



National Drought Management Authority
KWALE COUNTY
DROUGHT EARLY WARNING BULLETIN AUGUST 2020

AUGUST 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	60.47	50
State of Water Sources	5	5
Production indicators	Value	Normal
Crop condition (maize and legumes)	N/A	N/A
Milk Production (Litres)	2.8	2.8
Livestock Migration Pattern	No migration	No migration
Livestock deaths (from drought)	Zero deaths	Zero deaths
Access Indicators	Value	Normal
Terms of trade	58.8	48.5
Milk Consumption (litres)	1.6	1.1
Return distance to water sources for households (km)	2.4	2.8

Drought Situation & EW Phase Classification

Biophysical Indicators

- The first and second dekads received normal rainfall during the month.
- The vegetation condition index for August was above-normal for this time of the year implying higher-than-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, cowpeas and green grams were currently being harvested.
- Milk production was normal for this time of the year.
- No migration incidences or drought-related deaths were reported in August.

Access indicators

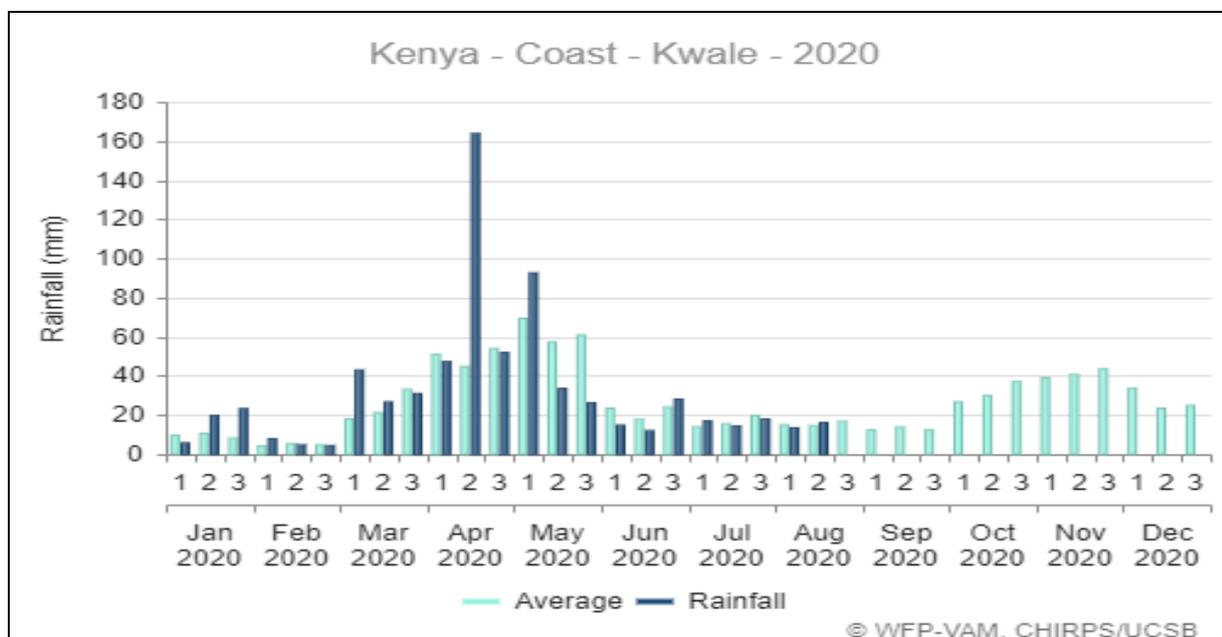
- Terms of trade (casual labour to maize) were 21.2 percent higher than normal implying above-average household purchasing power for this time of the year.
- Milk consumption at household level was within seasonal norms for the month.
- Distances to water sources for domestic use were within seasonal averages 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

- Normal rains were received this month in the first and second dekads where 13.357 and 16.093 mm were recorded respectively in comparison with 14.818 and 14.535 mm in the dekads' long-term averages (LTA) respectively.
- The temporal distribution was generally good in the county. However, the spatial distribution was poor with some areas in the livestock farming livelihood zone recording no rains at all.
- The chart below shows the trends in rainfall amounts over time.



2. IMPACTS ON VEGETATION AND WATER

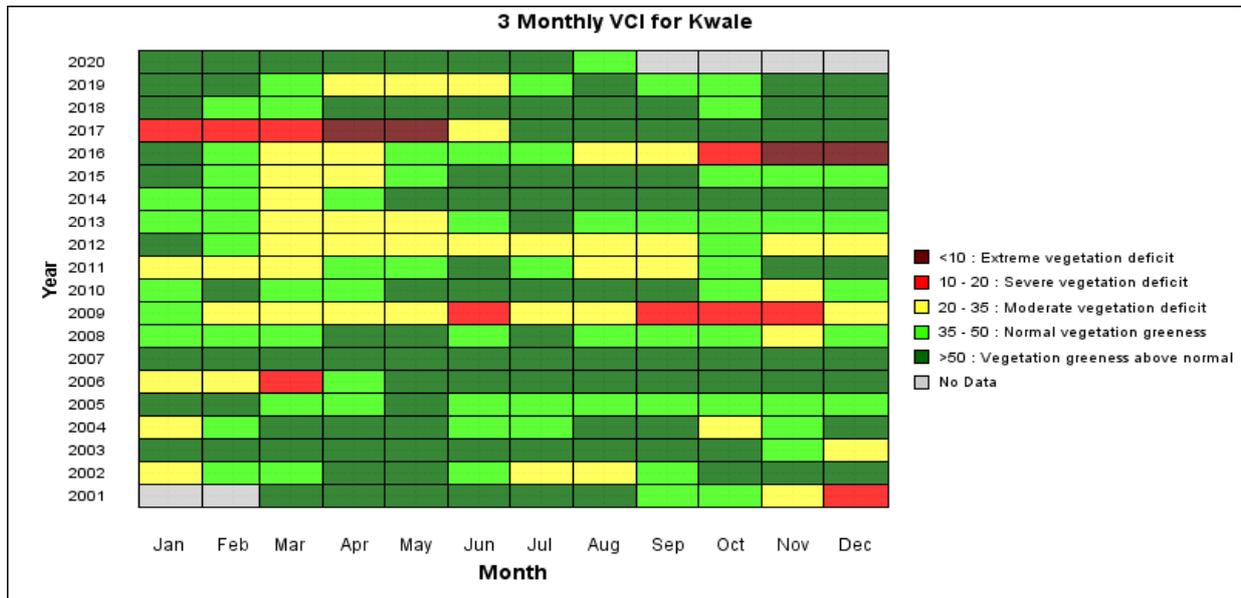
2.1 VEGETATION CONDITION

2.1.1 3-monthly Vegetation Condition Index (VCI)

- The vegetation greenness in the county deteriorated by a 23.1 percent margin compared with July as the 3-monthly VCI decreased from 60.47 last month to 46.51 in August.
- Although the vegetation condition had worsened, it was still within the 'vegetation greenness above-normal' band.
- The vegetation condition had worsened in both the mixed farming (largely comprising Matuga and Msambweni Sub-counties) and the livestock farming livelihood zone (largely comprising Kinango and Lunga Lunga Sub-counties) as shown in the table below.
- In addition the vegetation condition was normal in the livestock farming livelihood zone and above-normal in the mixed farming one.

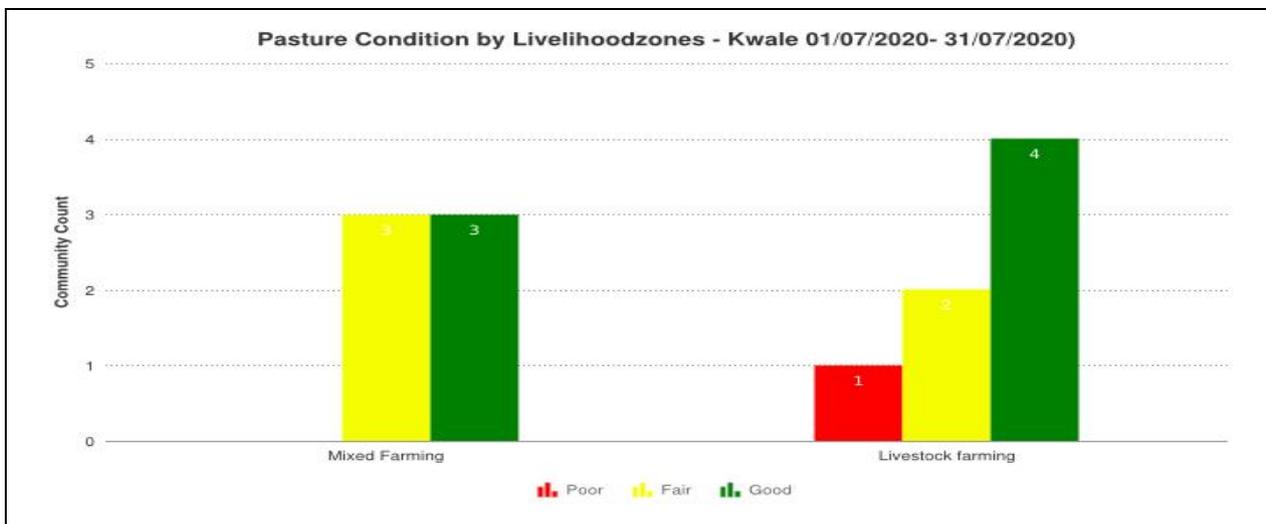
Area	January 2020	February 2020	March 2020	April 2020	May 2020	June 2020	July 2020	August 2020
Kinango Sub-county	89.67	91.99	106.65	105.45	90.87	74.06	59.41	46.1
Lunga Lunga Sub-County	91.33	92.41	94.14	97.3	86.23	73.97	59.65	40.52
Matuga Sub-county	86.23	88.67	90.54	96.54	75.85	65.2	66.97	56.27
Msambweni Sub-county	83.7	89	92.0	93.58	68.67	57.46	60.23	55.27
Kwale County	89.34	91.52	97.41	101.81	86.79	72.11	60.47	46.51

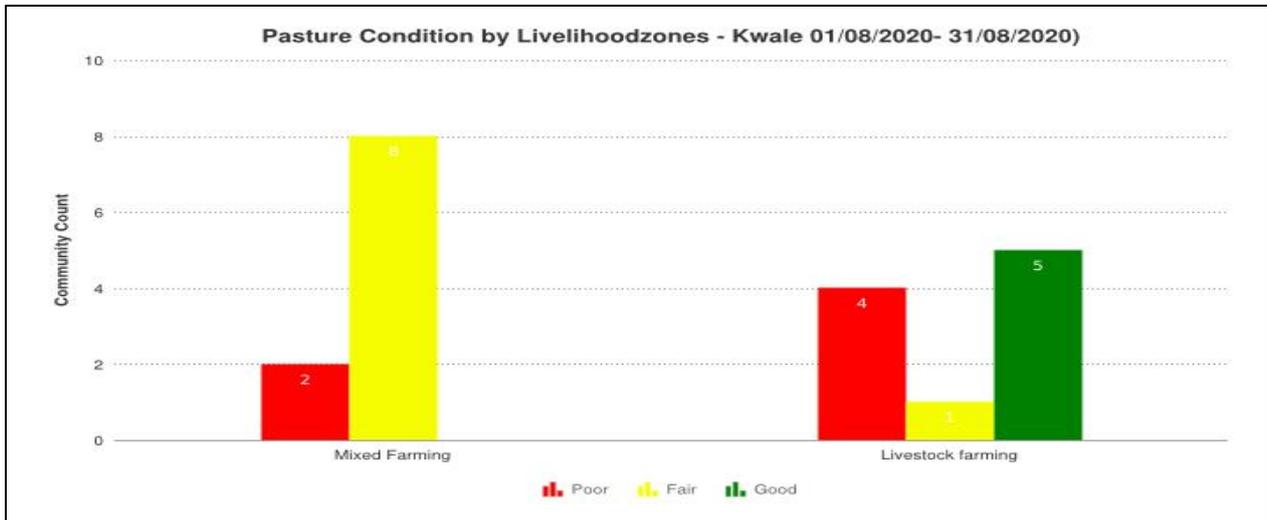
- The general vegetation condition was normal for this time of the year although it was slightly worse compared with a similar time last year as shown in the matrix below.



2.1.2 Pasture

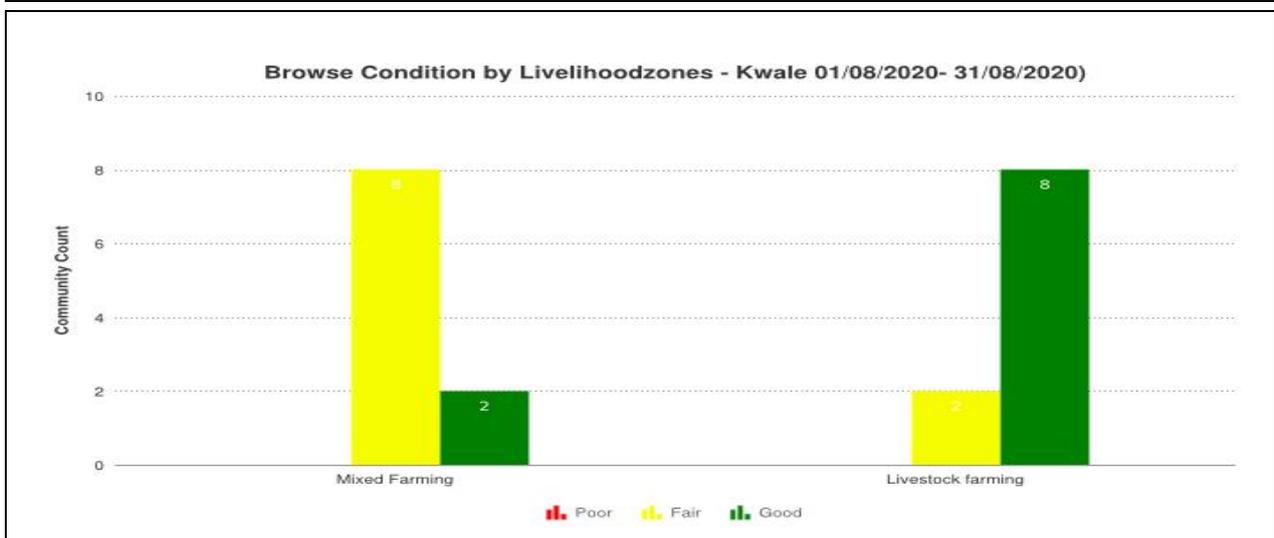
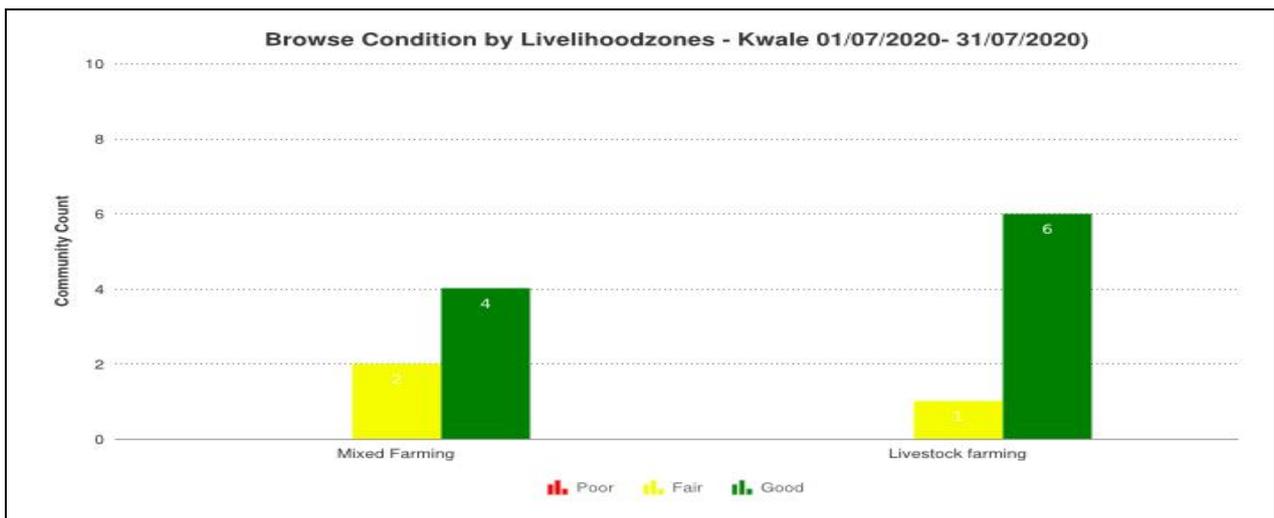
- The pasture condition in the county worsened this month as approximately 25 percent of households reported good condition in August in comparison with 53.8 percent in July.
- Approximately 30 percent also reported poor condition compared with 7.7 percent last month.
- The deterioration in pasture condition was also recorded at livelihood zone level as shown in the two graphs below.
- The deteriorated pasture condition was consistent with the worsened vegetation condition recorded in the county’s 3-monthly VCI this month.





2.1.3 Browse

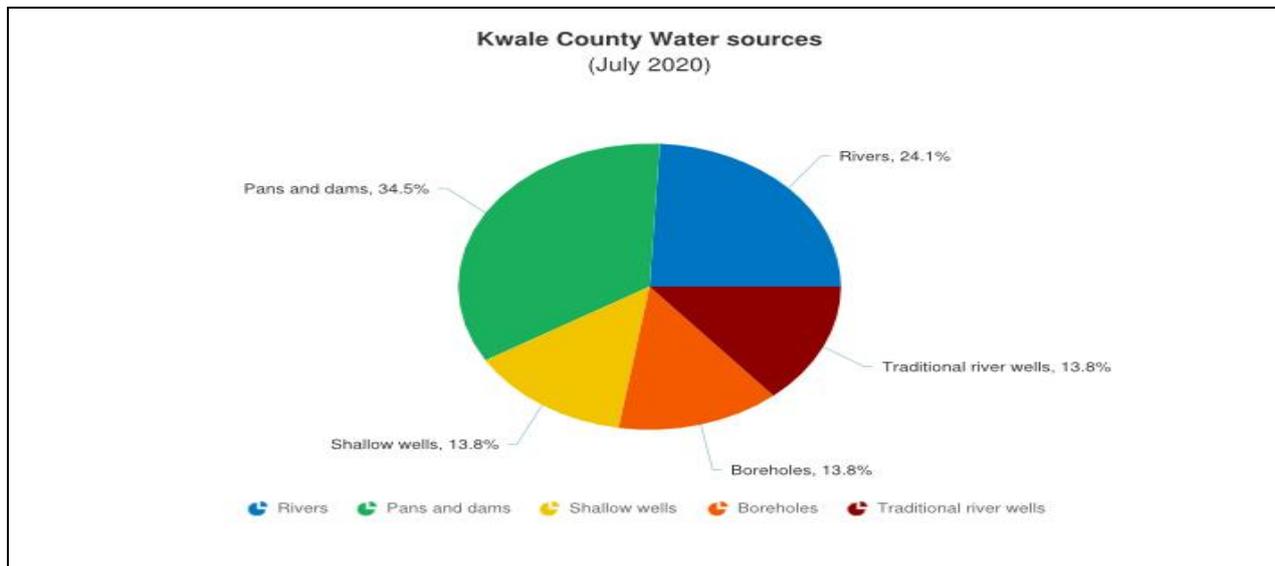
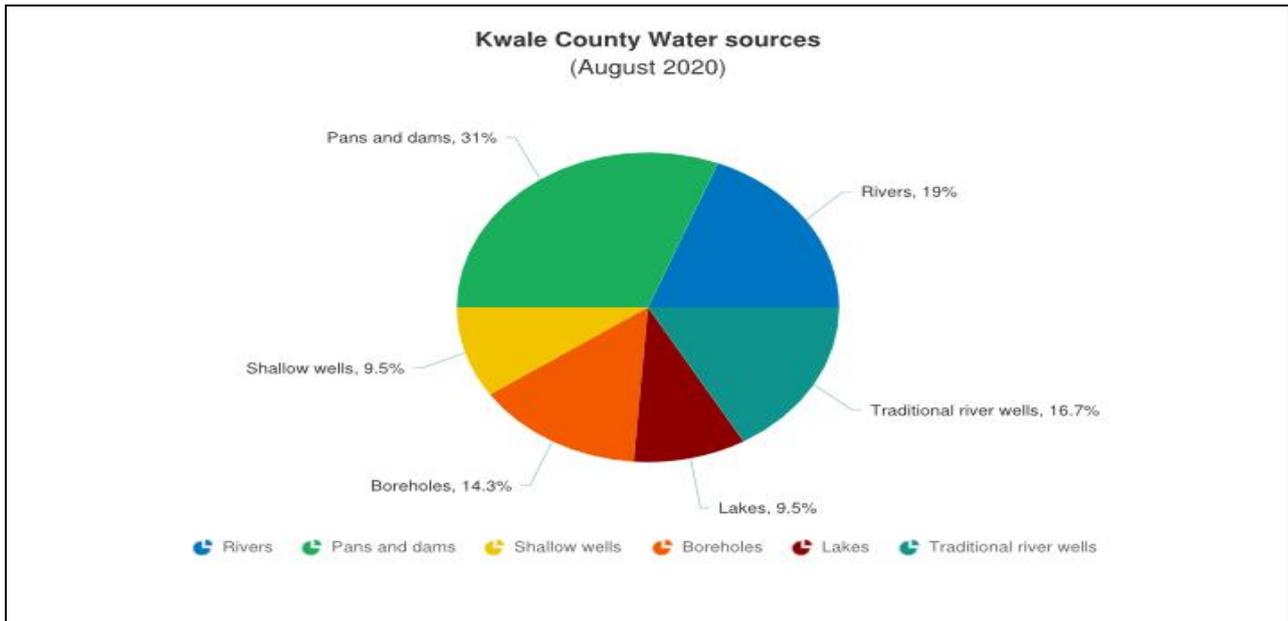
- The browse condition deteriorated as an estimated 50 percent of households reported good condition in August compared with 76.9 percent in July.
- However, the condition was normal for this time of the year.
- The deterioration in browse condition compared with last month was also registered at livelihood zone level as shown in the graphs below.



2.2 WATER RESOURCES

2.2.1 Sources

- Pans, dams and rivers were the major sources of water for household use this month similar to last month as shown in the pie-chart below.
- The sources were normal for this time of the year.
- The first pie-chart below shows the major sources of water for the month of August that indicates that the reliance on open water sources such as pans, dams and rivers reduced while those of more perennial sources such as boreholes increased in comparison with July.
- The reason could be due to the fact that open water sources had begun drying up as the long rains season had ended and were no longer being recharged.

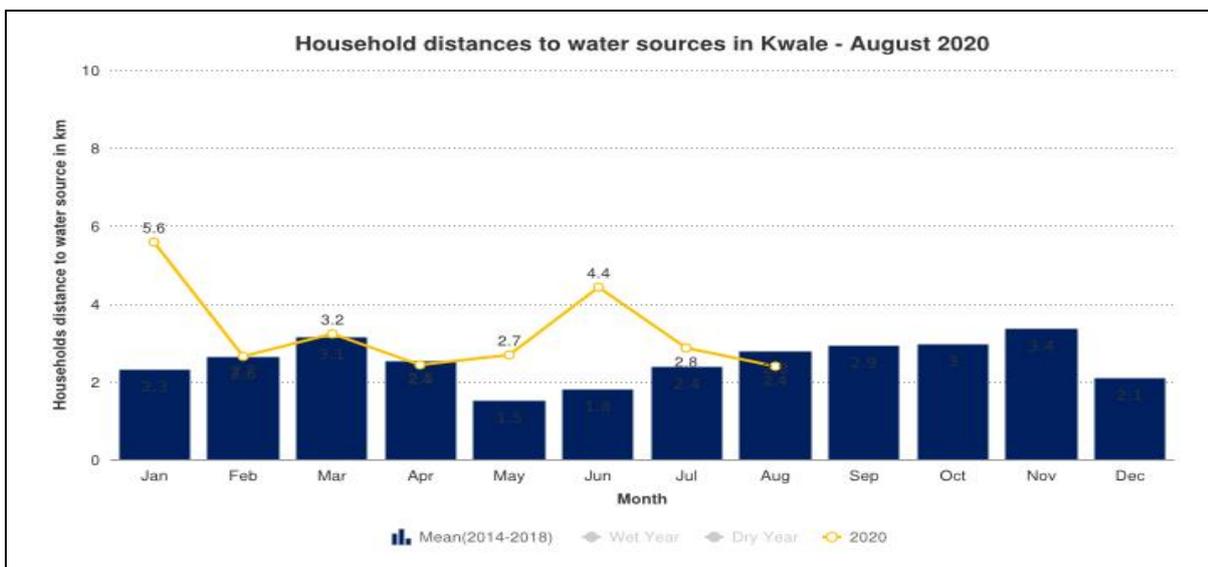


- The status of water resources remained normal at index '5' (a description is provided in the table below) similar to last month which was normal for this time of the year.

INDEX	STATUS 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

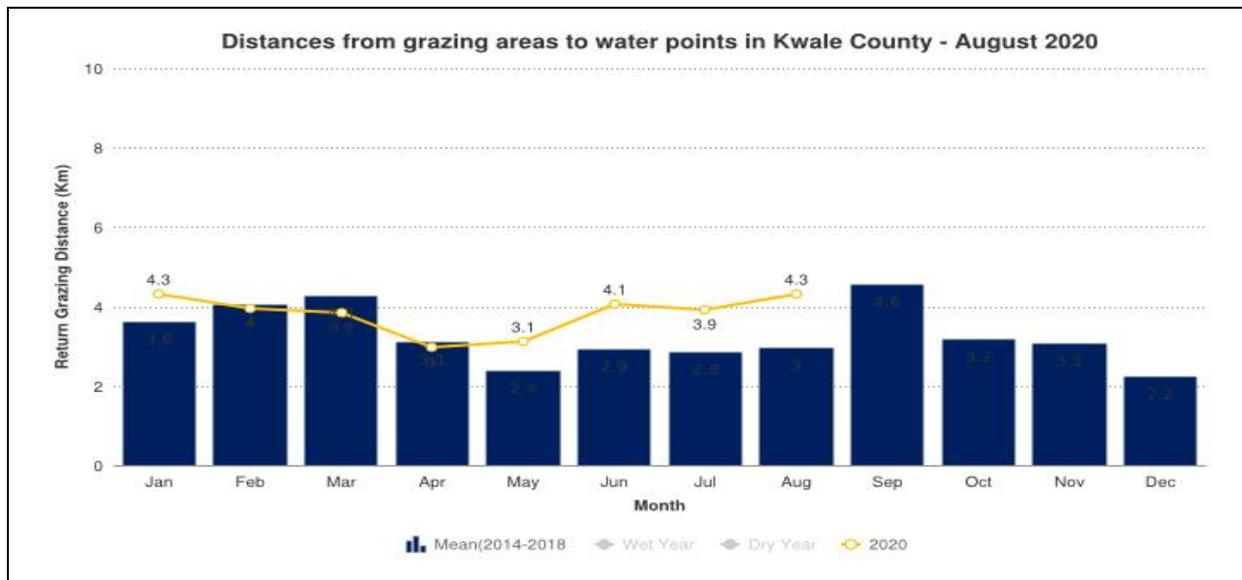
- Access to water for domestic consumption had maintained a relatively stable trend in comparison with last month as the distance to water sources was recorded at 2.4 km in August compared with 2.8 km in July.
- Access was within seasonal ranges as households would normally walk an average of 2.8 km as recorded in the 2014-2018 LTA as shown in the graph below.
- There were no significant variations at livelihood zone level as the livestock farming and mixed farming livelihood zones recorded distances of 1.3 and 1.6 km respectively in August in comparison with 1.2 and 1.4 km for the respective livelihood zones in July.



2.2.3 Livestock access to water

- Access to water for livestock consumption recorded a relatively stable trend in comparison with last month as a distance of 4.3 km was recorded from water sources to grazing areas in August compared with 3.9 km in July.

- Despite the month-to-month stability, the current distance was 43.3 percent higher than normal compared with 3.0 km recorded in the 2014-2018 LTA as shown in the graph below.
- The implication was that livestock had to walk a longer distance in search of water compared with normal times.
- The longest distance was recorded in the mixed farming livelihood zone at 2.3 km similar to last month.
- The shortest distance was recorded in the livestock farming livelihood zone at 2.0 km in comparison with 1.6 km posted last month.



3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Majority of the county’s livestock reported good body condition similar to July.
- The livestock body condition was classified as normal according to the early warning classification band described 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

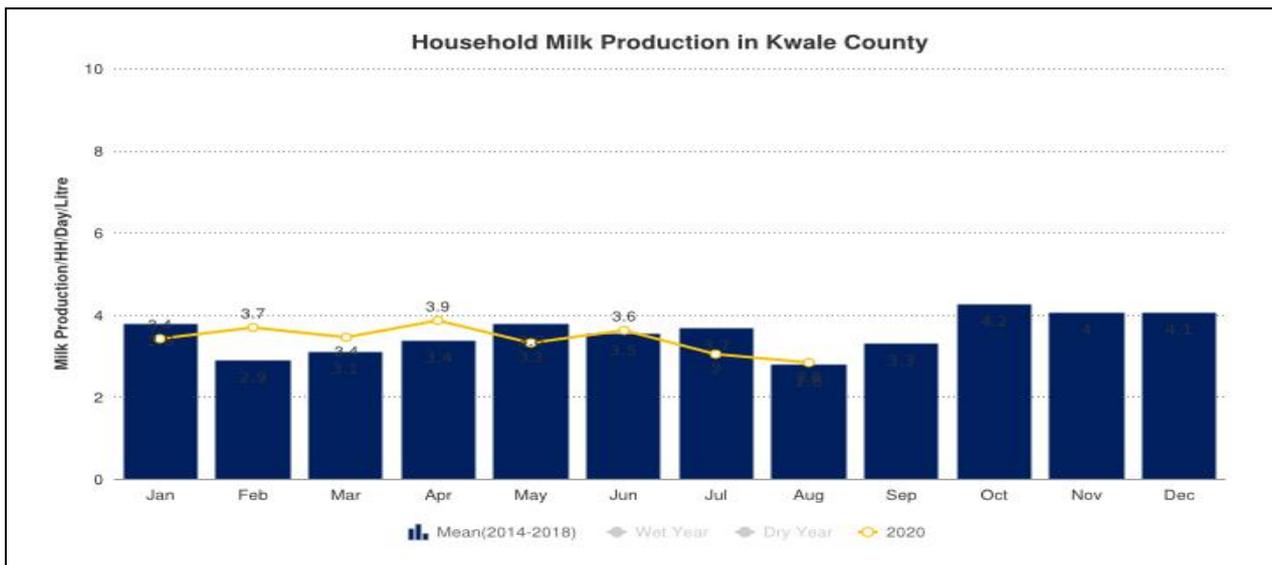
3.1.3 Livestock diseases

- The main livestock disease that had been reported that had a threat to food security is Contagious Bovine Pleuro-Pneumonia (CBPP) in cattle present largely in the livestock farming livelihood zone in Kinango and Lungu Lungu Sub-counties.

- A quarantine notice had been issued in Mwangulu Ward in Lunga Lunga Sub-county by the county’s veterinary department although it was yet to be enforced.
- The disease had led to mortalities in cattle which will likely affect livestock biomass and ultimately livestock keepers’ livelihood.

3.1.3 Milk Production

- Cattle were the main producers of milk this month which was normal.
- The milk production at household level averaged 2.8 litres in August having maintained a stable trend in comparison with 3.0 litres recorded in July.
- The production was normal for this time of the year as it coincided with the amount normally produced according to 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

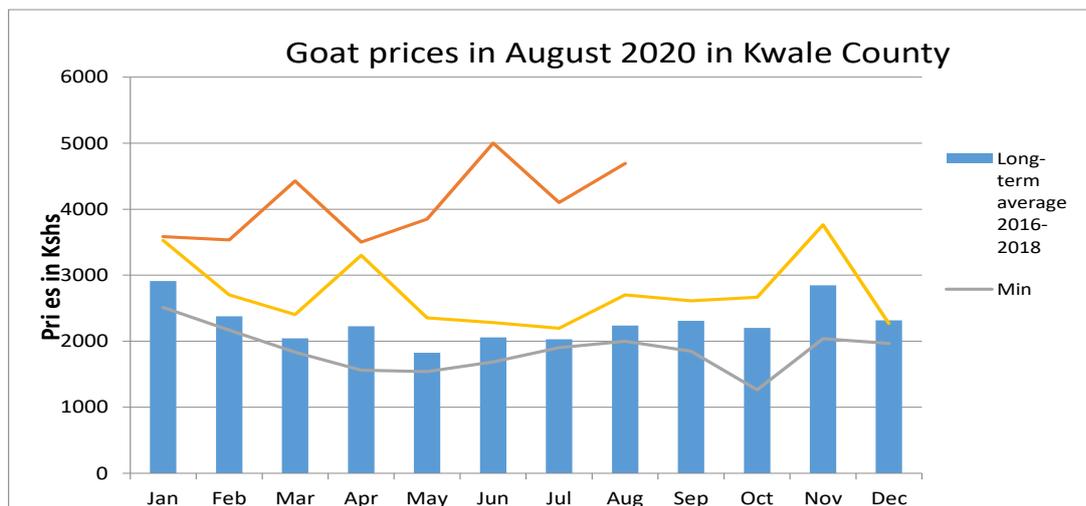
- Maize, green grams and cowpeas which were the three main crops grown in the county during the just-concluded long rains season were being harvested.
- Households who had completed harvesting were also beginning to plough their land in preparation for the short rains season.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Goat prices

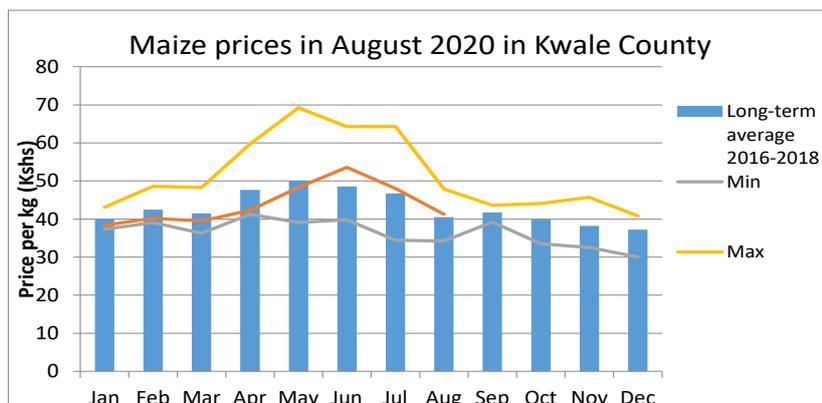
- The selling price of a medium-sized three-year old buck was Kshs 4,692 in August having increased by a 14.4 percent margin compared with Kshs 4,100 recorded in July.
- The current price was more than twice the normal price for this time of the year estimated at Kshs 2,236.83 in the 2016-2018 LTA as shown in the graph below.
- The continued availability of browse could be the reason goats had a good body condition and therefore fetching competitive prices at market level.



4.2 CROP PRICES

4.2.1 Maize

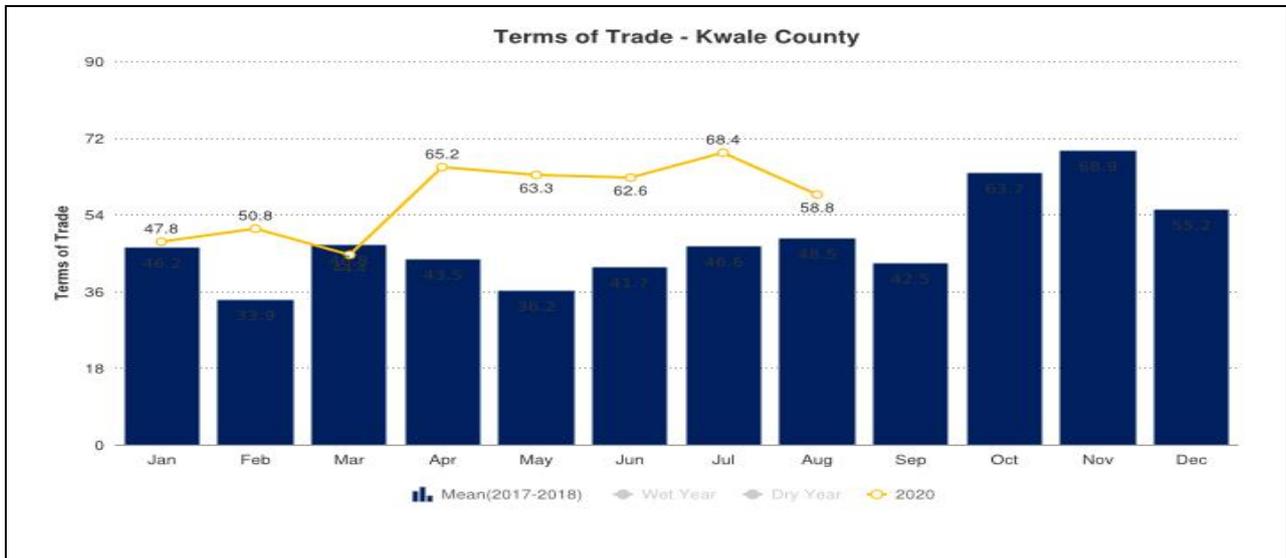
- A kilogram of maize was retailing at Kshs 41.25 in August having reduced by a 14.1 percent margin from Kshs 48 recorded in July.
- The reduction could be owed to the on-going harvesting of the crop that had reduced its demand due to increased supply.
- The current price was normal compared with Kshs 40.5 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 averaged 58.8 this month having reduced by a 14 percent margin from 68.4 recorded in July.
- Although the opportunities for casual labour were plenty, it is likely that most households were engaged in harvesting in their own farms and did not therefore seek these opportunities leading to decreased income from this source.
- However, despite the decrease, the ToT was 21.2 percent higher than the 2017-2018 LTA averaged at 48.5 as shown in the graph below.

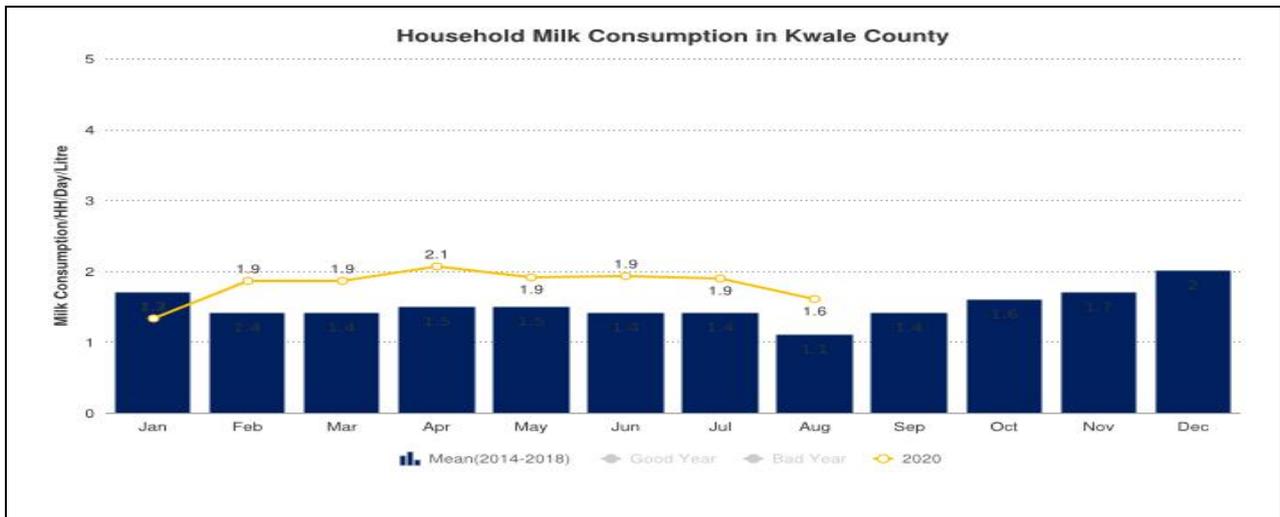
- The implication was therefore that households were able to buy a smaller quantity of maize from the proceeds of casual labour compared with last month, although this quantity was above the one they normally bought at this time of the year.
- Household purchasing power had therefore reduced in comparison with July but was above-average compared with normal times.



5.0 FOOD CONSUMPTION

5.1 MILK CONSUMPTION

- The average milk consumption at household level was recorded at 1.6 litres in August having maintained a stable trend with 1.9 litres recorded in July.
- Consumption was within seasonal ranges compared with 1.1 litres recorded in the 2014-2018 LTA as illustrated in the graph below.



5.2 FOOD CONSUMPTION SCORE

- The county's average food consumption score was recorded at 48.5 in August having maintained a stable trend compared with 49.6 posted in July.
- The mixed farming livelihood zone recorded the highest score at 59.3 having also maintained a stable trend compared with 58.9 recorded last month.

- The livestock farming livelihood zone recorded the least score at 38.5 having similarly maintained a stable trend in comparison with 40.2 recorded in July.
- Despite the relative stability in comparison with last month at both county and livelihood zone level, there had been a 24.7 percent increase in the score compared with a similar time last year which was recorded as 38.9.
- The implication was that therefore that food consumption patterns had improved compared with August last year with respect to food frequency, nutritional value and dietary diversity.
- However, they had remained relatively the same in comparison with last month both at county and livelihood zone level.
- The proportion of households with poor, borderline and acceptable food consumption score was estimated at 6.8, 21.6 and 71.6 percent respectively in August compared with 11.9, 19.2 and 68.9 percent respectively in July.
- Given that the proportion of households with a poor food consumption score had reduced from 11.9 percent in July to 6.8 percent in August, households had increased their food frequency and dietary diversity in addition to consuming food with higher nutritional value.

5.4 COPING STRATEGIES

- The average reduced coping strategy index (rCSI) in August was approximated at 13.1 having maintained a stable trend from 14.1 recorded in July.
- The stability had also been registered compared with a similar time last year where an index of 16.1 had been recorded.
- The highest index was recorded in the livestock farming livelihood zone at 13.9 having also maintained a stable trend compared with 14.2 recorded in July.
- The lowest index was posted in the mixed farming livelihood zone at 12.3 having also maintained a stable trend from 14.1 last month.
- The stability registered in the index at livelihood zone and county levels compared with last month and a similar time last year was indicative of no significant change in the frequency and/or severity of the consumption-based coping strategies employed to mitigate food deficits.

6. CURRENT INTERVENTION MEASURES

6.1 NON-FOOD INTERVENTIONS

○ Agriculture department

The department undertook the following interventions in August:

- Distribution of 100 metric tonnes of maize seeds (5 tonnes in each of the 20 wards in the county) for the short rains season.
- Trainings on post-harvest management throughout the county to reduce losses in the on-going harvests.
- Provision of post-harvest management equipment in every ward.

○ Livestock department

- Distribution of beehives and associated accessories to 14 groups in total in Dzombo, Tsimba, Mkongani, Waa, Tiwi and Kubo Wards.
- Support to dairy fodder production to seven groups in Tsimba, Mkongani, Waa, Tiwi and Kubo Wards.
- The Emergency Livestock-based livelihoods Assistance for Flood-affected Households in Kenya project carried out the following interventions:

- Distribution of mosquito nets to 388 households to reduce mosquito bites that may lead to the Rift Valley Fever (RVF) disease.
- Treatment of 16,212 cattle, 1,493 sheep and 6,125 goats to boost the health status of the livestock herd in Vanga, Ramisi and Pongwe Kikoneni Wards. The activity involved deworming, application of fly repellent to prevent biting flies that could be blood parasites that cause RVF and treatment of any infections. The activity reached 8,845 beneficiaries.
- Passive and active livestock disease surveillance to act as an early warning system in identifying RVF-causing mosquitoes.

7. EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

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

7.2 Migration

- No migration incidences were reported in August.

8. RECOMMENDATIONS

- Continued post-harvest management campaigns for the on-going harvests.
- Enforcement of the quarantine notice served in Lunga Lunga Sub-county for CBPP.
- Imposition of quarantine in Kinango Sub-county to curb the spread of CBPP and reduce mortalities in cattle.