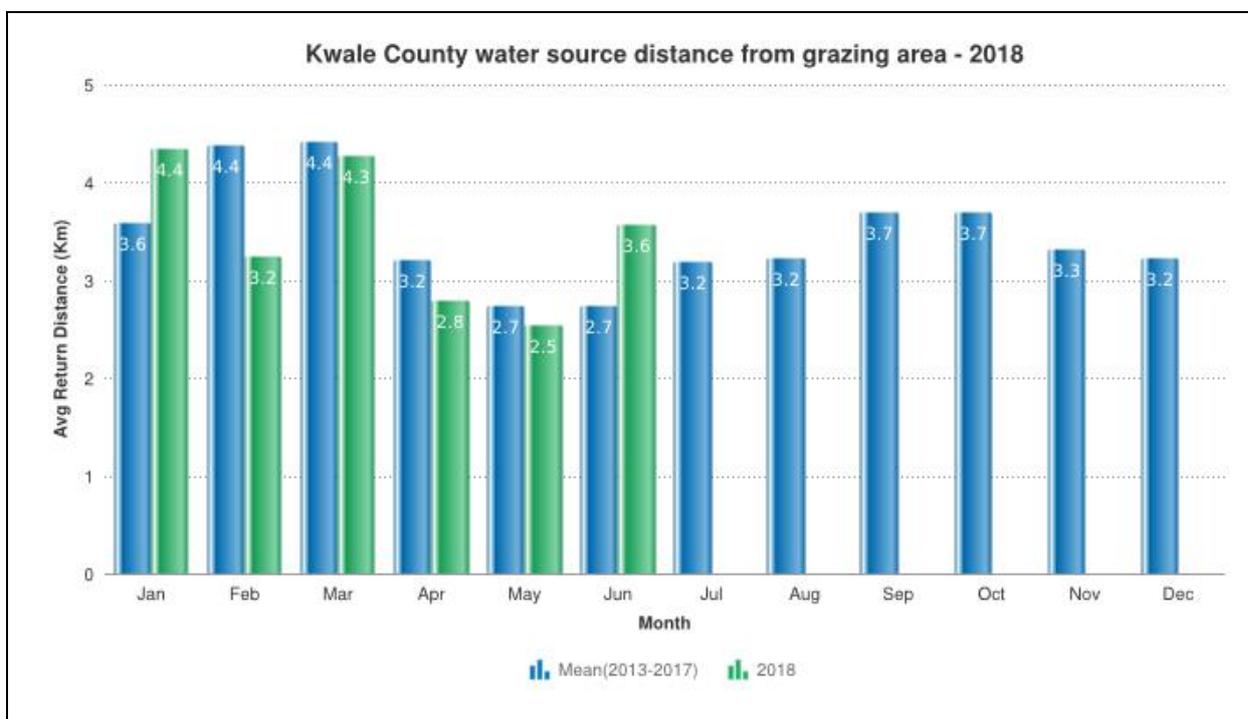
- Access to water sources for domestic consumption remained relatively similar in comparison with last month as illustrated in the graph below.



- At livelihood zone level, the distances also remained relatively the same as the mixed farming and livestock farming livelihood zones posted a distance of 1.5 km each in June compared with 1.3 km and 1.7 km in the respective zones last month.
- Household access to water therefore remained relatively stable although the distance to water sources in comparison with a similar time during normal times (1.6km) was slightly higher.

2.2.3 Livestock access to water

- Livestock access to water reduced slightly this month compared to May since the distances walked from the grazing areas to water points had increased.
- Livestock had to walk an average of 3.6 km in June compared to 2.5 km in May in order to access water.
- However, the distances were still within the seasonal ranges for the month as the normal distance in the 2013-2017 LTA was 2.7 km as indicated in the graph below.



- The shortest distance was recorded in the mixed farming livelihood zone at 1.8 km in June similar to 1.7 km reported in May.
- The longest distance was recorded in the livestock farming livelihood zone at 2.7 km this month which was equally quite comparable to 2.9 km posted last month.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- The livestock body condition retained the 'moderate early warning classification' similar to last month for both livelihood zones which was normal. (See below the early warning classification table for livestock body condition).
- The current condition was owed to the continued availability of forage and water as the availability of these two commodities was within the seasonal ranges for this time of the year.
- Livestock are likely to remain in the same body condition as water and forage are expected to continue being available for at least three months.

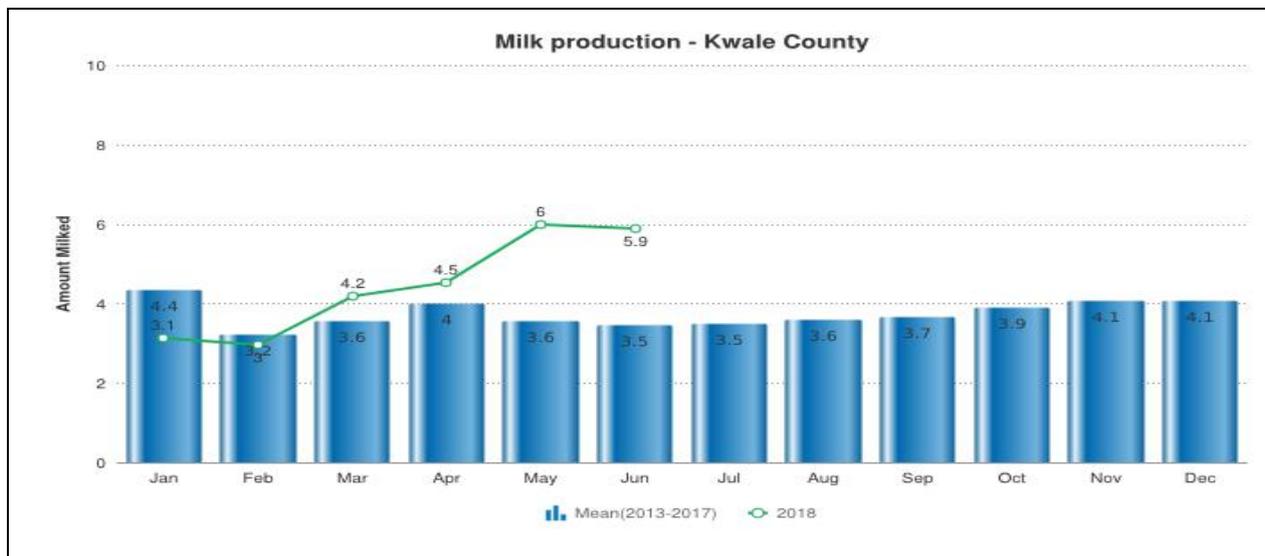
Level	Classification	Characteristics (this describes majority of the herd and not individual isolated Stock)
1	Normal	Very Fat Tail buried and in fat
		Fat, Blocky. Bone over back not visible
		Very Good Smooth with fat over back and tail head
		Good smooth appearance
2	Moderate	Moderate. neither fat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

- Foot and Mouth Disease (FMD), Contagious Bovine Pleuro-Pneumonia (CBPP) and New Castle Disease (NCD) were reported in Ndavaya ward in Kinango sub-county.
- In addition, according to the veterinary department, the county was at a high risk of a Rift Valley Fever out-break.
- The early warning alert had been issued due to the higher-than-normal rainfall amounts which had caused flooding in some areas, a conducive environment for the epidemic disease.

3.1.3 Milk Production

- Cows were the main producers of milk this month similar to last month which was normal.
- Milk production at household level remained relatively the same as last month as shown in the graph below. It also maintained a higher-than-normal trend as indicated in the 2013-2017 LTA.
- The sustained availability of pasture and water could be the reason the milk production had maintained an above-normal trend from the onset of the season to date.



3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and condition of food crops

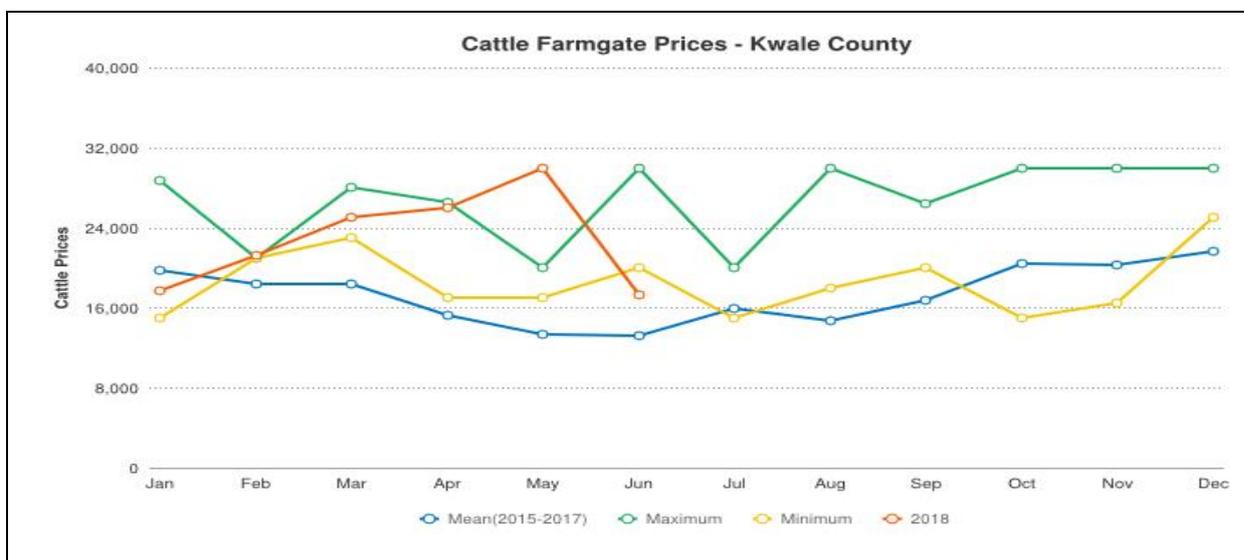
- During the month under review, most households were engaged in the second weeding while those who had planted early were already harvesting maize. The on-farm crop was in fair to good condition and a near-normal harvest was expected. However, some of the farms were still infested with fall army worm which could reduce production if not managed early enough.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

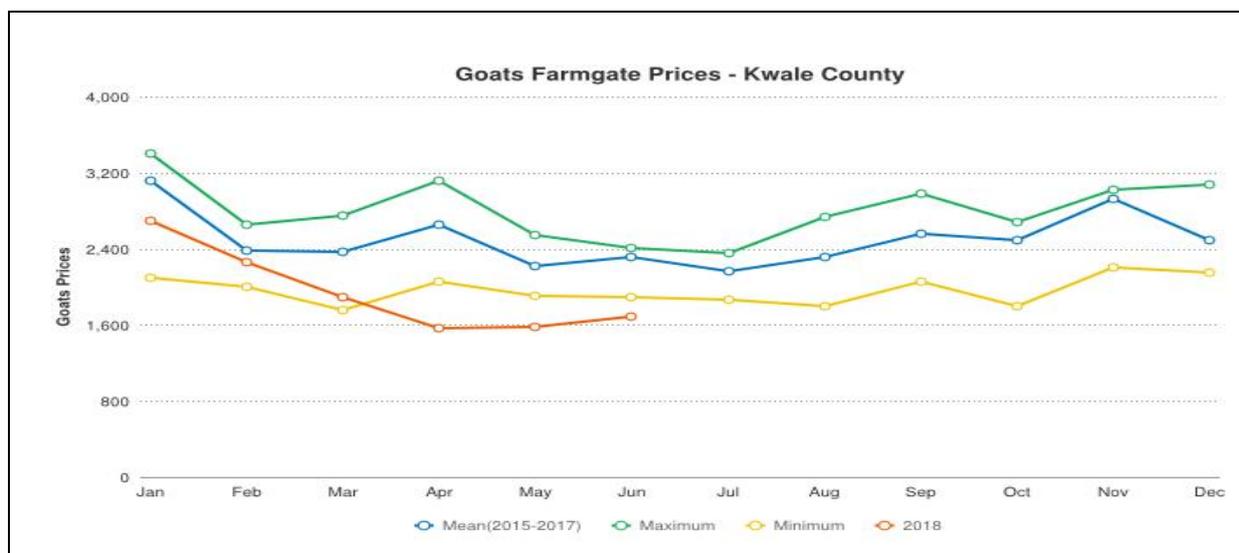
4.1.1 Cattle Prices

- A mature bull aged three years was selling at Kshs 17,333 this month having decreased by 42.2 percent from Kshs 30,000 recorded last month as indicated in the graph below.
- However, the price was still higher than the 2015-2017 LTA of Kshs 13,228 by 31 percent.



4.1.2 Goat Prices

- A medium-sized three-year old goat was selling at Kshs 1,685.9 in June which was quite comparable to Kshs 1,814.3 recorded in May.
- The price was 27.2 percent lower than the 2015-2017 LTA as shown in the graph below.

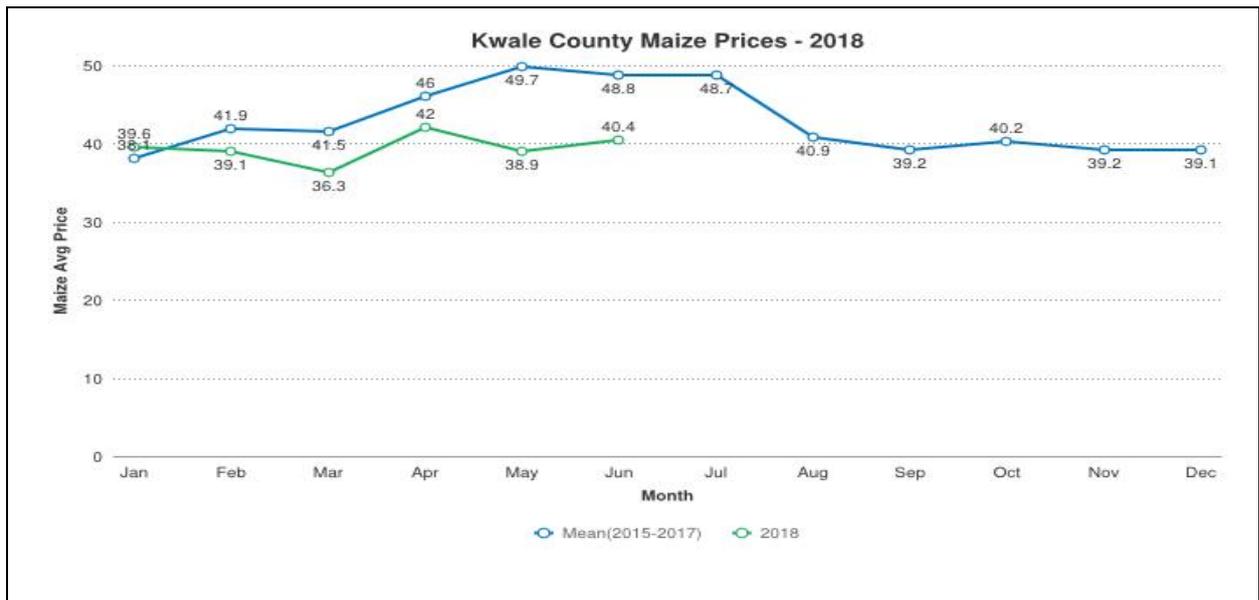


4.2 CROP PRICES

4.2.1 Maize

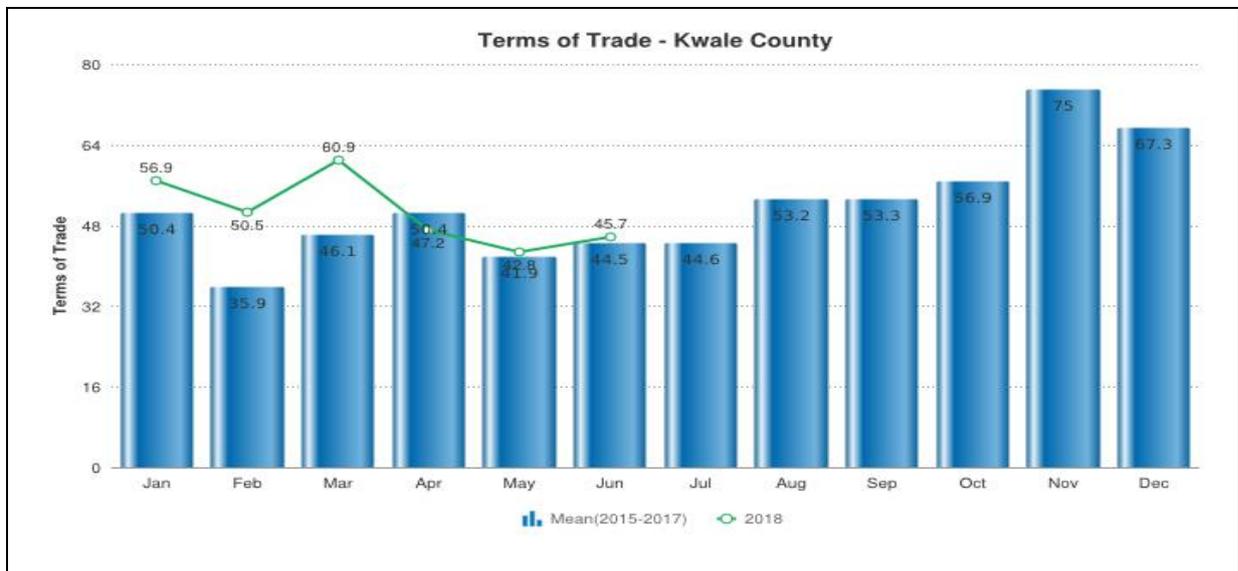
- A kilogram of maize was selling at Kshs 40.4 having remained stable compared with Kshs 38.9 posted in May.

- The price remained below the 2015-2017 LTA of Kshs 48.8 by 17.2 percent as indicated in the graph below.



4.3 TERMS OF TRADE (CASUAL LABOUR VERSUS MAIZE PRICES)

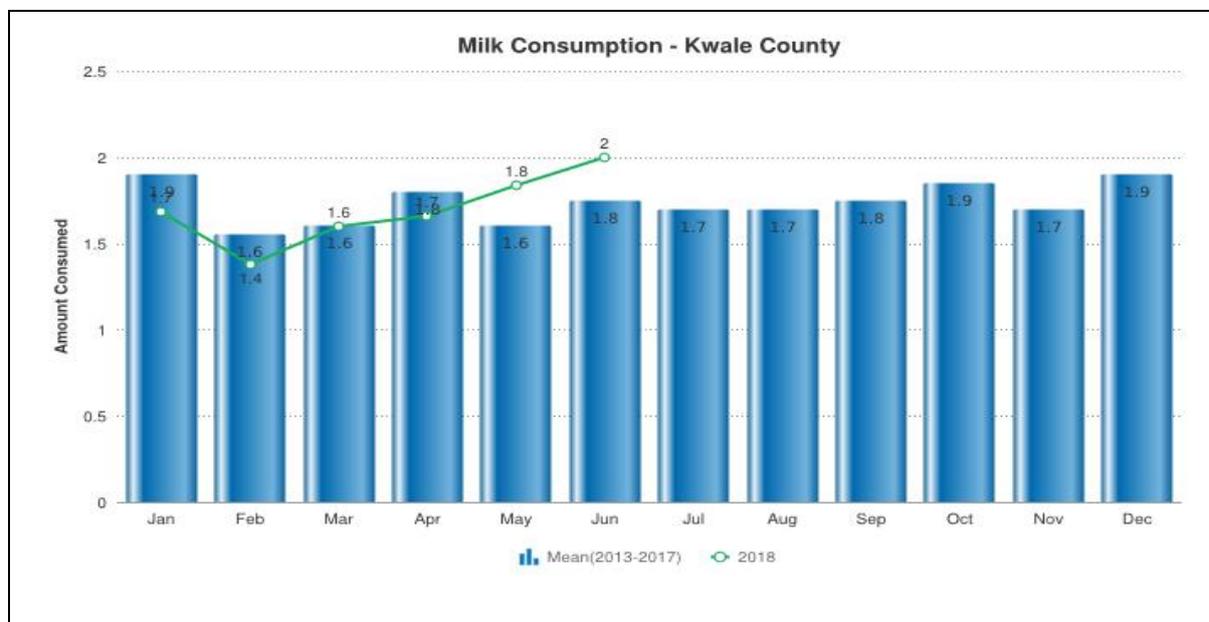
- The terms of trade (TOT) remained stable to stand at 45.7 this month compared with 42 in May which was also within normal seasonal ranges.
- The implication was that households could purchase a similar amount of maize this month compared with last month and also during normal times.
- Below is a graph showing the trends in terms of trade in the county.



5.0 FOOD CONSUMPTION AND NUTRITION STATUS

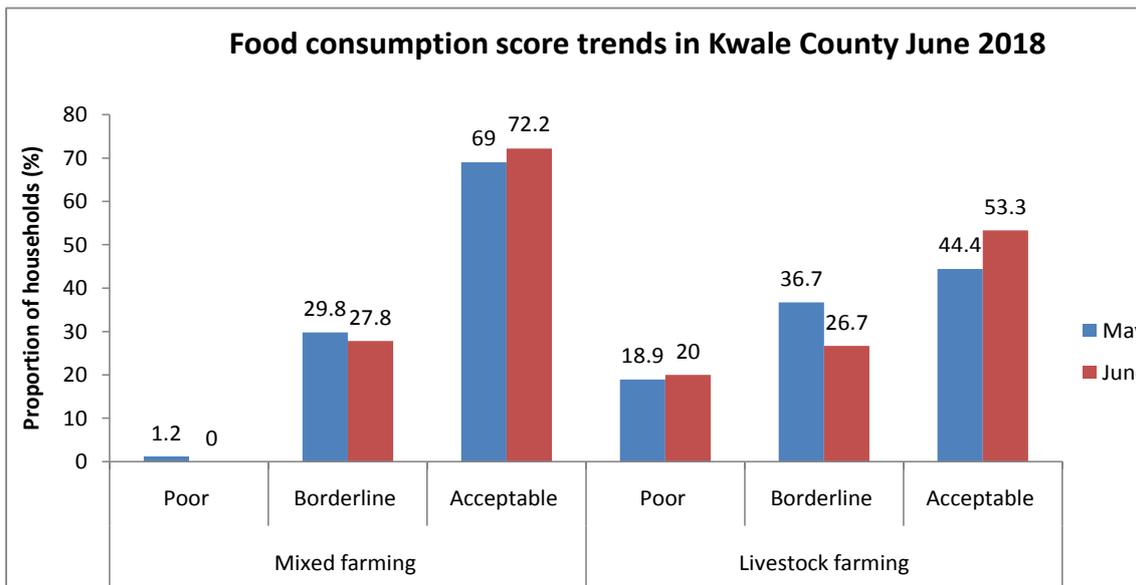
5.1 MILK CONSUMPTION

- Milk consumption remained relatively the same as last month to stand at 2.0 litres in June compared with 1.8 litres in May.
- It was also within seasonal norms for this time of the year as the 2013-2017 LTA stood at 1.8 litres as shown in the graph below.



5.2 FOOD CONSUMPTION SCORE

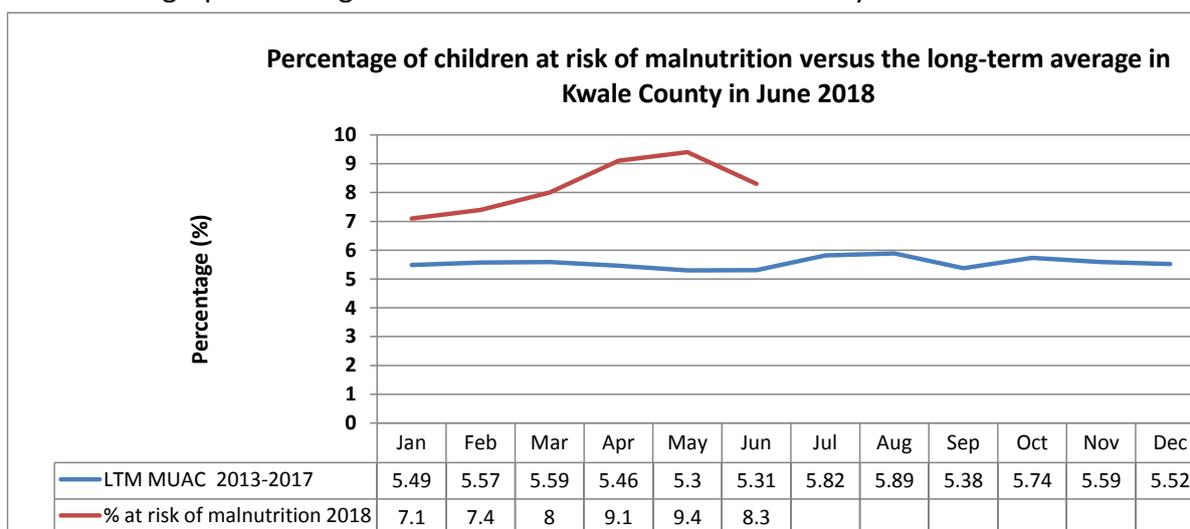
- The average food consumption score in the county for the month of June was 41.5.
- Approximately 63.9 percent of households in the county had acceptable food consumption in June indicative of a 12.7 percent increase from 56.7 percent recorded in May.
- It therefore meant that the proportion of households who were consuming vegetables and a staple daily, a frequent consumption of oils and pulses and occasionally dairy products, meat and fish had increased from last month.
- The implication was that there were reduced food consumption gaps in the county as dietary diversity, food frequency and nutritional value had increased in the meals consumed.
- Significant variations were recorded at the livelihood zone level as the mixed farming and livestock farming livelihood zones recorded 72.2 and 53.3 percent of households with acceptable consumption respectively as shown in the graph below. Food consumption gaps were therefore more severe in the latter compared with the former similar to last month.
- In addition, there had been no significant change in food consumption patterns in the mixed farming livelihood zone as approximately 69 percent of households had acceptable consumption compared with 72.2 percent currently.
- However, those with similar consumption patterns had increased by 20 percent in the livestock farming livelihood zone as it recorded 53.3 percent with acceptable food consumption currently in comparison with 44.4 percent in May. Consequently, food frequency, dietary diversity and nutritional value had improved for this cohort.



5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

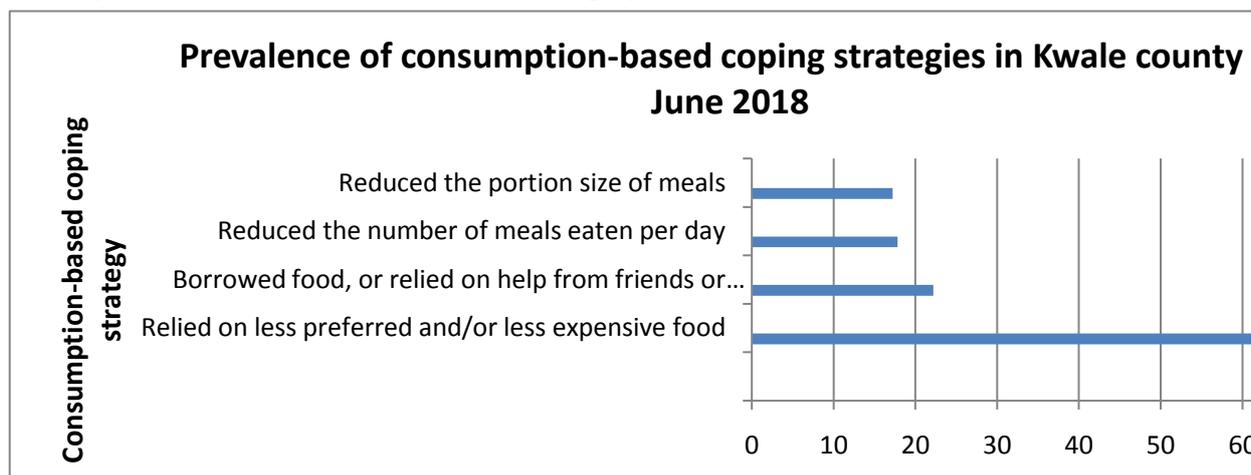
- The proportion of children sampled this month for the determination of those at risk of malnutrition (with a mid-upper arm circumference (MUAC) of between 125-134 mm) was 508 females and 582 males.
- This proportion of interest stood at 8.3 percent having dropped slightly from 9.4 percent that had been recorded in May implying a slightly improved nutritional status and could be attributed to reduced food consumption gaps.
- In addition, the prevalence of the global acute malnutrition (GAM) was 1.9 percent.
- However, the prevalence of malnutrition (particularly for the proportion of children at risk) still remained higher-than-normal in the county compared with the 2013-2017 LTA of 5.3 percent.
- Below is a graph showing the trend of malnutrition in the county.



5.4 COPING STRATEGIES

- The mean coping strategy index (CSI) in the county was 9.17 for the month of June compared with 11.94 posted in May displaying a stable trend.

- There were slight differences in the index at livelihood zone level as the mixed farming and livestock farming livelihood zones recorded indices of 7.03 and 11.31 respectively. Households in the latter livelihood zone were therefore employing more consumption-based coping strategies more frequently than those in the former.
- However, the considerably low index indicated that households in both livelihood zones were not engaging in severe consumption-based coping mechanisms frequently.
- The most frequently employed coping strategy for the month was reliance on less preferred and/or expensive food as approximately 70 percent of the households engaged in it when they lacked food or money to buy it.(See graph below)



6. CURRENT INTERVENTION MEASURES

6.1 NON-FOOD INTERVENTIONS

○ Agriculture department

The department undertook the following activities in June 2018:

- Conducted barazas on sensitization on fall army-worm management to reduce their infestation and consequently potential losses of the season's harvest.
- Conducted in-field training on horticulture for amaranthus, kales, tomatoes and brinjals in Matuga Sub-county funded by Shape Plus from Japan.

○ Health and Nutrition department

The department undertook the following activities during the month: Vitamin A supplementation, deworming, nutritional screening/referrals and growth monitoring.

○ NDMA

NDMA conducted a Participatory Disaster Risk Assessment (PDRA) and compiled a drought contingency plan for Ndavaya and Mwavumbo wards in the drought-prone Kinango sub-county.

7. EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

- No cases of insecurity, conflict or human displacement were reported in June.

7.2 Migration

- No migration was reported during this reporting month.

7.3 FOOD SECURITY PROGNOSIS

Harvesting was on-going in the mixed farming livelihood zone so food stocks were slowly being replenished at household level thereby stabilizing food consumption. On-farm activities were also still on-going assuring most rural households of an income for those who were not harvesting. Furthermore, food commodity prices such as maize were lower-than-normal and terms of trade were therefore within seasonal ranges since income from casual labour was abundant. As harvesting continues, food commodity prices are likely to continue reducing further increasing access to food for households in this zone. Therefore, food consumption is likely to remain stable and ultimately improve and consumption-based coping strategies employed on a lower scale and severity. The nutritional status of children is also likely to improve due to improved food consumption.

In the livestock farming livelihood zone, some farmers were also harvesting so food stocks were also being replenished at household level. In addition, milk was available for consumption and sale which supplemented diets and incomes for households in this zone in the back-drop of lower-than-average food commodity prices. Therefore, food consumption gaps are likely to continue reducing as they have done this month and households will employ fewer and less severe consumption-based coping strategies. The nutritional status of children aged below five years is also projected to improve as a result of improved food access and availability.

8. RECOMMENDATIONS

- Upscale nutritional screening to increase referrals for malnutrition as the rates have remained above-average for the better part of the year.
- Continue sensitization on, scouting for and monitoring of fall army-worm infestation in order to avert potential crop losses from the harvests expected for the season.
- Vaccination of approximately 80 percent (89,000) of the county's livestock herd against Rift Valley Fever to avert a potential epidemic in hotspots in the following wards: Kubo South, Gombato, Kinondo, Ramisi, Vanga and Kinango wards.