

National Drought Management Authority

KAJIADO COUNTY

DROUGHT MONITORING AND EARLY WARNING BULLETIN – DECEMBER 2017



A Vision 2030 Flagship Project



DECEMBER EW PHASE



Early Warning Phase Classification

LIVELIHOOD ZONE	EW PHASE	TRENDS
PASTORAL	ALARM	DETERIORATING
AGRO-PASTORAL	ALARM	IMPROVING
MIXED FARMING	ALART	IMPROVING
COUNTY	ALARM	DETERIORATING

Drought Situation & EW Phase Classification

Biophysical Indicators

- ✓ In December 2017, the county got some rains which were unevenly distributed.
- ✓ County had moderate vegetation deficit with Kajiado South having severe vegetation deficit.
- ✓ Pasture did not regenerate in Kajiado Central, West and parts of South.

Production and Access Indicators

- ✓ Cattle body condition remained poor in most pastoral areas.
- ✓ Household had no food stocks in all livelihoods.
- ✓ Livestock deaths due to diseases continued to be reported across the county.

Access indicators

- ✓ Water was still inadequate across the county due to poor recharge of water sources.
- ✓ ToT was unfavourable to pastoralists
- ✓ Milk production as well as consumption was

Utilization Indicators

- ✓ More than a quarter of households were consuming poor diet for the last three months.
- ✓ The risk of malnutrition for under-fives, pregnant and lactating mothers remained high.

Biophysical Indicators	Observed Value/Range	Normal Range/LTA
State of water	Inadequate	Adequate
3-months VCI	County	35 – 50
	K. South	
Forage condition	Poor r	Good
Production Indicators	Observed Value/Trend	Normal Range
Cattle body condition	Poor	Good
Milk production	Negligible	>5 litres
migration pattern	Out migration	No Migration
Livestock deaths	Deaths reported	No deaths
Access Indicators	Observed Value	Long Term Average
Terms of trade	44	59
Milk Consumption	Negligible	>4 litres
Distance to water source	Livestock	9.6 km
	Household	5.8 km
4 km	3.8 km	
Utilization indicators	Value	Long Term Average
MUAC (% <135 mm)	17.8%	12.0%

<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 onset of 2017 short rains was late. The rains started in the second week of November as opposed to the normal onset which is in the third week of October. Both temporal and spatial distribution of the rain were uneven.
- In December 2017, the southern parts of the county mainly Loitokitok received fair rains during the second week. In the third week of December, parts of Kajiado central got fair rains for a day.
- The rains in December was significantly below the long term average for similar month (Figure 1).

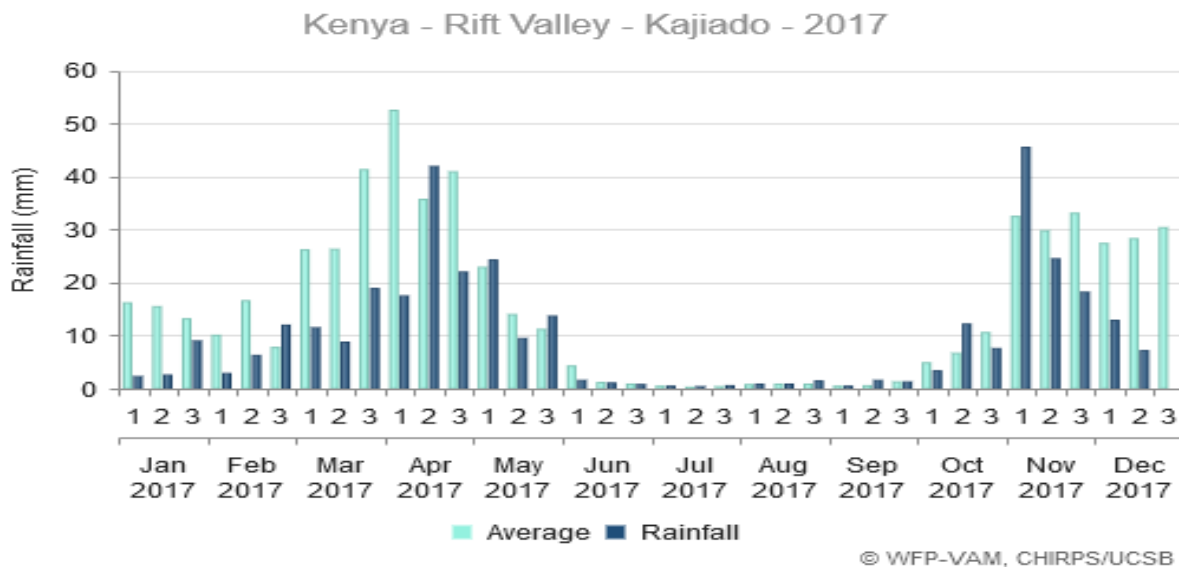


Figure 1: Rainfall performance for Kajiado County

Data source: World Food Programme; December, 2017

2.0 IMPACTS ON VEGETATION AND WATER

2.1 Vegetation Condition

- The county remained in moderate vegetation deficit band since May this year (Figure 2a). Overall, there was no significant change in vegetation condition in the county between November and December. In December the county vegetation condition index was 24.55 compared to 24.15 in November.
- The rainfall received during the season was far below normal and recovery from the drought during the previous months did not occur.

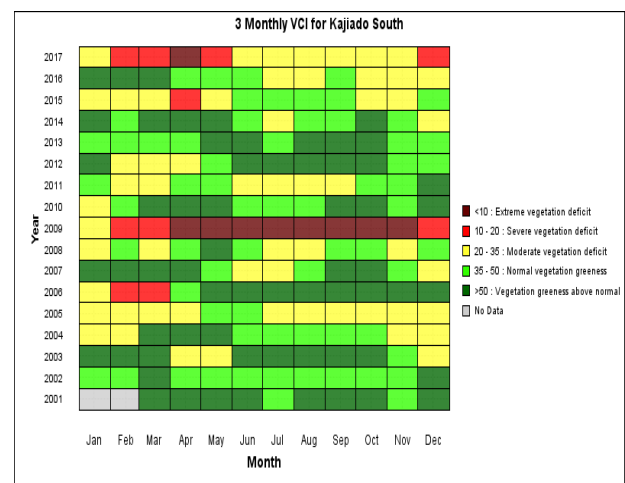
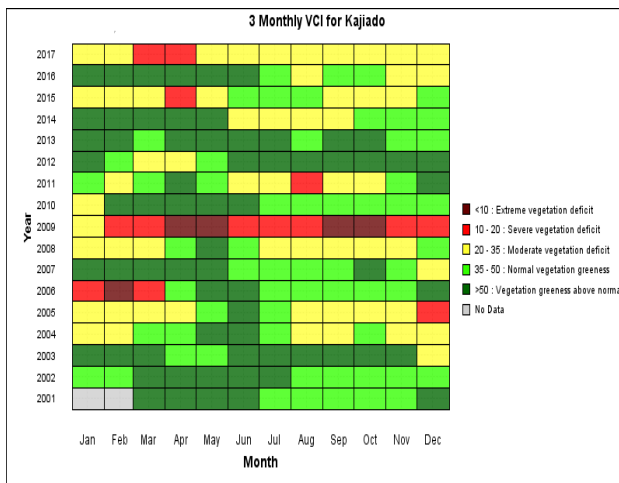


Figure 2a: Kajiado County VCI Matrix, December 2017

Figure 2b: Kajiado South VCI Matrix, December 2017

- In Kajiado South sub-county, the vegetation condition deteriorated in December compared to November (Figure 2b). In December, Kajiado South sub-county was in severe vegetation deficit with a vegetation condition index of 19.98.

2.2 Pasture and Browse Condition

- The state of pasture reflected the pattern of short rains in the county. Pastoral zones mainly the western and southern side of the county, extending from Mosiro, Ewauso, Magadi, Loondokilani, Matapato, Purko Lenkism and Mbirikani had no pasture. Pasture failed to regenerate in these areas due to poor rains during the season.
- The northern and eastern side of the county extending from Ngong, Kiserian, Isinya, Kitengela to Kinyawa poka is a mixture of Agro-pastoral and Pastoral zones. Pasture situation in these parts was fair and would last for one months.
- In mixed farming zone of Loitokitok, pasture is good and would last for two months.

- Browse was generally fair with no variations among livelihoods. It was expected to last for 2 months.
- Table 1 summarizes the current pasture and browse condition in the county against the normal.

Table 1: Pasture and browse condition

	Livelihood	Normal	Current	Trend	Duration to last
Pasture	Pastoral	Good	Depleted	-	-
	Agro-pastoral	Good	Fair	Deteriorating	1 months
	Mixed farming	Good	Fair	Deteriorating	2 months
Browse	All	Good	Fair	Deteriorating	2 months

2.3 Water Sources

- Boreholes and shallow wells were the main source of water for both livestock and domestic use in December. 35% of the communities depended on these sources (Figure 3). In a normal year pans and dams constitute the main source of water in December. The County was now water stressed.

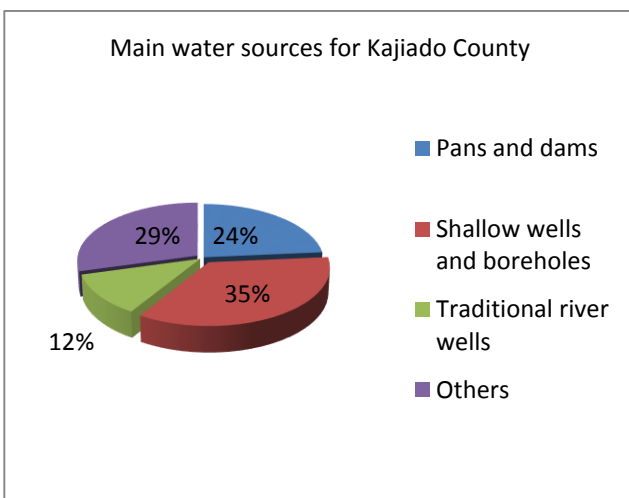


Figure 3: Main Water Sources, December 2017

- Recharge of pans and dams during the 2017 short rains was less than 10%.
- Overconcentration of people and livestock at water points posed greater risk of disease outbreak, and resulted in frequent breakdown of the boreholes.
- The water situation was expected to worsen in the next three months due to the expected dry spell.

2.4 Households Water Access and Utilization

- The return distance to water source travelled by people to get water for domestic use in December averaged 5.8 km compared to 5.2 km in November (Figure 4).
- The increase in distance that individuals travelled to fetch water was due to poor recharge of water sources such as season rivers in December. By December some of these sources had dried up and boreholes and shallow wells remained the main source of water for domestic use.

- Households in Pastoral areas of Mbirikani, Torosei, Meto, Mosiro were covering up to 15 km to and from the water sources.

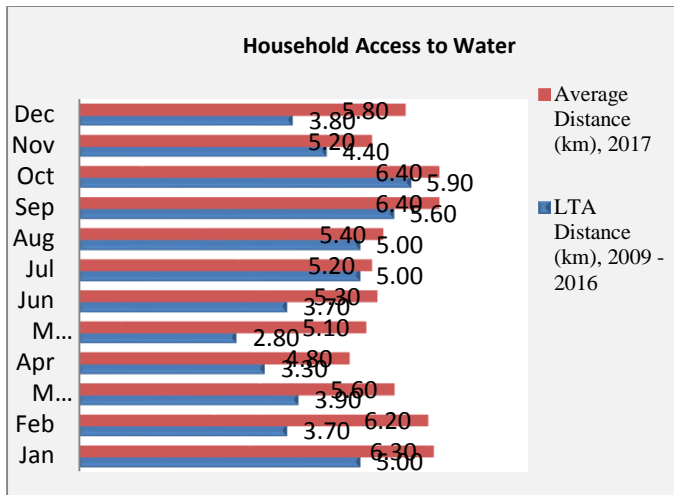


Figure 4: Return distance from household to water sources

- In mixed farming areas, the distance travelled by individuals to fetch water for domestic use was 4 km.
- Water for domestic use was drawn from the same outlet where livestock took water. Water for drinking was not treated in any way hence exposing households to risk of water borne diseases.

2.5 Livestock Access to Water

- The return distance trekked by livestock from grazing areas to water points averaged 9.6 km in December and 6.1 km in November. The long term average distance for December is 4.1 km (Figure5).
- The increase in the distance trekked by livestock from grazing areas to water points was due to drying up of water sources like pans and seasonal rivers.

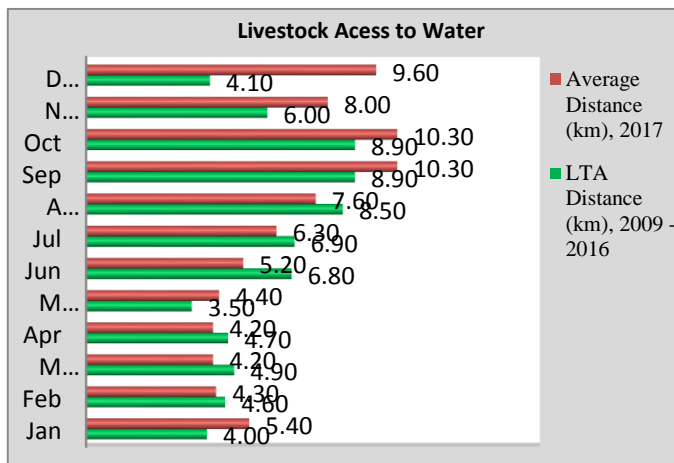


Figure 5: Return distance from grazing areas to water sources

- In pastoral livelihoods, livestock trekked about 20 km from grazing areas to watering points. In Mbirikani cattle were trekking a distance of about 40 km to and from grazing field in search of water. In Agro-pastoral and in Mixed Farming zone the distance was less than 6 km.

3.0 PRODUCTION INDICATORS

3.1 Livestock Body Condition

- Cattle in pastoral area especially the western, central and southern sides of the county were still emaciated. Pasture failed to regenerate in these areas due to poor rainfall.
- The body condition of cattle in eastern side of the county especially Kaputiei, Aroi, Imaroro, Mashuuru and Kinyawa Poka was fair. These areas received fair rains and pasture was thus fair.
- Cattle body condition was expected to deteriorate in the next three months of dry period.

3.2 Livestock Diseases

- Suspected cases of foot and mouth disease were being reported in Kajiado east and central.
- There are also confirmed cases of Sheep and Goat Pox infections in Kajiado west and central and cases of contagious caprine pleuropneumonia(CCPP) in Kajiado south.
- Unconfirmed cases of Foot and Mouth Disease (FMD) have been reported in Matapato South ward. Samples have been taken by the county veterinary department for verification.

3.3 Livestock Migration

- Early migration of livestock in search for pasture was observed in November and December. Normal migration is in September.
- Over 90% of cattle from Matapato, Lenkism and Kikonyokie moved to Kajiado east. Livestock were concentrated in Eselenkei, Oltepesi, Kiboko, Masimba, Ilpolosat and Ololotikosh - Kiserian belt.
- Cattle from the county also moved to Makueni, Machakos, Nairobi and Nakuru counties
- Return migration was not expected until April 2018 if the long rains will do well.

3.4 Milk Production

- Milk production was negligible in most households with no livelihood variations. Low household milk production was due to poor body recovery of livestock.

3.5 Rain-fed Crop Production

- By December, maize was 1 foot high due to delayed onset of rains. In a normal year, maize would be three 3 high. Crops condition in mixed farming zones was good and fair in Agro-pastoral.

4.0 MARKET PERFORMANCE

4.1 Livestock Marketing

- Shompole, Ilbibil, Kimana, Rombo and Kiserian are the main livestock markets in the County. All these markets were in operation since January.

4.1.1 Cattle Prices

- There was a slight increase in prices of cattle from Ksh. 10,000 in November to Ksh. 11,200 in December (Figure 6) due to, the then, anticipated drought recovery.

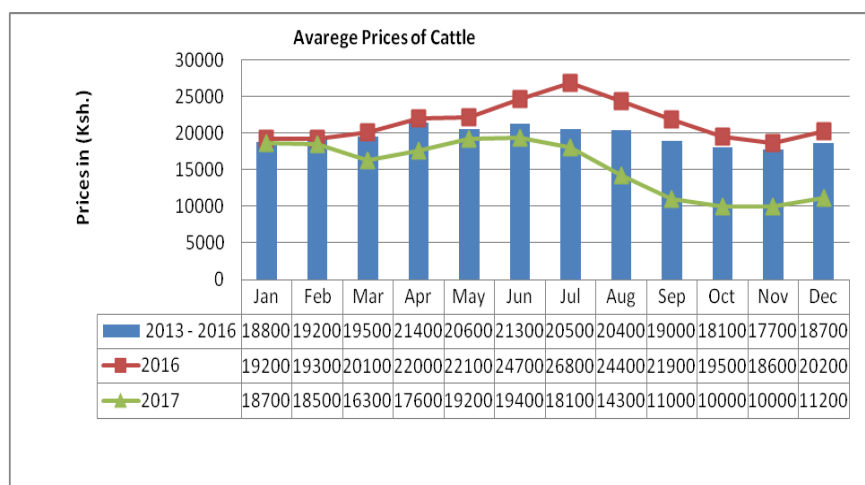


Figure 6: Trends in Cattle Price, December 2017

- There were no livelihood variations in prices of cattle in December.
- Prices of cattle was likely to start declining from January due to expected continued drought.

4.1.2 Goats Prices

- The price of goats increased from Ksh 2,050 in November to Ksh. 2,630 in December (Figure 7). The increase was mainly due to with increased demand for goat's meat during the festive season.

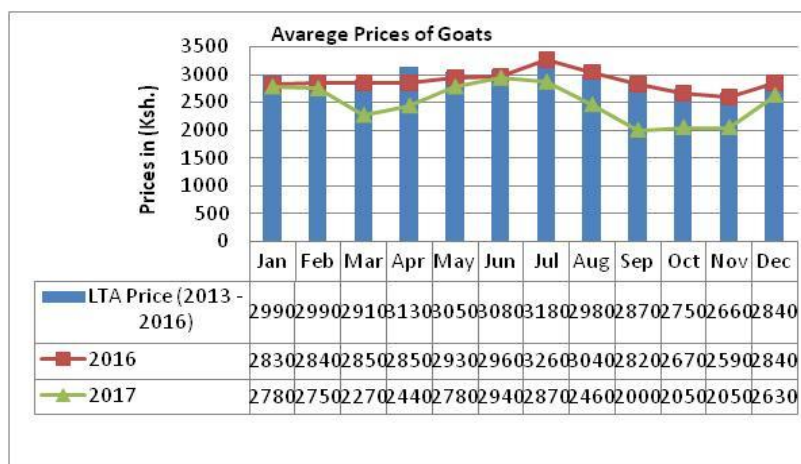


Figure 7: Trends in goats Price, December 2017

- There were no livelihood variation in prices of goats in December.
- The average prices of cattle was likely to remain stable for the next two months owing to their fair body condition

4.2 Prices of Cereals and Legumes

4.2.1 Maize Prices

- On average the cost of maize reduced from Ksh. 75 per kilogram in November to Ksh. 60 per kilogram in December (Figure 8). Some significant maize stock was released to the retailer by the whole sellers in anticipation that the planted maize crop would do well.

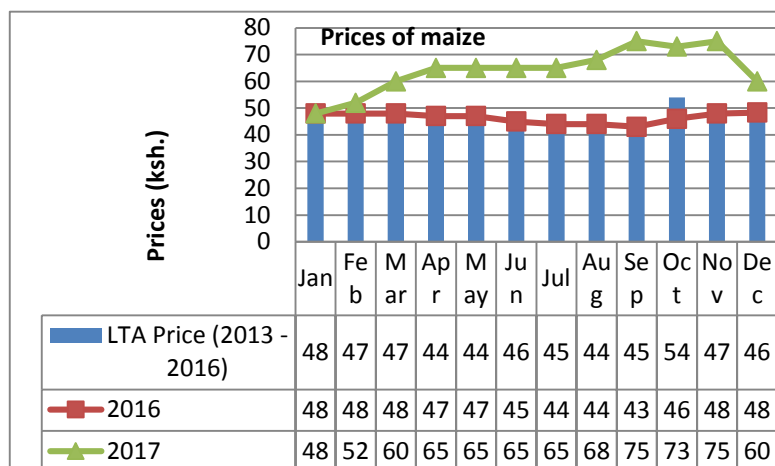


Figure 8: Trends in Maize prices, November 2017

- In Rombo, a kilogram of maize was retailing at Ksh. 35 and Ksh. 70 in Ewuaso.
- The price of maize was likely to decrease slightly in January and February 2018 if the maize crop performs fair.

4.2.2 Beans Prices

- The retail price of beans dropped from Ksh. 140 per kilogram in November to Ksh. 120 per kilogram in December (Figure 9). It was anticipated that the harvest for the short rains will be good. Thus traders were able to release the old stock to the market.
- Prices of beans was likely to decrease further in the coming month of January 2018 if the harvest of the crop will be good.

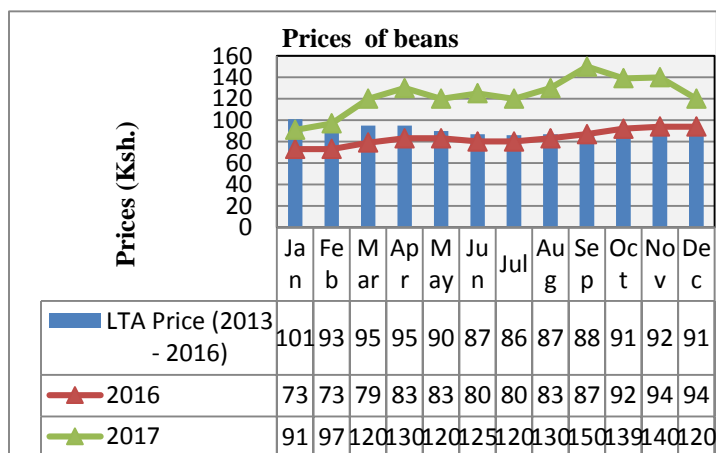


Figure 9: Trends in Bean Prices, December 2017

4.3 Prices of Milk

- The cost of milk remains high due to low production. In both November and December a litre of milk was selling at Ksh. 80. In a normal year a litre of milk cost Ksh. 40 in December.
- Prices of milk were expected to increase in the coming month as its production remains insignificant.

4.4 Terms of Trade (ToT)

- The term of trade increased from 27 kg of maize per goat in November to 44 kg of maize per goat in Decembers(Figure 10).
- The improvement of terms of trade was due to increase in prices of livestock and reduction of prices of food stuffs.
- The terms of trade was likely to remain stable in the next one months.

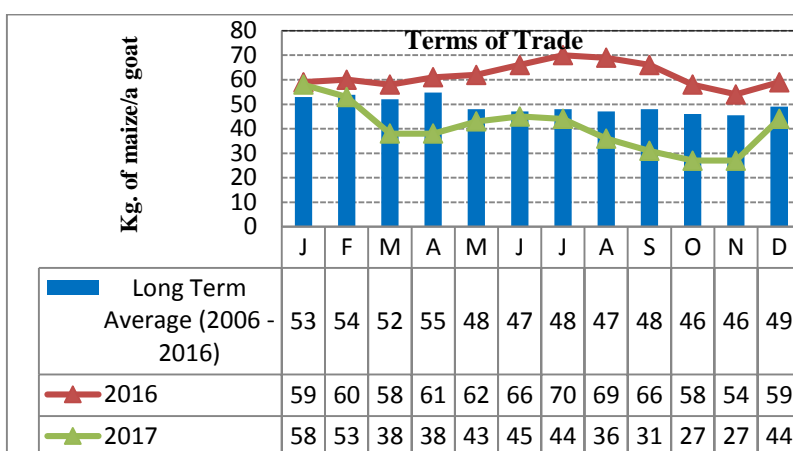


Figure 10: Trends in TOT, December 2017

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk Consumption

- Milk production was insignificant in December. Its consumption thus remained insignificant during the month. In a normal year household would be consuming 4 - 5 litres of milk in a day.

5.2 Food Consumption Score

- There was no much change in food consumption pattern between November and December this year. The proportion of those who consumed poor diet dropped by 1% between November and December (Figure 11).

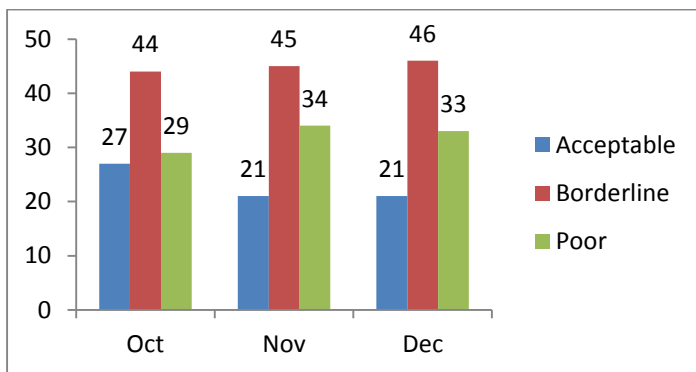
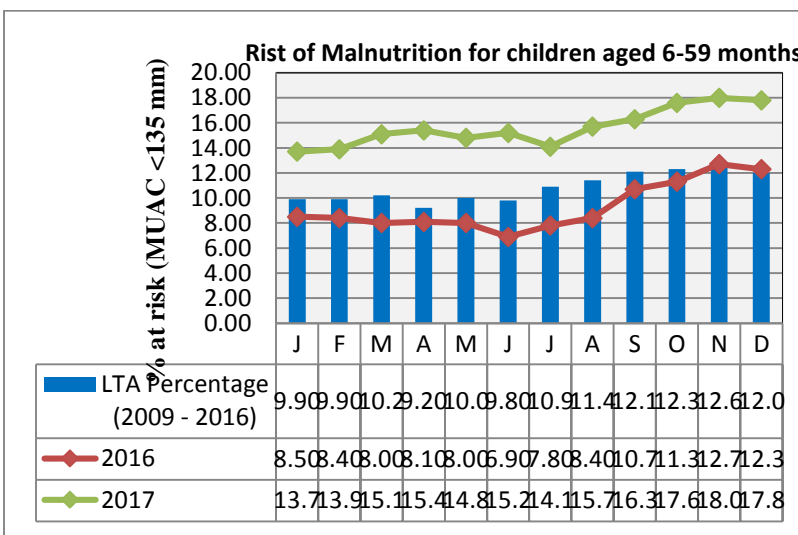


Figure 11: Food Consumption Score, Kajiado County.

- With some crops harvest being expected in January, household were expected to improve their diet. However, with expectation of no milk production, diversification of diet will be limited in pastoral areas.

5.3 Nutrition Status of Children aged 6-59 Months

- The proportion of under-fives who were at risk of malnutrition remained high at 18.0% in November and 17.8% in December (Figure 11) due to consumption of poor diet.



- For the last three months, more than a quarter of households were consuming poor diet. The situation was likely to continue for the next three months as the county continues to be in drought mode.

Figure 12: The proportion of children at risk of malnutrition

- Kajiado west, central and south (mainly Lenkism, Mbirikani, Kuku and Rombo wards) are hard hit by drought. Under-fives, pregnant and lactating mothers in these areas were more likely to be malnourished.

5.4 Human Diseases

- There was no report of human disease outbreak in the County in December.

5.5 Coping strategies

- Households continue to reduce the number and the portions of meals taken especially by adults in a day in order to cope with current drought situation.

6.0 FOOD SECURITY PROGNOSIS, CURRENT INTERVENTIONS AND RECOMMENDATIONS

6.1 Food Security Prognosis

- The 2017 short rains performance was below normal especially in Kajiado West, Central and South (Lenkism, Mbirikani, Rombo and Kuku wards). There was no regeneration of pasture in these areas, which resulted into massive outmigration of livestock, and poor recharge of water sources.
- Households lost nearly 70% of cattle due to drought this year. Livestock productivity was below normal while crop yields were expected to be less than 60% of the normal.
- Children, pregnant and lactating mothers were now more vulnerable to malnutrition.

6.2 Recommendations For Action

- Continued provision of livestock feeds mainly pellets, hay and concentrates. *Action by National Drought Management Authority, County Government and State Department of Livestock.*
- Vaccination of livestock against Foot and Mouth Diseases (FMD) and Contagious Caprine Pleuropneumonia (CCPP) especially along the migration routes. *Action by County Government (Veterinary services) in collaboration with National Drought Management Authority*
- Mass screening and integrated outreaches in Kajiado Central, East, South and West. *Action by ministry of health in collaboration with National Drought Management Authority* Livestock vaccination to curb possible outbreak of livestock diseases. *Action: County Government with support from National Drought Management Authority.*
- Introduction of Hunger Safety Nets programme in Mosiro, Mbirikani, Magadi and Lenkism wards. *Action: National Drought Management Authority and other players with mandate in food security.*
- Provision of relief food : *Action: County Government, National Government and partners*
- Repair and rehabilitation of strategic boreholes. *Action by County Government (Ministry of water and Irrigation) in collaboration with National Drought Management Authority*