



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

FEBRUARY 2021 EW FLAG

Drought Status: NORMAL



Shughuli za kawaida

Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Mixed Farming	Normal	Stable
Livestock Farming	Normal	Deteriorating
County	Normal	Deteriorating
Biophysical Indicators	Value	Normal Range/Value
VCI	59.16	>50
State of Water Sources	5	5
Production indicators	Value	Normal
Crop condition (maize and legumes)	N/A	N/A
Milk Production (Litres)	2.5	2.9
Livestock Migration Pattern	No migration	No migration
Livestock deaths (from drought)	Zero deaths	Zero deaths
Access Indicators	Value	Normal
Terms of trade	64.9	105
Milk Consumption (litres)	1.6	1.4
Return distance to water sources for households (km)	3.9	2.6
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	2.7	5.3

Drought Situation & EW Phase Classification

Biophysical Indicators

- The first dekad of the month recorded above average rainfall while the second dekad received below average rainfall.
- The vegetation condition index for February was in the above normal greenness band which was normal for this time of the year.
- The state of water sources was normal for this time of the year.

Socio Economic Indicators (Impact Indicators)

Production indicators

- Harvesting of legumes was in its last stages during the month.
- Milk production was within seasonal ranges for this time of the year.
- There were no livestock deaths attributed to drought during the month.
- No migration cases were recorded in February.

Access indicators

- Terms of trade (casual labour to maize) were higher than normal implying above-average purchasing power at household level for this time of the year.
- Household milk consumption was within normal ranges for February.
- Distances to water sources for domestic use were above-average for this time of the year.

Utilization Indicators

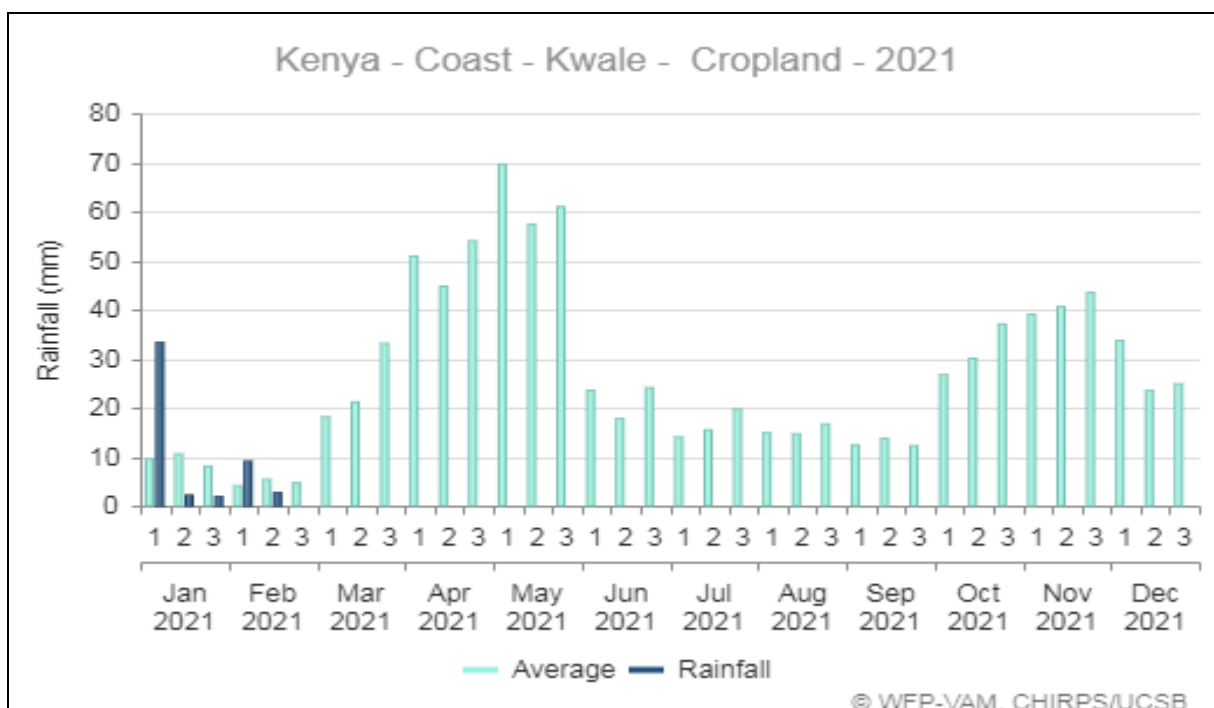
- The percentage of children at risk of malnutrition was below normal implying an improved nutritional status for children aged 0-5 years.

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 dekad of February received an average of 9.0 mm of rainfall compared with an average of 4.0mm.
- The second dekad of the month received 2.6 mm of rainfall compared with 5.3 mm in the long-term average.
- The minimal rains were evenly distributed in space and fairly good in time.
- The chart below shows the temporal distribution of rainfall at county level in February.



2. IMPACTS ON VEGETATION AND WATER

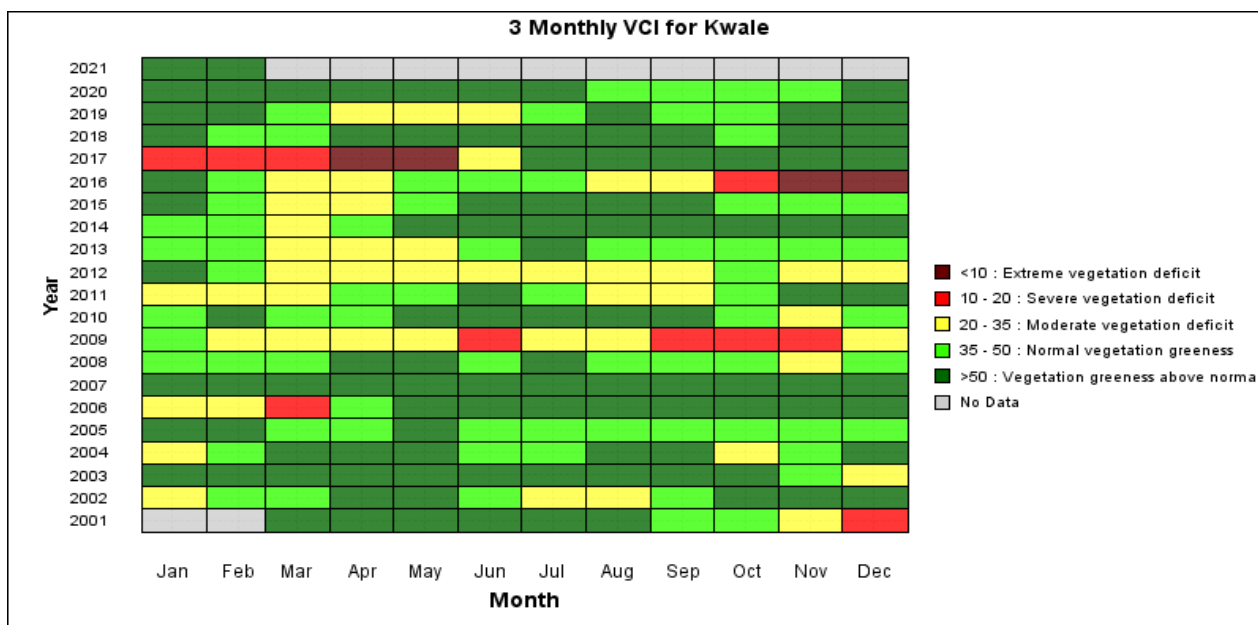
2.1 VEGETATION CONDITION

2.1.1 3-monthly Vegetation Condition Index (VCI)

- The vegetation greenness registered a slight decline as indicated by the decrease (8%) in the 3-monthly VCI from 64.28 recorded in January to 59.16 in February as shown in the table below.
- A similar trend was posted in the livestock farming livelihood zone comprising majorly of Kinango and Lunga Lunga Sub-counties which posted decreases of 9.9 and 9.6 percent respectively.
- However, the vegetation condition remained fairly similar to last month in the mixed farming livelihood zone comprising mainly Matuga and Msambweni Sub-counties as there were insignificant changes in the index.
- All sub-counties and the county in general were classified in the ‘vegetation greenness above-normal’ band. In addition, the county’s vegetation greenness was above average for this time of the year.
- The following table and matrix show the current vegetation condition in the county which was similar to the same time last year.

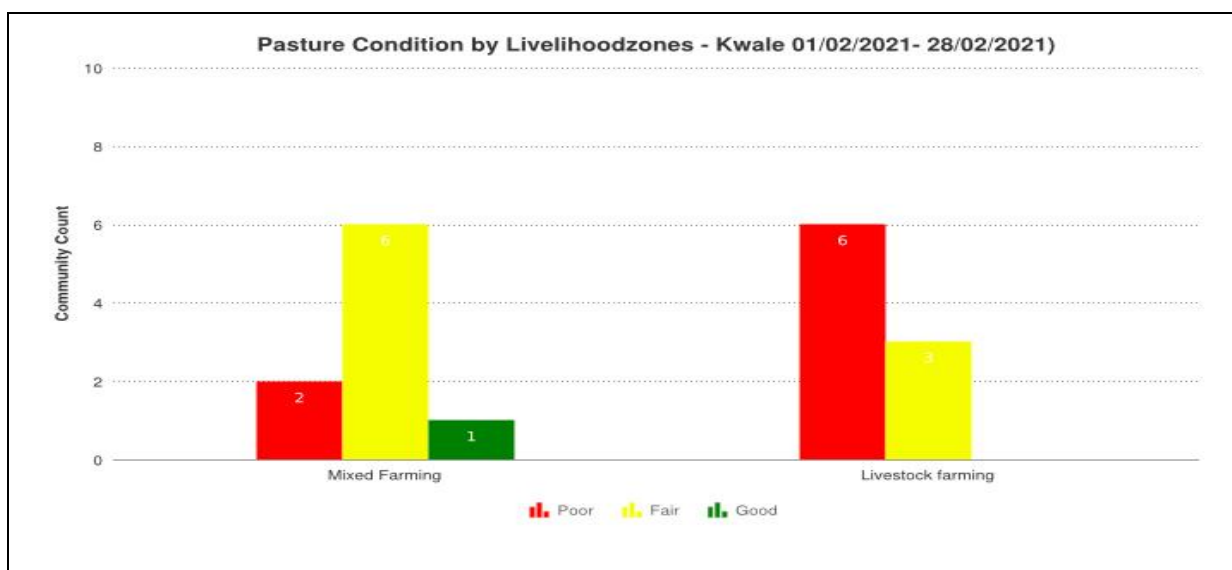
Area	September 2020	October 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021
Kinango Sub-county	38.82	38.51	33.84	55.02	61.91	55.81

Lunga Lunga Sub-County	29.27	28.4	30.71	60.06	68.29	61.71
Matuga Sub-county	47.78	48.91	50.75	61.46	67.06	67.2
Msambweni Sub-county	48.73	47.75	47.7	57.19	67.06	66.07
Kwale County	37.88	37.88	35.92	57.14	64.28	59.16



2.1.2 Pasture

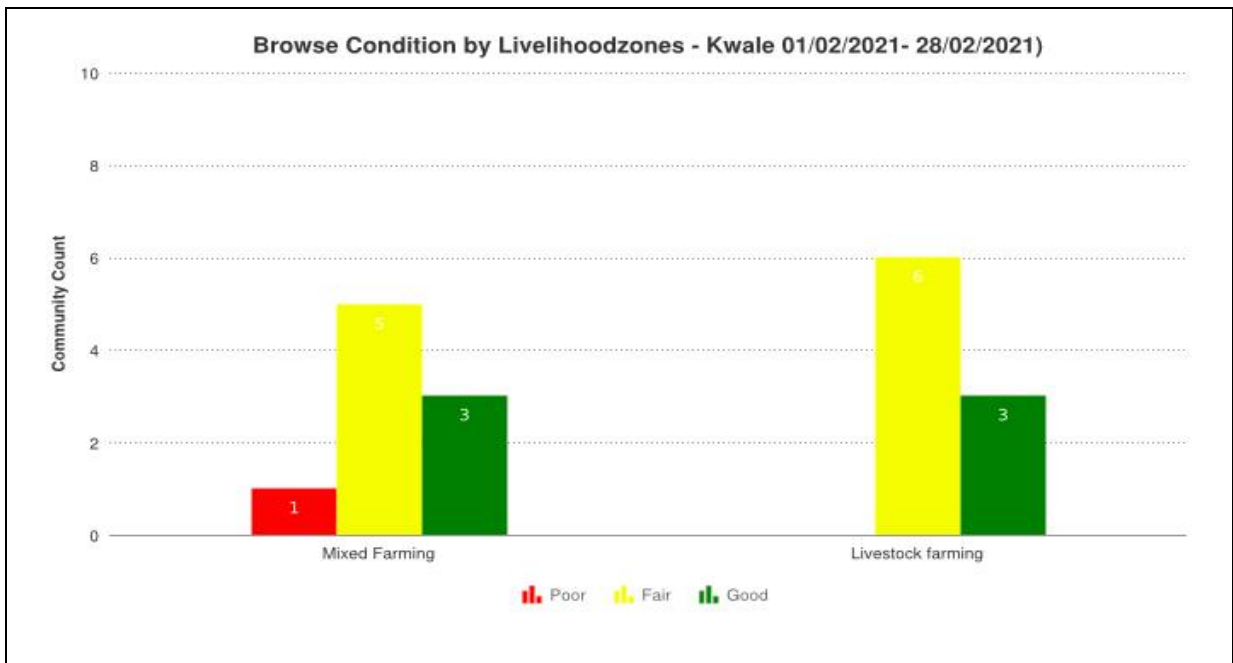
- The pasture condition deteriorated significantly this month compared with last month as approximately 5.6 percent of households reported good condition in comparison with 58.8 percent in January.
- In addition, the proportion of households who reported poor pasture condition increased from 5.9 percent in January to 44 percent in February.
- The following graphs show the change in the two months with the most significant change having been recorded in the livestock farming livelihood zone.

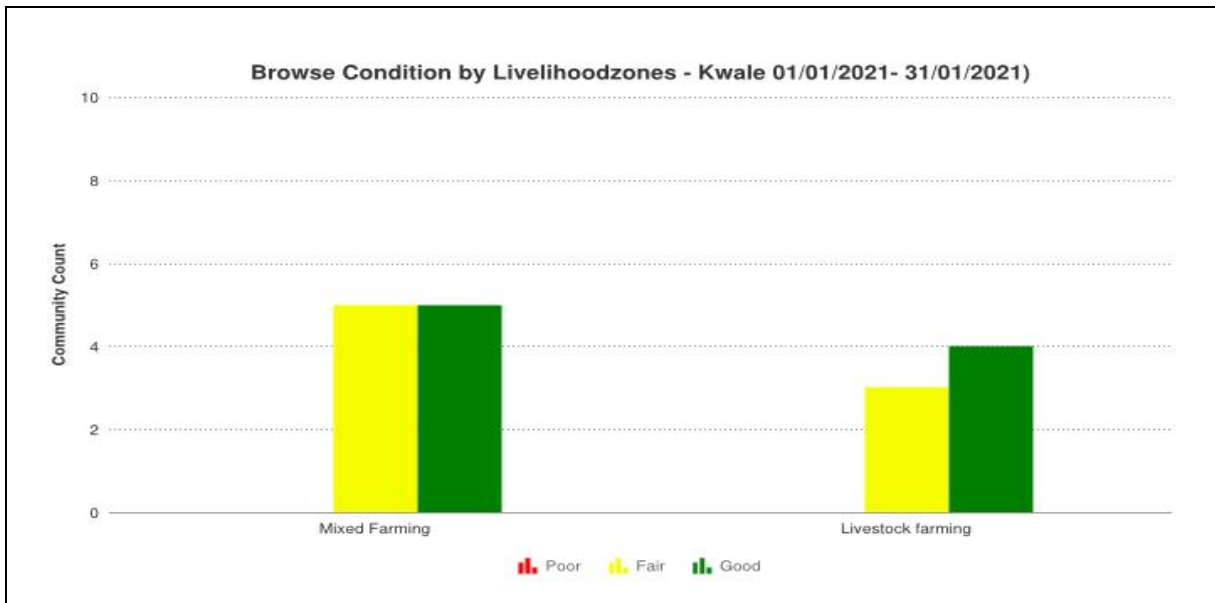




2.1.3 Browse

- Browse condition deteriorated in the county as approximately 33.3 percent of households had reported good condition in February compared with 52.9 percent in January.
- The worsened condition was also registered at livelihood zone level as shown in the two graphs below.

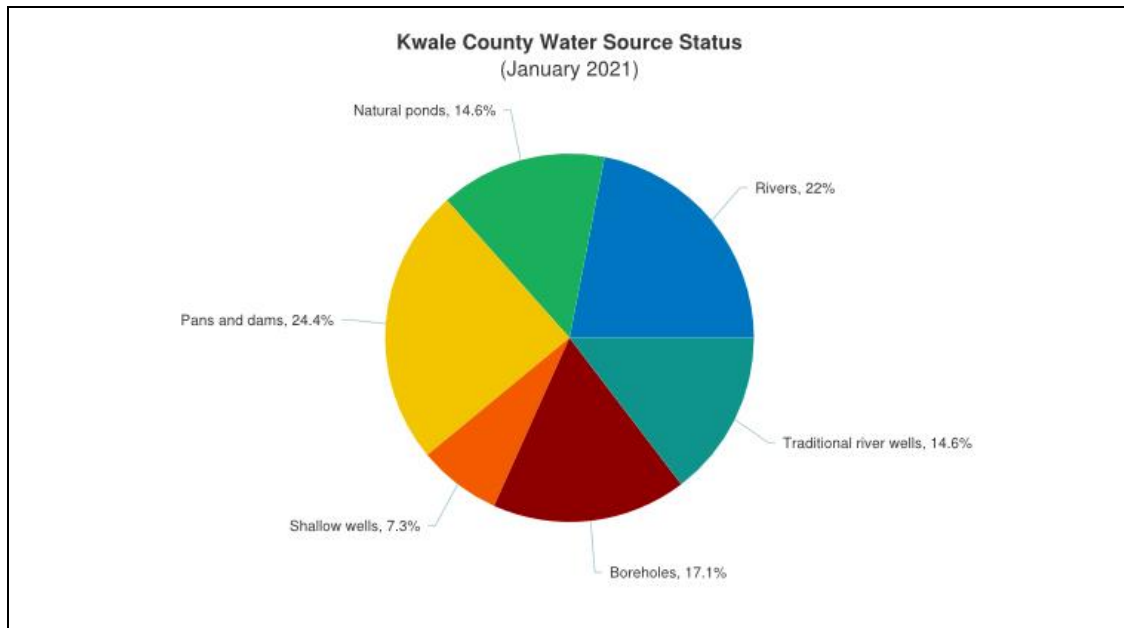




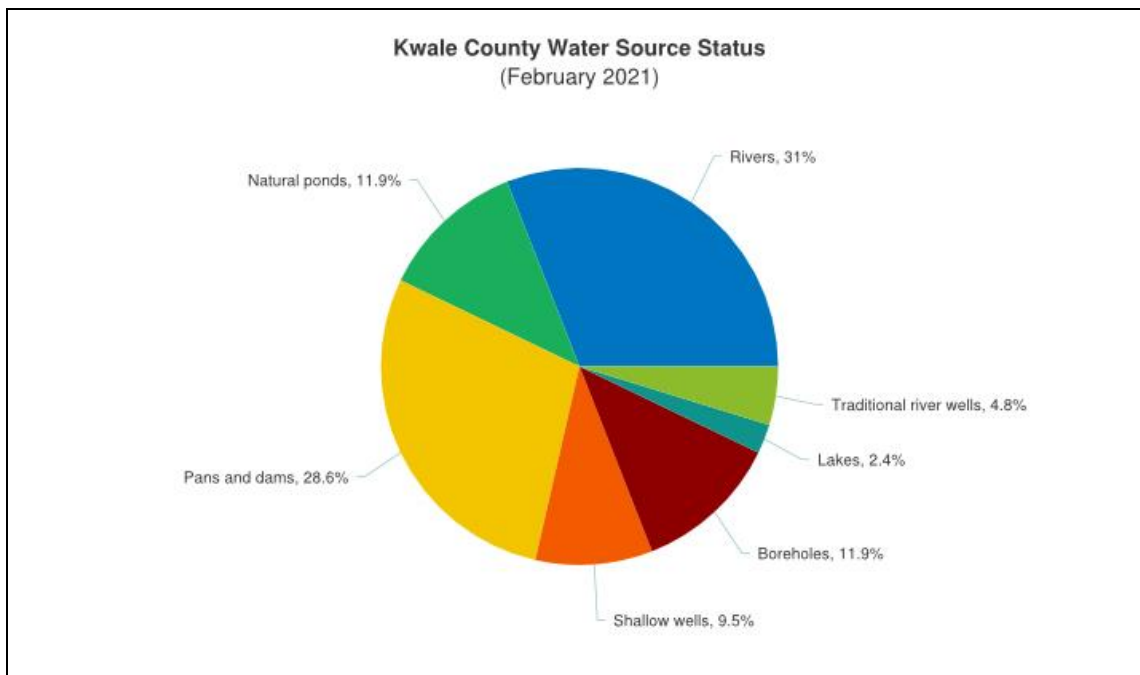
2.2 WATER RESOURCES

2.2.1 Sources

- Pans, dams, rivers, boreholes and natural ponds were the main sources of water for household use in February similar to last month as shown in the pie-charts below.
- The sources were normal for this time of the year.



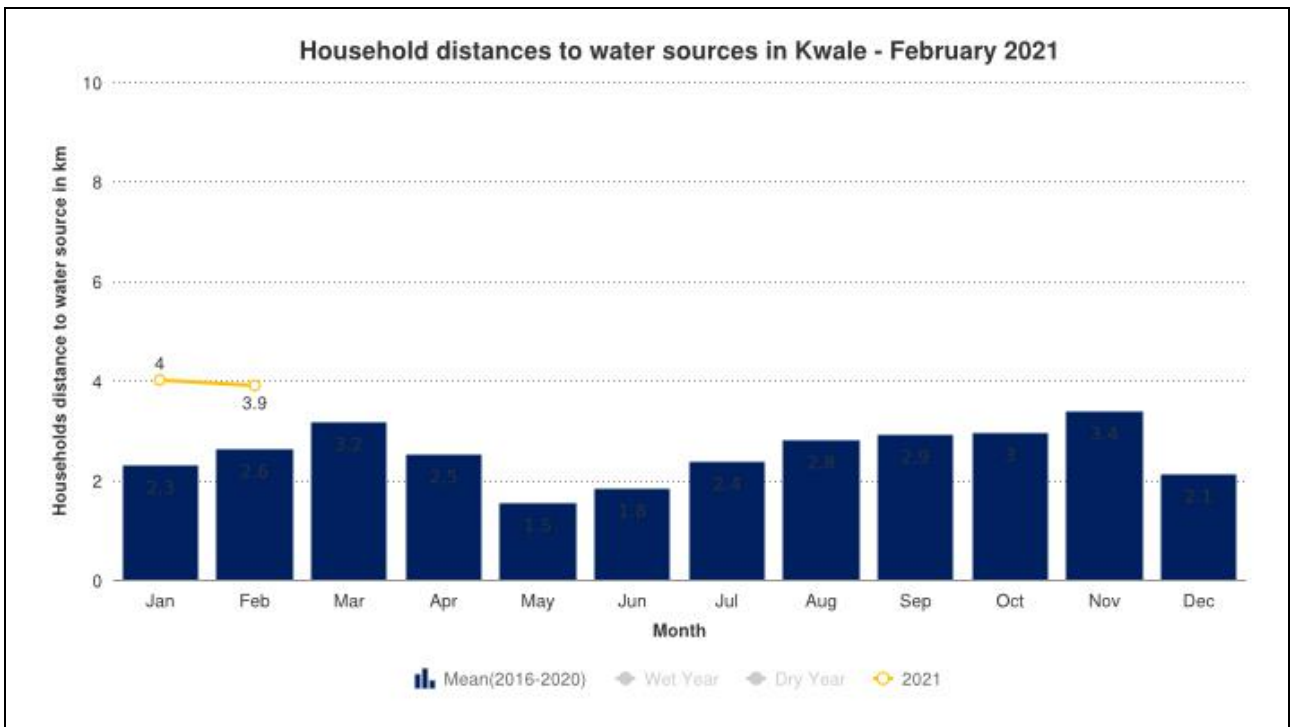
- The status of water resources was normal at index '5' (a description is provided in the table below) similar to last month which was normal for this time of the year.



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

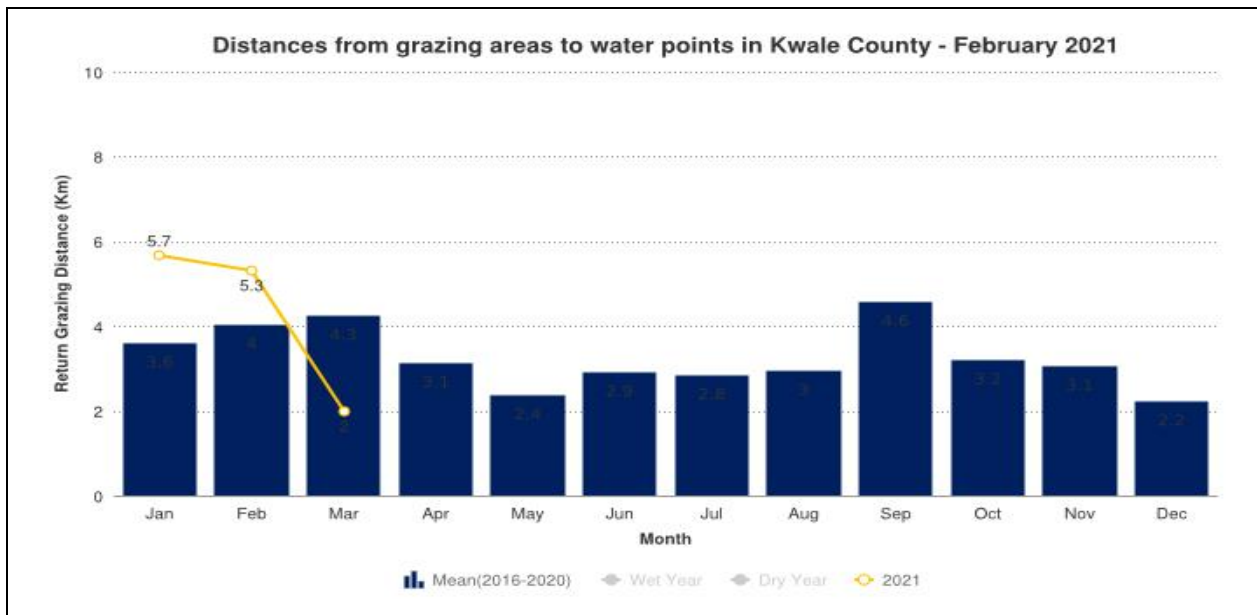
2.2.2 Household access and utilization

- Access to water for domestic consumption remained similar to last month as households had to walk an average of 3.9 km in February in comparison with 4.0 in January.
- The distance was longer than normal compared with the long-term average in the 2016-2020 LTA of 2.6 km as shown in the graph below.
- At livelihood zone level, households walked an average of 1.9 and 1.6 km in the livestock farming and mixed farming livelihood zones respectively.



2.2.3 Livestock access to water

- Access to water for livestock consumption remained relatively similar to January as livestock had to walk an average of 5.3 km in February to access water compared with 5.7 km last month.
- The distance walked was longer than normal in comparison with 4.0 km posted in the 2016-2020 LTA as shown in the figure below.
- The mixed farming livelihood zone posted the longest distance of 3.4 km while the livestock farming livelihood zone posted the shortest one at 2.0 km.

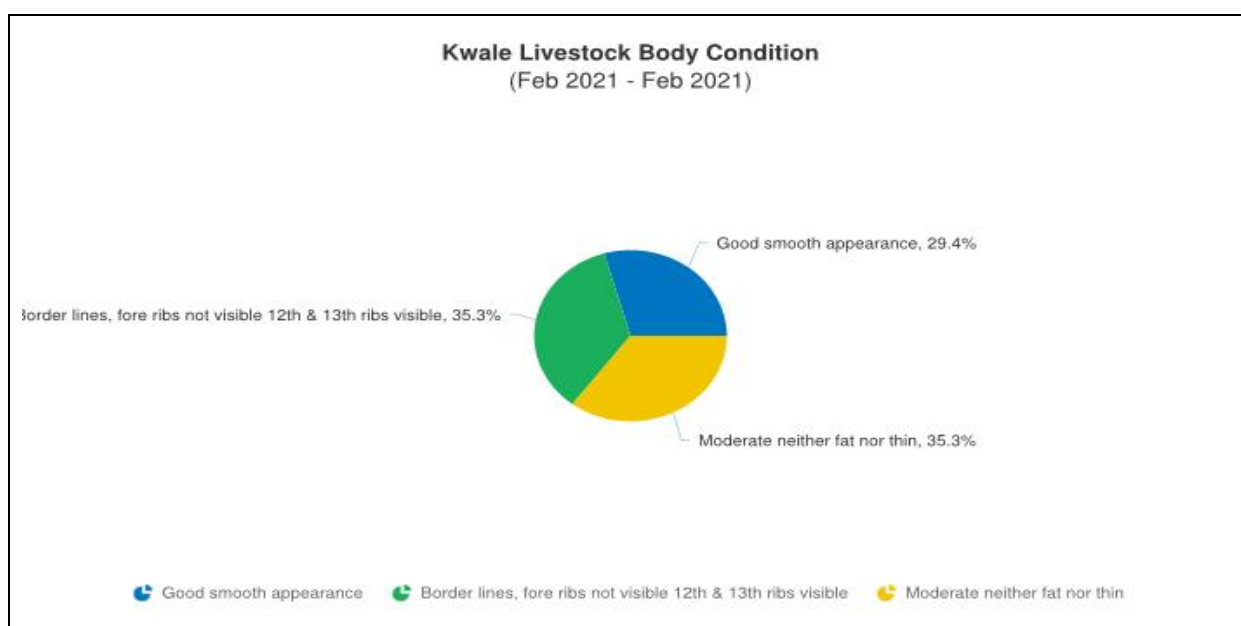


3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- The proportion of livestock in the normal body condition with a good smooth appearance (description provided in the table below) was 29.4 percent in February in comparison with 60 percent in January.
- The implication was that livestock body condition had deteriorated by approximately half this month.
- Livestock with moderate body condition were 35.3 percent in February similar to January's 33.3 percent while those with stressed body condition were 35.3 percent in February in comparison with 6.7 percent in January.
- The following chart shows the livestock body condition at county level for the month of February.



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

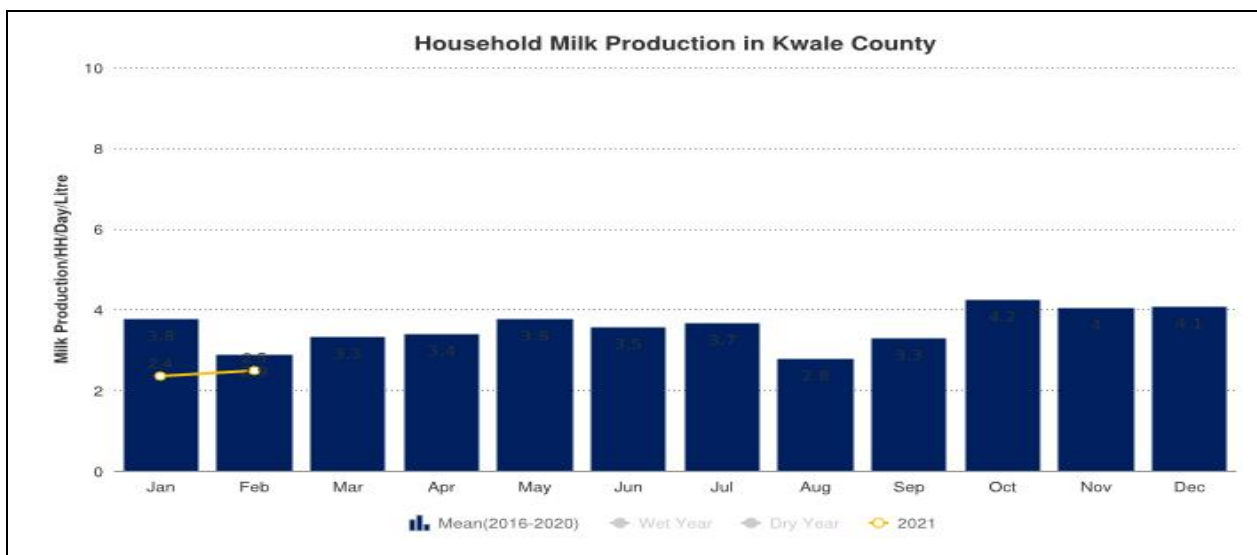
3.1.3 Livestock diseases

- There was a Foot and Mouth Disease and Lumpy Skin Disease outbreak in Mwereni Ward in Lunga Lunga Sub-county.

3.1.3 Milk Production

- Milk production averaged 2.5 litres per household this month similar to 2.4 litres recorded in January.

- The production was relatively similar to normal in comparison with 2.9 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

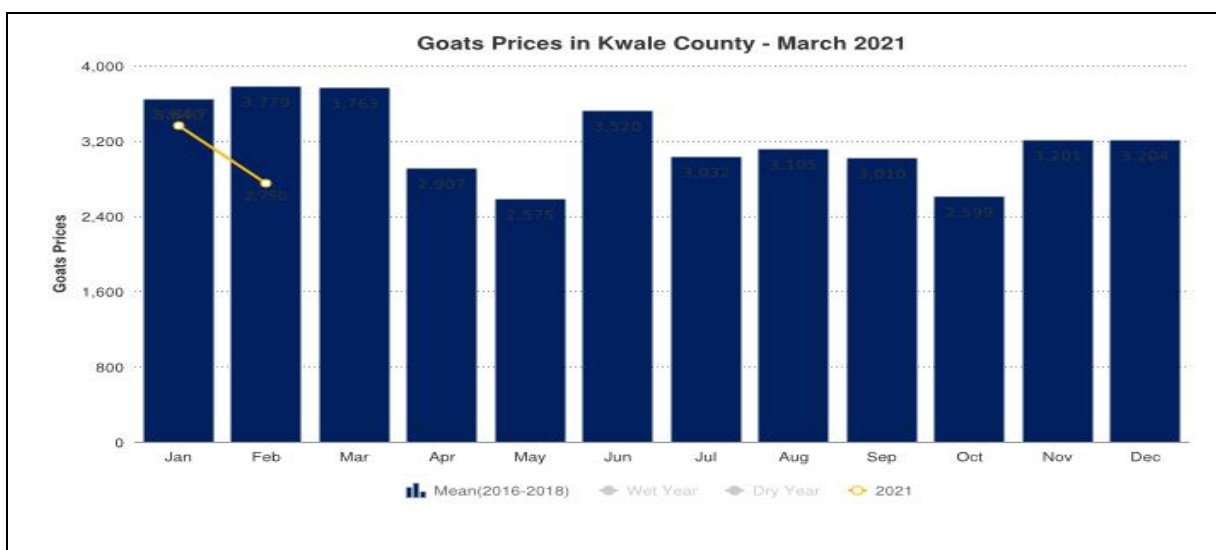
- Farmers were engaged in land preparation for the long rains season.
- Cowpeas and green grams were in the final harvesting stages.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Goat prices

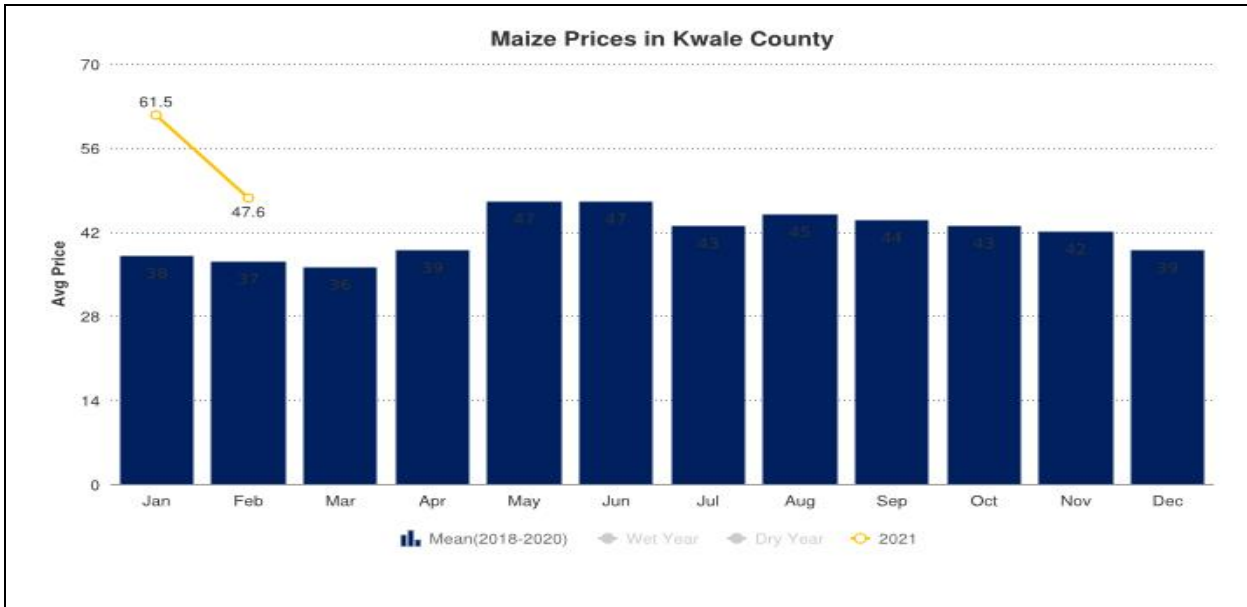
- The market price of a medium-sized three-year old buck was Kshs 2,750 in February having reduced by an 18.8 percent margin from Kshs 3,385.7 in January.
- The current market price was lower than normal by a 27.2 percent margin in comparison with Kshs 3,779 recorded in the 2016-2018 LTA.
- The graph below illustrates the trend in goat prices at county level.



4.2 CROP PRICES

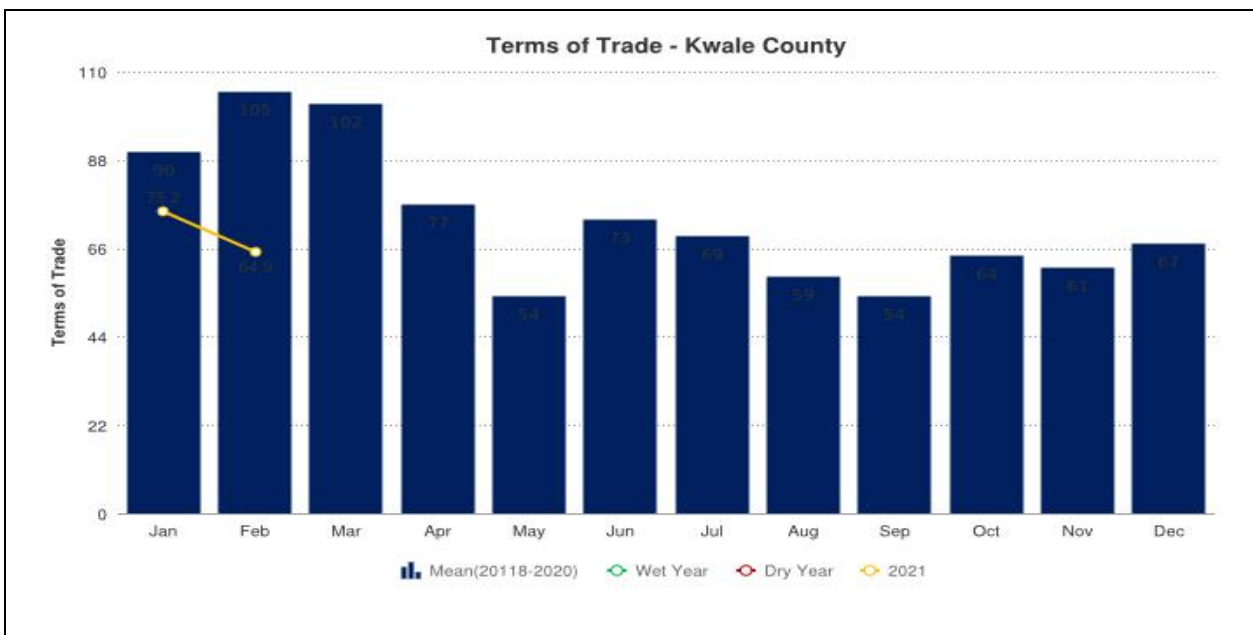
4.2.1 Maize

- The selling price of a kilogram of maize was Kshs 47.6 in February compared with Kshs 61.5 in January as shown in the graph below.
- The price was higher than normal by a 28.6 percent margin in comparison with Kshs 37.0 recorded in the 2018-2020 LTA.



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

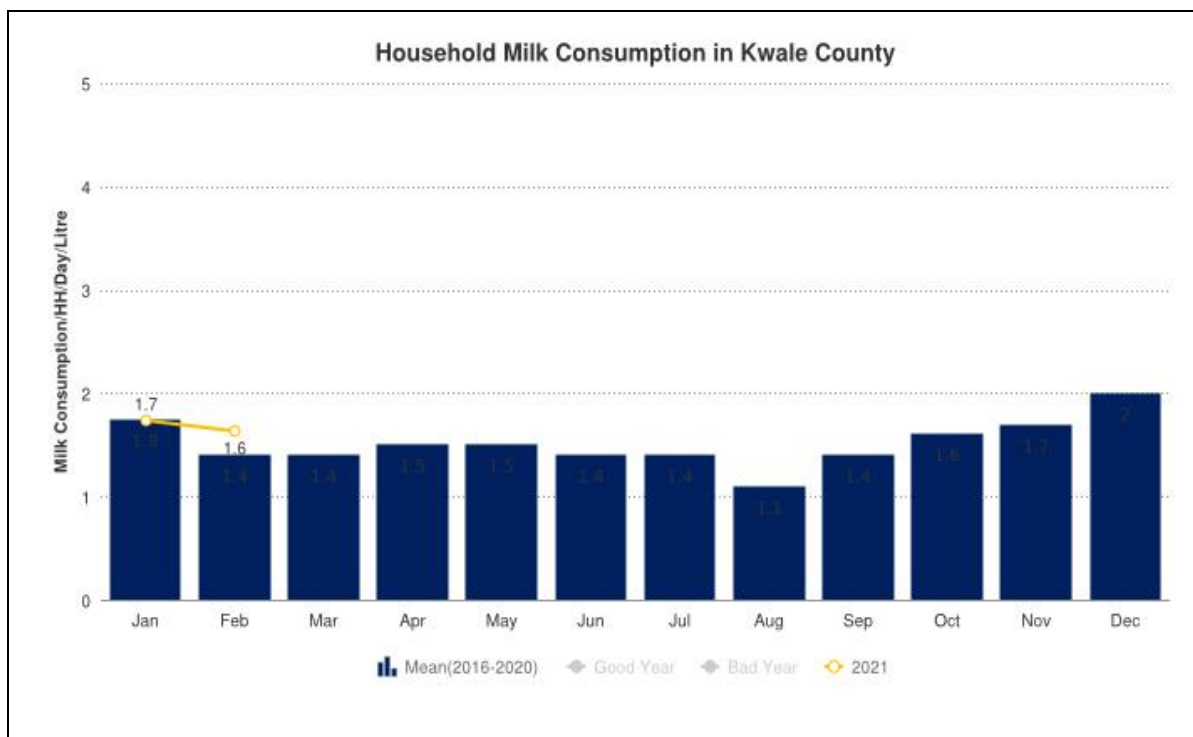
- The average ToT was estimated at 64.9 having reduced by a 13.7 percent margin from 75.2 recorded in January.
- The current ToT was lower than 105 recorded in the 2018-2020 LTA as shown in the graph below.
- The reduced ToT compared with last month and long-term average implied reduced household purchasing power this month and also compared with normal times.
- Households were therefore able to purchase a lesser quantity of maize from the proceeds of casual labour.



5.0 FOOD CONSUMPTION

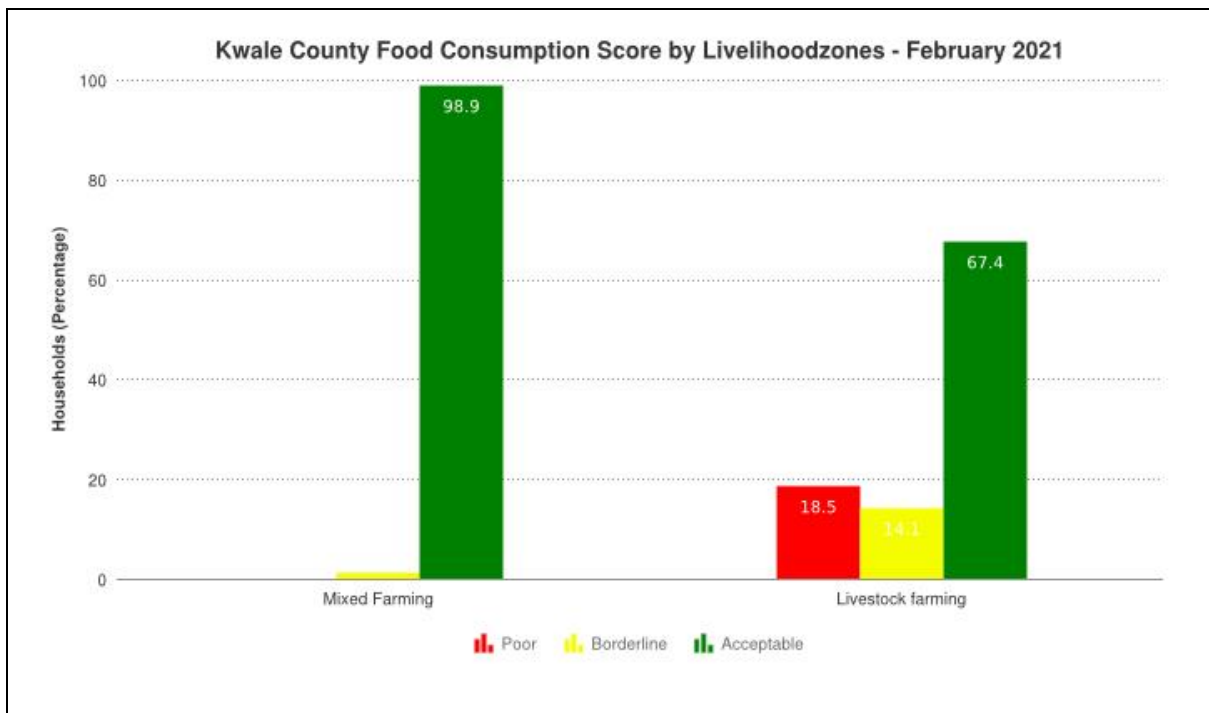
5.1 MILK CONSUMPTION

- Milk consumption remained stable at household level compared with last month as an average of 1.6 litres was consumed in February in comparison with 1.7 litres in January.
- It was also within seasonal ranges compared with 1.4 litres posted in the 2016-2020 LTA as shown in the graph below.



5.2 FOOD CONSUMPTION

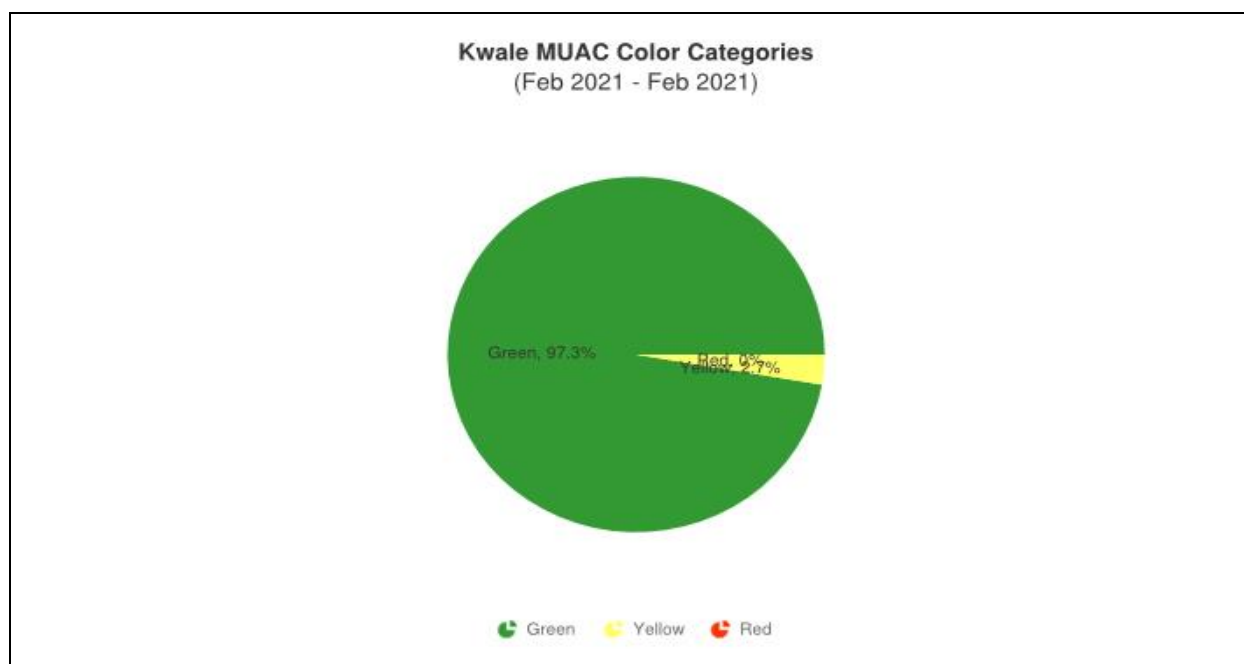
- An estimated 83.15 percent of households had acceptable food consumption this month at county level compared with 80.8 percent in January.
- Food consumption patterns with respect to food frequency, dietary diversity and nutritional value therefore remained relatively stable compared with last month.
- Households that had borderline and poor food consumption were approximated at 7.6 and 9.25 percent respectively in February.
- The following chart shows food consumption patterns at livelihood zone level where the mixed farming livelihood zone fared better than the livestock farming livelihood zone as it had a higher proportion with acceptable food consumption.



5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

- The proportion of children aged below five years at risk of malnutrition as determined by the mid-upper arm circumference was recorded at 2.7 percent in February compared with 2.8 percent in January.
- The nutritional status of children in this cohort had therefore remained relatively stable in comparison with last month.
- The pie-chart below shows the current nutritional status at county level for the month of February.



5.4 COPING STRATEGIES

- The county's average coping strategy index (rCSI) was recorded as 12.45 in February in comparison with 12.41 recorded in January.
- The index had therefore remained stable indicating that households had neither increased nor decreased their frequency or severity of consumption-based coping mechanisms to mitigate food gaps.
- The mixed farming livelihood zone recorded an index of 13.4 this month compared with 11.8 last month.
- The livestock farming livelihood zone posted an index of 11.5 in February in comparison with 13.0 in January.
- Therefore the index had also maintained a fairly stable trend at livelihood zone level too.

6. CURRENT INTERVENTION MEASURES

6.1 NON-FOOD INTERVENTIONS

○ Agriculture department of the County Government of Kwale

The department carried out the following interventions in February:

- Training of farmers on post-harvest management targeting maize and pulses.
- Training of farmers on agronomic practices
- Tractor ploughing has been done on 800 acres against a target of 6,000 acres.
- The department received the following farm inputs for distribution:
 - 26 No. motorized sprayers
 - 140 knapsack sprayers
 - 140 No. Personal Protective Equipment
 - 200 litres of Fall Army Worm pesticide.

○ Health and nutrition of the County Government of Kwale

- Growth monitoring for children aged below five years
- Vitamin A supplementation
- Folic acid supplementation for pregnant women.

○ Livestock department of the County Government of Kwale

- Distribution of 800 Galla goats to eight wards namely: Samburu/Chengoni, Kasemeni, Mwavumbo, Ndavaya, Kinango, Mwereni, Tsimba Golini and Mkongani Wards.

7. EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

- There were no reported cases of conflict, human displacement or insecurity reported in February.

7.2 Migration

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

8. RECOMMENDATIONS

- Vaccination against Foot and Mouth Disease (FMD) and Lumpy Skin Disease.
- Continue post-harvest management trainings and campaigns for maize and pulses harvested during the just concluded short rains season.