

National Drought Management Authority

KAJIADO COUNTY DROUGHT MONITORING AND EARLY WARNING SEPTEMBER 2018



A Vision 2030 Flagship Project



SEPTEMBER EW PHASE

Early Warning Phase Classification

Drought Status: NORMAL

Shughuli za kawaida

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

- ✓ Vegetation greenness was far above normal for similar period of the year.
- ✓ Pasture, browse and water situations remain above the long-term average since April. Southern pastoral zone is water stressed.

Production Indicators

- ✓ Livestock body condition was good and stable for all species.
- ✓ Household daily milk production was still below the long-term average due to low livestock tropical unit and low calving rate.
- ✓ No livestock migration since April as pasture and browse was available.

Access indicators

- ✓ The terms of trade was above the long term average and expected to remain so for the next two months.
- ✓ Milk consumption was below the long-term average for similar period of the year due to low production.
- ✓ Distances to water sources from homestead and grazing fields were shorter than the long-term averages.

Utilization Indicators

- ✓ Households used minimal coping strategy mainly by consuming less preferred food in September. Most of them were in acceptable food consumption score category.
- ✓ 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
State of water	Pastoral	Stressed	Adequate
	Mixed	Adequate	Adequate
3-monthly VCI		97	35-50
Forage condition		Good	Good
Production Indicators		Observed Value/Trend	Normal Range
Cattle body condition		Good	Good
Household milk production per day		3 litres	5 litres
migration pattern		No migration	No migration
Access Indicators		Observed Value	Long Term Average
Terms of trade		97kg of maize/goat	50 kg of maize/goat
Household milk Consumption per day		2.5 litres	4 litres
Distance to water source	Livestock	6.8 km	8.9 km
	Household	5.4 km	5.6 km
Utilization indicators		Value	Long Term Average
125mm <MUAC <135mm		9.0%	11.9%

<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"> ▪ Long rains ▪ Planting/weeding ▪ 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 Performance

- The county did not receive any rains during the month of September. Dry weather condition is normal for the County in September (Figure 1).
- Positive impacts of the above normal rainfall that the county experienced during 2018 long rains (March, May and April) (Figure 1) were still being felt in by relevant sectors including; Livestock, Agriculture and Markets.

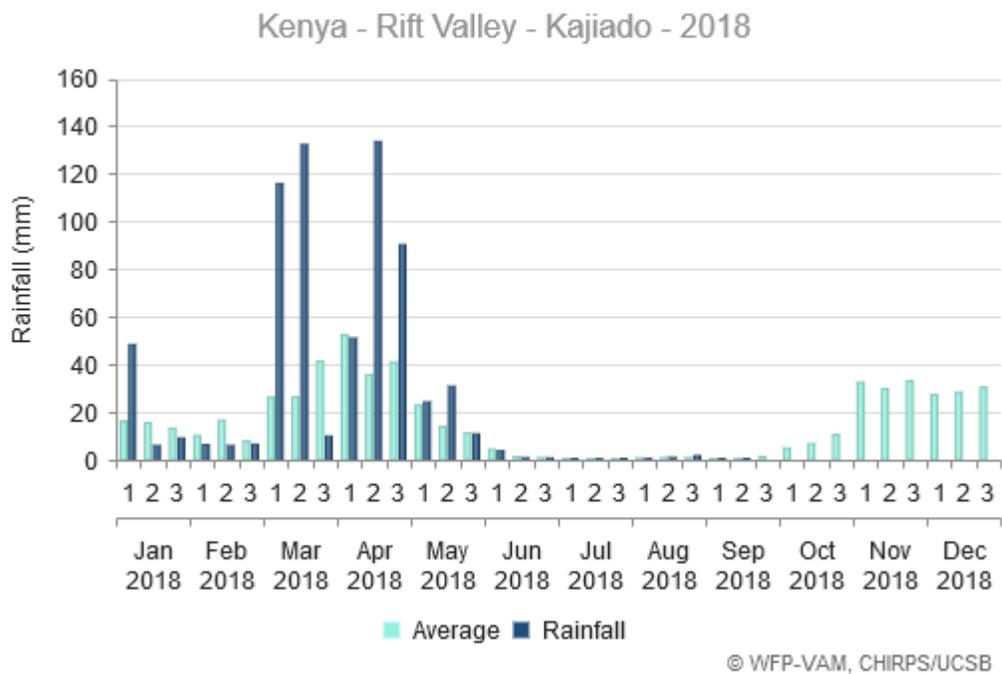


Figure 1: Rainfall performance; Kajiado, 2018

2.0 VEGETATION AND WATER CONDITIONS

2.1 Vegetation Condition

- The County vegetation greenness has been above normal since April (Figure 2). Heavy rains experienced during the 2018 long rains resulted into above the average regeneration of vegetation.
- In September, the vegetation condition index (VCI) for the County was 95.27 and 95 in August. Normal vegetation greenness has VCI ranging between 35 and 50.
- The County had the highest VCI for the months between May and September this year since the year 2001 (Figure 3).
- With the forecasted enhanced rainfall for the short rains season, the vegetation greenness in the County was expected to remain above normal for the next six months.

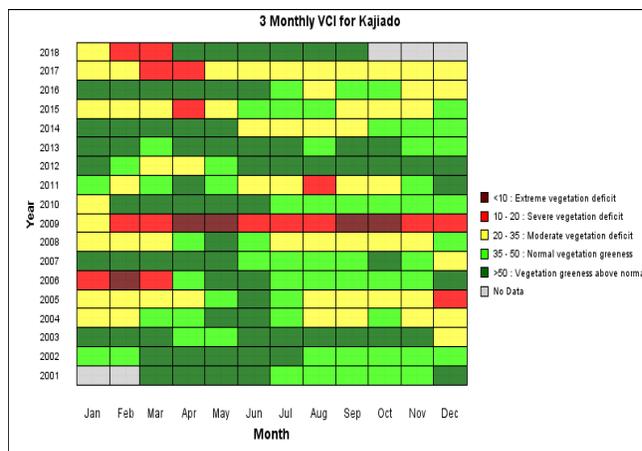


Figure 2: 3-monthly VCI matrix; Kajiado 2001-2018

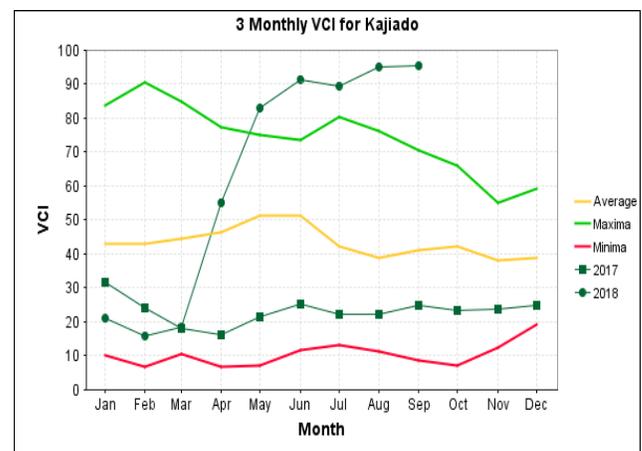


Figure 3: 3-monthly VCI chart; Kajiado 2001-2018

2.2 Pasture and Browse Condition

- In September, pasture and browse was good across all livelihoods in the County.
- Some factors that led to availability of pasture at this time of the year include; above normal rains during the long rains season, fencing of land especially in agro-pastoral areas of Dalalekutuk and Maparasha where land is demarcated and setting up of dry grazing areas especially in Kajiado South where land is communally owned.
- Invasive *ipomea* weed is a threat to pasture access in Kajiado Central and Kajiado East sub-Counties. The weed hinders the growth of pasture.

- The available pasture and browse is expected to last up to the short rains season which normally starts in mid-October.

2.3 Water Sources

- Shallow wells and boreholes were the main source of water for the County in September. Forty

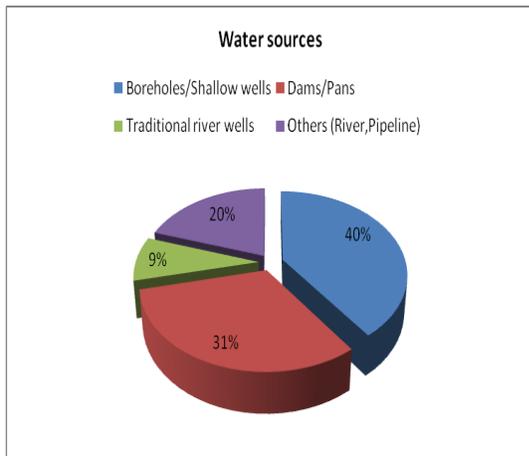


Figure 4: Water sources; Kajiado, September 2018

percent (Figure 4) of the Key informants reported shallow wells or boreholes as the main source of water for both livestock and domestic use.

- This is normal for the county at this time of the year.
- Most pans were now holding little water and were expected to last for at most one month.
- Water trucking was observed in some Pastoral areas including Magadi and Selengei wards.

2.4 Households Water Access and Utilization

- The distance to water points that household travelled to fetch water increased between August and

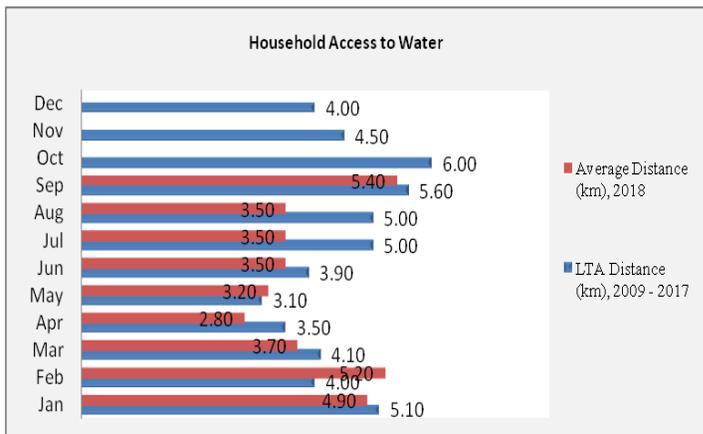


Figure 5: Average return distance from homesteads to water sources; Kajiado 2009 -2018

September. Most pans and traditional river wells dried up in September.

- In August the average return distance to water point from homesteads was 3.5 km and 5.4 km in September (Figure 5).
- Since June, the distance that household travelled to fetch water remained shorter than the long-term average.
- It was observed that some households in pastoral areas were travelling more than six kilometres to get water.

- Kenya Wildlife Service was trucking water to residence of Injekita (Selengei ward) while TATA Chemicals was trucking water in Magadi. Households in Magadi (Tinga, Esonorua, Kamukuru, Naserian) were also buying water from a vender at Ksh. 20 for a twenty litre jerrican.

2.5 Livestock Access to Water

- The average return distance that livestock covered from grazing fields to water points continue to increase since July. In July, this distance was 2.9 km and 6.8 km in September (Figure 6).
- The current distance was expected to reduce by the end of October if short rains starts normally.
- Livestock in pastoral areas of Selengei and Enkeiroroi were covering more than 10 km from grazing areas to watering points.
- Increased distance to watering points from the grazing areas was due to drying up of pans. Livestock were also moving far into dry season grazing areas which are normally far from water sources.
- Since June, the distance that the livestock covered travelled to watering points remained shorter than the long-term average.

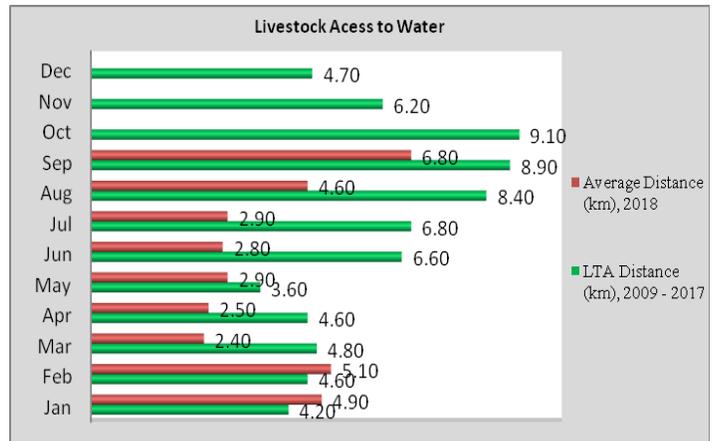


Figure 6: Average return distance from grazing fields to water sources; Kajiado, 2009-2018

3.0 PRODUCTION INDICATORS

3.1 Livestock Body Condition

- The available good pasture and browse continue to positively impact on livestock productivity. In September, livestock body condition for all species was good with no variations across the livelihoods. Cattle were fat with smooth appearance.
- Livestock body condition was expected to remain good for the next five months if the County was to experience enhanced short rains as forecasted.

3.2 Livestock Diseases

- Clinical cases of endemic livestock diseases including Heart Water, Contagious Caprine Pleuropneumonia (CCPP) were reported mainly in Kajiado central, south and west.
- Cases of Pestes des Petits Ruminants (PPR) were report in Loondokilani ward since August. Spot vaccination against the disease was done in the same ward in September.

3.3 Livestock Mortalities

- There were no reports of unusual livestock mortalities in the months of September.

3.4 Livestock Migration

- Livestock were not expected to migrate to other counties in search of pasture. The available pasture will take the livestock to the next rainy season (Short rains seasons).
- However, livestock have been moving into the dry season grazing areas since August.

3.5 Milk Production

- Cattle are the main source of milk in the County. Household milk production was three litres a day in both August and September. In a normal year the daily household milk production is five litres.
- In pastoral zones, the daily household milk production was three and half litres a day and two litres a day in Agro-pastoral areas.
- Pastoralists expect high calving in November which will result into increased milk production.

3.6 Rain-fed Crop Production

- Land preparation for the short rains was ongoing in Agro-pastoral and Mixed livelihood zones.

4.0 MARKET PERFORMANCE

4.1 Livestock Marketing

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

4.1.1 Cattle Prices

- Continuous improvement of cattle body condition coupled with demand for restocking following

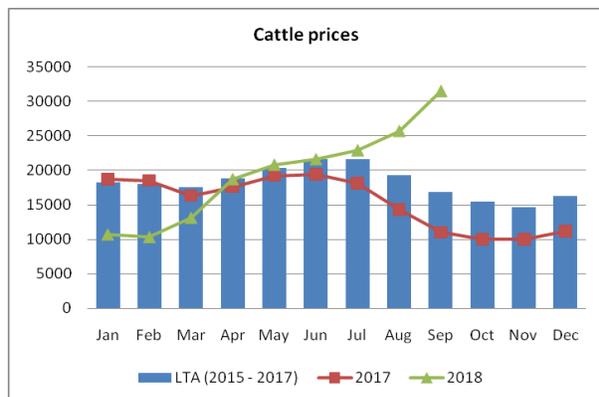


Figure 7: *Cattle prices; Kajiado, 2015-2018*

good performance of 2018 long rains resulted in increased prices. The market prices of a medium size bull increased continually from Ksh. 18,700 in April to Ksh, 31,500 in September (Figure 7).

- The three-year average price of a medium size bull in September is Ksh. 16,800.
- There was no difference in prices of cattle among livelihoods in September.
- The prices of cattle were likely to stabilize above the long-term average for the next four months as their body condition remained good.

4.1.2 Goats Prices

- The average market price of a three-year old goat in September was Ksh. 3,890 and Ksh. 3,250 in July (Figure 8). The three-year average price of goat in September is Ksh. 2,450.

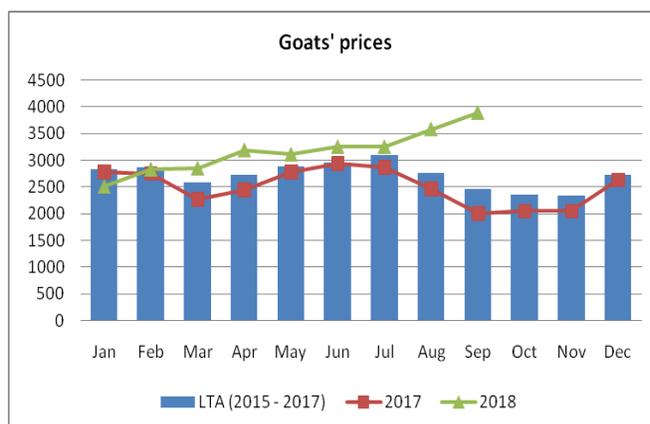


Figure 8: *Goats' prices; Kajiado, 2015-2018*

- The continuous rise in prices of goats since March was due to demand for restocking after good performance of long rains.
- There was no variation in prices of goats among livelihoods in September.
- The prices of goats were likely to stabilize above the long-term average for the next four months as their body condition remained good.

4.2 Prices of Cereals and Legumes

4.2.1 Maize Prices

- The average market price of maize was Ksh. 40 per kilogram in August and September (Figure 9). The three-year average price of maize in September is Ksh. 55.
- Stability of maize prices along the long-term average was due to the availability of the commodity. Maize harvest from the long rains season was fair.
- The average price of maize was likely to remain stable for the next two months due to available stock held by traders and farmers.
- In mixed farming zone, maize was retailing at Ksh. 20 per kilogram and Ksh. 45 in pastoral areas.

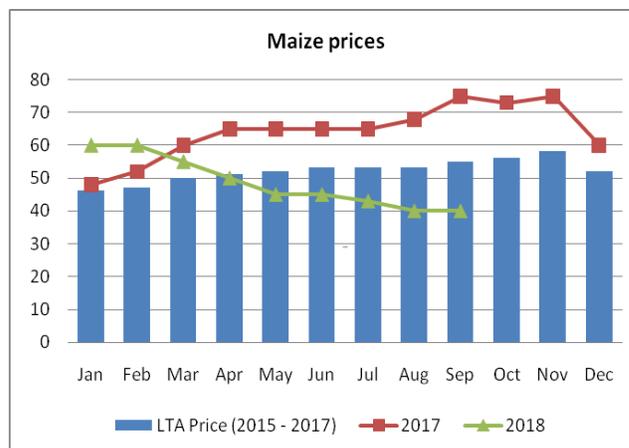


Figure 9: Average prices of Maize; Kajiado, 2015-2018

4.2.2 Beans Prices

- The market price of beans was stable for August-September period due to increased supply of the commodity in the market. The crop yield from long rains season was good.
- In August a kilogram of beans was selling at Ksh. 72 and Ksh. 71 in September (Figure 10). The three-year average for September is Ksh. 110 per kilogram.
- In pastoral livelihood zones, some varieties of beans were selling at Ksh. 100 per kilogram.
- Prices of beans were likely to rise slightly in the next month due to anticipated demand against the reducing supply. Beans were harvested in July and the stock held by farmers has since reduced.

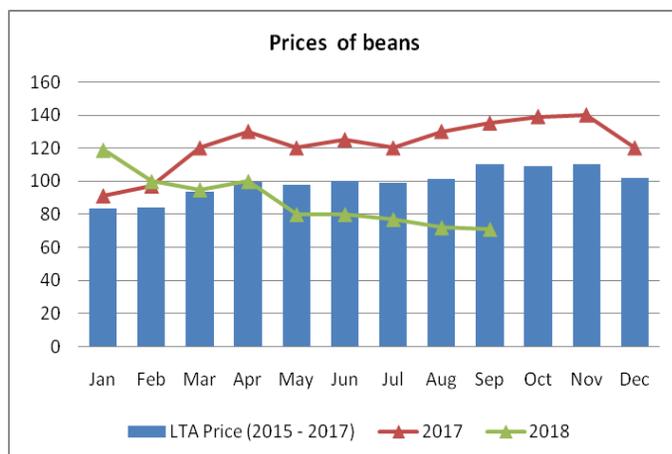


Figure 10: Average prices of beans; Kajiado, 2015-2018

4.3 Prices of Milk

- The average price of milk has remained high this year due to low production. In September the farm gate price of a litre of milk was Ksh. 60 with no livelihood variations.
- In a normal year, the average price of a litre of milk in September is Ksh. 45.
- The farm gate milk prices were expected to remain high until November. High rate of calving was expected in November which would result in increased milk production and consequently reduce the price.

4.4 Terms of Trade

- The terms of trade have steadily improved in favour of pastoralist since January. This was a response to the increasing prices of livestock against reducing prices of foodstuffs.
- In January a pastoralist would exchange a medium size goat for a 42 kg of maize. In September, one would exchange a goat for 97 kg of maize (Figure 11).
- The long-term average terms of trade for the month of September is 50 kg of maize for a goat.
- The terms of trade (ToT) were expected to stabilize above the long-term average for the next two months.

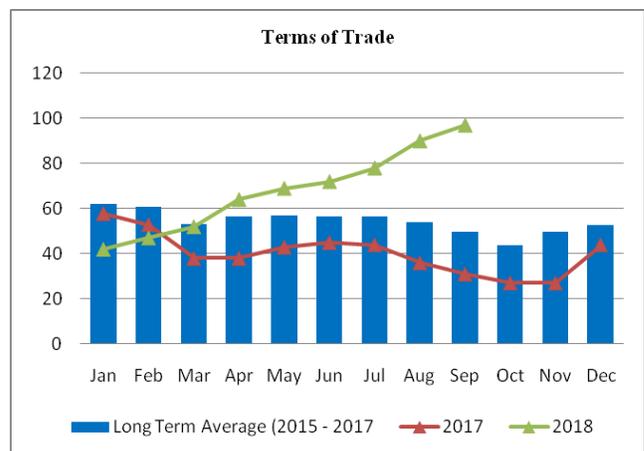


Figure 11: Trends in ToT; Kajiado 2015-2018

5.0 FOOD CONSUMPTION AND NUTRITION STATUS AND DISEASE

5.1 Milk Consumption

- The average household milk consumption remained stable at two and half litres per day during August-September period. In a normal year, the daily household milk consumption is four litres.
- Milk consumption was expected to improve by November if as most pastoralists expect increase in calving rate.

5.2 Food Consumption Score

- Favourable terms of trade for pastoralists coupled with low prices of food stuffs resulted into most (Over 79%) households consuming acceptable diet (Figure 12). This implies improvement in both

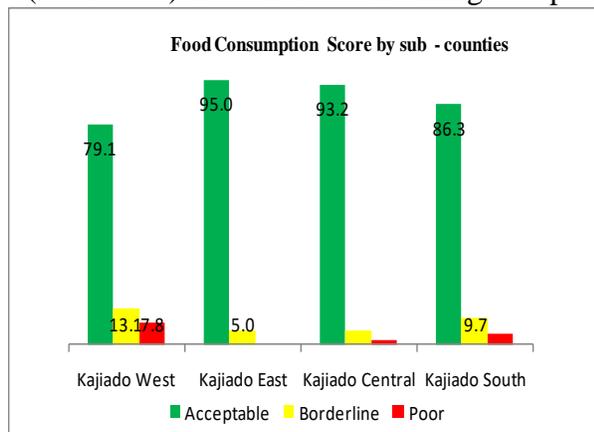


Figure 12: Food consumption score; Kajiado, Sept 2018

in variety and frequency of foods consumed by household members.

- It is worth noting that close to 8% of households in pastoral zone of Kajiado West had poor food consumption score implying more reliance on cereals. The cost of food stuffs in this sub-county is usually high due to inaccessibility of most parts.

5.3 Coping Strategies

- In September households had less strain in accessing food. The main strategy used by households was by consuming less preferred food.
- The mean coping strategy index for the month of September was 5.67 with pastoral livelihoods recording 7.1 and agro-pastoral at 3.0.
- The variation is attributed to availability of cereals due to harvest in agro-pastoral while pastoral households suffered reduced Tropical Livestock Units due to 2016/2017 drought.

Nutrition Status of Children aged 6-59 Months

- The prevalence of under-fives at risk of malnutrition consistently continues to reduce since the beginning of the year.
- In September the proportion of children aged 6 - 59 months at risk (125mm <MUAC <135mm) of malnutrition reached 9.0% compared to 17.6% in January (Figure 13). Loodokilani had 11.8%.
- The current proportion of children at risk of malnutrition is lower than the long-term average. This may imply better nourishment of the children.
- Nutritional status of under-fives was likely to stabilize with risk of malnutrition falling below the long-term average for the next four months as milk production and consumption was expected to increase by November.

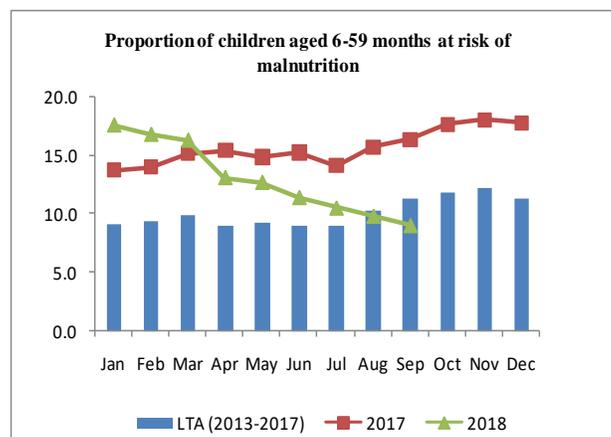


Figure 13: Risk of malnutrition for children aged 6-59 months; Kajiado, 2013-2018

5.5 Human Diseases

- No human disease outbreak was reported in September.

6.0 FOOD SECURITY PROGNOSIS, CURRENT INTERVENTIONS AND RECOMMENDATIONS

6.1 Food Security Prognosis

- The available pasture, browse and water would probably last up to the start of short rains by mid-October.
- Milk production will probably increase by November if calving rate increase as projected. This will contribute to improvement of household food consumption.
- Food stock held by households in mixed farming and Agro- pastoral zones would last for one to two months.
- The ToT will probably remain favorable for pastoralists for least two months due to expected stability of prices of foodstuffs.
- The county was therefore likely to remain food secure for the next three to four months.

6.2 Ongoing Interventions

- Human and livestock disease surveillance; *by county government.*
- Vaccination against Pestes des Petits Ruminants (PPR); *by County Government with support from Food and Agricultural Organization*
- Routine extension services; *by the relevant departments.*

6.3 Recommendations for Action

- Vaccination campaign against Contagious Caprine Pleuropneumonia (CCPP), Heart water and Pestes des Petits Ruminants (PPR). *Action by County Government (Veterinary services) in collaboration with National Drought Management Authority and partners.*
- Desilting of strategic pans - *Action by County Government through Ministry of water and Irrigation*
- Repair and rehabilitation of strategic boreholes - *Action by County Government through Ministry of water and Irrigation*
- Training of communities on various value addition and alternative livelihoods. *Action by National Drought Management Authority and other partners.*
- Training communities on pasture management - *Action by County Government (Livestock production) in collaboration with National Drought Management Authority and partners.*