



National Drought Management Authority
KWALE COUNTY
DROUGHT EARLY WARNING BULLETIN AUGUST 2021

AUGUST 2021 EW FLAG



Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Mixed Farming	Alarm	Deteriorating
Livestock Farming	Alert	Deteriorating
County	Alert	Deteriorating
Biophysical Indicators	Value	Normal Range/Value
VCI	21.04	>35
State of Water Sources	5	5
Production indicators	Value	Normal
Crop condition (maize and legumes)	-	-
Milk Production (Litres)	2.7	2.8
Livestock Migration Pattern	No migration	No migration
Livestock deaths (from drought)	Zero deaths	Zero deaths
Access Indicators	Value	Normal
Terms of trade	59.5	59
Milk Consumption (litres)	1.8	1.4
Return distance to water sources for households (km)	3.4	2.8
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	2.4	-

Drought Situation & EW Phase Classification

Biophysical Indicators

- The first two dekads of the month received near normal rainfall.
- The vegetation condition for August was below normal for the month with Lunga Lungu, Matuga and Msambweni Sub-counties classified in the moderate drought category while Kinango Sub-county classified in the severe drought category.
- The state of water sources was normal for August.

Socio Economic Indicators (Impact Indicators)

Production indicators

- Harvesting was on-going for the long rains season crop.
- The projected production of maize, cow peas and green grams was below average.
- Milk production was normal for the month.
- No cases of migration or drought-related livestock deaths were recorded during the month.

Access indicators

- Terms of trade (casual labour to maize) were normal implying normal household purchasing power.
- Household milk consumption was normal for the month of August.
- Distances to water sources for domestic use were slightly above normal.

Utilization Indicators

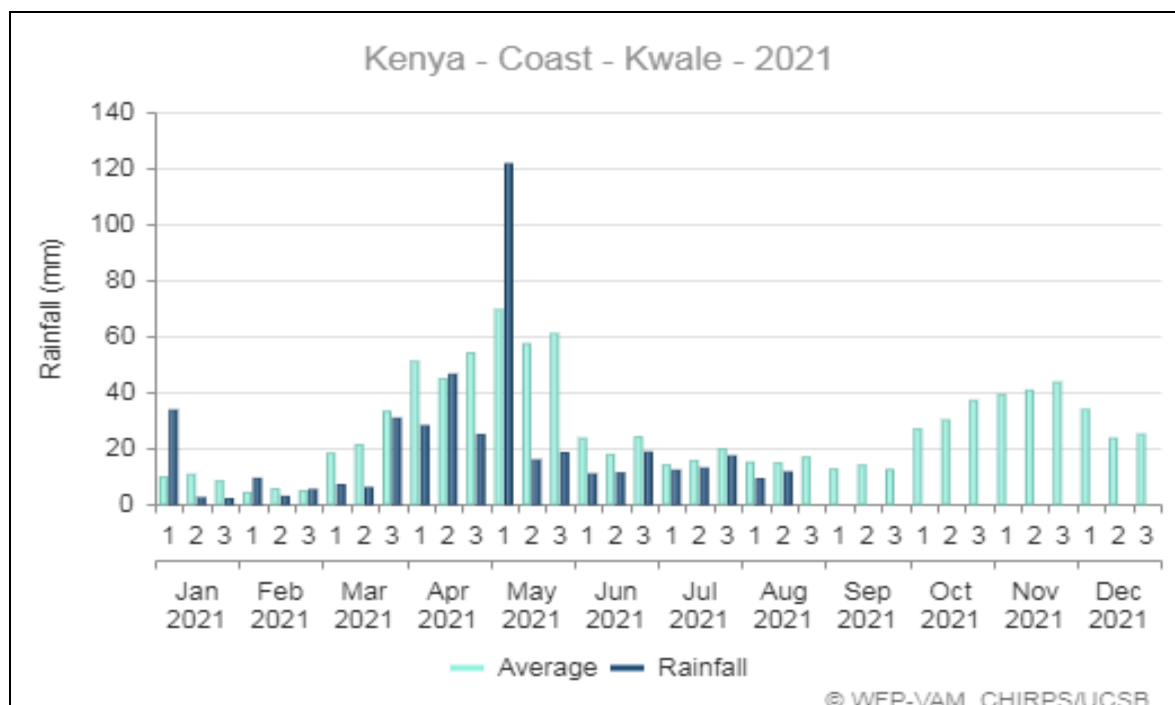
- The proportion of children at risk of malnutrition was estimated at 2.4 percent for children aged 0-5 years.

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 first two dekads of the month received near normal rainfall as shown in the graph below.
- The first dekad received 8.881mm of rainfall compared with 14.818 mm in the long-term average (LTA).
- The second dekad received 11.342mm compared with 14.535mm in the LTA.
- The rains were poorly distributed in time but fairly even spatially.



2.0 IMPACTS ON VEGETATION AND WATER

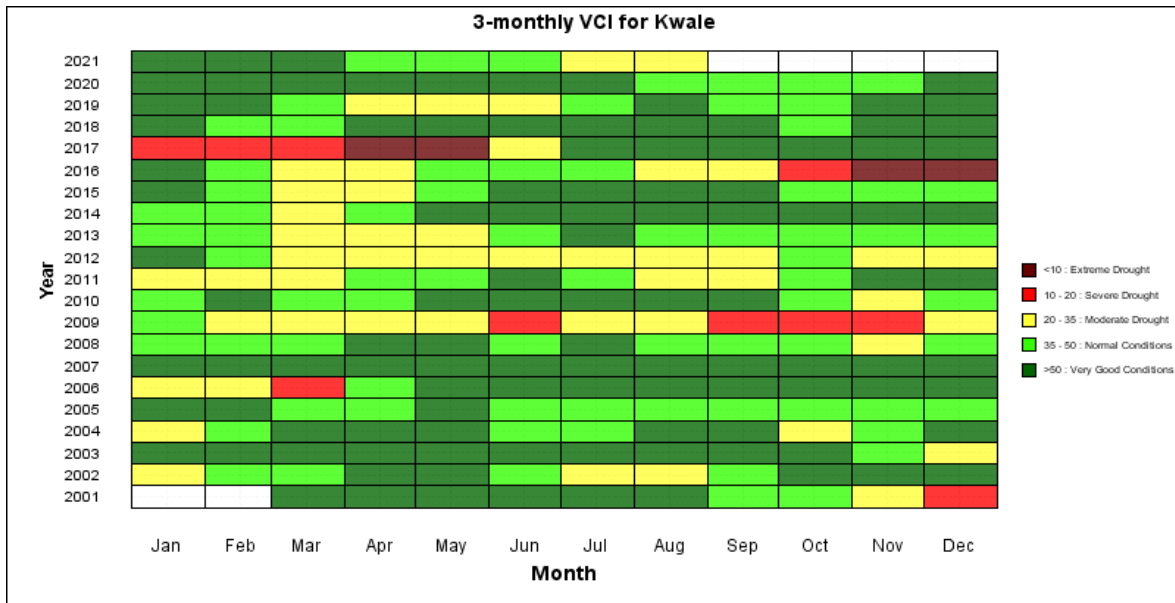
2.1 VEGETATION CONDITION

2.1.1 3-monthly Vegetation Condition Index (VCI)

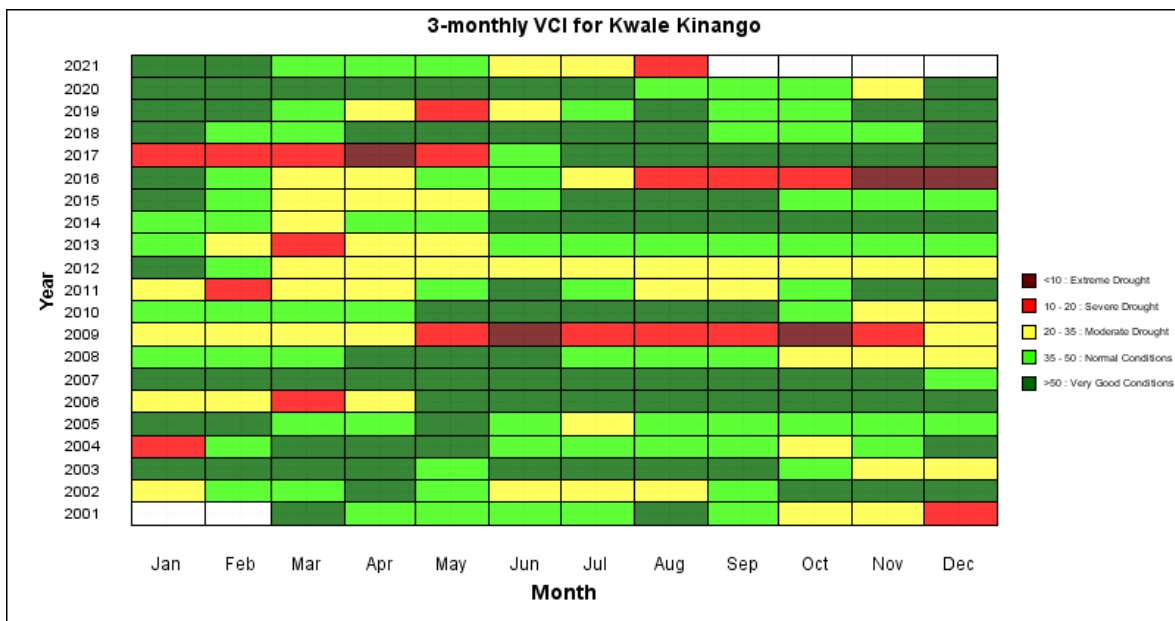
- Some deterioration in the county's vegetation greenness was recorded as the 3-monthly VCI decreased by a 31.6 percent margin from 30.75 in July to 21.04 in August.
- The county is therefore classified in the moderate drought category with a likelihood of deteriorating to the severe drought category in September if the county does not record any rains next month.
- All the sub-counties also recorded deterioration in vegetation greenness as shown in the table below.
- In addition, all sub-counties were also categorized in the moderate drought category with the exception of Kinango Sub-county which is categorized in the severe drought category.

Area	Jan 2021	Feb 2021	Mar 2021	April 2021	May 2021	June 2021	July 2021	August 2021
Kinango Sub-county	61.91	55.81	45.9	36.67	37.17	34.22	26.02	16.93
Lunga Lunga Sub-County	68.29	61.71	54.78	36.67	53.4	48.88	40.55	28.8
Matuga Sub-county	67.06	67.2	64.76	53.92	43.63	36.06	31.23	23.56
Msambweni Sub-county	67.06	66.07	64.34	55.43	51.81	47.42	38.99	26.21
Kwale County	64.28	59.16	51.29	43.08	42.55	38.57	30.75	21.04

- The matrix below shows that the current vegetation condition was worse than a similar time last year and similar to the same period in 2016 when the county experienced a severe drought.

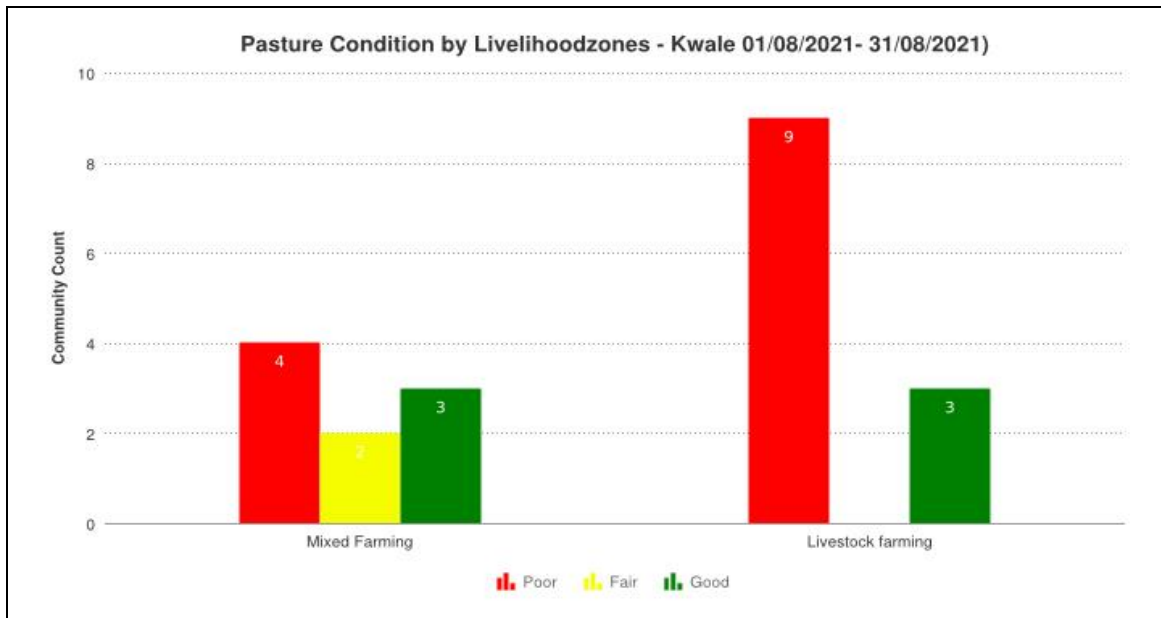
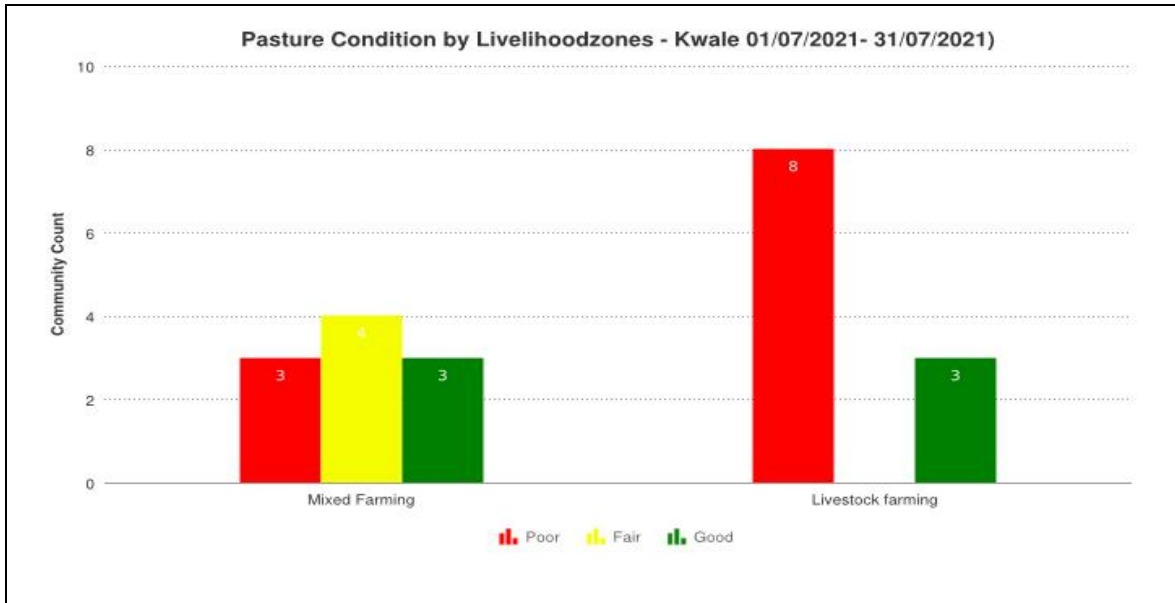


The matrix below shows the vegetation condition for Kinango Sub-county which is categorized in the severe drought category and is similar to the same period in 2016.



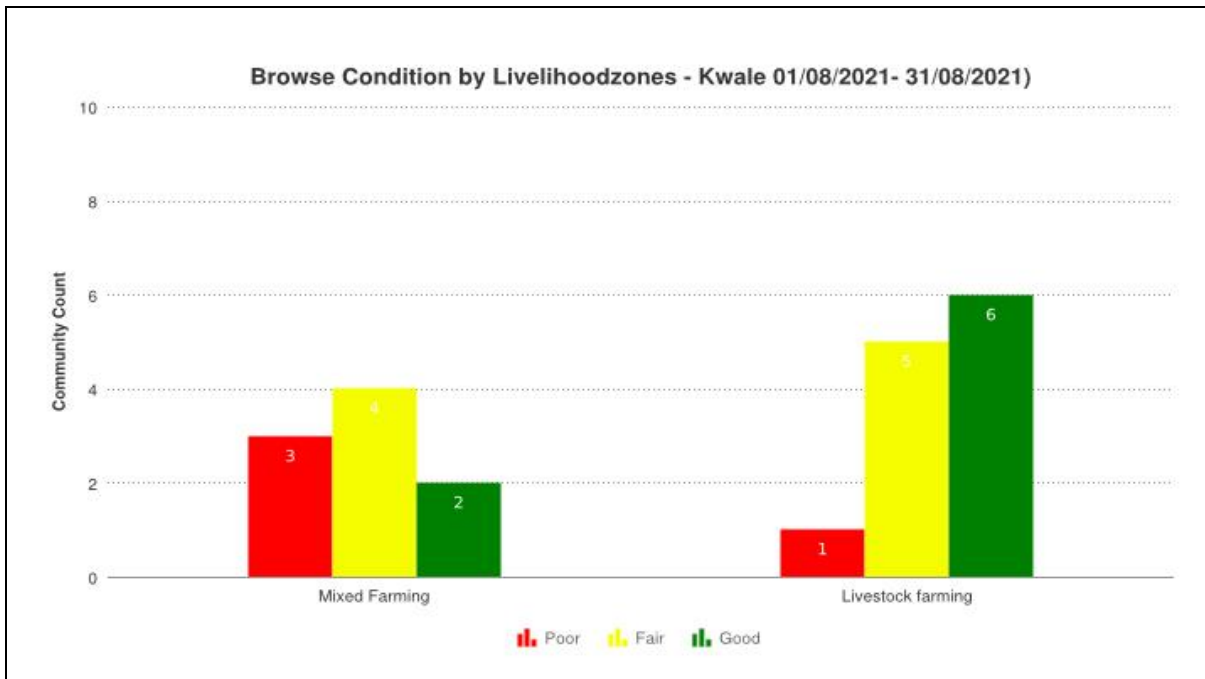
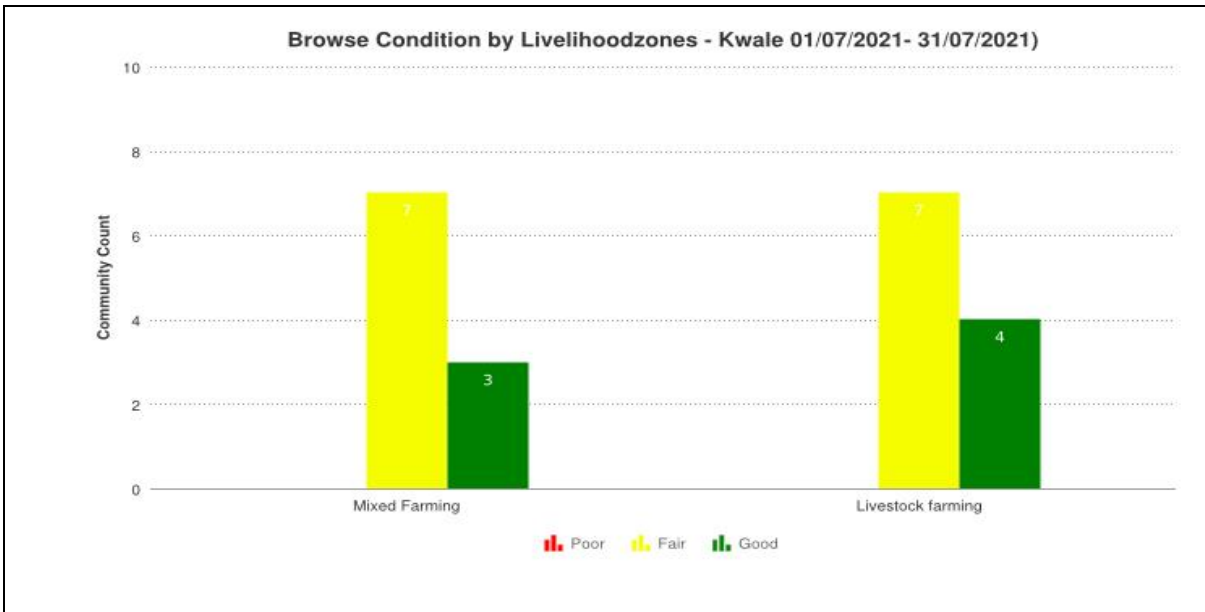
2.1.2 Pasture

- There was a slight deterioration in pasture condition in the county as an estimated 61.9 percent of households reported poor pasture condition compared with 52.4 percent in July.
- In addition, an estimated 9.5 percent of households reported fair condition in August in comparison with 19 percent in July.
- The proportion of households who reported good pasture condition remained similar to last month at 28.6 percent.
- However, there were minimal changes at livelihood zone level as shown in the graphs below.



2.1.3 Browse

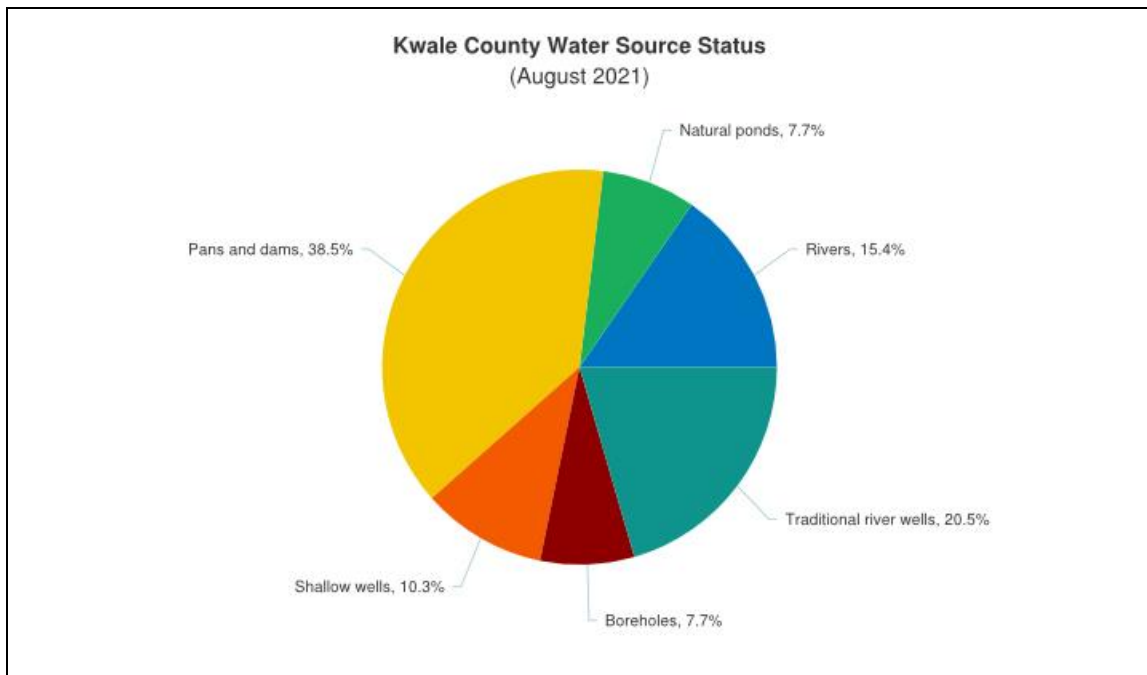
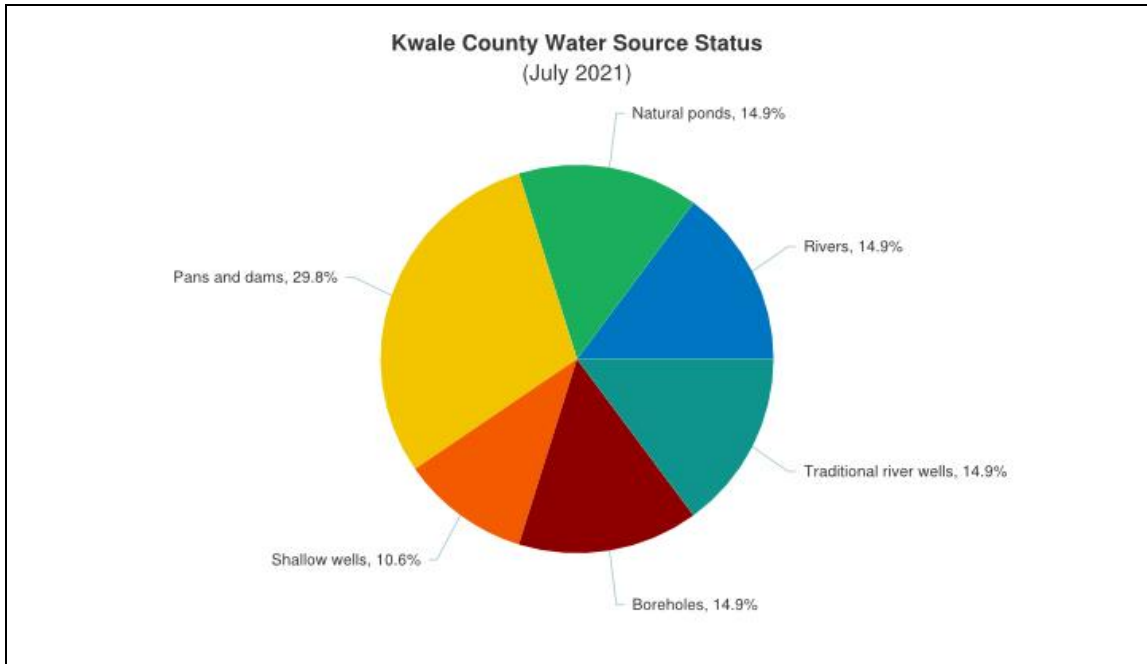
- There was some deterioration in browse condition in comparison with last month as approximately 38.1 percent of households reported good condition in August in comparison with 52.9 percent in July.
- An estimated 42.9 and 19 percent of households reported fair and poor pasture condition respectively in August.
- There were changes at livelihood zone level as some households that had not reported poor condition in July reported the same in August as shown in the figures below.



2.2 WATER RESOURCES

2.2.1 Sources

- Pans and dams were the main water sources for household use in August. Other water sources were as shown in the second pie-chart below. The first pie-chart shows the sources of water in July for comparison purposes.
- The sources currently in use were the normal ones for this time of the year.



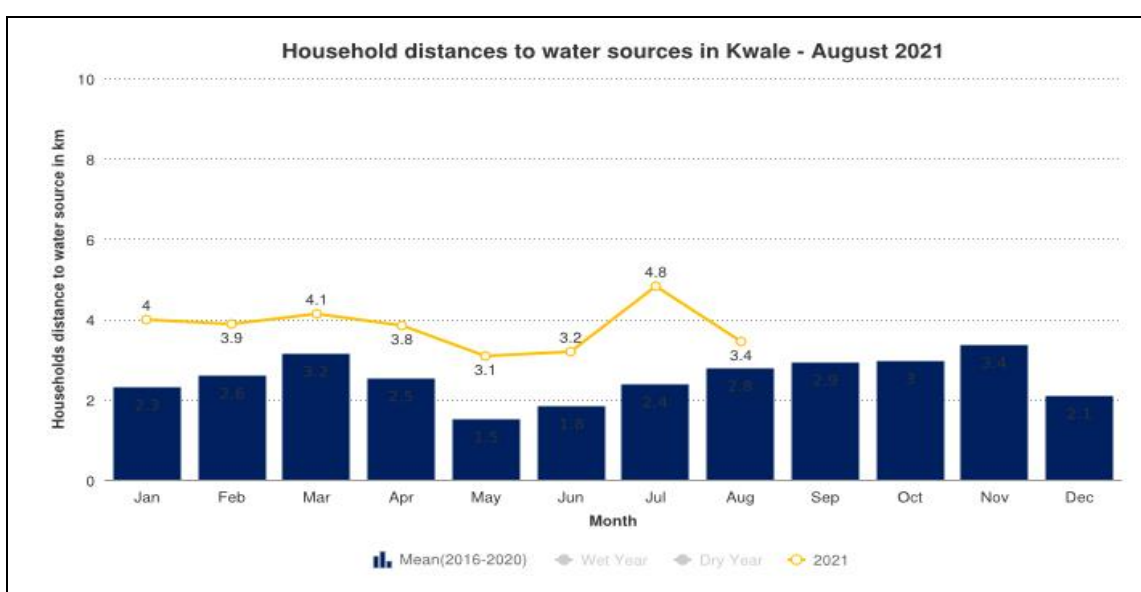
- The status of water sources was normal at index '5', a description of which is provided in the table below and is similar to July.

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

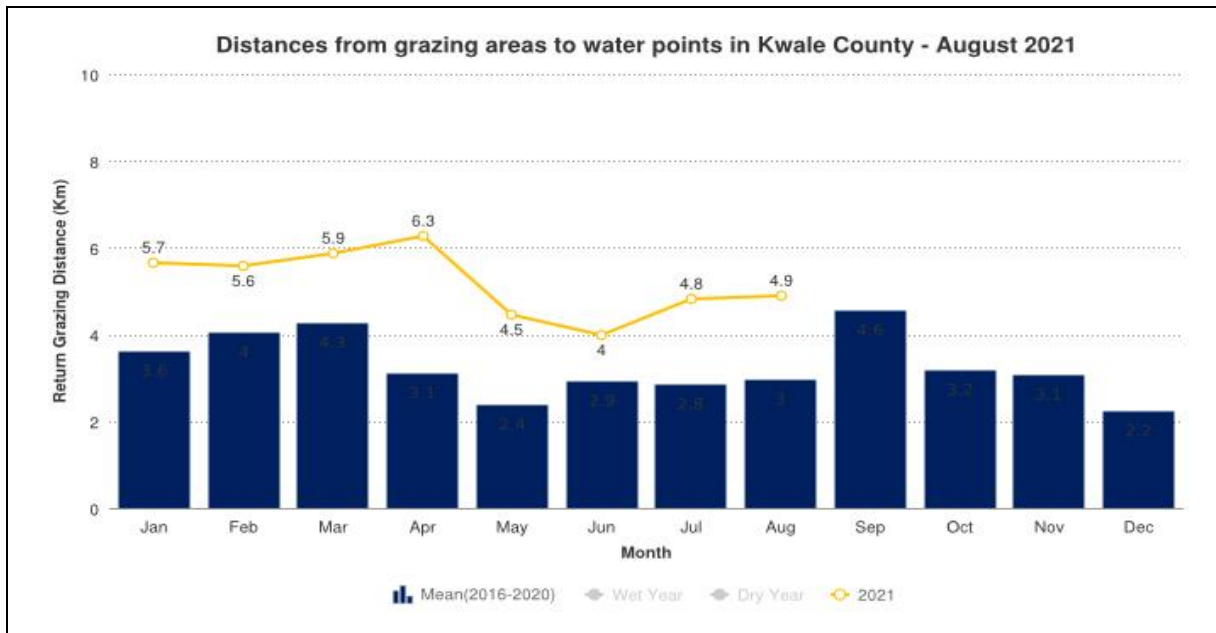
2.2.2 Household access and utilization

- Access to water for domestic consumption was slightly easier this month in comparison with July as households had to walk an average of 3.4 km in August compared with 4.8 km in July.
- The current distance was slightly higher than expected for this time of the year which was estimated at 2.8 km in the 2016-2020 LTA.
- The graph below shows the average distance walked by households in the county.



2.2.3 Livestock access to water

- Access to water by livestock was stable as livestock had to walk an average of 4.9 km in August compared with 4.8 km in July.
- However, despite the month-on-month stability, the current distance was slightly higher than normal compared with 3.0 km recorded in the 2016-2020 LTA as shown in the graph below.

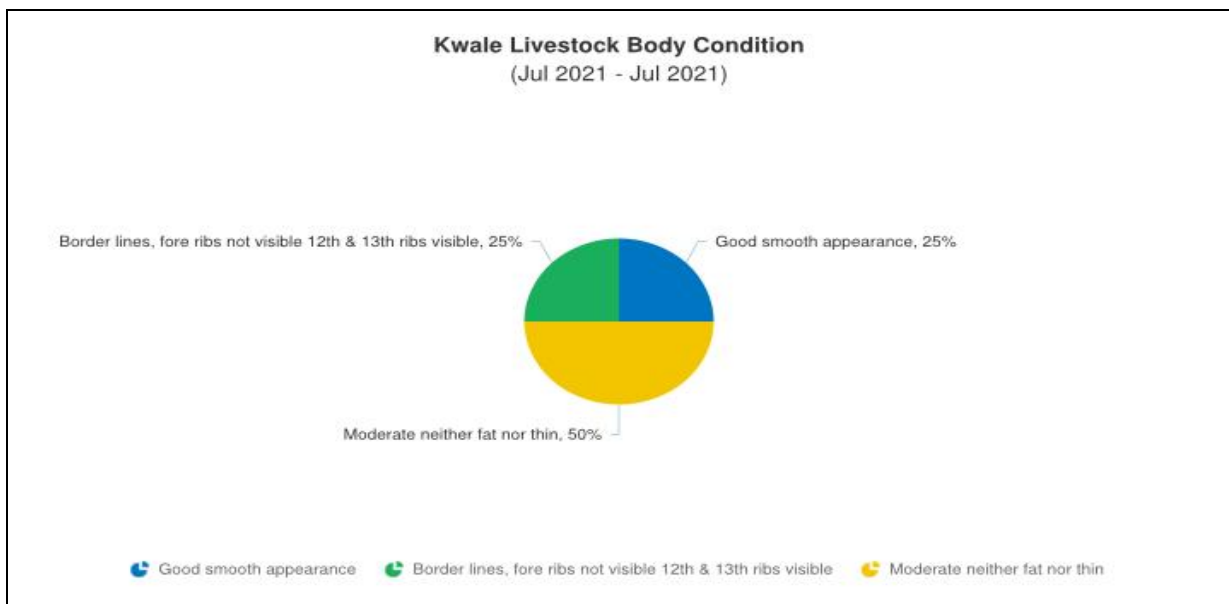


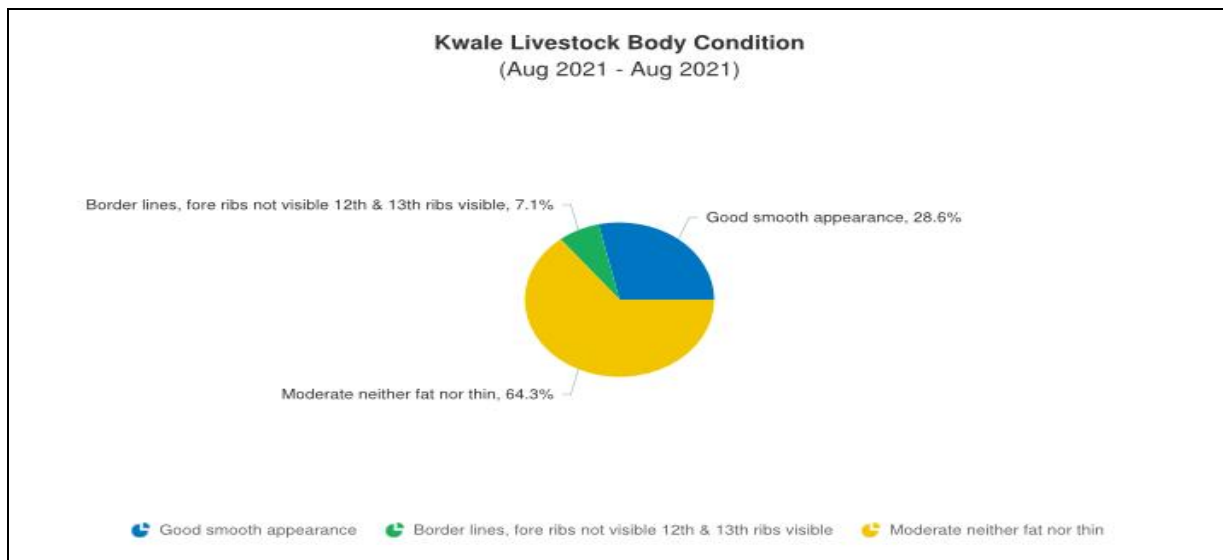
3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Livestock body condition improved this month as the proportion of households who reported good smooth appearance increased from 25 percent in July to 28.6 percent in August.
- In addition, those who reported livestock with moderate body condition (neither fat nor thin) increased from 50 percent to 64.3 percent during the same period.
- The improvement in body condition was as indicated in the pie-charts below.

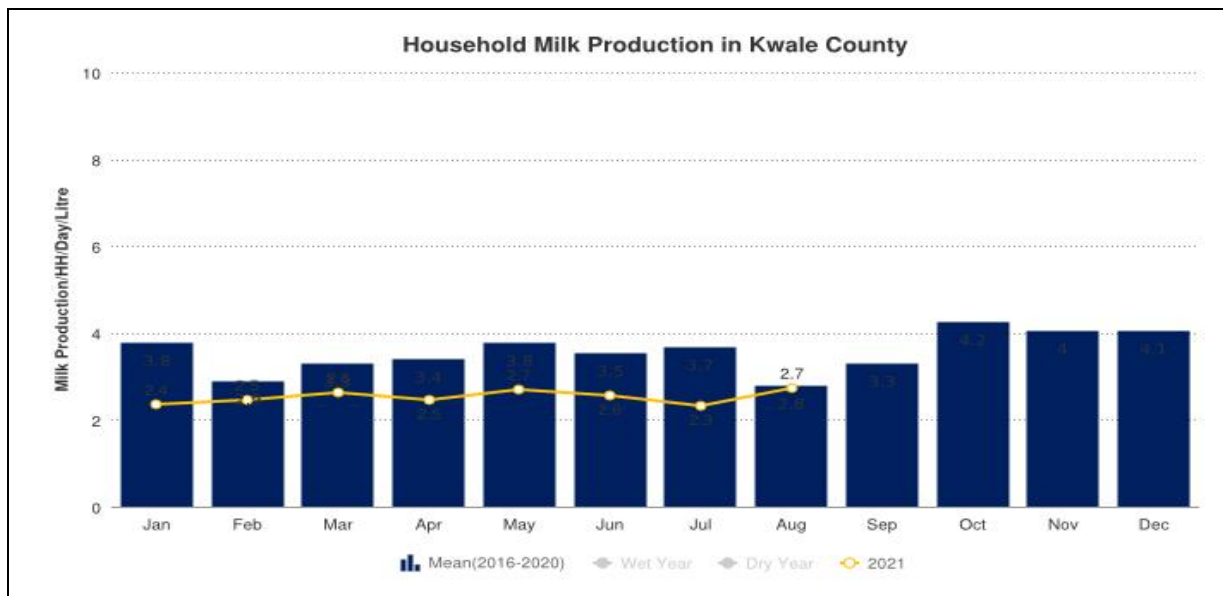




Level	Classification	Characteristics (this describes majority of the herd and not individual isolated stock)
1	Normal	Very Fat Tail buried and in fat
		Fat, Blocky. Bone over back not visible
		Very Good Smooth with fat over back and tail head
		Good smooth appearance
2	Moderate	Moderate. neither fat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

3.1.2 Milk Production

- The average household milk production was 2.7 litres in August having remained stable in comparison with 2.3 litres in July as shown in the graph below.
- The production was within seasonal norms for this time of the year in comparison with 2.8 litres recorded in the 2016-2020 LTA as shown in the graph below.



3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and condition of food crops

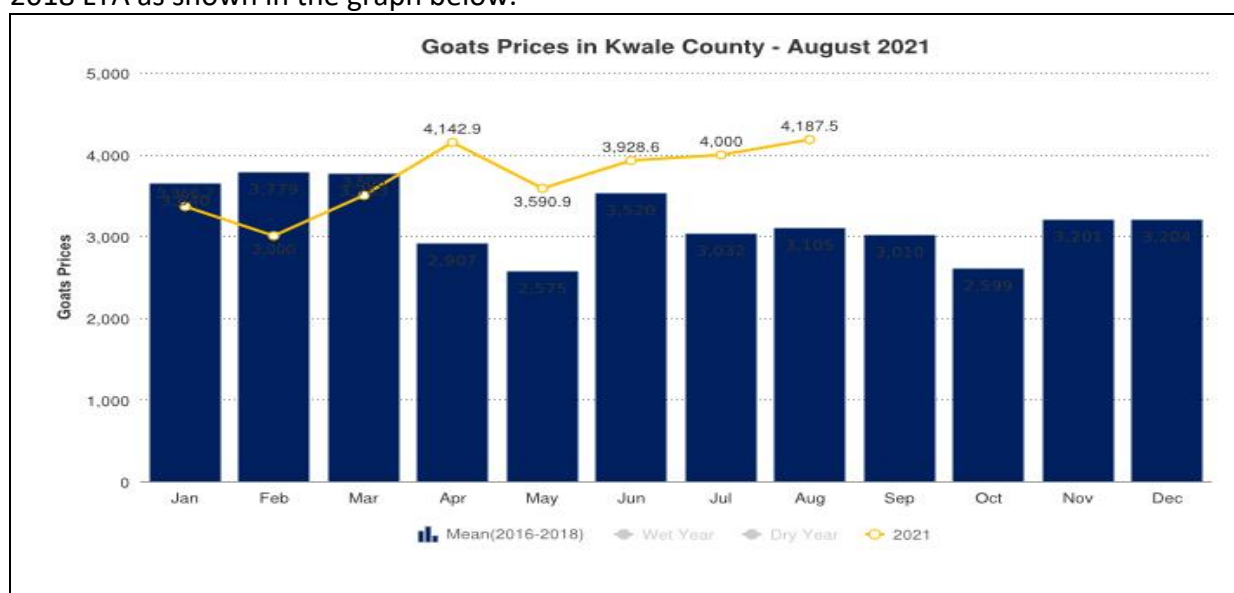
- Harvesting of the long rains season crop was on-going.
- Maize, cow peas and green grams were the main crop grown during the season.
- According to the county long rains assessment report, projected maize production was approximately 43 percent of the long-term average while that of cow pea and green gram were estimated at five percent of their long-term averages.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Goat prices

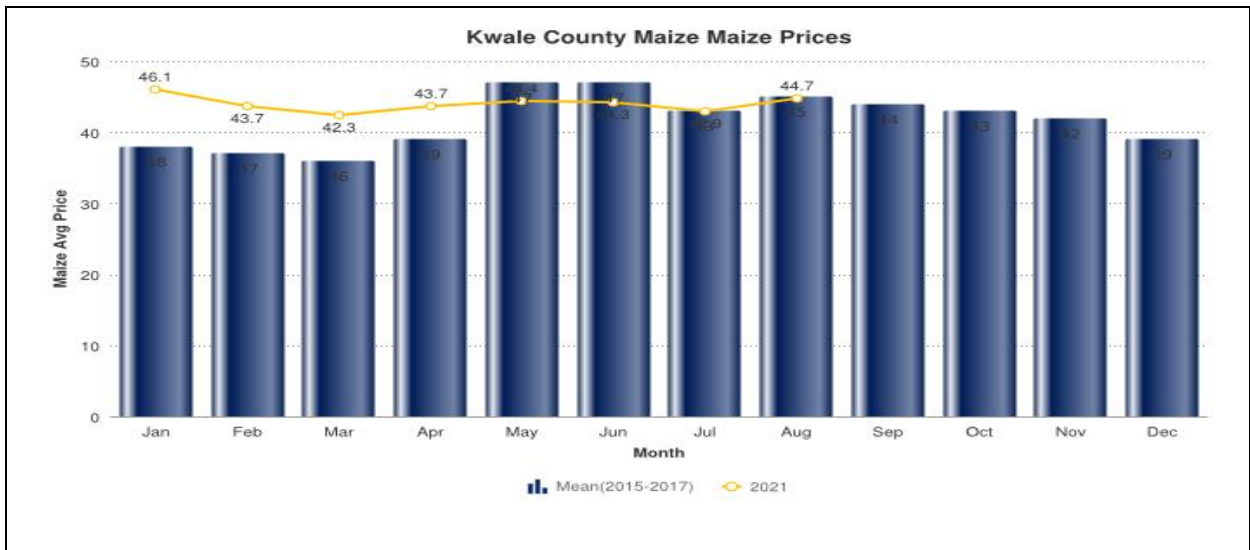
- The trading price of a medium-sized three-year old buck was Kshs 4,187.5 in August having remained relatively stable in comparison with Kshs 4,000 recorded in July.
- The price was 34.9 percent higher than normal compared with Kshs 3,105 recorded in the 2016-2018 LTA as shown in the graph below.



4.2 CROP PRICES

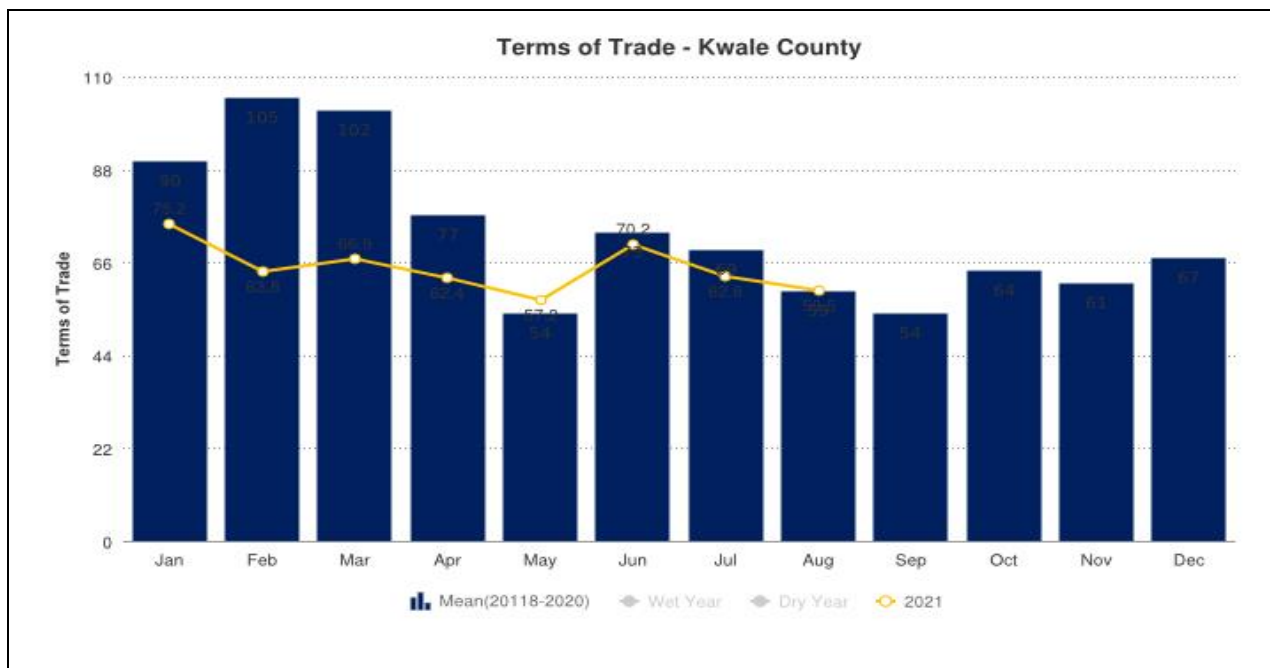
4.2.1 Maize

- The retail price of a kilogram of maize was Kshs 44.7 in August having maintained a stable trend from Kshs 43 recorded in July as shown in the graph below.
- The price was within seasonal ranges compared with Kshs 45 recorded in the 2015-2017 LTA.



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

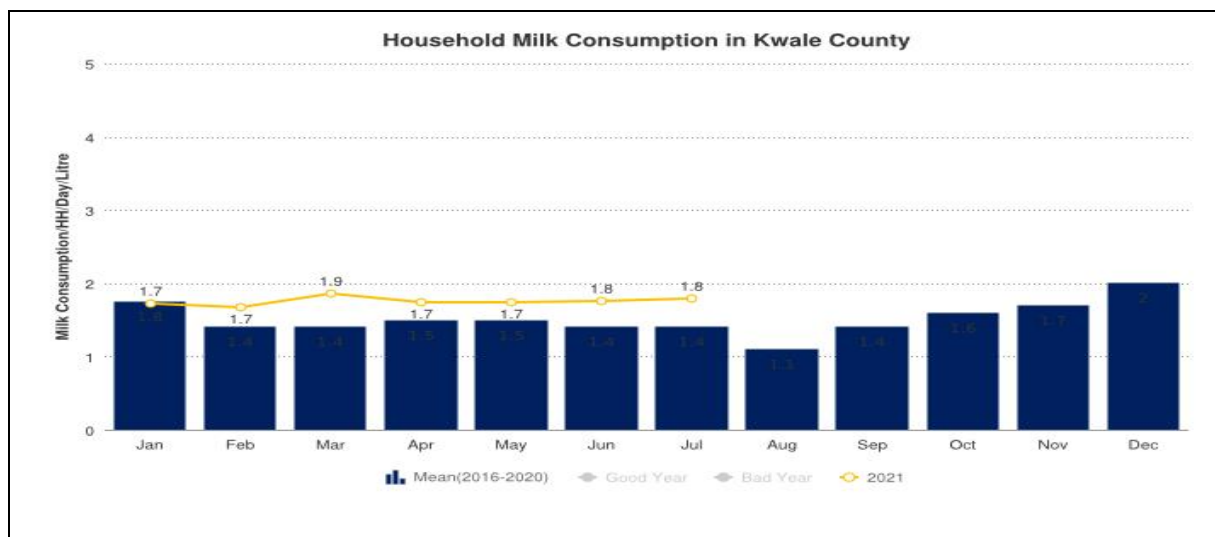
- The average ToT this month was 59.5 having reduced by a negligible margin of 5.4 percent from 62.9 recorded last month.
- The ToT was within seasonal norms compared with 59 recorded the 2018-2020 LTA as shown in the graph below.
- The implication was that household purchasing power had remained relatively stable in comparison with last month and was normal for this time of the year.



5.0 FOOD CONSUMPTION

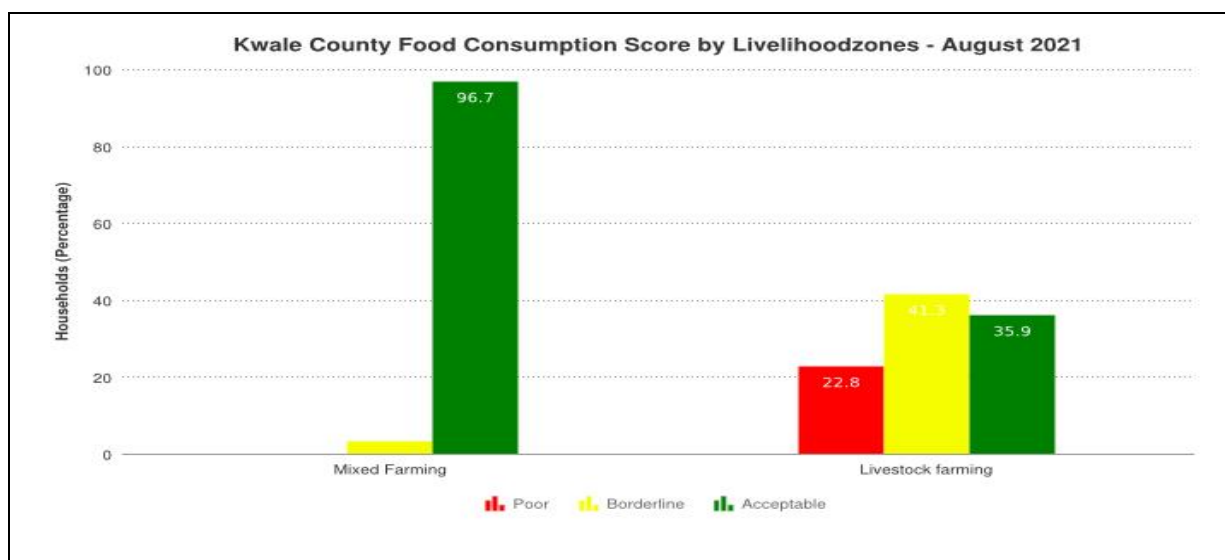
5.1 MILK CONSUMPTION

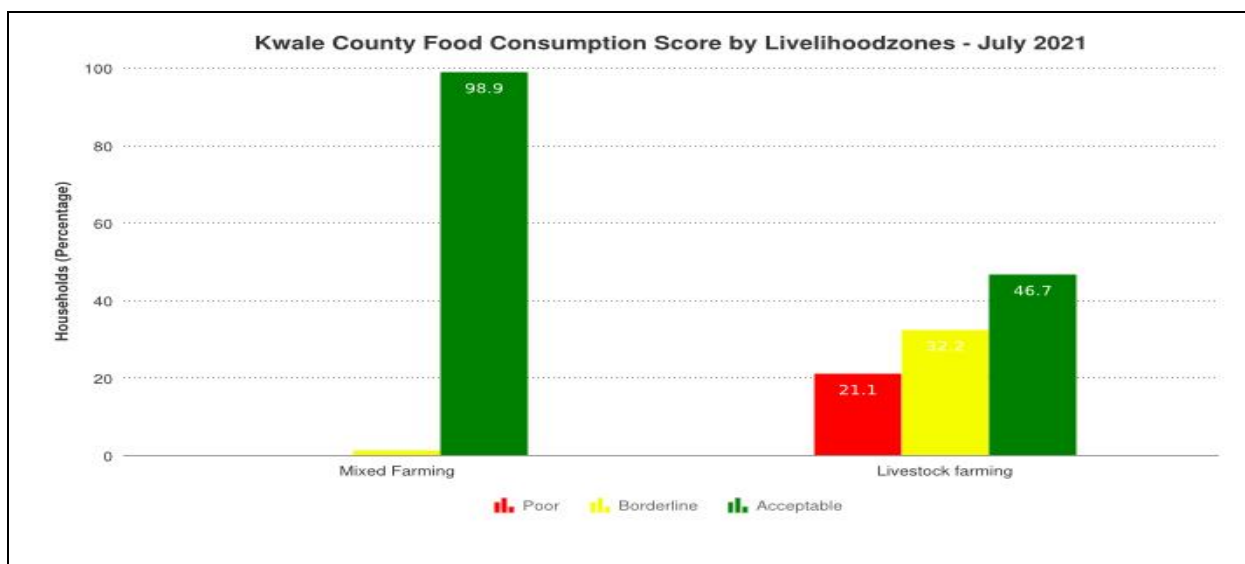
- Household milk consumption averaged 1.8 litres in August having remained the same as the amount posted in July as shown in the graph below.
- The consumption was within seasonal ranges for this time of the year in comparison with 1.4 litres in the 2016-2020 LTA as shown in the graph below.



5.2 FOOD CONSUMPTION

- There was a slight change in food consumption patterns as households who reported having acceptable food consumption reduced from 72.8 percent in July to 66.3 percent in August.
- The implication was therefore that dietary diversity, food frequency and nutritional value of food had slightly deteriorated by 8.9 percent in comparison with last month.
- Households with borderline food consumption averaged 22.3 percent in August having increased from 16.65 percent in July.
- In addition, households with poor food consumption remained relatively stable at 11.4 percent this month compared with 10.55 percent in July.
- The following charts illustrate the change in food consumption patterns in the county for the months of July and August.





5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

- The mid-upper arm circumference (MUAC) method was used to determine the proportion of children at risk of malnutrition.
- The method estimated 2.4 percent of children were at risk of malnutrition in August which was an increase in comparison with 1.2 percent recorded in July.

5.4 COPING STRATEGIES

- The average reduced coping strategy index (rCSI) at county level was 13.6 in August having maintained a stable trend from 13.8 in July.
- The implication was therefore that households had neither significantly decreased nor increased the severity and/or frequency of the consumption-based coping mechanisms to mitigate food consumption gaps.
- The mixed farming livelihood zone recorded the highest index at 13.8 having reduced from 14.6 last month.
- The livestock farming livelihood zone recorded the lowest index at 13.3 having remained stable in comparison with 13.0 recorded in July.

6. CURRENT INTERVENTION MEASURES

6.1 NON-FOOD INTERVENTIONS

Nutrition department

- Iron Folate supplementation for pregnant and lactating women.
- Deworming for children aged five years and below.
- Promotion of proper child care practices, sanitation and hygiene
- Vitamin A and zinc supplementation for children aged below five years.

7. EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

- No cases of human displacement, conflict or insecurity recorded in August.

7.2 Migration

- No migration cases were recorded during the month under review.

8. RECOMMENDATIONS

- A comprehensive rapid assessment should be conducted in Kinango Sub-county to inform the food security situation with an aim to trigger the operationalization of the county drought contingency plan to mitigate the current drought impacts.