



**National Drought Management Authority**  
**KWALE COUNTY**  
**DROUGHT EARLY WARNING BULLETIN JUNE 2020**

**JUNE 2020 EW FLAG**

**Drought Status: NORMAL**



**Shughuli za kawaida**

**Early Warning (EW) Phase Classification**

Livelihood Zone	Phase	Trend
Mixed Farming	Normal	Worsening
Livestock Farming	Normal	Worsening
County	Normal	Worsening
Biophysical Indicators	Value	Normal Range/Value
VCI	72.11	>50
State of Water Sources	5	5
Production indicators	Value	Normal
Crop condition (maize and legumes)	Good	Good
Milk Production (Litres)	3.6	3.5
Livestock Migration Pattern	No migration	No migration
Livestock deaths (from drought)	Zero deaths	Zero deaths
Access Indicators	Value	Normal
Terms of trade	62.6	41.7
Milk Consumption (litres)	1.9	1.4
Return distance to water sources for households (km)	4.4	1.8

**Drought Situation & EW Phase Classification**

**Biophysical Indicators**

- Both the first and second dekads of the month received below-average rainfall.
- The vegetation condition index for June was significantly above normal for this time of the year implying above-average vegetation greenness.
- The state of water sources was as expected for this time of the year.

**Socio Economic Indicators (Impact Indicators)**

**Production indicators**

- Maize and legumes were in good condition which was normal for this time of the year.
- Milk production was within seasonal averages.
- No migration incidences or drought-related deaths were reported in June.

**Access indicators**

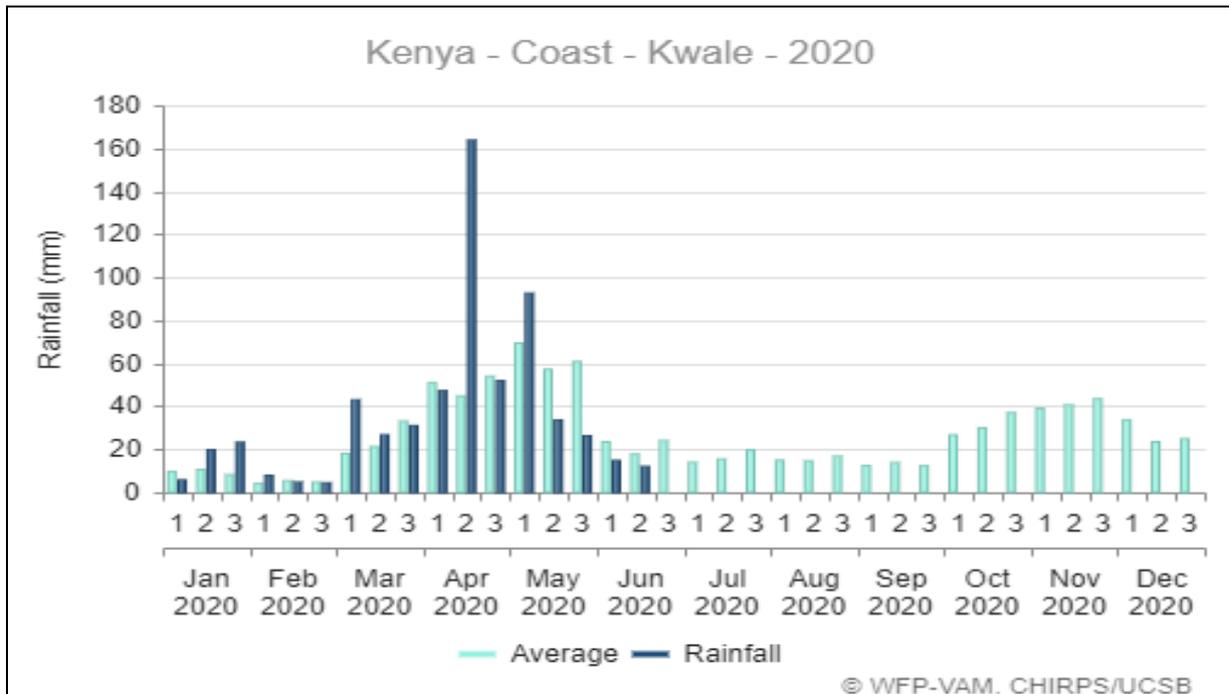
- Terms of trade (casual labour to maize) were significantly higher than the seasonal averages this month implying improved purchasing power at household level for this time of the year.
- Milk consumption at household level was normal for the month.
- Distances to water sources for domestic use were above-average for this time of the year.

**Seasonal Calendar**

<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

## 1.1 RAINFALL PERFORMANCE

- The long rains' season ceased in the last dekad of May although some off-season showers were experienced this month.
- In June, both the first and second dekads received below normal rainfall.
- The first dekad received an average of 14.743 mm compared with 23.416mm in the long-term average while the second dekad received an average of 11.896 mm compared with 17.621 mm normally.
- The rainfall trends are shown in the figure below.
- The temporal distribution was poor and the spatial distribution uneven as the mixed farming livelihood zone received more rainy days than the livestock farming livelihood zone.



## 2. IMPACTS ON VEGETATION AND WATER

### 2.1 VEGETATION CONDITION

#### 2.1.1 3-monthly Vegetation Condition Index (VCI)

- The vegetation condition at county level deteriorated by a 16.9 percent margin compared with last month as the 3-monthly vegetation condition index decreased from 86.79 in May to 72.11 in June.
- However, despite the deterioration, the vegetation greenness in the county was classified in the 'vegetation greenness above-average' similar to last month.
- All sub-counties also registered some deterioration in vegetation greenness as the index reduced in all compared with last month.
- Kinango Sub-county recorded the highest deterioration at 18.5 percent followed by Msambweni, Lunga Lunga and Matuga Sub-counties at 16.3, 14.2 and 14.0 percent respectively as shown by the reducing indices in the table below.
- However, all sub-counties were still classified in the 'vegetation greenness above-average' category similar to last month.
- The deterioration in vegetation condition could be owed to the reduced amount of rainfall this month compared with last month.

Area	January 2020	February 2020	March 2020	April 2020	May 2020	June 2020
Kinango Sub-county	89.67	91.99	106.65	105.45	90.87	74.06
Lunga Lunga Sub-County	91.33	92.41	94.14	97.3	86.23	73.97
Matuga Sub-county	86.23	88.67	90.54	96.54	75.85	65.2
Msambweni Sub-county	83.7	89	92.0	93.58	68.67	57.46
Kwale County	89.34	91.52	97.41	101.81	86.79	72.11

### 2.1.2 Pasture

- The pasture condition deteriorated slightly in the county as 71.4 percent of households reported good pasture condition in June compared with 100 percent in May.
- However, despite the deterioration, the condition was normal for this time of the year.
- The deterioration could be attributed to the reduced amount of rains recorded this month compared with last month.

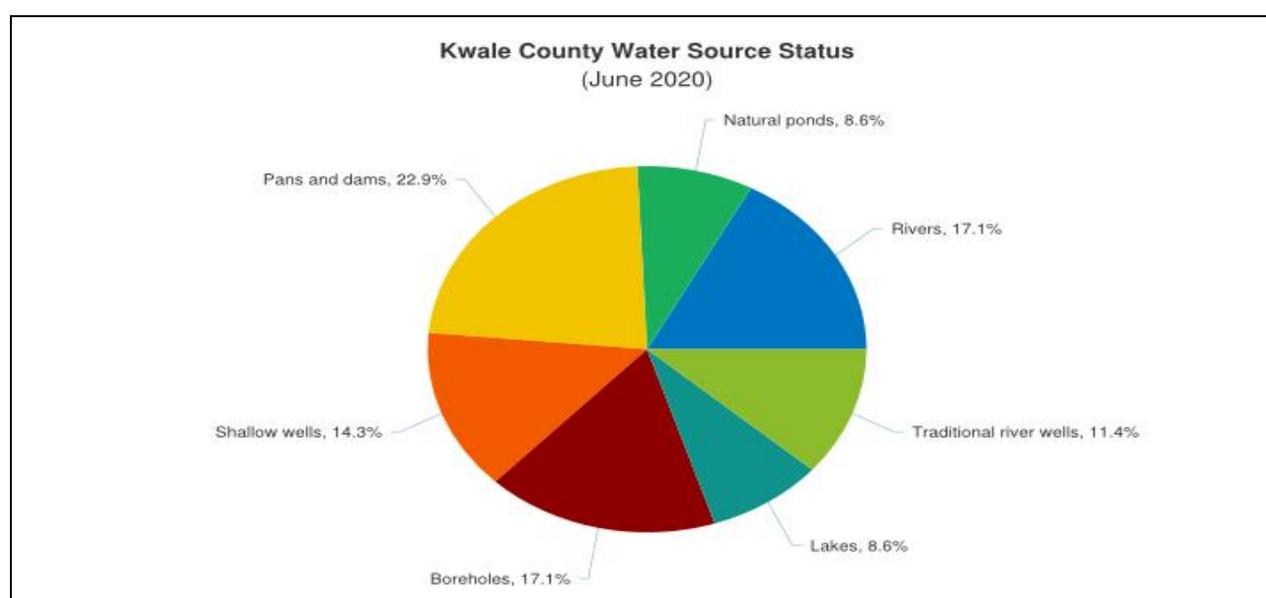
### 2.1.3 Browse

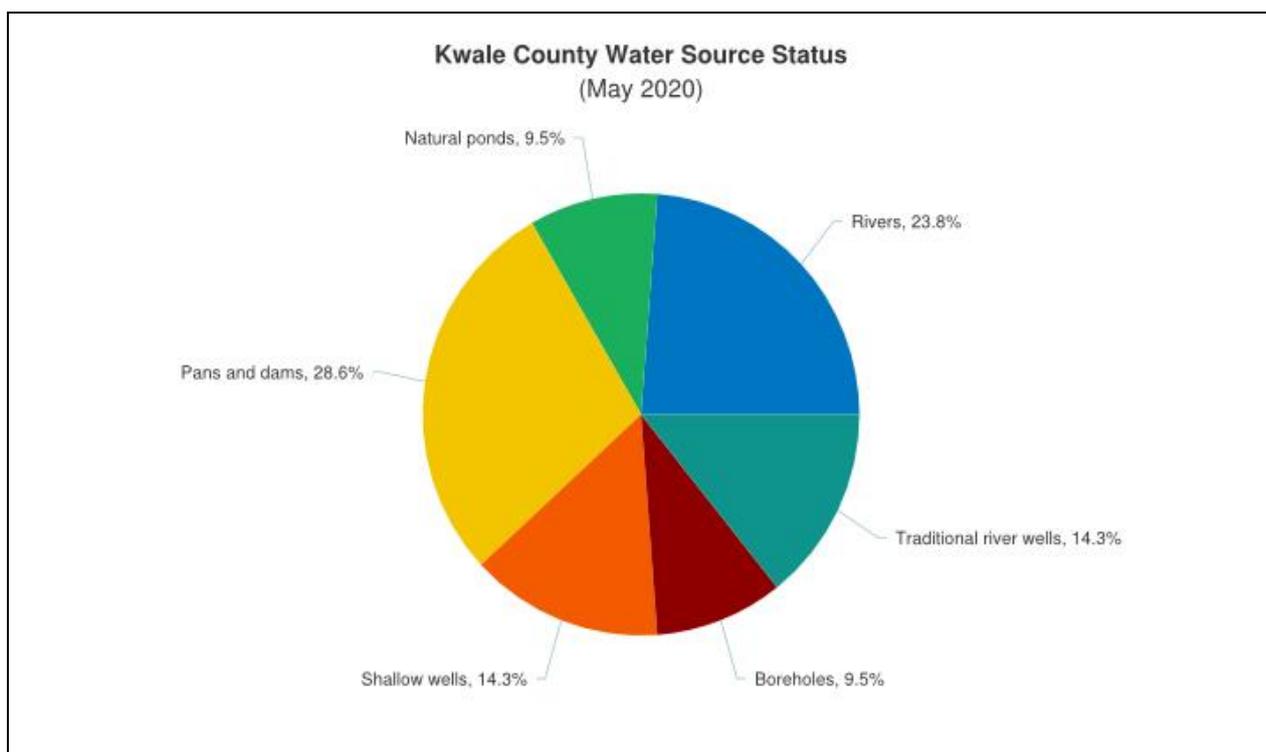
- The browse condition deteriorated slightly as 71.4 percent of households reported good condition this month in comparison with all households in May.
- The slight deterioration could be owed to the reduced rainfall amounts received this month in comparison with last month.
- Browse condition was however normal for this time of the year.

## 2.2 WATER RESOURCES

### 2.2.1 Sources

- Pans/dams, boreholes and rivers were the main sources of water in the county this month for household use as shown in the first pie-chart below.
- The situation was slightly different compared with last month where shallow wells and traditional river wells were among the most relied upon sources as shown in the second pie-chart.
- As rains had ceased, some sources had dried up thereby increasing reliance on more perennial water sources such as pans, dams and boreholes.
- However, reliance on these water sources was normal for this time of the year.





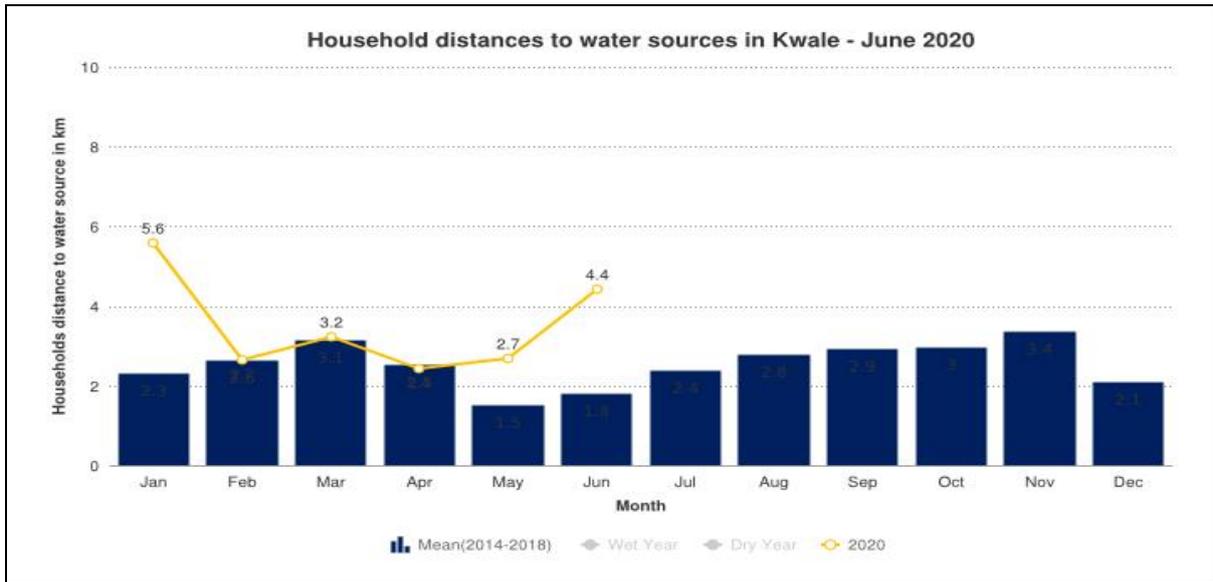
- The status of water resources remained normal at index '5' (described in the table below) similar to last month which was normal for this time of the year.

INDEX	STATUS OF WATER SOURCE	DESCRIPTION
1	<b>EMERGENCY SITUATION</b>	All main water sources have dried up; only few boreholes still yielding significant amounts
2	<b>STRONGLY INADEQUATE</b>	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	<b>INADEQUATE</b>	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	<b>DECLINING</b>	The water availability is below normal for the period
5	<b>NORMAL</b>	The water availability is normal for the period
6	<b>GOOD</b>	The water availability is above normal for the period

### 2.2.2 Household access and utilization

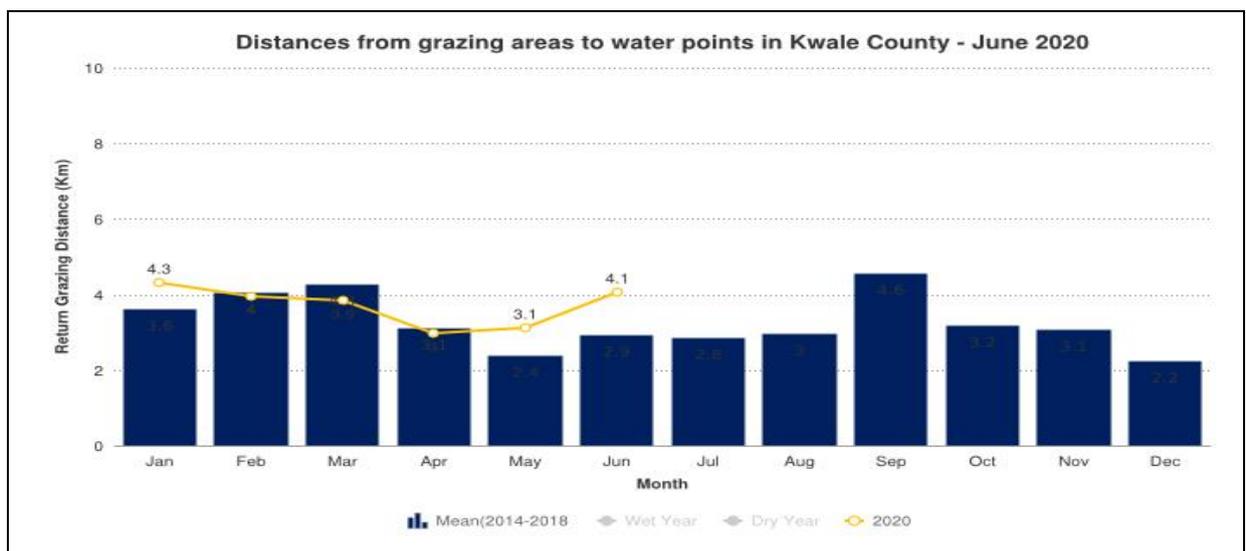
- Access to water for domestic use was slightly more difficult this month compared with last month as households had to walk an average of 4.4 km to water sources in June compared with 2.7 km in May.
- Access was also more difficult for this time of the year as normally households would walk an average of 1.8km implying that the distance had more than doubled compared with the 2014-2018 LTA as shown in the graph below.
- There were insignificant differences in the distances walked at livelihood zone level as 1.2 and 1.4 km were recorded in the livestock farming and mixed farming livelihood zones respectively.

- The differences at livelihood zone level were equally insignificant compared with last month where the livestock farming livelihood zone had posted the same distance as last month while the mixed farming one had recorded a distance of 1.1 km in May.



### 2.2.3 Livestock access to water

- Access to water for livestock was reduced slightly as livestock had to walk an average of 4.1 km from grazing areas to watering points in June compared with 3.1 km recorded last month as shown in the diagram below.
- The reduced access may be attributed to the deteriorated forage condition owing to the reduced amount of rains in comparison with May.
- Further, access was more difficult for this time of the year as livestock would normally walk an average of 2.9km as recorded in the 2014-2018 LTA.
- The mixed farming livelihood zone posted the longest distance at 2.3 km this month recording a marginal increase from 1.9 km in May.
- The shortest distance was recorded in the livestock farming livelihood zone at 1.5 km having maintained a relatively stable trend from 1.3km last month.



## 3.0 PRODUCTION INDICATORS

### 3.1 LIVESTOCK PRODUCTION

#### 3.1.1 Livestock Body Condition

- Most livestock maintained good body condition similar to last month and had a good smooth appearance.
- The county's livestock body condition was therefore classified in the normal early warning classification band similar to May.
- For clarity, a description of the early warning classification for livestock body condition is provided in the table below.

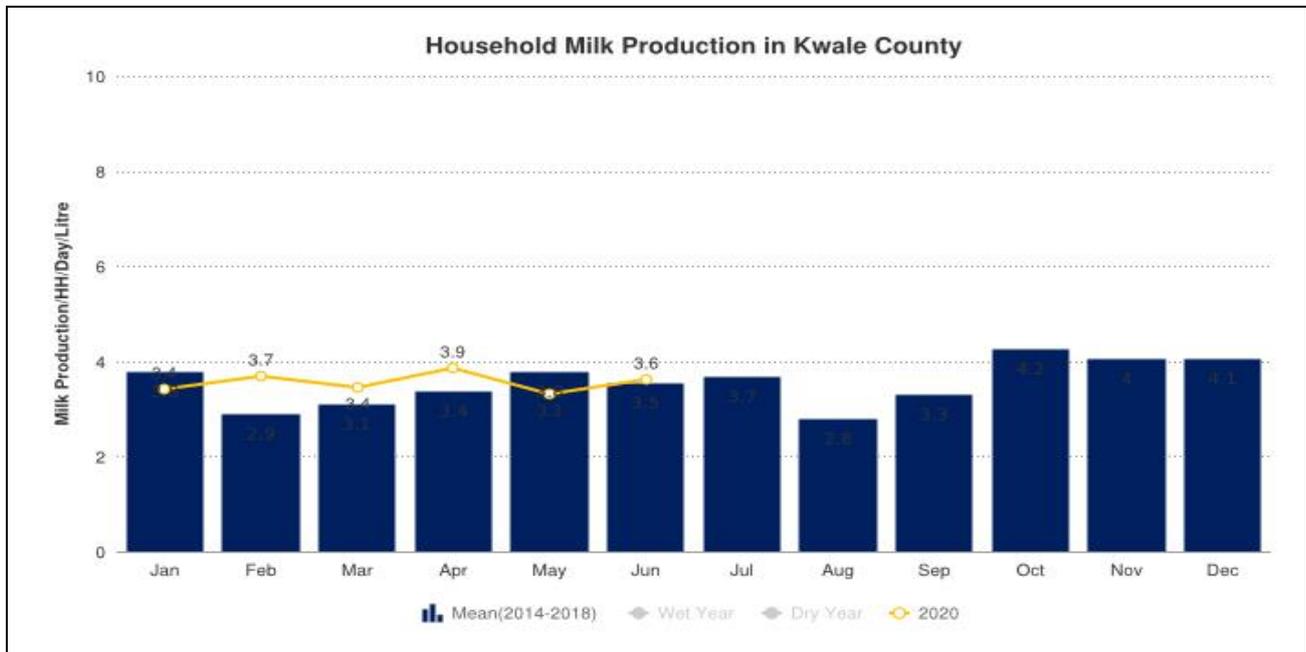
Level	Classification	Characteristics (this describes majority of the herd and not individual isolated stock)
1	Normal	Very Fat Tail buried and in fat
		Fat, Blocky. Bone over back not visible
		Very Good Smooth with fat over back and tail head
		Good smooth appearance
2	Moderate	Moderate. neither fat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

#### 3.1.3 Livestock diseases

- Contagious Bovine Pleuro-Pneumonia (CBPP) a notifiable disease in cattle has been confirmed in Ndavaya, Puma, McKinnon and Samburu/Chengoni Wards in Kinango Sub-county.

#### 3.1.3 Milk Production

- Cattle were the main milk producers this month which was expected at this time of the year.
- An average of 3.6 litres of milk was produced at household level in June having maintained a relatively stable trend from 3.3 litres recorded in May.
- The production this month was also normal for this time of the year compared with 3.5 litres recorded in the 2014-2018 LTA as shown in the graph below.



### 3.2 RAIN-FED CROP PRODUCTION

#### 3.2.1 Stage and condition of food crops

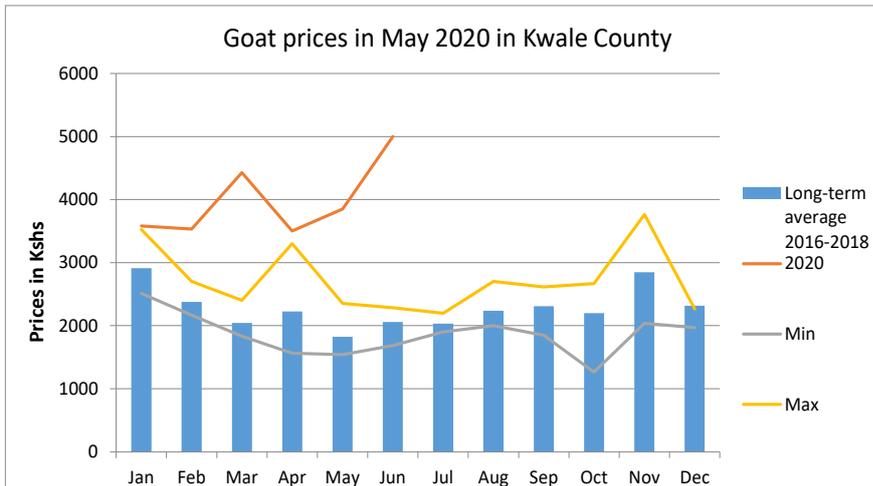
- Maize, cow peas and green grams were the main food crops grown during the long rains season.
- Maize was mostly at knee high/flowering and grain-filling stage while green grams and cowpeas were mostly at podding stage. However, farmers who had planted early were already harvesting green grams which had matured after 70 days.
- All crops were in fair to good condition except in parts of McKinnon Road Ward where farmers had planted late and so most maize was still at germination stage which might not result in much crop production. However, the area had reported a good harvest of green grams.
- Forest locusts invaded crops in Kasemeni Ward in Kinango Sub-county although the impact was minimal as the department of Agriculture sprayed them before they could cause substantial destruction.

## 4.0 MARKET PERFORMANCE

### 4.1 LIVESTOCK MARKETING

#### 4.1.1 Goat prices

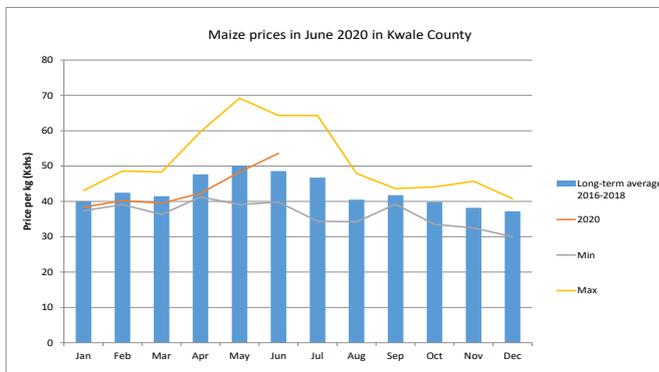
- A medium-sized three-year old goat was trading at Kshs 5,000 in June having increased by a 29.9 percent margin from Kshs 3,850 recorded last month as shown in the graph below.
- The current price was more than double the normal price for this time of the year in comparison with Kshs 2,059.3 in the 2016-2018 LTA, making it very favourable for livestock keepers.
- It was also higher than the highest price ever recorded which was estimated at an average Kshs 2,283.



## 4.2 CROP PRICES

### 4.2.1 Maize

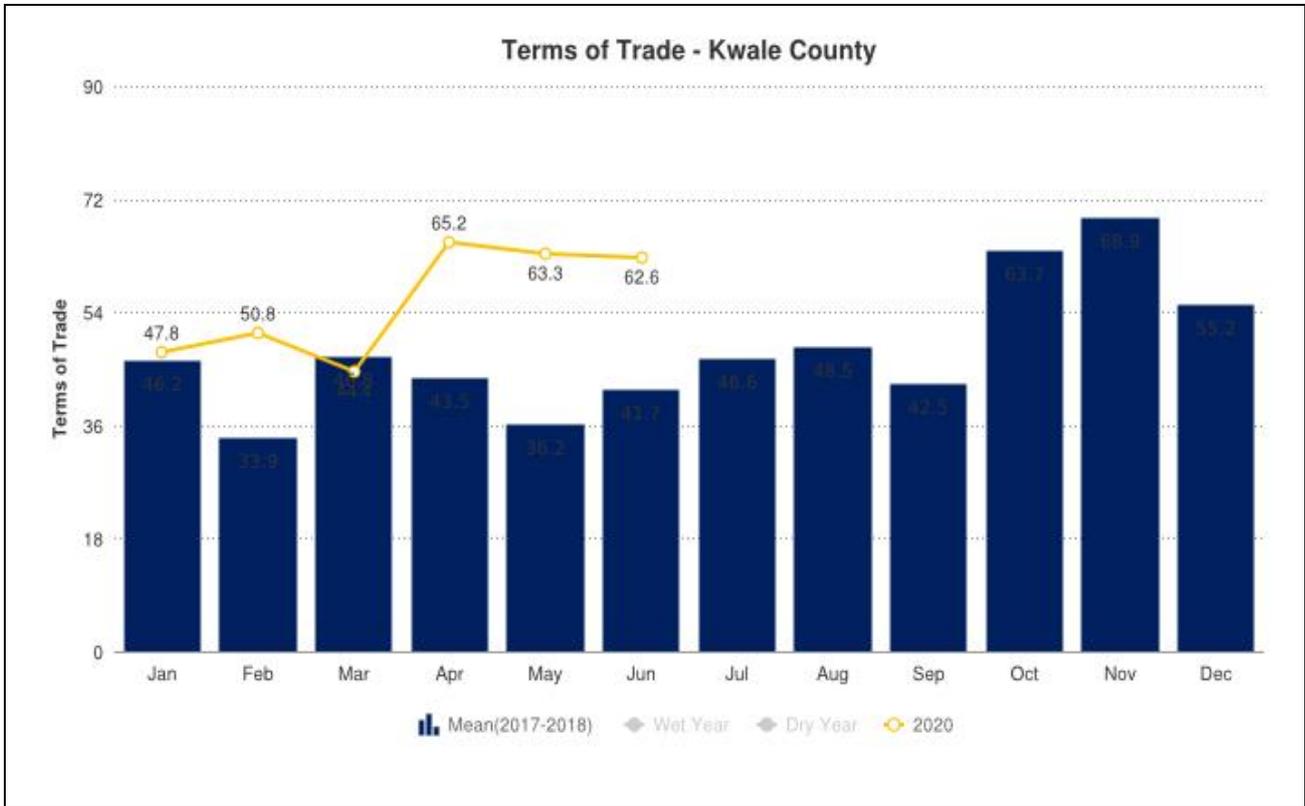
- A kilogram of maize was retailing at Kshs 53.6 in June having increased by an 11 percent margin from Kshs 48.3 recorded in May.
- The price was 10.3 percent higher than normal in comparison with Kshs 48.6 recorded in the 2016-2018 LTA as shown in the graph below.



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

- The ToT this month was recorded as 62.6 in June having maintained a stable trend compared with 63.3 recorded in May as shown in the graph below.

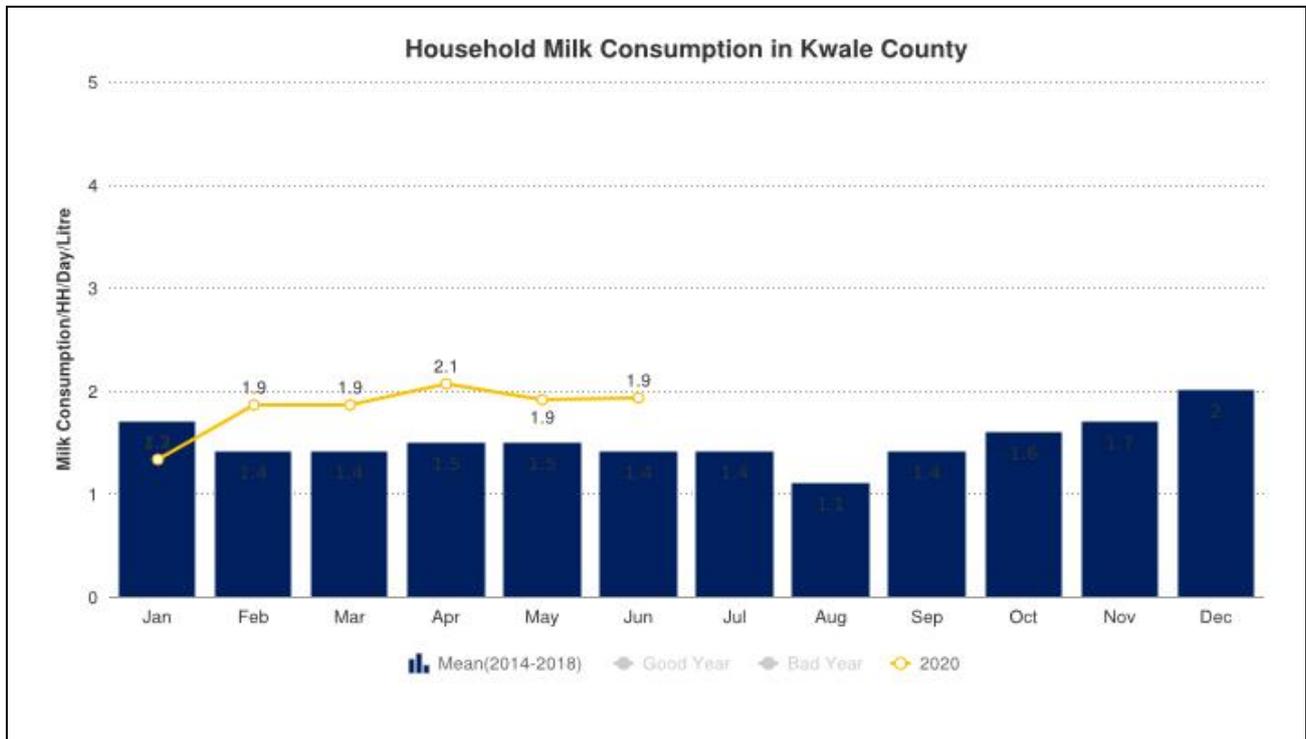
- The current ToT was significantly higher than expected for this time of the year compared with 41.7 recorded in the 2017-2018 LTA.
- Households were therefore able to purchase an almost similar quantity of maize in June with the proceeds from casual labour compared with last month but a considerably higher quantity in comparison with normal times.
- The implication was that household purchasing power had remained relatively the same compared with last month but was above-average for this time of the year.



## 5.0 FOOD CONSUMPTION

### 5.1 MILK CONSUMPTION

- Milk consumption averaged 1.9 litres at household level this month having remained the same as last month as shown in the figure below.
- The consumption was within seasonal averages compared with the 2014-2018 LTA recorded at 1.4 litres.



## 5.2 FOOD CONSUMPTION SCORE

- The average food consumption score at county level in June was recorded at 48.1 having maintained a stable trend from last month whose score was posted at 47.6.
- The mixed farming livelihood zone posted the highest score at 56.0 while the livestock farming one posted the least score at 40.2.
- There was an improvement in food consumption patterns this month compared with a similar time last year both at county and livelihood zone level.
- The county’s food consumption score in June last year was 39.9 compared with the current 48.1.
- In addition, the mixed farming and livestock farming livelihood zones recorded scores of 48.1 and 31.7 respectively in June last year compared with 56.0 and 40.2 respectively this month.
- The proportion of households in the three food consumption groups remained stable at county level compared with last month. An estimated 11.5, 18.2 and 70.3 percent of households had poor, borderline and acceptable food consumption respectively in June compared with 11, 19.2 and 69.8 respectively in May.
- At livelihood zone level, the proportions remained relatively the same as last month as an estimated 23, 28.6 and 48.4 percent of households had poor, borderline and acceptable food consumption respectively compared with 23.3, 28 and 48.4 percent in the respective groups recorded in May in the livestock farming livelihood zone.
- In the mixed farming livelihood zone, no household had poor food consumption similar to last month. However, 7.8 and 92.2 percent had borderline and acceptable food consumption respectively having maintained a stable trend in comparison with 11.1 and 88.9 percent respectively in May.

## 5.4 COPING STRATEGIES

- The county’s average reduced coping strategy index (rCSI) was 14.7 in June having remained stable from 15.6 recorded in May.
- Households had therefore neither significantly increased nor decreased the frequency and severity of consumption-based coping strategies in comparison with last month.

- The livestock farming livelihood zone posted the highest index at 15.7 having remained stable compared with 15.9 recorded in May.
- The lowest index was recorded in the mixed farming livelihood zone at 13.6 having also remained stable compared with 15.3 posted in May.

## **6. CURRENT INTERVENTION MEASURES**

### **6.1 FOOD INTERVENTIONS**

#### **○ Base Titanium Limited**

- The corporate distributed an assortment of food items to 1140 beneficiaries in Msambweni Sub-county and 1167 beneficiaries each in Lunga Lunga and Matuga Sub-counties. The food hamper consisted of 12 kilograms of maize, four kilograms of wheat flour, five kilograms of rice and seven kilograms of beans. Other food items included in the hamper were two kilograms of sugar, two litres of cooking oil, 0.5 kilograms of salt and 0.25 kilograms of tea leaves.

### **6.2 NON-FOOD INTERVENTIONS**

#### **○ Agriculture department**

The department undertook the following interventions in June 2020:

- Spraying of forest locust in Kasemeni Ward in Kinango Sub-county to prevent crop production losses.
- Procurement of 1100 knapsack sprayers and 85 Personal Protective Equipment (PPEs)
- Procurement of pest control products: 429 litres of Proove pesticide valued at 1.5M and 240 kg of Ridomil fungicide at a cost of 0.6M
- Distribution of 21,665 seedlings of coconut, 16,268 seedlings of mango and 5,000 seedlings of cashew nuts to farmers in all wards in the county.

#### **○ Health department**

The following interventions were carried out by the county health department in June 2020.

- Continuation of the supplementary and therapeutic feeding programs
- Iron folate supplementation for pregnant women
- Immunization, deworming and vitamin A supplementation for children aged below five years.
- Testing of suspected COVID-19 cases and contact tracing
- Provision of hand sanitizers to the public

#### **○ Livestock department**

- The department of livestock production distributed 15 breeding bucks to farmers in Tsimba/Golini ward.
- The department of veterinary services conducted livestock disease surveillance and treatment of CBPP cases.

#### **○ National Drought Management Authority**

- The Authority conducted a simulation exercise for drought response followed by reviewing and updating of the county drought contingency plan.

## **7. EMERGING ISSUES**

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

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

### **7.2 Migration**

- No migration was reported in June.

## **8. RECOMMENDATIONS**

- Continued disease surveillance for confirmed cases of CBPP in Kinango Sub-county.
- Quarantining of livestock due to CBPP outbreak.
- Testing and slaughtering of livestock followed by compensation of farmers, mass treatment of affected herds and ring vaccination against CBPP.