National Drought Management Authority
KWALE COUNTY
DROUGHT EARLY WARNING BULLETIN SEPTEMBER 2019

SEPTMBER 2019 EW FLAG

Early Warning (EW) Phase Classification

<table>
<thead>
<tr>
<th>Livelihood Zone</th>
<th>Phase</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed Farming</td>
<td>Normal</td>
<td>Stable</td>
</tr>
<tr>
<td>Livestock Farming</td>
<td>Normal</td>
<td>Deteriorating</td>
</tr>
<tr>
<td>County</td>
<td>Normal</td>
<td>Deteriorating</td>
</tr>
</tbody>
</table>

Biophysical Indicators

- VCI: 47.77 (>50)
- State of Water Sources: 5/5

Production indicators

- Crop Condition (maize and legumes): 2 – moderate (livestock farming and mixed farming livelihood zones)
- Milk Production (Litres): 3.9 (3.3)
- Livestock Body Condition: No migration
- Livestock Migration Pattern: No migration
- Livestock deaths (from drought): Zero deaths

Access Indicators

- Terms of trade (casual labour to maize): 31.9 (42.5)
- Milk Consumption (litres): 1.4 (1.4)
- Return distance to water sources for households (km): 4.6 (2.9)
- Utilization Indicators: Nutrition Status, MUAC (% at risk of malnutrition): 10.0 (6.3)

Drought Situation & EW Phase Classification

**Biophysical Indicators**

- Normal rains were received during the month under review.
- The VCI for the month was below-average for this time of the year.
- The state of water sources was normal for this time of the year.

**Production indicators**

- Livestock body condition remained normal and at the moderate early warning classification similar to August.
- Milk production was slightly above-normal during the month.
- No migration was reported this month.
- No drought-related deaths were recorded this month.

**Access indicators**

- Terms of trade (casual labour to maize) were 25 percent below-normal implying reduced purchasing power at household level compared with normal times.
- Milk consumption was within seasonal norms in September.
- Distances to watering points for domestic consumption were above-normal in September.

**Utilization Indicators**

- The prevalence of children at risk of malnutrition was above-average for this time of the year implying a deteriorated nutritional status for children aged below five years compared with normal times.

Seasonal Calendar

- Short rains harvests
- Short dry spell
- 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

<table>
<thead>
<tr>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
</table>
1.1 RAINFALL PERFORMANCE

- All dekads in September received normal rainfall amounts for this time of the year as shown in the diagram below.
- The temporal distribution was good as all dekads received rains during the month while the spatial distribution was even as both livelihood zones recorded some rains.
- The showers being experienced in the county were still on-going up to the end of the month.

![Rainfall Diagram](image)

2. IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- There was a marginal decline in the county’s vegetation condition as the 3-monthly VCI decreased from 54.23 in August to 47.77 in September.
- However, despite the decrease in vegetation greenness, the county was still categorized in the ‘normal vegetation greenness’ band similar to last month.
- The decline was also recorded in the livestock farming livelihood zone which comprises largely Kinango and Lunga Lunga Sub-counties, which had posted indices of 52.14 and 56.23 respectively in August in comparison to 42.62 and 50.62 respectively in September.
- The VCI remained stable in Matuga Sub-county from 59.56 in August to 60.97 in September. However, it increased slightly in Msambweni Sub-county from 55.89 in August to 61.78 in September.

2.1.2 Pasture

- There was a slight deterioration in pasture condition this month in comparison to last month as 33.3 percent of the households in the county reported poor condition this month compared with 28.6 percent in August.
- The deterioration was also evident at livelihood zone level as shown in the graphs below. The livestock farming livelihood zone was far off in pasture condition in comparison to the mixed farming one.
2.1.3 Browse

- Browse condition deteriorated this month as approximately only 5.6 percent of households reported good condition in September compared with 33.3 percent in August.
- The deterioration was also evident at livelihood zone level as shown in the graphs below.

- Browse condition was poorer in the livestock farming livelihood zone compared with the mixed farming one similar to last month.
2.2 WATER RESOURCES

2.2.1 Sources
- Shallow wells, rivers, pans and dams were the major water sources for household consumption in September similar to August.
- The other major water sources during the month were as shown below.

- The status of water sources was 5 implying that the water availability was normal for this time of the year as described in the table below.

<table>
<thead>
<tr>
<th>INDEX</th>
<th>STATE OF WATER SOURCE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EMERGENCY SITUATION</td>
<td>All main water sources have dried up; only few boreholes still yielding significant amounts</td>
</tr>
<tr>
<td>2</td>
<td>STRONGLY INADEQUATE</td>
<td>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</td>
</tr>
<tr>
<td>3</td>
<td>INADEQUATE</td>
<td>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</td>
</tr>
<tr>
<td>4</td>
<td>DECLINING</td>
<td>The water availability is below normal for the period</td>
</tr>
<tr>
<td>5</td>
<td>NORMAL</td>
<td>The water availability is normal for the period</td>
</tr>
<tr>
<td>6</td>
<td>GOOD</td>
<td>The water availability is above normal for the period</td>
</tr>
</tbody>
</table>
2.2.2 Household access and utilization
- The distance walked by households to water points remained relatively similar to last month at 4.6 km in September compared with 4.0 km in August.
- However, the distance was higher than expected for this time of the year as show in the graph below.

2.2.3 Livestock access to water
- There was a 21.7 percent increase in the distance livestock walked from grazing areas to watering points from 4.6 km in August to 5.6 km in September as shown in the graph below.
- The distance was also higher than average in comparison to the 2014-2018 LTA by a similar margin implying that livestock had to walk longer than normal distances to access water.

3.0 PRODUCTION INDICATORS
3.1 LIVESTOCK PRODUCTION
3.1.1 Livestock Body Condition
- The livestock body condition remained good in September similar to August.
- The early warning classification was moderate implying neither fat nor thin as described in the table below which was normal for this time of the year.
### 3.1.2 Milk Production
- Cattle were the main producers of milk this month similar to last month and at this time of the year.
- Milk production was estimated at 3.9 litres this month indicating a reduction by a 23.5 percent margin in comparison to 5.1 litres recorded last month.
- The reduction in production could be attributed to the deteriorated pasture condition in addition to the increased distances to pastoral resources of pasture and water compared with last month.
- However, despite the reduction compared with last month, it maintained a higher-than-average trend in comparison with the 2014-2018 LTA recorded at 3.3 litres as shown in the graph below.

![Milk production - Kwale County](image)

### 3.2 RAIN-FED CROP PRODUCTION
#### 3.2.1 Stage and condition of food crops
- The food crops normally grown in the county include maize, cowpeas and green grams. Currently there are no food crops in the farms because the season is yet to begin next month. The major on-farm activity this month was land preparation.

### 4.0 MARKET PERFORMANCE
#### 4.1 LIVESTOCK MARKETING
##### 4.1.1 Goat prices
• A medium-sized three-year old buck was retailing at Kshs 4775 in September having increased by 24.6 percent from Kshs 3833 in August as shown in the graph below.
• The current price was slightly more than double that expected at this time of the year compared with the 2016-2018 LTA at Kshs 2308.1.

4.2 CROP PRICES
4.2.1 Maize
• The average selling price for a kilogram of maize was Kshs 48.1 in September having maintained a stable trend from Kshs 50.9 recorded in August.
• The price was 22.7 percent higher than average compared with Kshs 39.2 in the 2016-2018 LTA as shown in the graph below.
• Maize prices had maintained a higher-than-average trend due to the high demand of the commodity as the last season crop had failed and stocks at household level had been depleted.

4.3 TERMS OF TRADE (ToT) - CASUAL LABOUR VERSUS MAIZE PRICES
• The ToT remained almost similar to last month at 31.9 in September compared with 34.2 last month.
• However, they were lower by a 25 percent margin compared with 42.5 in the 2017-2018 LTA as shown in the graph below.
• The implication was that households were purchasing a similar amount of maize this month compared with August although the amount was lower than expected for this time of the year.
5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION
- A stable trend was recorded in average milk consumption at household level from 1.2 litres in August to 1.4 litres in September.
- The average milk consumption was also within seasonal norms of 1.4 litres recorded in the 2014-2018 LTA as shown in the graph below.

5.2 FOOD CONSUMPTION SCORE
- The mean food consumption score for the county in September was 38.0 having maintained a stable trend from 38.9 recorded in August. The implication was that food frequency, dietary diversity and nutritional value of food consumed had remained stable.
- The highest score was recorded in the mixed farming livelihood zone at 45.3 having reduced slightly from 47.4 recorded in August.
- The lowest score was posted in the livestock farming livelihood zone at 30.7 this month having maintained a stable trend from 30.1 recorded last month.
- The proportion of households who reported a poor food consumption score increased in both livelihood zones this month in comparison with last month as shown in the graphs below.
- The implication was slight increases in food consumption gaps at livelihood zone level.
5.3 **HEALTH AND NUTRITION STATUS**

5.3.1 Nutrition Status

- The proportion of children at risk of malnutrition as determined by the mid-upper arm circumference method was estimated at 10.0 percent this month having reduced by 21.9 percent from 12.8 percent posted in August.
- The current proportion was slightly above that expected at this time of the year at 6.3 percent in the 2014-2018 LTA as shown in the graph below.
• With the proportion having reduced marginally compared with last month, the implication was that the nutritional status of children had improved slightly in comparison with August.

5.4 COPING STRATEGIES
• The aggregate coping strategy index (CSI) in the county averaged 14.1 this month compared with 16.1 recorded in August implying a stable trend.
• The highest index was recorded in the mixed farming livelihood zone at 14.6 while the least was posted in the livestock farming livelihood zone at 13.5.
• It had slightly reduced in both livelihood zones from 15.8 in the former and 16.3 in the latter, implying that households were employing consumption-based coping strategies less frequently and of less severity.

6. CURRENT INTERVENTION MEASURES

6.1 NON-FOOD INTERVENTIONS
  o Agriculture department
    - National Agricultural and Rural Inclusive Growth Project (NARIGP) funded by the World Bank that aims to enhance profitability and productivity carried out the following interventions in September:
      • Members of the Community-Driven Development Committees from several wards were trained on monitoring and evaluation, finance and procurement procedures in preparation for implementation of identified micro-projects.
  o Nutrition department
    • The department carried out routine activities including distribution of therapeutic/supplementary food, vitamin A supplementation, health and nutrition education programs and growth monitoring for children aged below five years.

7. EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement
• No cases of human displacement, conflict or insecurity was reported in the month of September.

7.2 Migration
• No migration was reported during the month under review.

7.3 FOOD SECURITY PROGNOSIS
With households having depleted food stocks from the just concluded failed season, reliance on markets was quite high this month having coincided with higher-than-average maize prices alongside below-average terms of trade. With below-normal purchasing power, households are currently having constrained food access that have led to increased food gaps. The situation is further compounded by the deteriorating condition and decreasing availability of pastoral resources such as browse, water and pasture. However, the meteorological department forecasted an above-average rainfall performance for the short rains season that will likely improve the forage condition. In addition, the start of the season will spur on-farm activities such as land preparation which will avail casual labour opportunities to even poor households. Therefore, although some food consumption gaps exist during the month under review, increased food access will likely reduce them from next month and households will likely engage
fewer and less severe consumption-based coping strategies. It may also result in reduced malnutrition rates in children aged below five years in the absence of other non-food security related causes of malnutrition such as poor hygiene/sanitation and sub-optimal childcare practices.

8. RECOMMENDATIONS

- The above-normal rains forecasted by the meteorological department may have negative impacts such as washing away of farm inputs, displacement of households and property, destruction of crops or breaching of surface water sources. Stakeholders ought to be prepared with both food and non-food items as a contingency measure.