

National Drought Management Authority
KAJIADO COUNTY
DROUGHT MONITORING AND EARLY WARNING BULLETIN – JULY 2017



A Vision 2030 Flagship Project



JULY EW PHASE



Early Warning Phase Classification

LIVELIHOOD ZONE	EW PHASE	TRENDS
PASTORAL	ALERT	DETERIORATING
AGRO-PASTORAL	ALERT	DETERIORATING
MIXED FARMING	ALERT	DETERIORATING
COUNTY	ALERT	DETERIORATING

Drought Situation

Biophysical Indicators

- ✓ July was usually a dry month with a moderate vegetation deficit. Kajiado Central was in severe vegetation deficit.
- ✓ Water situation was inadequate with strategic waterpoints getting pressure from livestock, people and wildlife.

Production and Access Indicators

- ✓ Livestock production namely; their body condition, milk production and prices remained far below the long-term average with a deteriorating trend.
- ✓ The harvest from 2017 long rains was less than 10% of the normal.

Utilization Indicators

- ✓ Household milk consumption was below the long term average due to low production.
- ✓ The proportion of households consuming poor diet was stable but high for the last three months.
- ✓ The TOT remained stable but below the long-term average for the past three months.
- ✓ Risk of malnutrition for under-fives remained far above the long term average since January.

Biophysical Indicators	Observed Value/Range	Normal Range/LTA	
Rainfall	No rains	No rains	
State of water	Inadequate	Adequate	
3-Month VCI	22.14	35 – 50	
Production Indicators	Observed Value/Trend	Normal Range	
Livestock body	Poor	Good	
Milk production	2.1 lt	3-4 lt	
Migration pattern	80%-90% migration	No migration	
Livestock deaths	No deaths	No deaths	
Access Indicators	Observed Value	Long Term Average	
Terms of trade	44	48	
Milk Consumption	1.5 lt	2- 3 lt	
Distance to water sources	Livestock	6.3 km	6.9 km
	Household	5.2 km	5.0 km
Utilization indicators	Percentage	Normal Range/LTA	
MUAC (% <135 mm)	14.1%	10.9%	

<ul style="list-style-type: none"> ▪ Short rains harvest ▪ Short dry spell ▪ Reduced milk yields ▪ Increased HH food stock 			<ul style="list-style-type: none"> ▪ Planting/Weeding ▪ Long rains ▪ High calving rate ▪ Milk yields increase 			<ul style="list-style-type: none"> ▪ Long rains harvest ▪ A long dry spell ▪ Land preparation ▪ Increased HH food stocks 			<ul style="list-style-type: none"> ▪ Short rains ▪ Planting/weeding 		
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

Seasonal Calendar

1.0 CLIMATIC CONDITIONS

1.1 Rainfall

- The month of July is normally a dry month in the County. This year, July was a normal month where the County did not receive any rainfall (Figure 1).
- The performance of various productive sectors continue to depend heavily on long rains whose performance was poor.

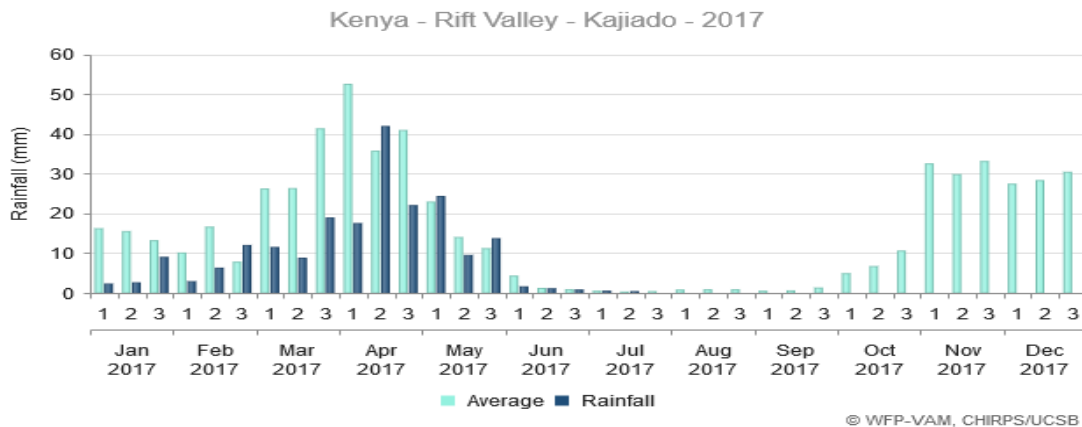


Figure 1: Rainfall performance for Kajiado County

Data source: World Food Programme; July, 2017

2.0 IMPACTS ON VEGETATION AND WATER

2.1 Vegetation Condition

- The County vegetation deteriorated during June-July period. In June, the County vegetation condition index (VCI) was 23.83 and 22.14 in July (Figure 2a).
- Kajiado central sub-County was in severe vegetation deficit with a VCI of 15.92 (Figure 2b). The vegetation condition for all other four sub-Counties was moderate.
- The County vegetation condition was expected to continually deteriorate in the coming four months.

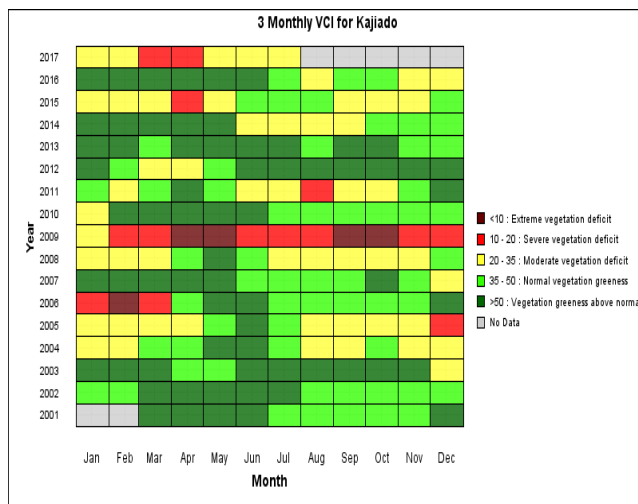


Figure 2a: VCI matrix for Kajiado County, 2001 – 2017

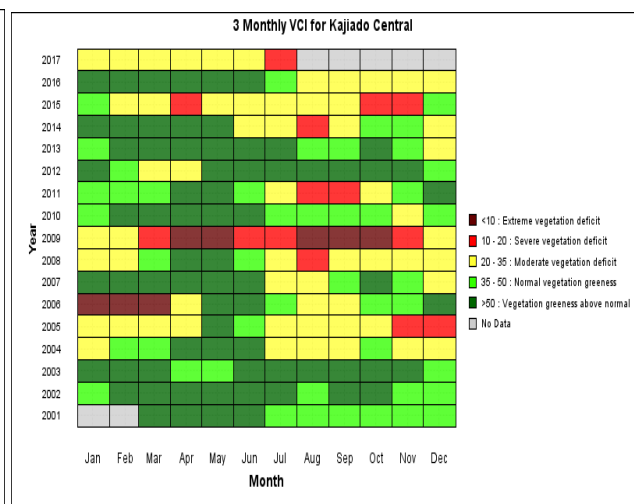


Figure 2b: VCI matrix for Kajiado Central, 2001 – 2017

2.2 Pasture and Browse Situation

- Pasture condition was poor in all the livelihoods due to below normal long rains.
- Pasture was fast deteriorating and would hardly last for a month. Areas like Magadi, Mosiro, Ewuaso, Lenkism and Mbirikani wards, pasture was depleted. Regeneration of pasture in these areas during the long rains season was very low as these areas never received any meaningful rainfall.
- Browse was fair in most parts of the County with no livelihood variations. It was expected that the current browse would last for the next one months.

2.3 Water Sources

- In a normal year, boreholes/shallow wells account for about 65% of water sources for both livestock and for domestic use in July.
- In July this year, boreholes/shallow wells accounted for 73% of the water sources (Figure 3) compared to 39% in June. Most of water pans dried up in June. Recharge of pans during the long rains was about 10%.
- Strategic boreholes were now experiencing pressure from livestock, human beings and wildlife. This situation was likely to last for three months till the start of the short rains.
- Other sources of water include piped water, rivers/streams, traditional river wells and water tankering

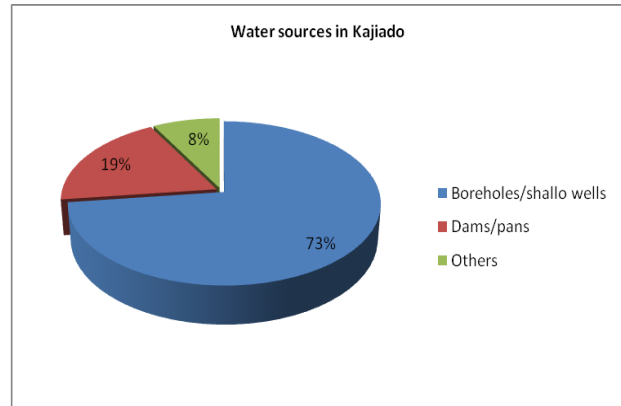


Figure 3: Main water sources; Kajiado County, July 2017

2.4 Households Access to Water

- In June and July, the average return distance that households travelled in search of water was stable at 5.3 km and 5.2 km respectively(Figure 4).
- The current distance was likely to remain stable for the next two months as households will continue to draw water from permanent water sources mainly boreholes.

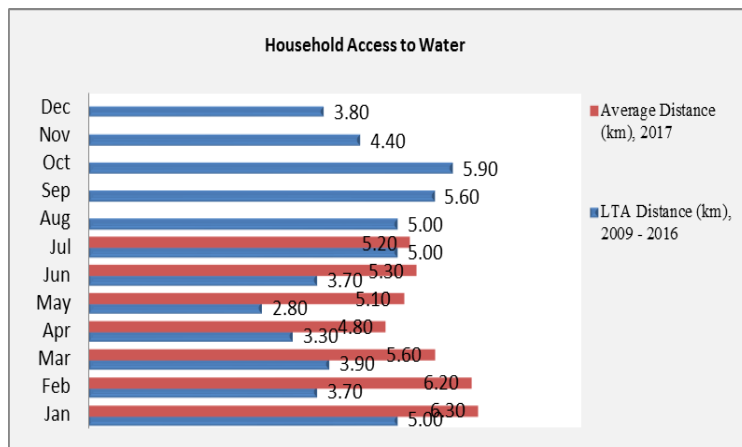


Figure 4: Average return distance from households to water sources; Kajiado County, 2009 – 2017

- Magadi and Mosiro wards are served with few boreholes. In these wards, the return distance that households travel to get was over 10 km. Water tankering was observed in Magadi ward.

2.5 Livestock Access to Water

- In June and July, boreholes and shallow wells were the main source of water for livestock. Most pans had dried up by the first dekad of June.
- The distance that livestock travelled from grazing fields to water sources increased to 6.3 km in July from 5.2 km in June (Figure 5).
- In Mosiro, Magadi and Mbirikani livestock were covering over 20 km in search of water.

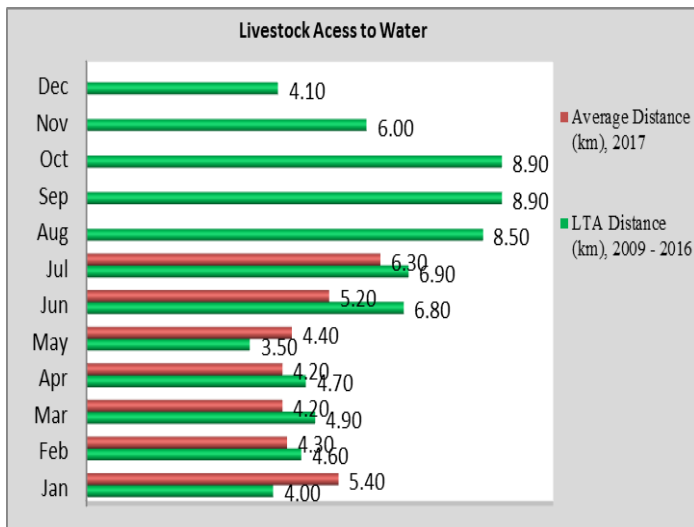


Figure 5: Return distance from grazing areas to water sources; Kajiado County, 2009 – 2017

- The distance trekked by livestock in search of water was likely to remain relatively stable in the next three months. Most livestock are not expected to move further within the County in search of pasture.
- The watering frequency was expected to decrease from the current 3 times a week to 2 times a week.

3. PRODUCTION INDICATORS

3.1 Livestock Body Condition

- Cattle body condition was poor and in deteriorating trend across all the livelihoods. In a normal year, cattle body condition is usually good.
- In Pastoral areas of Magadi, Ewaso and Mosiro, cattle were more affected by drought compared to other parts of the County.
- The current cattle body condition and the deterioration trend of their body condition reflected the state of pasture.
- Goats' body condition was fair with no significant variation across livelihoods. Their body condition was expected to remain stable for a month as browse was available for a month.

3.2 Livestock Diseases

- Cases of Contagious Bovine Pleuropneumonia (CBPP) were reported along the livestock migratory corridors while clinical evidence of Contagious Caprine Pleuropneumonia (CCPP) being observed in various parts of the County in June and July.
- As livestock migrate outside the county in search of pasture, cases of Foot and Mouth Disease and Trypanosomiasis were likely to be observed in the next two months.

3.3 Milk Production

- The average milk production per day per household in July was 2.1 litres compared to 2.6 litres in June. The decline in milk production was due to deterioration of cattle body condition. Cattle are the main source of milk in the County.
- In Pastoral areas, the average milk production per day was 2.4 compared to 1.8 litres in Agro-Pastoral zones. The difference was attributed to difference in tropical livestock units in these zones.
- In a normal year, the average household milk production is 3 – 4 litres per day.
- Milk production was expected to continually decline for the next three months as livestock body condition deteriorate.

3.4 Migration of Livestock

- Early migration of livestock in search of pasture were reported in June. Normal migration was in Septemebr. By July, about 80% of cattle had moved to Chylu hills from Mbirikani and Kuku wards. Over 90% of cattle from Lenkism and Olgulului were now in Olgulului hills while close to 80% of cattle from Ewuaso and Mosiro were now in Ewuaso Nyiro swamp near shompole.
- Further movement of cattle towards Taita-Taveta, Machakos and Makueni counties was expected in the coming two months.

4. MARKET PERFORMANCE

4.1 Livestock Marketing

- All livestock markets in the County have been in normal operation. The main livestock markets include; Shompole, Ilbisil, Kimana, Rombo and Kiserian.

4.1.1 Prices of Cattle

- This year, the prices of cattle remained below the long term price since January. In July the average price of a mature bull was Ksh. 18,100 compared to Ksh. 19,400 in June (Figure 6).
- Reduction of prices of cattle was due to deterioration of their body condition. There was also high supply of livestock from Agro-Pastoral and in Mixed farming livelihoods following crop failure.

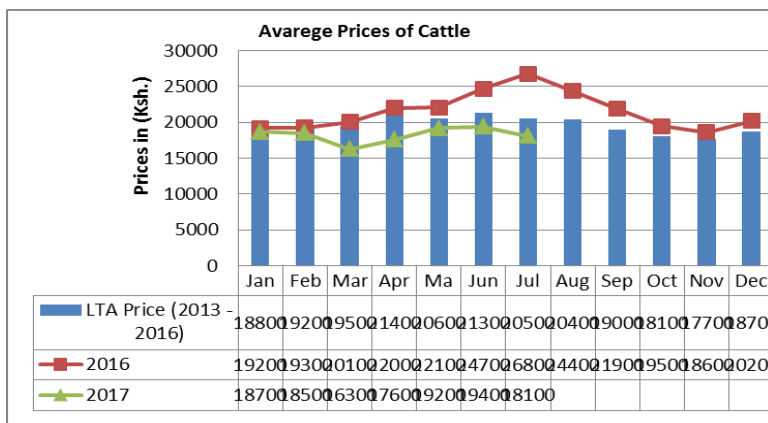


Figure 6: Average price of cattle; Kajiado County, 2013 - 2017

- No livelihood variation of prices of cattle observed in July.
- As cattle body condition deteriorate continually in the next three months, so will be their prices.

4.1.2 Prices of Goats

- On average the price of goats was stable at Ksh. 2,940 in June and Ksh. 2,870 in July (Figure 7).

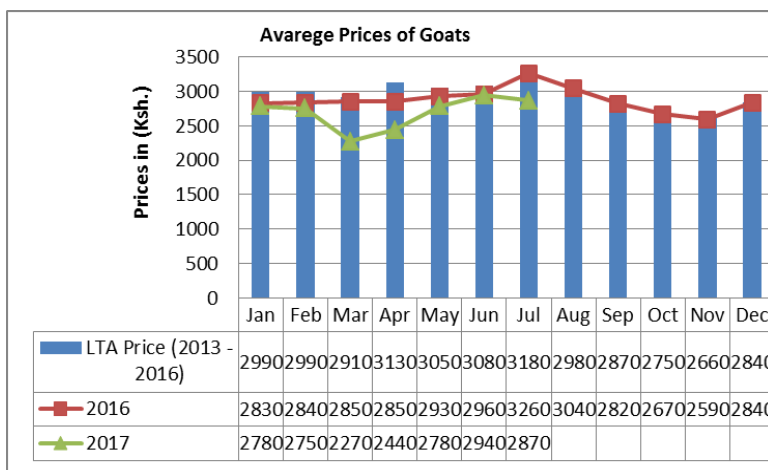


Figure 7: Trends of goats' price; Kajiado County, 2013 - 2017

- There were no significant livelihood variations in prices of goats in June and July.
- Prices of goats were expected to remain nearly stable for a month as their body condition was still fair.

4.2 Prices of Cereals and Legumes

4.2.1 Prices of Maize

- On average, the market price of maize stabilized but at a high price of Ksh. 65 per kilogram since April this year (Figure 8). High price of maize was due to consecutive poor harvest during both short and long rains.
- Great variation in price of maize existed within the County depending on accessibility of the area. In Mosiro for example, a kilogram of maize was selling at Ksh. 120 while in Rombo it was Ksh. 40.

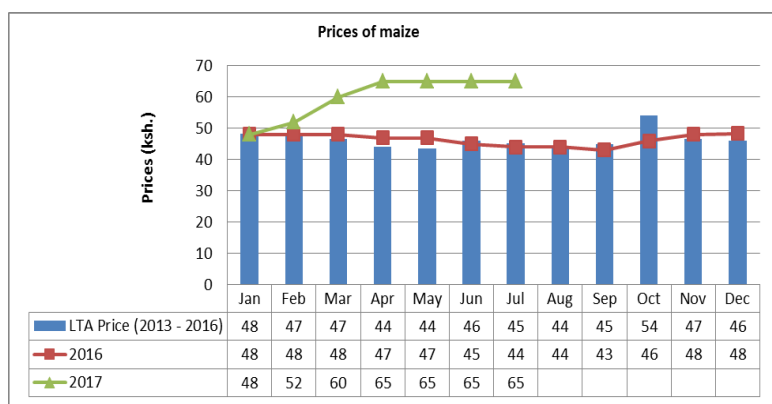


Figure 8: Trends of price of maize; Kajiado County, 2013 – 2017

- By September the market price of maize was likely to go up due to anticipated scarcity.

4.2.2 Prices of Beans

- The average market price of beans reduced from Ksh. 130 in April to Ksh. 120 in July (Figure 9).
- Reduction of the prices of beans was due to some harvest of the commodity in June. This was coupled by supply of the commodity from Tanzania.

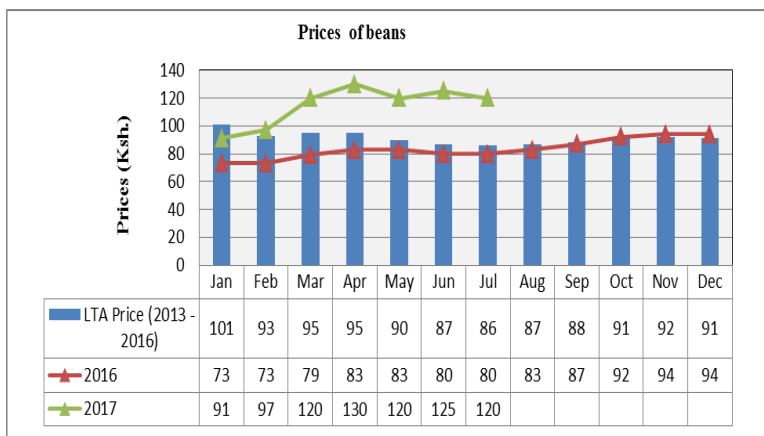


Figure 9: Trends of beans' prices; Kajiado County, 2013 – 2017

- In Mosiro a kilogram of beans was selling at Ksh. 145 due to its scarcity.
- The price of beans was likely to remain stable but at high price in the next two months as there very low stock kept by farmers.

4.3 Prices of Milk

- The average farm gate price of milk was Ksh. 75 in June and July with no significant livelihood variations. In a normal year, a litre of milk cost Ksh. 45.
- Milk prices were expected to remain elevated due to low production for the next three months.

4.4 Livestock Terms of Trade

- The terms of trade was relatively stable for May-July period. In May, one would exchange a goat for 43 kg of maize while in July a goat would be exchanged for 44 kg of maize(Figure 10).

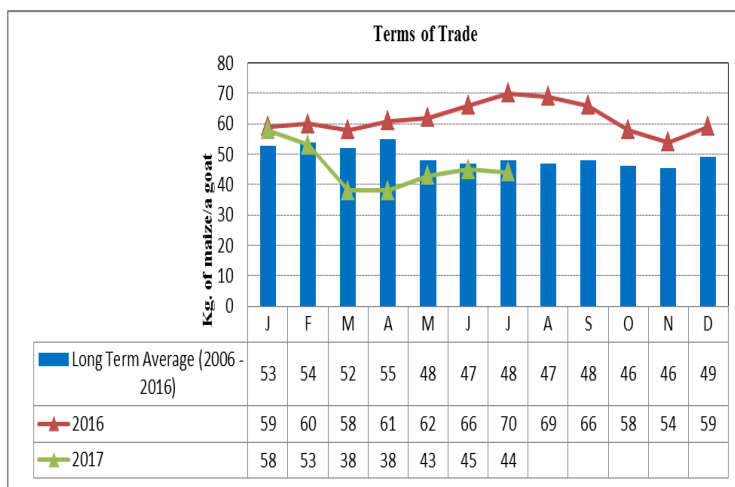


Figure 10: Trends of terms of trade; Kajiado County, 2006 - 2017

- It was anticipated that the price of goat will remain stable for the next one month while the prices of maize was expected to increase. In this case the purchasing power of pastoralists will reduce.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk Consumption

- The average household milk consumption per day in July was 1.5 litres due to low production. In a normal year, the daily household milk consumption in July is 2-3 litres.
- There was no significant variation in milk consumption by livelihoods in July.

5.2 Food Consumption Score

- The proportion of households consuming poor diet remains high at 14% in July(Figure 11).
- The number of households consuming acceptable diet was likely to reduce by August.

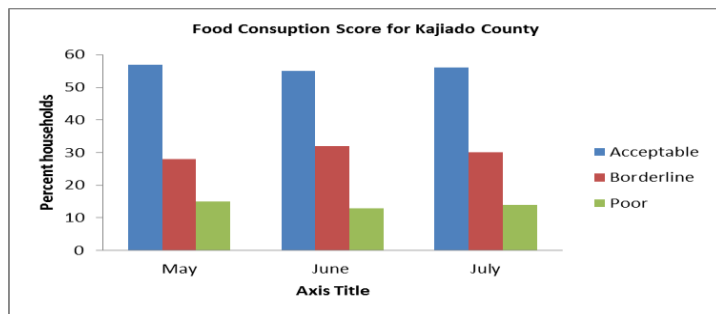


Figure 11: Food consumption score; Kajiado County, May – June 2017

- There are also areas such as Mosiro where food was not easily available due to poor road network that makes transportation difficult.

5.3 Nutritional Status of Children aged 6-59 Months

- The risk of malnutrition for under-fives reduced from 15.2% in May to 14.1% in July (Figure 12) due to intergrated outreaches done in April-July period.

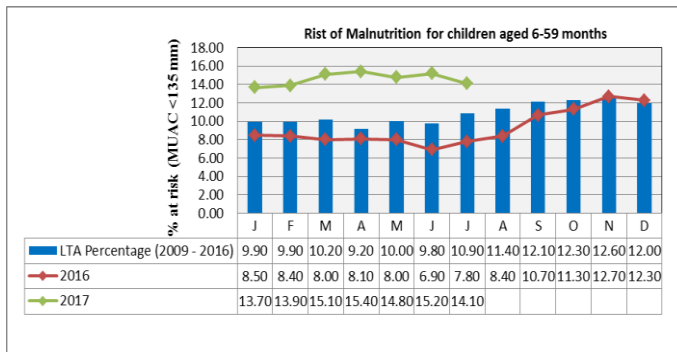


Figure 12: Percentage of children aged 6-59 months at risk of malnutrition; Kajiado county, 2009 – 2017

- Malnutrition among under-fives will remain high for a couple of months.
- Areas marked for high risk of malnutrition for under-fives include; Rombo, Lenkism, Mbirikani, Magadi and Mosiro

5.3.2 Human Diseases

- A number of cholera cases were reported in Kitengela and Ngong in July.

6 FOOD SECURITY PROGNOSIS, CURRENT INTERVENTIONS AND RECOMMENDATIONS

6.1 Food Security Prognosis

- The 2017 long rains performance was below normal (50% - 70%) with poor temporal and spatial distribution.
- Pasture was getting depleted fast in many parts of the County. Migration of livestock in search of pasture was as early as January.
- Boreholes are the main source of water. Strategic boreholes were now under pressure from livestock, people and wildlife.
- Livestock productivity was deteriorating while crop yields were about 10% - 30% of normal. Food stocks at the household level was very low.
- Malnutrition among under-fives will remain high as household milk consumption remain low in the next three months.
- More environmental degradation was expected as individuals continue with charcoal burning and sand harvesting as drought coping strategies.

6.2 Current Interventions

- Vaccination of cattle against Contagious Bovine Pleuropneumoia (CBPP) in Kajiado South at a cost of about Ksh. 1.1 million: By Kenya Agricultural and Livestock Research Organization.
- Provision of extension services targeting 800,000 households at a cost of Ksh. 500,000: By County Government through livestock production department.
- Construction of hay store in Kajiado Central targeting 1250 households at a cost of Ksh.4 million: By County Government through livestock production department.
- Construction of livestock market at Sultan-Humud at a cost of Ksh 10,000,000: By County Government in collaboration with Regional Pastoral Livelihood Resilience Project.

6.3 Recommendations for Action

- Vaccination of goats against Contagious Caprine Pleuropneumonia (CCPP) in Kajiado West and Kajiado Central. *Action by National Drought Management Authority in collaboration with the County development partners.* The estimated cost is Ksh. 6 million.
- Mass screening and integrated outreaches in Kajiado Central, East, South and West. *Action by ministry of health in collaboration with other partners who have mandate on health and nutrition.* The estimated cost is Ksh 2 million.
- Targeted food security assessment in drought hotspot areas especially in Lenkism, Mosiro, Ewuaso and Magadi wards. *Action by National Drought Management Authority in collaboration with other stakeholders.* The estimated cost is Ksh. 800,000.
- Vaccination of livestock against Foot and Mouth Diseases (FMD) especially along the migration routes. *Action by County Government (Veterinary services) in collaboration with National Drought Management Authority and other partners.* The estimated cost is Ksh. 10 million.
- Provision of school meals across the County targeting 121, 987 pupils at a cost of Ksh. 62 million: By the National Government through Ministry of Education.