National Drought Management Authority

KAJIADO COUNTY
DROUGHT MONITORING AND EARLY WARNING OCTOBER 2018

A Vision 2030 Flagship Project

OCTOBER EW PHASE

Early Warning Phase Classification

LIVELIHOOD ZONE	EW PHASE	TRENDS
PASTORAL	NORMAL	STABLE
AGRO-PASTORAL	NORMAL	STABLE
MIXED FARMING	NORMAL	STABLE
COUNTY	NORMAL	STABLE

Drought Situation & EW Phase Classification

Biophysical Indicators

- ✓ The County maintained above normal vegetation greenness since March following enhanced long rains.
- ✓ Forage condition was good in pastoral zones and fair in Agro-Pastorals areas.
- ✓ The Southern Pastoral livelihood was water stressed.

Production Indicators

- ✓ Livestock all species were fat and smooth in appearance while milk production was below the long term average. Low milk production was due to low livestock tropical unit and low calving rate during the month.

Access indicators

- ✓ The terms of trade increase steadily from 42 kg of maize for a goat in January to 101 kg of maize for a goat in October.
- ✓ The amount of milk consumed by households was less than the normal for similar period of the year due to low production.
- ✓ Distances to water sources from homestead and grazing fields increased in October but still remained shorter than long term averages for similar months.

Utilization Indicators

- ✓ Households with no money to buy their favourite food opted for less preferred foods. Most households were consumed required food varieties at required frequency.
- ✓ Nutritional status of under-fives improved resulting into reduction of those at risk of malnutrition to below the long-term average.

Biophysical Indicators		Observed Value/Range	Normal Range/LTA
3-monthly VCI		89.73	35-50
State of water	South Pastoral	Stressed	Adequate
	Mixed & Agro-Pastoral	Adequate	Adequate
Forage condition		Good to fair	Good
Production Indicators		**Observed Value/Trend**	**Normal Range**
Livestock body condition		Good	Good
Household milk production per day		4 litres	5 litres
Livestock Migration		None	None
Access Indicators		**Observed Value**	**Long Term Average**
Terms of trade (kg of maize for a goat)		101	44
Household milk Consumption per day		2.9 litres	3.8 litres
Distance to water sources	Livestock	7.2 km	9.1 km
	Household	5.9 km	6.0 km
Utilization indicators		**Value**	**LTA**
Coping Strategy Index (CSI)		4.4	Less than 10
125mm <MUAC <135mm		9.4%	12.2%

▪ Short rains harvest ▪ Short dry spell ▪ Reduced milk yields ▪ Increased HH food stock	▪ Long rains ▪ Planting/weeding ▪ High calving rate ▪ Milk yields increase	▪ Long rains harvest ▪ A long dry spell ▪ Land preparation ▪ Increased HH food stocks	▪ 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 Performance

- In a normal year, the onset of the short rains season is between third and four week of October (Figure 1).
- This year, only the northern parts of the County mainly Ngong and Kiserian received fair rains by the last week of October.
- Rainfall onset in the northern part of the County was thus normal and late in other parts of the County.

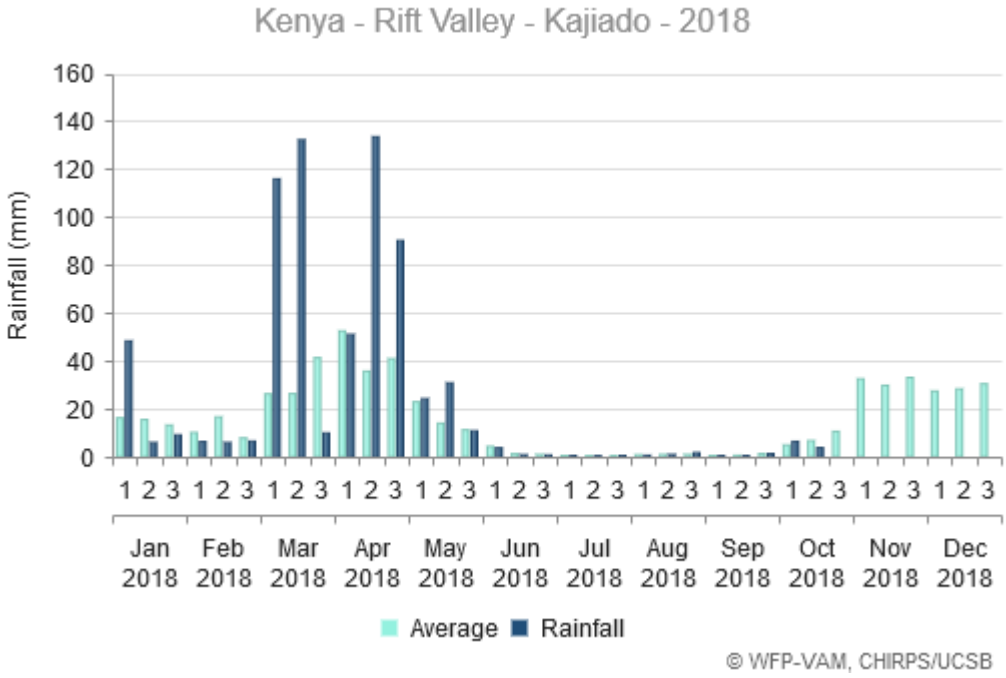

Figure 1: Rainfall performance; Kajiado, 2018

2.0 VEGETATION AND WATER CONDITIONS

2.1 Vegetation Condition

- The County vegetation condition improved steadily to above normal between April and September this year (Figure 2). This improvement seems to stabilise above maximum between August and October (Figure 3).
- In September and October the County vegetation condition index was 95.27 and 89.73 respectively.

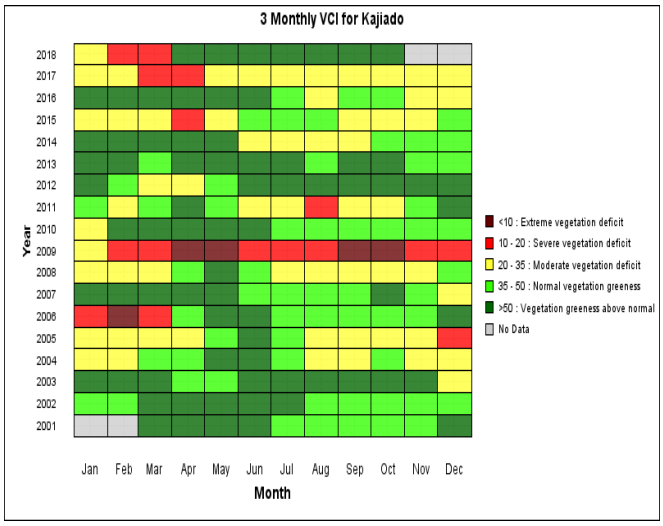

Figure 2: 3-monthly VCI matrix; Kajiado 2001-2018

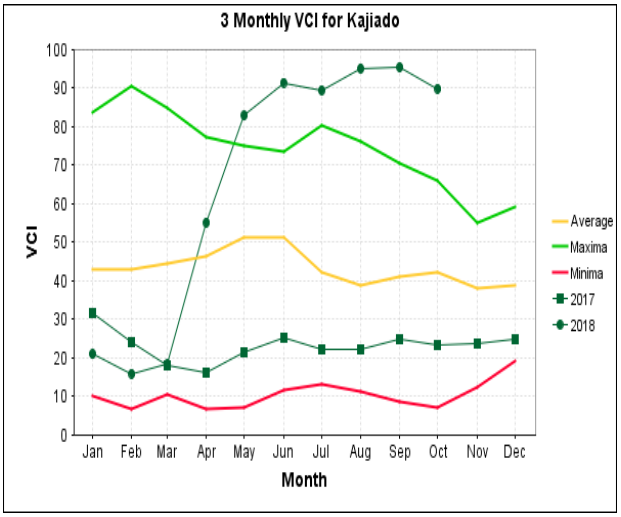

Figure 3: 3-monthly VCI chart; Kajiado 2001-2018

- With the expected short rains, the County vegetation greenness will remain above the long term average for at least the next three months.

2.2 Pasture and Browse Condition

- Pasture condition in most Pastoral areas of Kajiado South, and Kajiado West was good and above normal compared to similar times of the year.
- In Pastoral areas, the available pasture would last for three months. Most Pastoral areas have community institutionalized grazing system that helps them preserve some areas for grazing during the dry period.
- In Mixed farming and in most Agro-Pastoral zones, pasture condition was fair and would last for the next two months.
- The main factor that hinders access to pasture especially in Kajiado Central is the invasive *ipomea* weed. The weed suppresses pasture regeneration and growth.
- Browse was good across the County and can last for the next three months

2.3 Water Sources

- Forty four percent (Figure 4) of the key informants reported boreholes and shallow wells as the main source of water for livestock and domestic use in the month of October.

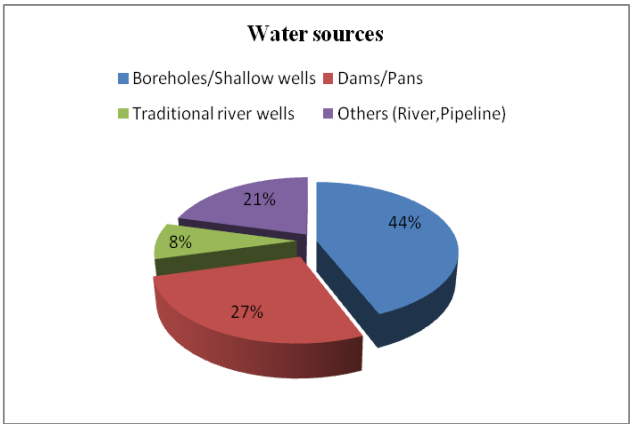

Figure 4: Water sources; Kajiado, October 2018

- In September, boreholes and shallow wells accounted for 40 percent of the water sources.
- The increased use of boreholes and shallow wells was due to drying up of pans. Although October is a wet month in a normal year, many parts of the County had not received rains by end of October.
- Other water sources include water trucking, streams and piped water.

2.4 Households Water Access and Utilization

- The average return distance to water points travelled by households was 5.4 km in September and 5.9 km in October (Figure 5).

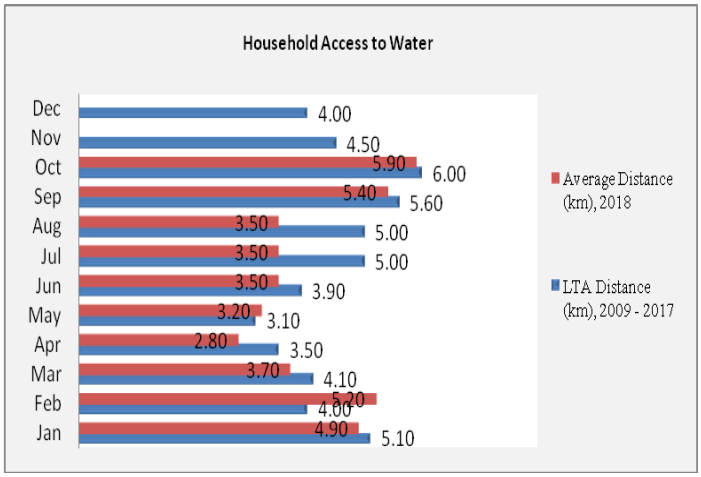

Figure 5: Average return distance from homesteads to water sources; Kajiado 2009 -2018

- The increase in distance that households travelled to water points was due to drying up of most of traditional river wells.
- The long term average distance in October is 6.0 km.
- In Pastoral areas households were travelling nearing seven kilometres to and from water sources.
- At the source, a jerrican of 20 litres of water was costing at Ksh 5.00. Water vendors sold a 20 litres jerrican of water between Ksh. 20.00 (in Injekita in Lenkism/Entonet ward) to Ksh. 50.00 (Kamukuru, Esonorua and Naserian in Magdi ward).
- Households in Mixed farming zones used about four jerricans of 20 litres of water per day while pastoral zones used three jerricans of 20 litres of water per day.

2.5 Livestock Access to Water

- In Pastoral areas, livestock were moving far into dry grazing areas since September. Most of these areas are far from water sources. This resulted into increased average return distances that livestock travelled from grazing fields to water sources from 4.6 km in September to 7.2 km in October (Figure 6).
- The current distance is shorter than the long term average of 9.1 km for similar period.
- In Lenkism/Entonet and Magadi wards, livestock were travelling more nearly 10 km to and from watering points.

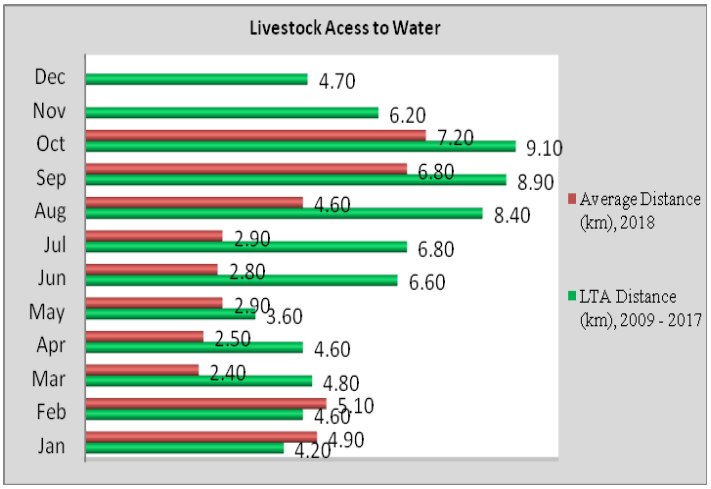

Figure 6: Average return distance from grazing fields to water sources; Kajiado, 2009-2018

- Distances to water points that the livestock travel from grazing fields was expected to decrease in November if it rains.

3.0 PRODUCTION INDICATORS

3.1 Livestock Body Condition

- Livestock all species were very fat with smooth appearance. This was due to availability of pasture and browse.
- Given that the pasture and browse was available for the next two to three months, livestock body condition was expected to remain good during this period.

3.2 Livestock Diseases

- In October, cases of Pestes des Petits Ruminants (PPR) were reported in the county in Kajiado Central and West sub-counties. Laboratory tests of samples showed positives results for the disease.
- Clinical cases of Contagious Caprine Pleuropneumonia (CCPP) were also reported mainly in Kajiado Central, South and West sub-Counties.
- With anticipated short rains, there were high likelihood of outbreak of Rift valley fever and Blue Tongue diseases. The County is marked as a hotspot for these diseases.

3.3 Livestock Mortalities`

- In October, there were no reports of unusual livestock mortalities within the County.

3.4 Livestock Migration

- No inter-County migration was observed in October. However, livestock movement following dry grazing pattern or closer to water sources were observed in Pastoral areas in Kajiado South since August. For instance, livestock from Injekita in Lenkism/Entonet ward moved close to Amboseli National Park in search of water.

3.5 Milk Production

- Household daily milk production increased from 3.5 litres in September to 4.0 litres in October (Figure 7). The increased milk production is attributed to increase in kidding in October. Cattle and goats are the sources of milk in the County.

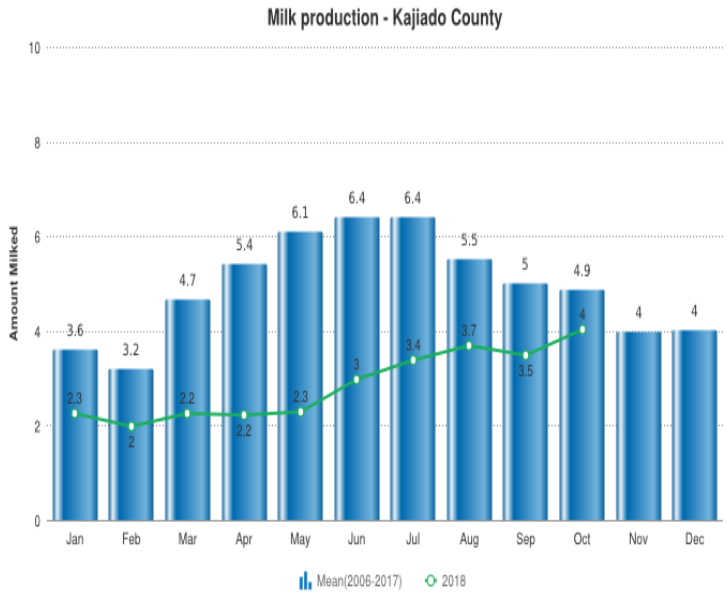

Figure 7: Milk production; Kajiado, 2006-2018

- Milk production varied across livelihoods. In pastoral zone the daily milk production per household was 4.5 litres and 3 litres in Agro-pastoral.
- In October, milk production was less than the long term average of 5.9 litres for similar period of the year due to reduced Tropical Livestock Units. Close to 70 percent of cattle died during the 2016/17 drought.
- Milk production was still expected to improve in November and December when pastoralists expect more calving.

3.6 Rain-fed Crop Production

- Land preparation and planting was on-going in Agro-pastoral and Mixed livelihood zones.

.

4.0 MARKET PERFORMANCE

4.1 Livestock Marketing

- Livestock markets have been operating normally since January. The major livestock markets in the County include; Shompole, Kiserian, Ilbisil, Kimana and Rombo.

4.1.1 Cattle Prices

- The prices of cattle stabilized between September and October after a continually steady increase since March. The market price of a medium size bull in March was Ksh. 13,100, Ksh 31,500 in September and Ksh. 30,100 in October (Figure 8).

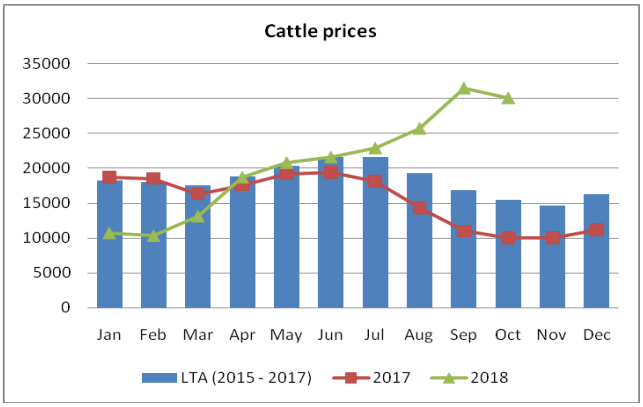

Figure 8: Cattle prices; Kajiado, 2015-2018

- There were no livelihood variations in cattle prices since January this year.
- Stabilizing of cattle prices corresponded to stability of their body condition and that of demand against supply.
- Cattle prices were higher and above the long term average since July and would probably remain stable for the next three months. Their body condition was expected to stay good between now and January 2019.

4.1.2 Goats Prices

- Prices of goats improved steadily and above long term average between July and October. In July a three -year old goat was selling at Ksh. 3,250 and Ksh. 4,530 in October (Figure 9).
- Continues improvement in prices of goats was. due to high demand including that of restocking against the low supply.
- Like cattle, there were no livelihood variations in goats' prices since January this year.
- The prices of goats were expected to increase slightly in the next two months. Traders now prefer buying goats especially for slaughter compared to cattle. Cattle are too fat resulting into low profits.

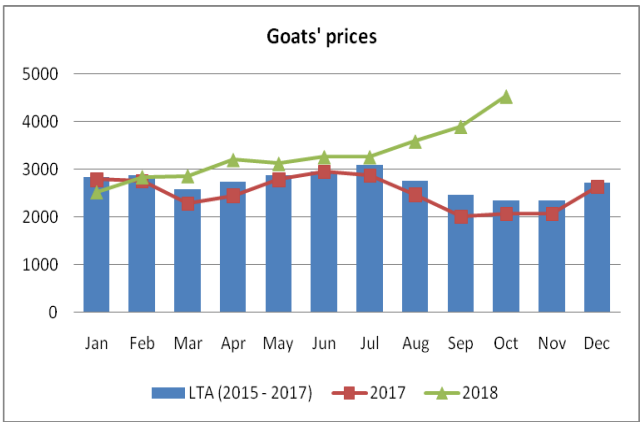

Figure 9: Goats' prices; Kajiado, 2015-2018

4.2 Prices of Cereals and Legumes

4.2.1 Maize Prices

- In October the average market price of maize increased to Ksh. 45 per kilogram from Ksh. 40 per kilogram in September (Figure 10). The current price is lower than the long term average of Ksh. 56 per kilogram.
- The increase in prices of maize was due to reduced supply to the market by farmers.
- In mixed farming areas of Rombo and Kimana, a kilogram of maize was selling at Ksh. 25 and Ksh. 50 in Pastoral areas of Magadi.
- It is expected that the prices of maize will stabilize between November and December if it rains.

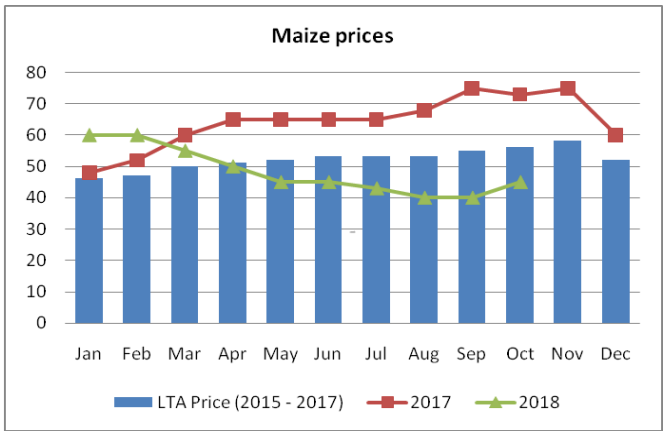

Figure 10: Average prices of Maize; Kajiado, 2015-2018

4.2.2 Beans Prices

- Like maize, the average market price of beans increased between September and October period due to reduction in supply from farmers. In September a kilogram of beans was retailing at Ksh 72 and in October a kilogram of beans was retailing at Ksh. 75 (Figure 11). The long term average is Ksh. 109 per kilogram.
- In Pastoral areas of Magadi, a kilogram was being sold at Ksh. 100.

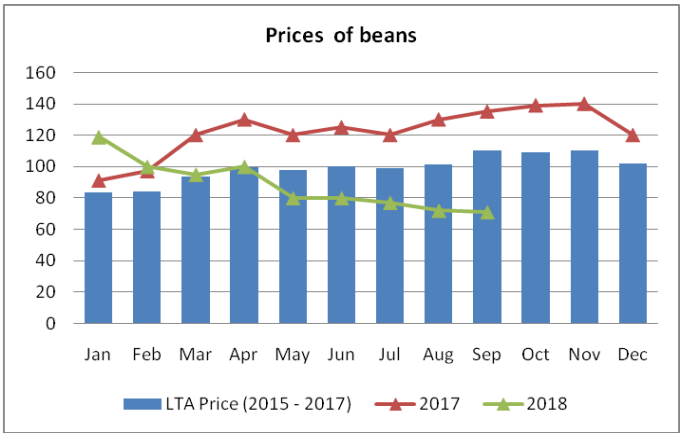

Figure 11: Average prices of beans; Kajiado, 2015-2018

- Prices of beans were likely to stabilize in November and December if it rains.

4.3 Prices of Milk

- The average farm gate price of milk was Ksh. 60 per litre with no significant livelihood variations. Normal price of milk at this time of the year is Ksh. 45 per litre.

- The current high price of milk was due to low production. Milk production was likely to improve in November and consequently reduce the prices.

4.4 Terms of Trade

- Terms of trade (TOT) continued to improve in favour of pastoralists since January this year. During the year, the prices of goats were increasing while that of maize were either decreasing or increasing at a lower rate.
- In January and October one would buy 101 kilograms and 42 kilograms of maize respectively by selling a three-year old goat (Figure 12).
- The long term TOT in October is 44 kilograms of maize for a goat.
- Livestock and food stuffs prices were expected to stabilize in November and December and so would be terms of trade.

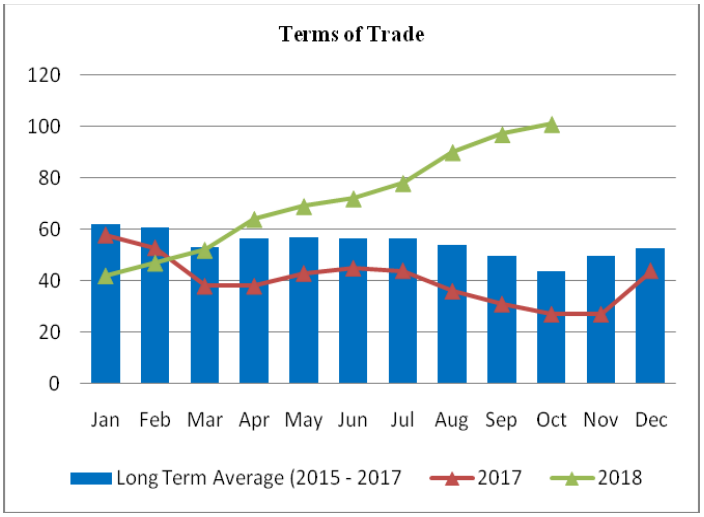

Figure 12: Trends in ToT; Kajiado 2015-2018

5.0 FOOD CONSUMPTION AND NUTRITION STATUS AND DISEASE

5.1 Milk Consumption

- The average household milk consumption was 3 litres per day in October. In a normal year, the daily household milk consumption is 4 litres.
- Milk consumption was expected to improve by November if calving rate improves as was expected.

5.2 Food Consumption Score

- Nearly 90% (Figure 13) of households were able to consume required variety of food at required frequency in October.
- For pastoralists, this was due to favourable terms of trade while Mixed farming households had a good harvest during the long rains.
- It was anticipated that most households can afford acceptable diet for at least the next two months.

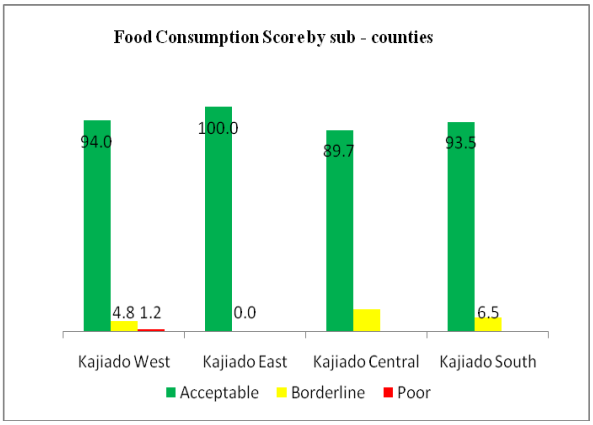

Figure 13: *Food consumption score; Kajiado, Oct 2018*

5.3 Coping Strategies

- The mean coping strategic index for the County in October was 4.4 and 5.67 in September which meant that households were able to access food with fewer difficulties during this period.
- Coping index of less than 10.00 is good for the County.
- Mixed farming livelihood zones had a coping strategy index of 2.8 compared to 5.2 for the Pastoral livelihoods zone. The variation is explained by the factor that pastoralists rely more on markets for alternatives foods compared to farmers.

5.4 Nutrition Status of Children aged 6-59 Months

- The risk of malnutrition among the under-fives stabilized during September-October period.
- In September and October, the proportion of children aged 6-59 months whose mid upper arm circumference (MUAC) measured between 125 mm and 135 mm was 9.0 % and 9.4 % respectively (Figure 14). The long term average for September and October is 11.9% and 12.2% respectively.

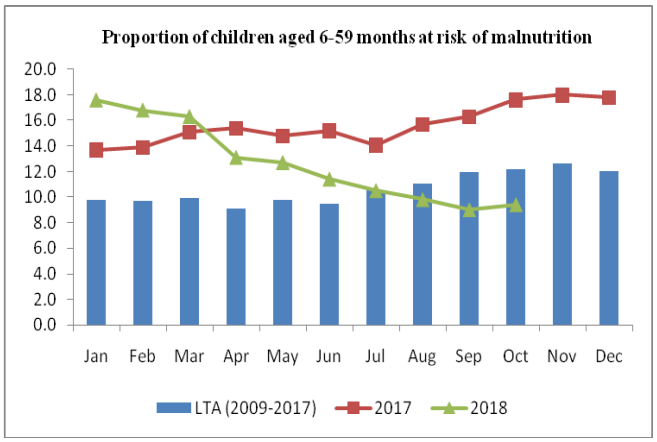

Figure 14: Risk of malnutrition for children aged 6-59 months; Kajiado, 2013-2018

- Reduction of risk of malnutrition below long term average reflected household access and utilization of improved diet. The County Government and partners have also intensified nutritional interventions.
- With majority of households consuming acceptable diet and possible increase in milk production and consumption in November and December, risk of malnutrition for under-fives was likely to reduce further.

5.5 Human Diseases

- No human disease outbreak was reported in October.

6.0 FOOD SECURITY PROGNOSIS, CURRENT INTERVENTIONS AND RECOMMENDATIONS

6.1 Food Security Prognosis

A number of factors were likely to influence County food security in the next three months. These factors include but not limited to;

- ✓ The expected short rains in November and December. This would improve livestock access to water for the two months. Pasture and browse would also improve.
- ✓ Livestock productivity, especially their prices is at optimal while milk production was likely to increase by November if calving rate increase as projected. This will improve household dietary intake especially in pastoral zones.
- ✓ Livestock were also not likely to migrate outside the County within the next three months.
- ✓ Crops were likely to perform poorly for the short rains season due to late onset of rains. By end of October, only the northern parts (Ngong and Kiserian) had received some fair rains.
- ✓ Food stock held by traders would probably last for at least the next two months. Prices of foodstuffs were probably going to stabilize if it rains.

6.2 On going Interventions

- Water trucking in Kajiado South (Lenkism/Entonet ward) and Kajiado West (Magadi ward); *by County Government*.
- Repaire of Ilpurrua water pan (in Purko ward); *by County Government*.
- Routine active and passive disease surveillance - *by County Government*.

6.3 Recommendations for Action

- Vaccination campaign against Contagious Caprine Pleuropneumonia(CCPP), Pestes des Petits Ruminants, Blue Tongue and Rift Valley Fever diseases - *Action by County Government (Veterinary services) in collaboration with National Drought Management Authority and partners.*
- Develop five (5) more ward contingency plans/action plans for timely response and building of community resilience- *Action by National Drought Management Authority and partners.*
- Training of communities on various value addition and alternative livelihoods. *Action by National Drought Management Authority and other partners.*
- Training communities on pasture conservation - *Action by County Government (Livestock production) in collaboration with National Drought Management Authority and partners.*