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

NOVEMBER 2020 EW FLAG

Drought Status: NORMAL

Shughuli za kawaida

Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Mixed Farming	Normal	Improving
Livestock Farming	Alert	Improving
County	Normal	Improving
Biophysical Indicators	**Value**	**Normal Range/Value**
VCI	35.92	35
State of Water Sources	5	5
Production indicators	**Value**	**Normal**
Crop condition (maize and legumes)	N/A	N/A
Milk Production (Litres)	3.0	4.1
Livestock Migration Pattern	No migration	No migration
Livestock deaths (from drought)	Zero deaths	Zero deaths
Access Indicators	**Value**	**Normal**
Terms of trade	93.9	42.5
Milk Consumption (litres)	1.7	1.9
Return distance to water sources for households (km)	3.3	3.4

Drought Situation & EW Phase Classification
Biophysical Indicators
- The first two dekads received above normal rainfall during the month.
- The vegetation condition index for November was normal for this time of the year implying normal vegetation greenness.
- However, the vegetation condition in the livestock livelihood zone showed a declining trend, with both Lunga Lunga and Kinango Sub-counties falling into the moderate vegetation deficit band of vegetation greenness.
- The state of water sources was normal for this time of the year.

Socio Economic Indicators (Impact Indicators)

Production indicators
- Farmers had started planting during the month and most of the crops were at germination stage
- Milk production was slightly below normal for this time of the year.
- No drought-related deaths or migration incidences were reported this month.

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

Seasonal Calendar

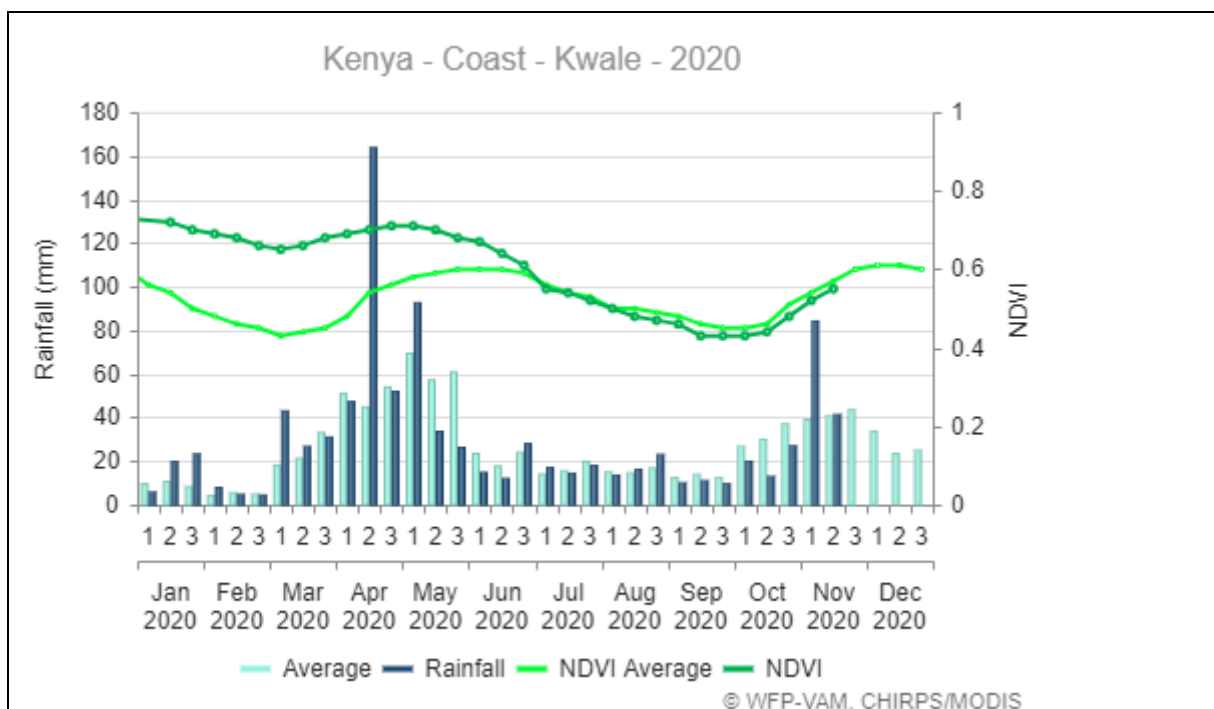| - Short rains harvests - Short dry spell - Reduced milk yields - Increased household food stocks - Land preparation	- Planting/weeding - Long rains - High calving rate - Milk yields increase	- Long rains harvests - A long dry spell - Land preparation - Increased household food stocks - Kidding (Sept)	- Short rains - Planting/weeding

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

1.1 RAINFALL PERFORMANCE

- The first and second dekads of the month received above normal amounts of rainfall of approximately 84.1 and 41.2 mm respectively compared with long-term averages of 39 and 40.3 mm in the respective dekads.
- Temporal and spatial distribution was fair as most parts of both livelihood zones recorded some rainfall during the three dekads.
- The chart below illustrates trends in rainfall performance for November.

2. IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

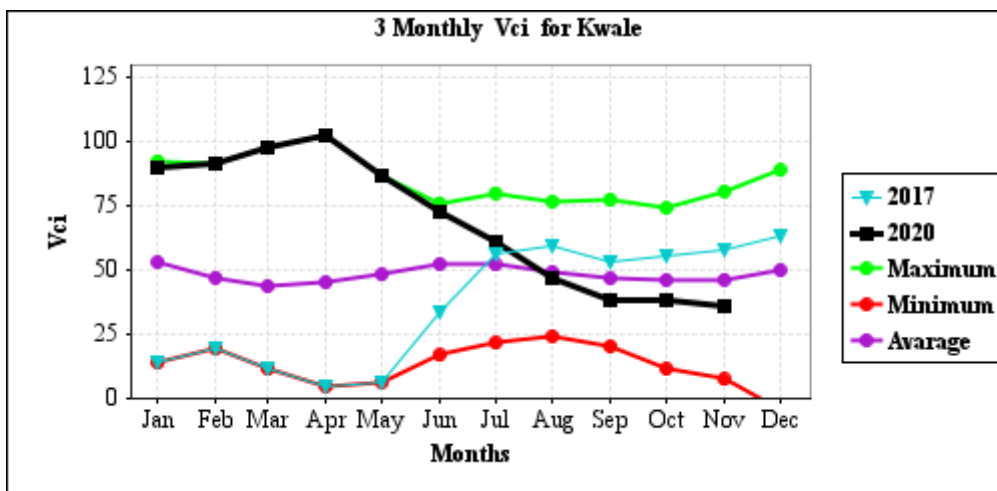### 2.1.1 3-monthly Vegetation Condition Index (VCI)

- The vegetation greenness in the county remained similar to last month and was in the 'normal vegetation greenness' band at 35.92 as shown in the table below.
- At livelihood zone level, there were some slight inter-zone variations. The mixed farming livelihood zone (comprising largely Matuga and Msambweni Sub-counties) was within the normal to above normal vegetation greenness while the livestock farming livelihood zone (comprising largely Kinango and Lunga Lunga Sub-counties) saw one sub-county fall into the moderate vegetation deficit band from normal vegetation greenness band recorded last month.
- Msambweni sub-county remained within the 'normal vegetation greenness' band, Matuga improved to 'above normal vegetation greenness' band, Lunga Lunga Sub-county remained in the 'moderate vegetation deficit' band, while Kinango sub-county also sliding into 'moderate vegetation deficit' band recording 33.84 down from 38.51 recorded last month as shown below;

Area	March 2020	April 2020	May 2020	June 2020	July 2020	August 2020	September 2020	October 2020	November 2020
Kinango Sub-county	106.65	105.45	90.87	74.06	59.41	46.1	38.82	38.51	33.84
Lunga Lunga Sub-County	94.14	97.3	86.23	73.97	59.65	40.52	29.27	28.4	30.71
Matuga Sub-county	90.54	96.54	75.85	65.2	66.97	56.27	47.78	48.91	50.75
Msambweni Sub-county	92.0	93.58	68.67	57.46	60.23	55.27	48.73	47.75	47.7
Kwale County	97.41	101.81	86.79	72.11	60.47	46.51	37.88	37.88	35.92

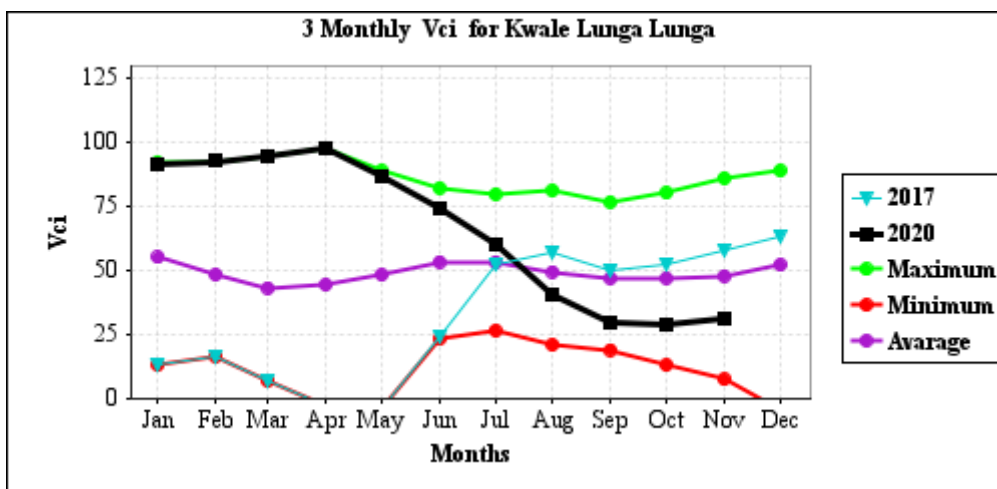KWALE COUNTY NOVEMBER 2020 DROUGHT EARLY WARNING BULLETIN

- According to the 1 monthly VCI, the county had declined from the normal vegetation greenness in the month of October into the moderate vegetation deficit band this month as shown in the indices below.

	1-monthly VCI(Sept. 2020)	1-monthly VCI (Oct. 2020)	1-monthly VCI (Nov. 2020)
Kwale	35.72	44.36	34.33
Kinango	35.51	45.45	30.65
Lungalunga	27	34.58	33.22
Matuga	47.66	55.29	48.78
Msambweni	49.75	50.28	46.45

- The graph below shows the general vegetation condition at county level which was slightly below the average for that time of the year.
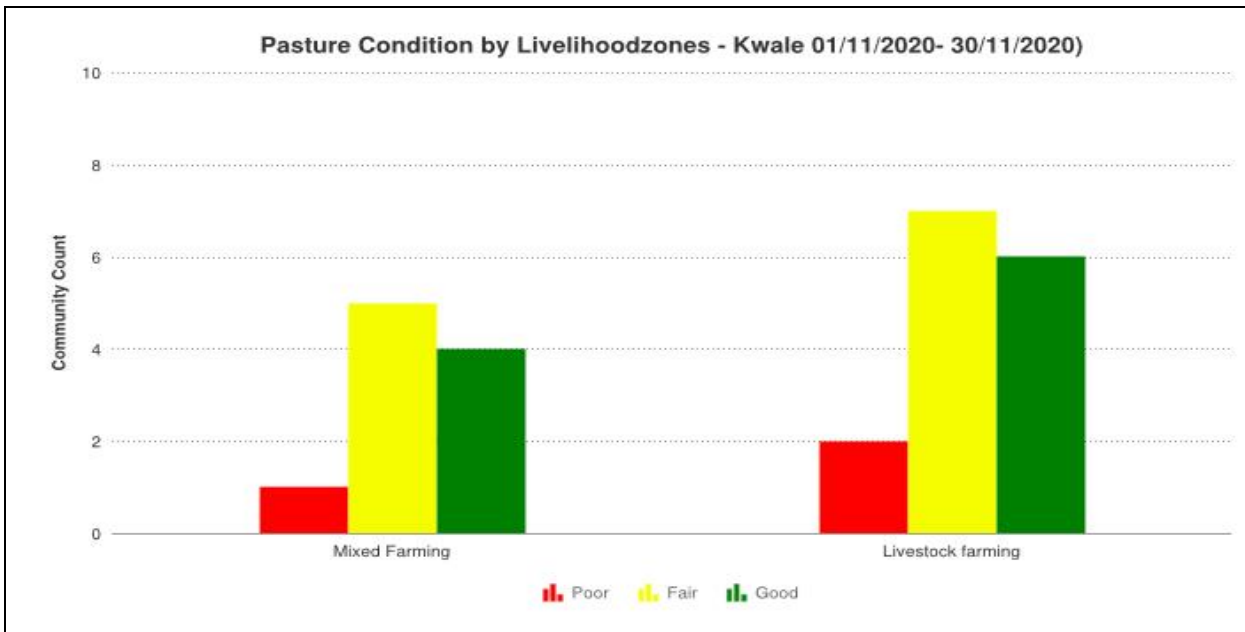

- The graph below shows the vegetation condition in Lunga Lunga Sub-county which indicates that the vegetation greenness remained in the 'moderate vegetation deficit' band and worse than the long term average.

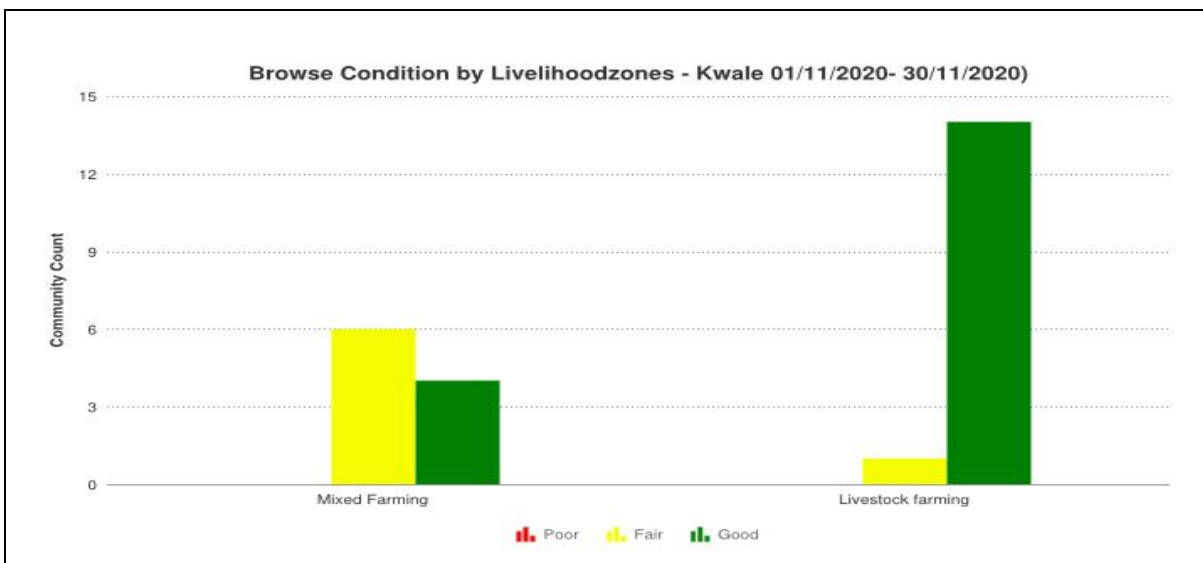KWALE COUNTY NOVEMBER 2020 DROUGHT EARLY WARNING BULLETIN

2.1.2 Pasture

- The pasture condition at the county level improved this month compared with last month as 40 percent of the households reported good condition while no households reported good pasture condition in last month.
- The percentage of households which reported poor pasture condition dropped to 12 from 78.6 percent reported in October.
- The improvement in pasture condition was also recorded at the livelihood zone level as shown in the graphs below.
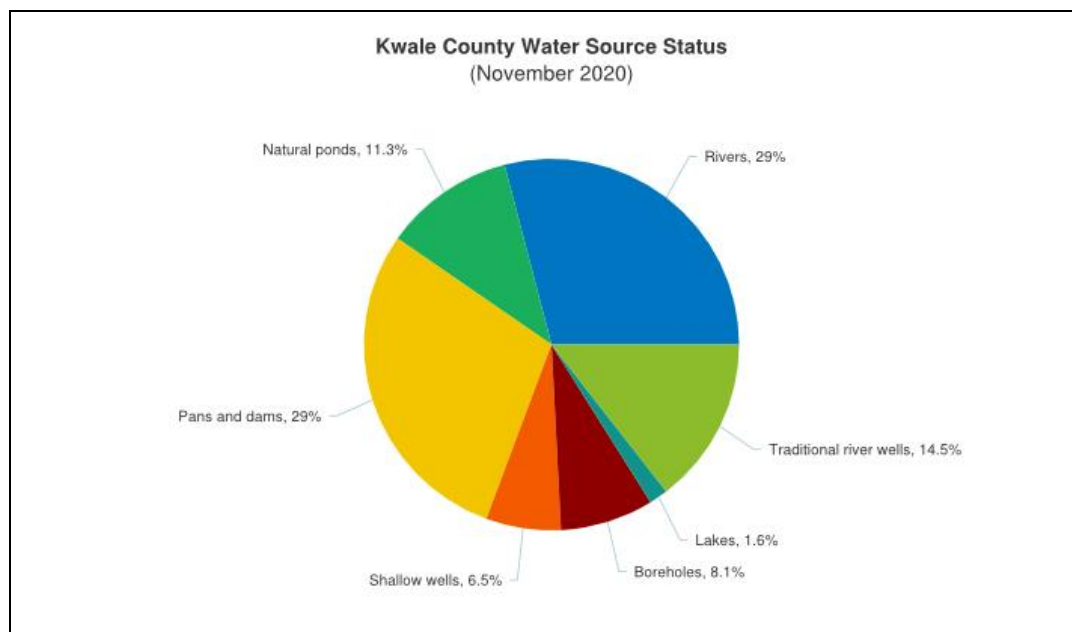

2.1.3 Browse

- The browse condition improved this month as approximately 72 percent of households reported good condition whereas no household reported good condition in the month of October.
- The improvement in browse condition was evident at livelihood zone level as shown in the graphs below.

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2.2 WATER RESOURCES
2.2.1 Sources
- Pans, dams and rivers were the major sources of water for domestic consumption this month similar to last month as shown in the pie-chart below.
- The sources were normal for this time of the year.

Kwale County Water Source Status
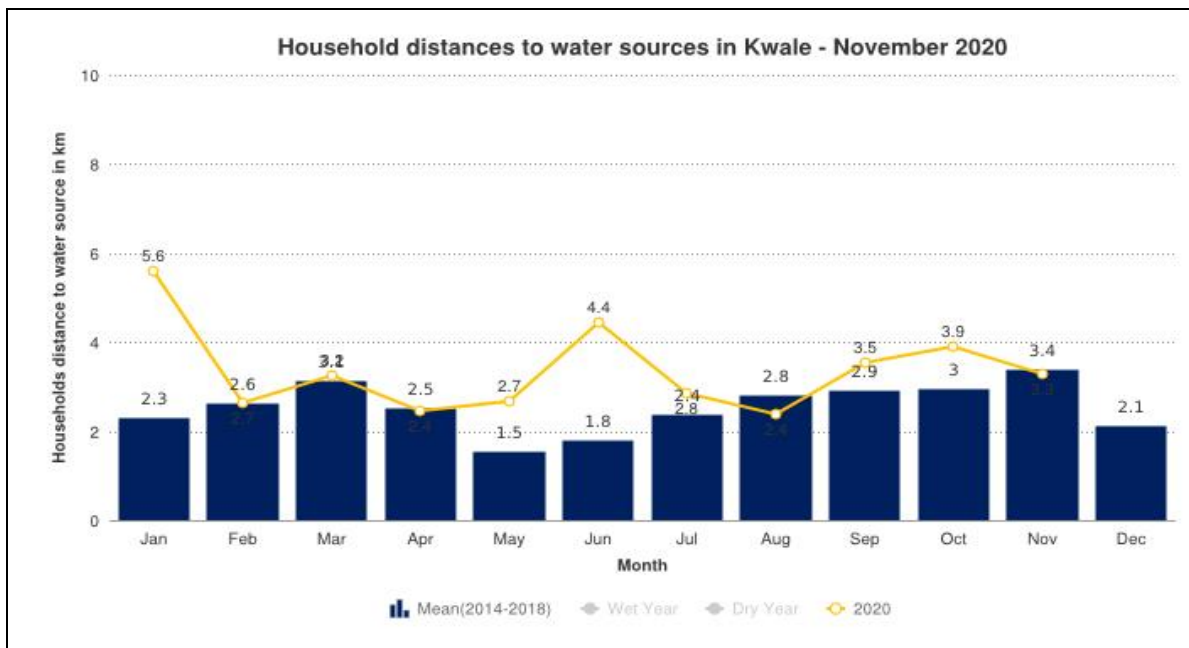(November 2020)

- 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.

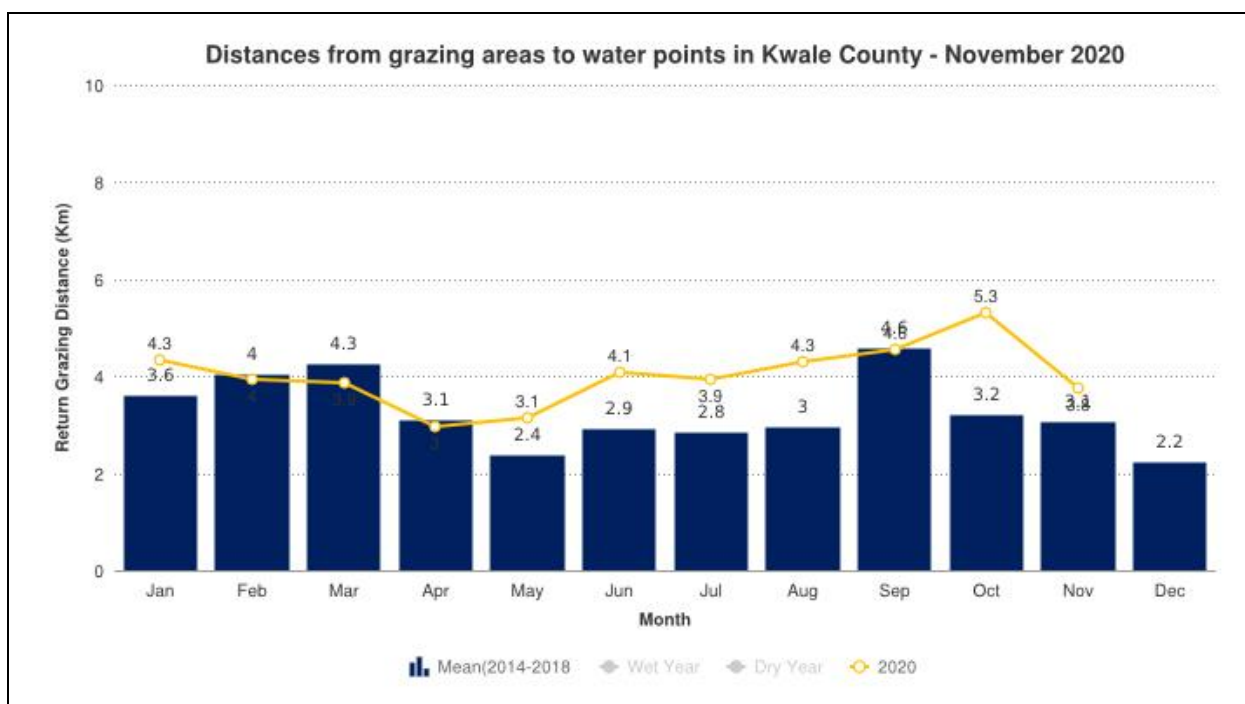| INDEX	STATUS OF WATER SOURCE	DESCRIPTION
1	EMERGENCY SITUATION	All main water sources have dried up; only few boreholes still yielding significant amounts
Z 2	STRONGLY INADEQUATE	Surface water sources have dried up while the underground water sources are yielding very little amounts of water. Breakages 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 household use improved this month compared with last month as households had to walk a shorter distance from 3.9 km last month to 3.3 km in November.

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- The distance was within the seasonal norms which was recorded as 3.4 km in the 2015-2019 LTA as shown in the graph below.
- The average distances recorded in the two livelihood zones were similar and on a declining trend. The livestock farming livelihood zone recorded an average distance of 1.4km compared with 1.9km in October while the mixed farming livelihood zone posted a distance of 1.4km compared with 1.7km last month.

Household distances to water sources in Kwale - November 2020

2.2.3 Livestock access to water
- Access to water for livestock use decreased as livestock had to walk an average distance of 3.8 km from grazing areas to water sources in November compared with 5.7 km in October.
- The distance was also longer than normal for this time of the year which was 3.1km as shown in the graph below.

Distances from grazing areas to water points in Kwale County - November 2020

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3.0 PRODUCTION INDICATORS

3.1   LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- The larger proportion of livestock in the county were in normal body condition band with good and smooth appearance this month while they were in the stressed band in October.
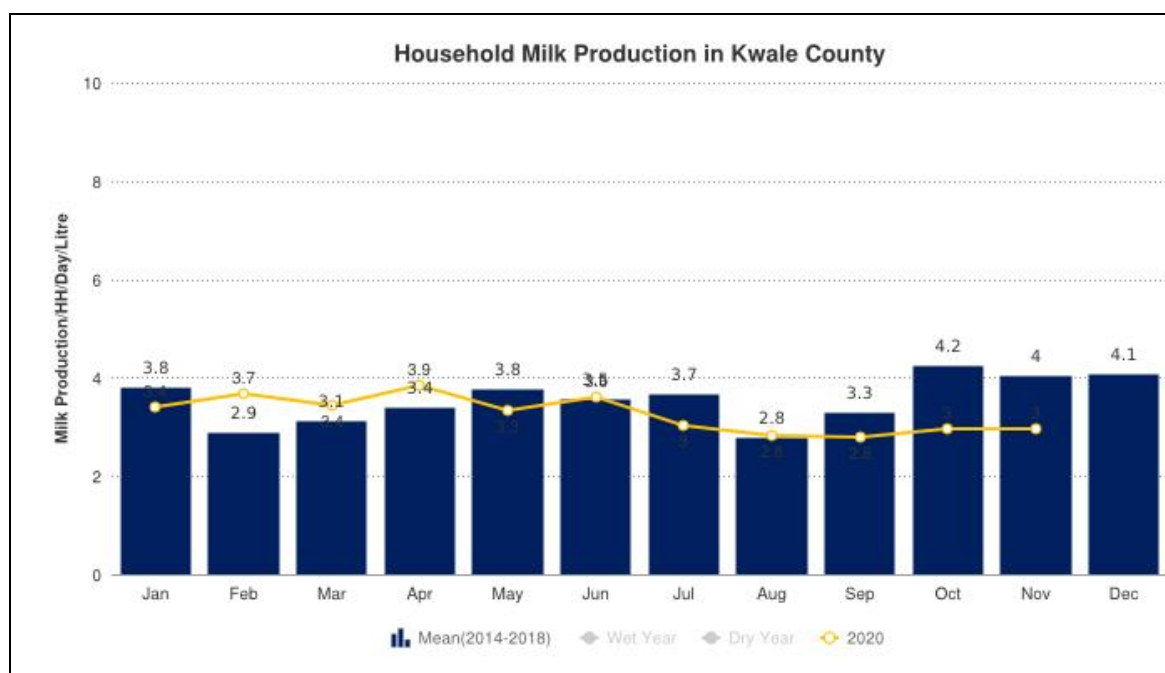- This condition was normal for this time of the year following the early warning classification below.

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

- No major livestock disease outbreaks were reported this month

3.1.3 Milk Production

- The average milk production this month was 3.0 litres which was similar to what was recorded in October.
- The production was slightly lower than normal compared with 4.1 litres recorded in the 2015-2019 LTA as shown in the graph below.

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3.2 RAIN-FED CROP PRODUCTION
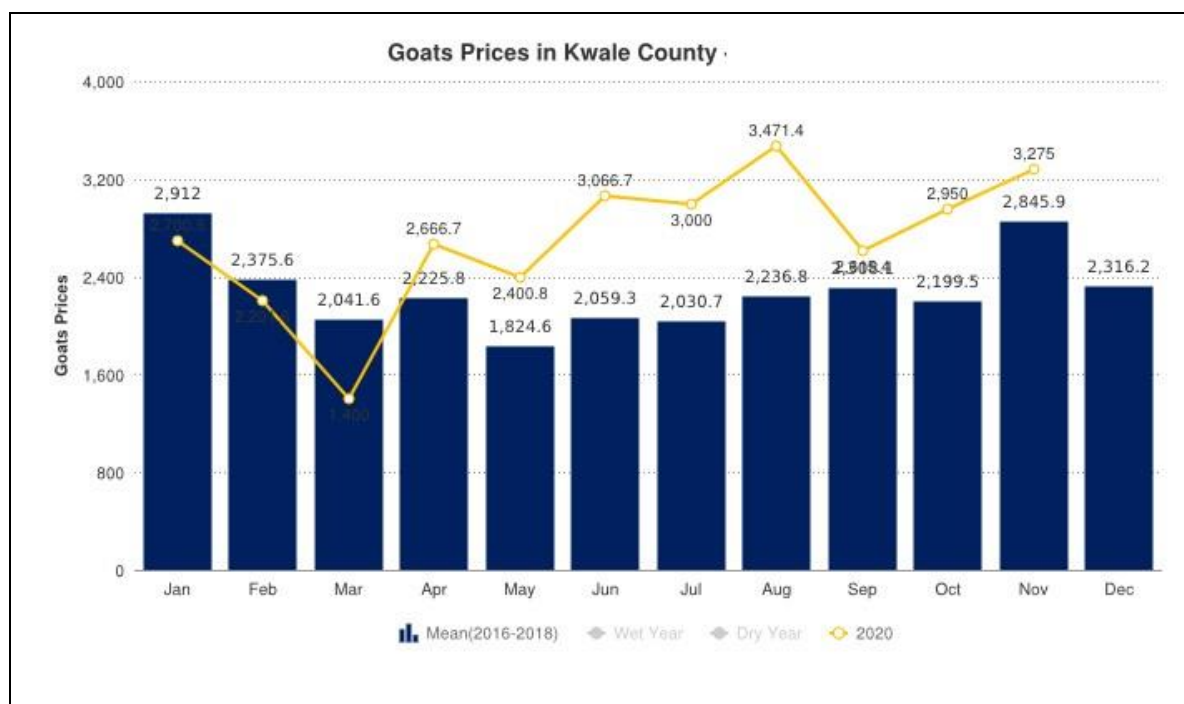### 3.2.1 Stage and condition of food crops
- Farmers had started planting with most of the crops at knee-high stage. A few farmers who planted early had their crops at tussling stage.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING
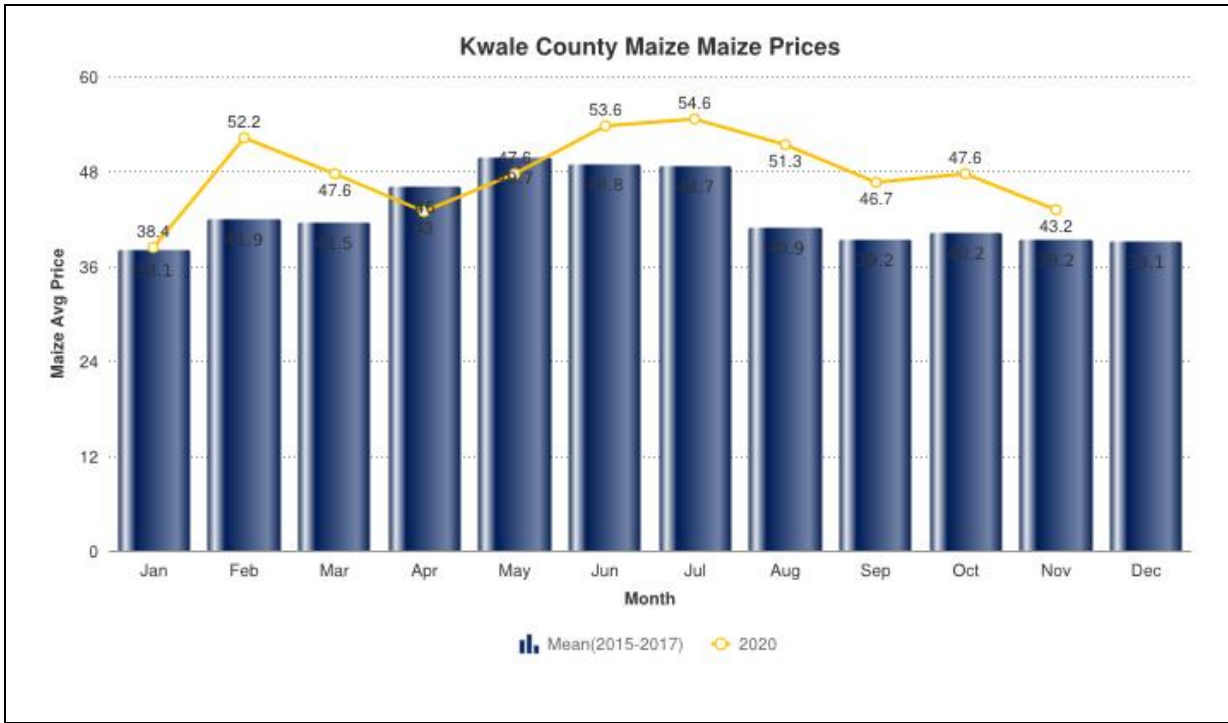
4.1.1 Goat prices
- The trading price of a medium-sized three-year old buck was Kshs 3,275 in November having increased from Kshs 2,950 recorded in October.
- The current price was above the normal price expected for this time of the year approximated at Kshs 2,845 recorded in the 2017-2019 LTA as shown in the graph below.
- The current good browse and body condition of goats could have contributed to the competitive market price posted.

Goats Prices in Kwale County
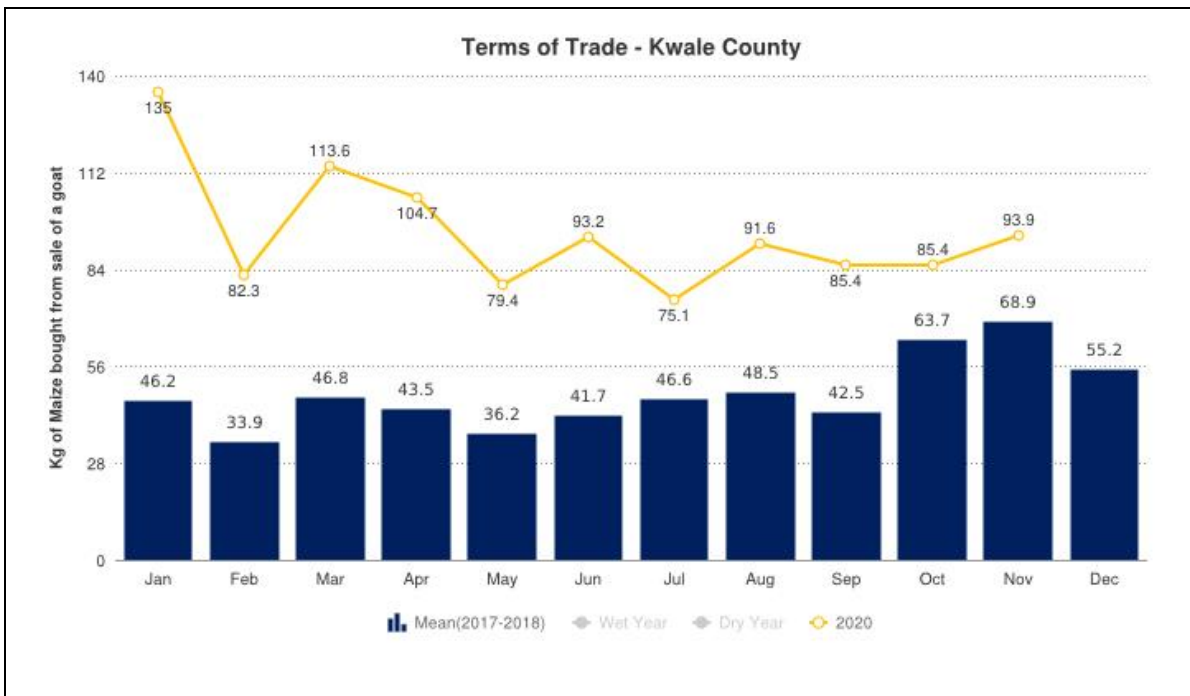
4.2 CROP PRICES
4.2.1 Maize
- A kilogram of maize was selling at Kshs 43.2 in November having slightly decreased from Kshs 47.6 posted in October.
- The price was within seasonal norms compared with Kshs 39.2 posted in the 2017-2019 LTA as shown in the graph below.

Kwale County Maize Maize Prices

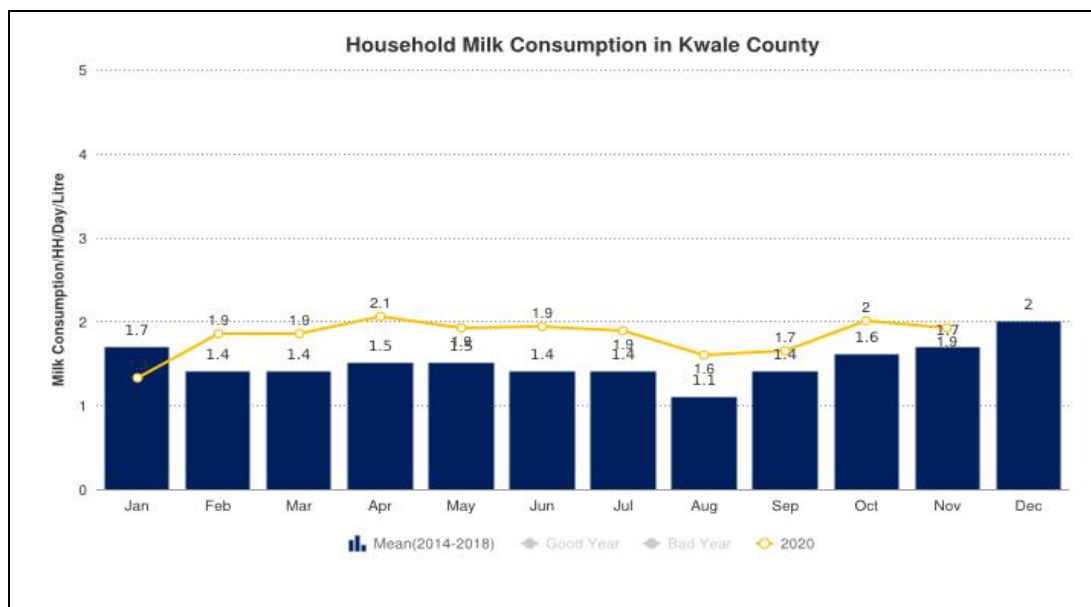## 4.3 TERMS OF TRADE (ToT) - CASUAL LABOUR VERSUS MAIZE PRICES

- The ToT averaged 93.9 in November having increased from 85.4 recorded in October.
- The current ToT was higher than expected at this time of the year as shown in the graph below.
- The increase in the ToT and the above-average trend implied increased purchasing power at household level compared with last month and normal times.
- Households were therefore able to purchase a higher quantity of maize from the proceeds of casual labour this month and compared with normal times.

Terms of Trade - Kwale County

5.0 FOOD CONSUMPTION

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5.1 MILK CONSUMPTION

▪ Milk consumption at household level remained relatively similar at an average of 1.7 litres this month as compared to 2.0 litres in the month of October.
▪ It was also within seasonal norms of 1.9 litres recorded in the 2015-2019 LTA as shown in the graph below.

Household Milk Consumption in Kwale County

5.2 FOOD CONSUMPTION SCORE

▪ Approximately 78 percent of households were in acceptable food consumption category compared to 73 percent of household recorded in October.
▪ In addition, 12 percent and 10 percent of households had poor and borderline food consumption respectively
▪ The implication was therefore that food consumption patterns had improved compared with the previous month with respect to food frequency, nutritional value and dietary diversity.

5.4   COPING STRATEGIES

▪ The county's aggregate coping strategy index (rCSI) was recorded as 15 in November having remained fairly stable compared with 16.5 recorded in October.
▪ The livestock farming livelihood zone recorded the least index at 14.8 which indicated a slight increase from 13 last month.
▪ The mixed farming livelihood zone recorded the highest index at 15.2 having decreased from 20 recorded in October.

6.   CURRENT INTERVENTION MEASURES

6.1   NON-FOOD INTERVENTIONS

o **Agriculture department**
   The department undertook the following interventions in November:
▪ Training of farmers on good agricultural practices (GAP)
▪ Installation of solar pumping system at Nyalani Irigation Scheme in Kinango Sub County
▪ Distribution of 5300 coconut and 3200 cashewnut seedlings to farmers

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o **Veterinary department**
- Disease surveillance and control.

7. EMERGING ISSUES

7.1   Insecurity/Conflict/Human Displacement

▪ No cases of insecurity, human displacement or conflict were recorded in November.

7.2   Migration

▪ No migration incidences were reported in November

8.   RECOMMENDATIONS

▪ Monitoring of the rainfall situation to identify isolated areas which may not have experienced the onset of the short rains
▪ Heighten Covid-19 prevention guidelines and measures across the county.