


National Drought Management Authority

KAJIADO COUNTY DROUGHT MONITORING AND EARLY WARNING BULLETIN JUNE 2021



A Vision 2030 Flagship Project



JUNE EW PHASE		Early Warning Phase Classification			
Drought Status: NORMAL  Shughuli za kawaida		LIVELIHOOD ZONE	EW PHASE	TRENDS	
		PASTORAL	NORMAL	WORSENING	
		AGRO-PASTORAL	NORMAL	WORSENING	
		MIXED FARMING	NORMAL	WORSENING	
		COUNTY	NORMAL	WORSENING	
Drought Situation & EW Phase Classification Biophysical Indicators ✓ June is usually a cold month as was the case this year. ✓ The vegetation greenness was above the normal for the month while water was fairly available and accessible for both livestock and domestic use. Production Indicators ✓ Beans yields was below normal for the season while maize was under moisture stress due to poor temporal distribution of rainfall. ✓ Pasture was available for livestock and as such, livestock were still in good body condition. ✓ Cattle prices reduced slightly while that of goat increased minimally during May-June period. ✓ Similarly, milk production reduced to below the long-term average production for the month. Access indicators ✓ In June, the terms of trade was above five-year average but in a declining trend, while the amount of milk consumed by households was similar to the long term average. ✓ Distances to water sources from both homesteads and grazing fields were slightly longer than long-term averages for similar period of the year. Utilization Indicators ✓ The risk of malnutrition for under-fives was below the five-year average for similar month with households employing the normal coping strategies such as selling small stocks to get food or money to buy food		Biophysical Indicators	Observed Value/Range	Normal Range/LTA	
		3-monthly VCI	77.99	35 - 50	
		State of water	Fairly adequate	Adequate	
		Forage condition	Fair	Good	
		Production Indicators		Observed Value/Trend	Normal Range
		Livestock body condition		Good	Good
		Milk production		2.6 litres	>4.5 litres
		Livestock Migration		None	None
		Access Indicators		Observed Value	LTA
		Terms of trade		113 kg/goat	71 kg/goat
		Milk consumption		2.8 litres	2.8 litres
		Distance to water sources	Livestock	6.2 km	4.8 km
			Household	4.9 km	4.2 km
		Utilization indicators		Value	LTA
		MUAC (% <135 mm)		6.3	9.6
CSI		5.9	<10		
FCS: Kajiado west		Border line = 59.3% , Acceptable = 40.7%			

<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

- June is usually a cold month and this was the case for this year (Figure 1).
- In addition to cold weather, the County received traces of rains in isolated parts such as Ngong. The cumulative rainfall for the first and second dekads of the month was about 5 mm.

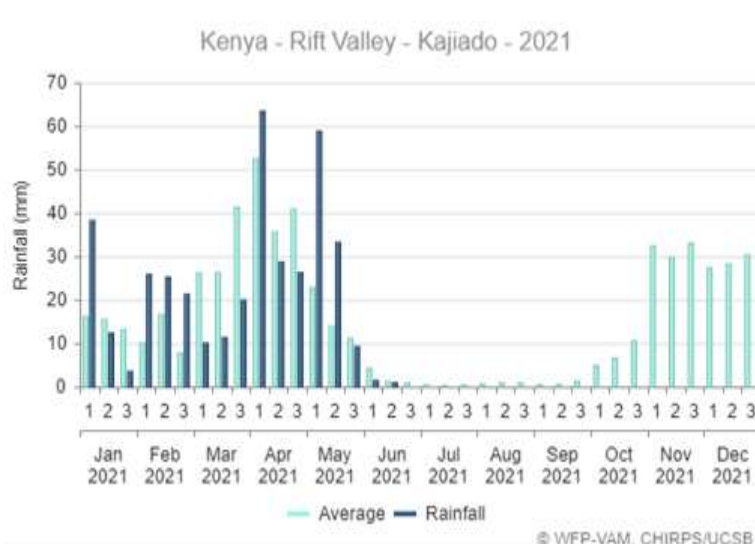


Figure 1: Rainfall performance; Kajiado

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index

- For more than one and half years, the County vegetation greenness remained above normal (Figure 2). This is because, for the last four consecutive seasons (Since 2019 short rains 2019), the County has been receiving good rains.
- This month, the County three-monthly vegetation condition index was 58.69 compared to 77.99 in June last year. The vegetation condition index for normal vegetation greenness range between 35 and 50.



Figure 2: 3-monthly VCI matrix; Kajiado 2001-2021

2.1.2 Pasture and Browse Condition

- In Pastoral and Agro-pastoral livelihood zones, pasture was now fair while in mixed zone pasture was good. This is normal for this time of the year.
- From Figure 1, the County seemed to have received above normal rainfall in May. Although its temporal distribution was erratic while spatial distribution was poor, it was able to enhance the

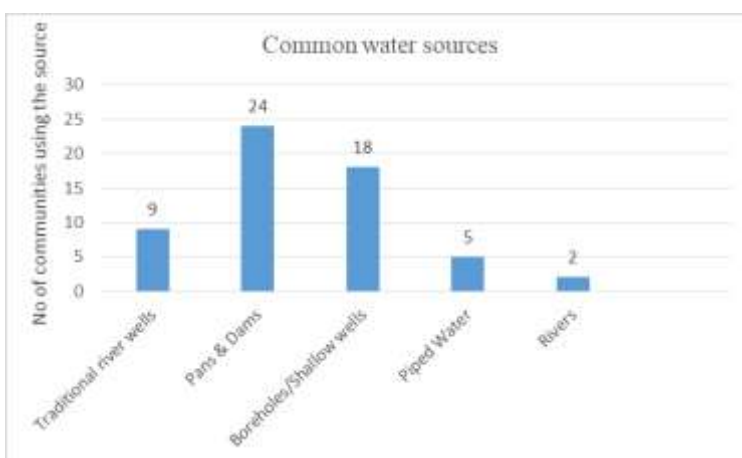
positive effect of the January-February off-season rains. This year, the available pasture may last to a near normal period possibly up to August.

- Areas with poor pasture include purko, Meto wards (Pastoral central), part of Dalalekutk ward (Pastoral central), Magadi (Pastoral west) and parts of Lenkism ward (Pastoral south). These areas were likely to experience earlier than normal migration of livestock in search of pasture and water.
- Since the beginning of this year, browse has remained good and normal in all parts of the County.

2.2 WATER SOURCES

2.2.1 Sources

- Figure 3 show the main sources of water for communities. During the month of June, majority of communities sourced water especially for livestock from pans.



- Out of 24 key informants interviewed, regarding the three sources of water for their communities, all the 24 of the reported pan being one of them. Boreholes were reported by 15 (62 percent) of these Key informants.

- These are normal sources of water at this time of the year. Pans were likely to dry up by beginning of July. If the long rains were normal and evenly distributed over the season, pans would carry water up to the end of July.

Figure 3: Water sources; Kajiado, June 2021

2.2.2 Households Water Access and Utilization

- The average distance that people travelled to get water for domestic use increased from 4.3 km in May to 4.9 km in June (Figure 4).
- Usually this distance start increasing by June as the County enters into the dry spell. During this time, sources such as traditional river wells dry up. Boreholes now become the main source of water for

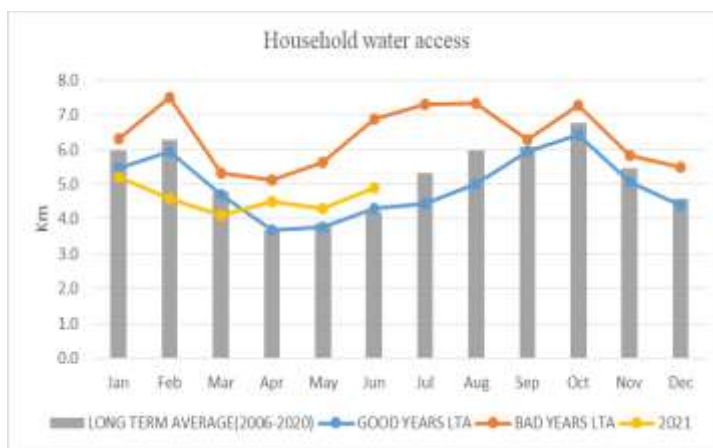


Figure 4: Average return distance from homesteads to water sources; Kajiado 2009-2021

domestic use and for livestock. However, it is worth noting that distances for April, May and June this year were longer than the historical averages for these months. The long term averages for these months are 3.7 km, 3.9 km and 4.2 km respectively. Increase in distance this year would be explained by erratic temporal distribution of rainfall for the two previous rainy seasons.

- In Pastoral zone, the average return distance between homesteads and livestock watering points was 3.1 km and 3.6 km in Agro-pastoral zone.
- The cost of water was between Ksh. 5 per 20-litre jerrican in Kaputiei North (Agro-pastoral east) and Ksh.20 per 20-per litre jerrican in Mbirikani (Pastoral south).

2.2.3 Livestock Access to Water

- Livestock mainly used water from pans/dams. In June, all communities reported pans/dams as one of the three sources of water. These were the normal sources of water for livestock at this time of the year.
- On average, the distance that livestock travelled from grazing fields to watering points in May was 4.7 km and 6.2 km in June. The long-term average distance between the grazing fields and livestock watering points in June is 4.8 km (Figure 5).

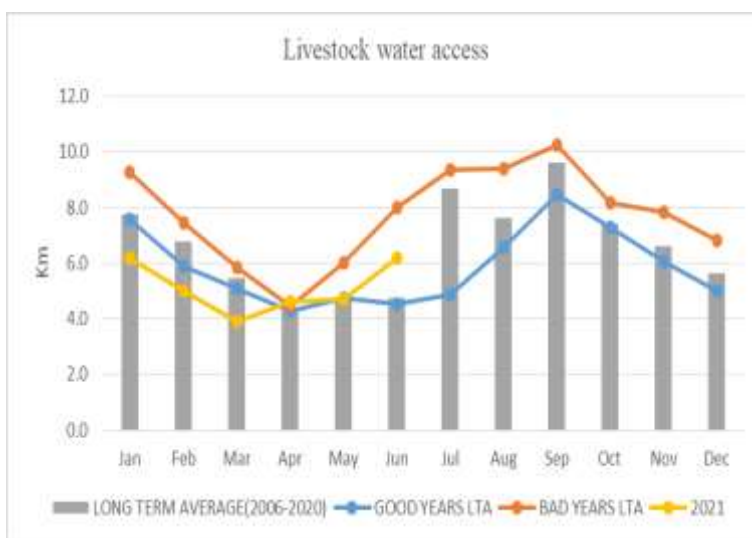


Figure 5: Average return distance from grazing fields to water sources; Kajiado, 2009-2021

- Livestock in Pastoral zone covered longer distance to water points from grazing fields than those in Agro-pastoral. In Pastoral zone, this distance was 3.6 km while in agro pastoral zone it was 1.9 km. Mbirikani ward (Pastoral south) reported the longest distance of 9.3 km.
- Watering frequency for livestock was daily which was normal for this time of the year.
- Distance to water points from grazing fields were likely to increase by end of July as pans were expected to dry up by then.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Livestock all species in May and June appeared smooth and good. This was normal for this time of the year given availability of pasture and water. No livelihood variations in livestock body condition was observed during the month.
- By the end of July, cattle body condition would probably deteriorate as pasture quantity and quality decline.

3.1.2 Livestock Diseases

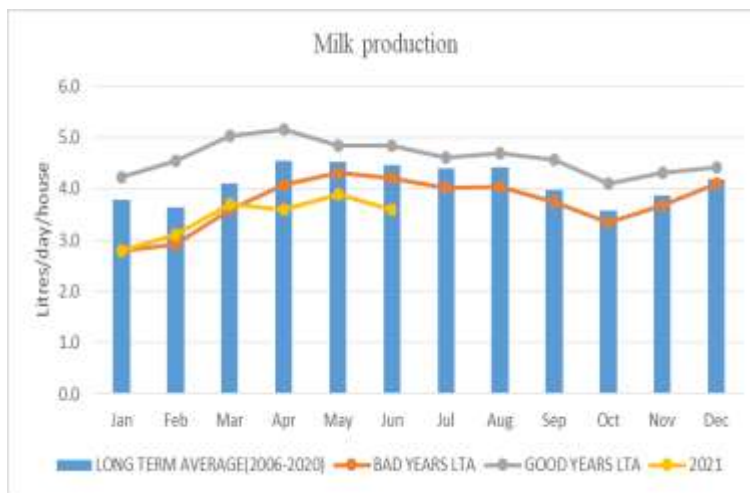
- Foot and Mouth Disease, Contagious Caprine Pleuropneumonia (CCPP), Contagious Bovine Plueropneumonia (CBPP) and Worms continued being reported especially in Kajiado West.

3.1.3 Livestock Migration

- There was no migration of livestock outside the County in search for pasture and water in June. This year, the County expect livestock migration by mid-August.

3.1.3 Milk Production

- The average daily household milk production dropped from 3.9 litres a day in May to 2.6 litres a day in June. The long-term average household milk production for June is 4.5 litres a day (Figure 6).
- Since January this year, milk production was below the long-term average production despite good rainy seasons. This was probably due to reduction in tropical livestock units and or reduction in calving rates.
- Further reduction in milk production *Figure 6: Average milk production; Kajiado, 2006-2021* was likely due to the expected decline in pasture and water in the next one to two months.



3.2 RAIN-FED CROP PRODUCTION

- The main rain fed crops in the County are maize and beans. Ninety percent of the area planted with beans was harvested by June with yield being falling below normal for the season due to poor temporal distribution of rainfall.
- Maize was maturing but with a lot of moisture stress. This point to a possible below normal yields.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

- Shompole, Kiserian, Ilbisil, Kimana and Rombo are the main livestock markets in the county. These markets have been operating normally for more than two years now..

4.1.1 Cattle Prices

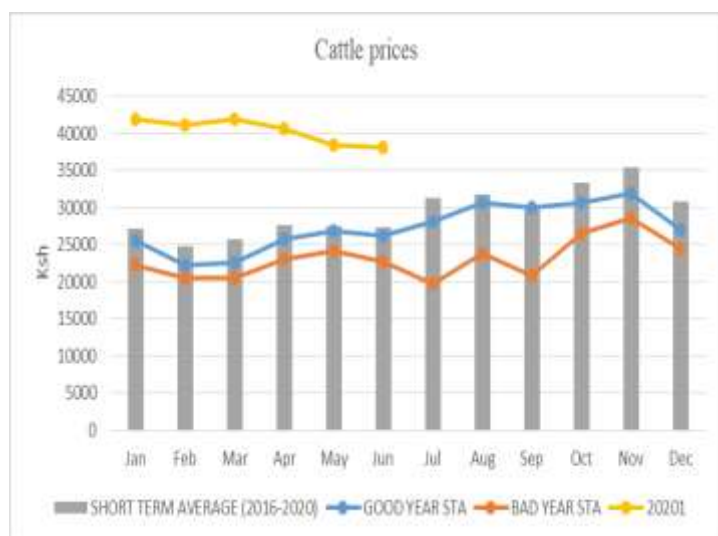


Figure 7: Average cattle prices; Kajiado 2016-2021

- In May, the average market price of a mature bull was Ksh. 38,500 and Ksh 38,200 in June. The average price of a mature bull for the last five years for June is Ksh. 27,400 (Figure 7). The decrease in market price of cattle after March this year would probably be due to increased volumes in the markets after some COVID-19 containment measures such as those related to movements were lifted.
- Markets that recorded prices of cattle less than Ksh. 30,000 include Najile, Ewuaso Kedong (Pastoral west) and Mbirikani (pastoral south).
- Cattle prices were probably going to reduce further due to expected decline in pasture and water availability.

4.1.2 Goats Prices



Figure 8: Average goats' prices; Kajiado, 2016-2021

- The average market price of medium size goat in May was Ksh. 6,000 in May and Ksh. 6,200 in June with no livelihood variations. For the last five years, the average price of a medium size goat in June is was Ksh. 4,200 (Figure 8).
- Goats maintained stable and above the short-term average prices since January. They were still likely to remain so next month due to their good body condition.

4.2 PRICES OF CEREALS AND LEGUMES

4.2.1 Maize Prices

- On average, maize was retailing at Ksh. 55 per kilogram in June. In May one kilogram of maize was selling at Ksh. 52. The average price for the past five years in June is Ksh. 54 per kilogram (Figure 9).



Figure 9: Average price of maize; Kajiado 2016-2021

- The increase in price of maize since January was due to reduced supply of the foodstuff in the market.
- Markets that recorded prices above Ksh. 50 per kilogram include Kamukuru, Najile and Ewuaso Kedong all in pastoral west. In Rombo (postoral south) maize was selling at Ksh. 38 per kilogram.
- The price of maize was likely to reduce by next month due to increased supply in the market when harvesting of the crop starts.

4.2.2 Beans Prices

- The average market price of beans reduced from Ksh. 98 per kilogram in May to Ksh. 93 per kilogram in June after harvesting of the crop. The current price for the month of June is the same as the average price for the previous five years. (Figure 10).

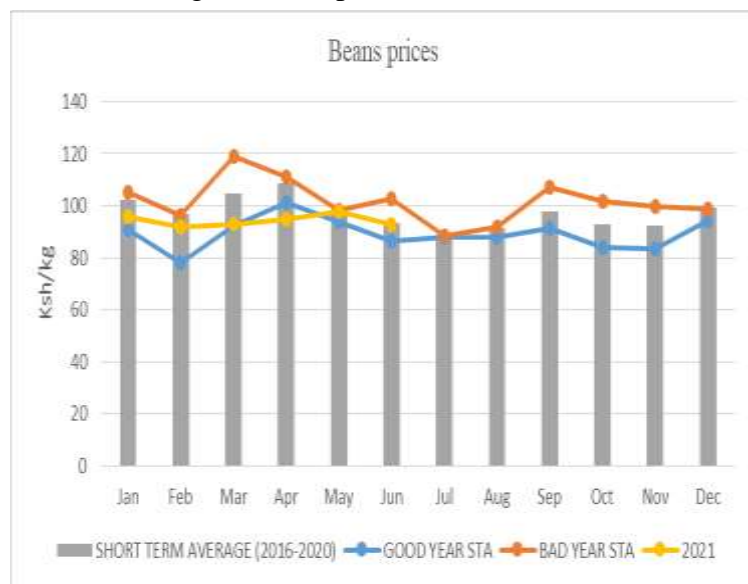


Figure 10: Average beans prices; Kajiado, 2016-2021

- The price of beans varied across livelihood zones with Kamukuru, Ewuaso Kedong and Najile (all pastoral west) recording prices above Ksh. 110 per kilogram.
- Further reduction in beans prices was likely in July when farmers starts harvesting other crop such as maize.

4.3 Milk Prices

- The average price of milk remained Ksh. 50 per litre due to low production with no livelihood variations. Normally, a litre of milk would cost Ksh. 40 during similar period of the year.
- Prices of milk are expected to remain high for a couple of months due low production

4.4 Terms of Trade

- Proportionately higher increase in prices of goats compared to that of maize resulted into reduction of terms of trade. In May, a medium sized goat would be exchanged with 115 kg of maize. In June one would buy 113 kg of maize after a sale of a medium size goat (Figure 11).



Figure 11: Trends in ToT; Kajiado 2016-2021

- The average ToT for the previous five years is 71 kg of maize per medium sized goat.
- This year, the ToT remained above the long term ToT due to good prices of goats.
- Pastoral west (Kamukuru, Najile, Ewuaso Kedong) had lower than the County average terms of trade

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk Consumption

- Corresponding to reduction in milk production during May-June period was the milk consumption.
- The average household milk consumption per day in May was 3.0 litres and 2.8 litres in June. The current consumption rate is the same as the long-term average consumption rate (Figure 12).
- Both production and consumption of milk was likely to decline further in July as water and pasture declines.

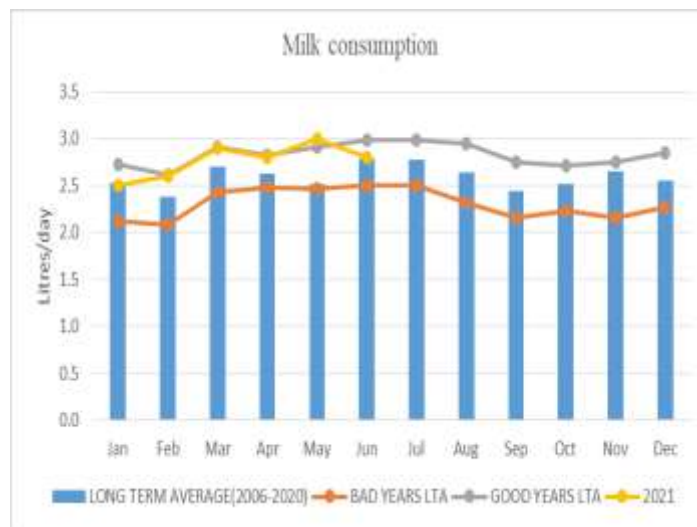


Figure 12: Milk consumption; Kajiado, 2006-2021

5.2 Food Consumption Score

- Figure 13 shows the percentages of the households under various food consumption score band for four sub-Counties.
- Pastoral west usually worse off in terms of food security compared to other parts of the County. This part of the County face challenges of poor connectivity; food prices are relatively high while the livestock prices are relatively low.
- In June, majority (59.3%) of the households in this zone had food consumption score between 21.5 and 35 (Borderline).
- In pastoral west, some households in borderline food consumption score band were likely to slip into the poor band. This was because livestock productivity would reduce during the said period. Consequently, the terms of trade in these zones would also decline.

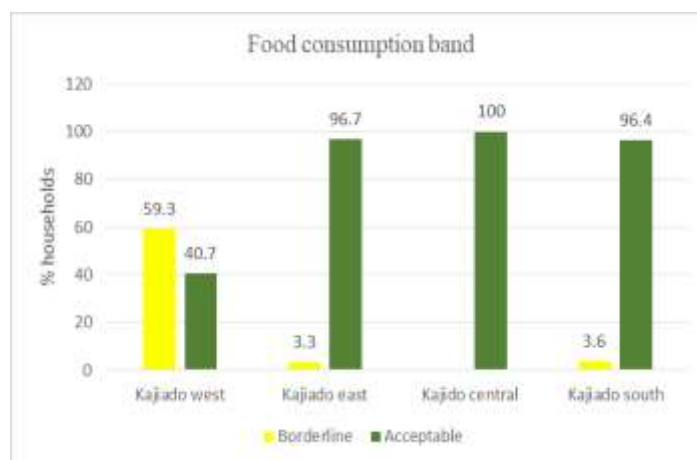


Figure 13: Food consumption score; Kajiado, June 2021

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status of Children aged 6-59 Months

- The proportion of children aged 6 – 59 months at risk of malnutrition; both the current and the long-term averages are shown in Figure 14.

- From the results, there has been some increase (19 %) in proportion of under-fives at risk of malnutrition between May and June. This was attributed probably to reduced milk consumption during the period. Terms of trade also reduced indicating reduction of ability of the households to get food. Increase in coping strategy index further support the reason for increase in proportion of under-five children at risk of malnutrition.

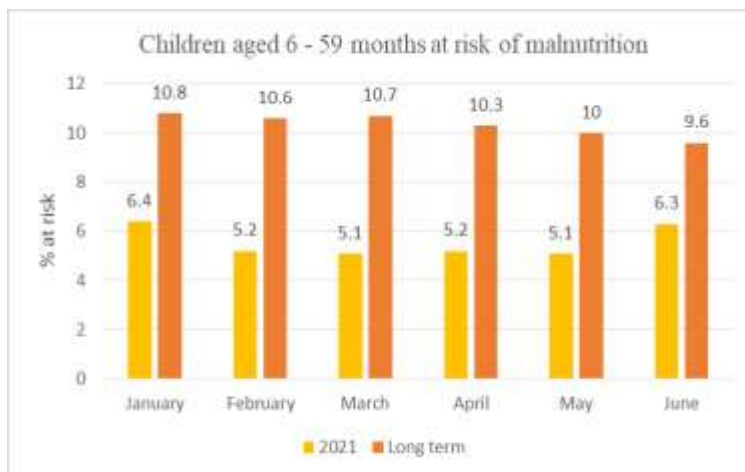


Figure 14: Risk of malnutrition for children aged 6-59 months; Kajiado, 2016-2021

- Pastoral south recorded the highest proportion of under-five at risk of malnutrition at 8.8 percent.
- Mbirikani, Esineti, Magadi, Ewuaso and Mosiro need close monitoring due to continuous high levels of malnutrition.

5.3 Coping Strategies

- The ability of the households to cope with stress due to lack of food or money to buy food reduced in June compared to May this year. In May, the average coping strategy index was 5.0 and 5.9 in June.
- In order to get food, households in Pastoral zone were more stressed compared to those in Agr-pastoral with coping strategy index of 7.6 and 1.4 respectively.
- The common coping strategies employed by households across the livelihood zones in May and June included purchasing food on credit and selling small stock in exchange for other foodstuffs.

6.0 FOOD SECURITY PROGNOSIS, CURRENT INTERVENTIONS AND RECOMMENDATIONS

6.1 Food Security Prognosis

- The 2021 rainfall enhanced the January-February off-season rains. This was now able to sustain livestock during the dry period. Thus livestock productivity during July-August period was likely to reduce but within the normal range for the dry season.
- Although the 2021 long rains season performed above normal, the rainfall was characterized by delayed onset, poor temporal and spatial distribution. This affected crop performance to below the normal yields for the season.
- Consequently, although foodstuff will be available in the market, their prices were likely to increase continuously while the terms of trade decline continuously for the next six months.
- Malnutrition among under-fives will most likely increase but within the normal range as household milk production reduce in the next two months.
- Corona Virus remains a great threat not only to the health sector but also to the entire economy including food security in the County and by extension the Country.

6.2 Current Interventions

- Routine extension services by *department of Agriculture and department of livestock*
- Human disease surveillance especially COVID-19 and livestock diseases surveillance; *by respective County departments and partners.*
- Integrated outreaches in Kajiado West, Central and South; *by County Government and partners.*

6.3 Recommendations for Action

- Vaccination campaign against Contagious Caprine Pleuropneumonia(CCPP), Lumpy Skin Disease and Foot & Mouth Disease; *by County Government (Veterinary services) in collaboration with National Drought Management Authority and partners.*
- Sensitization on pasture conservation and eradication of Ipomoea weed across the entire county; *Livestock production department and partners*
- Continuous human disease surveillance and community sensitization especially on COVID-19; *by County Governments in collaboration with partners.*
- Livestock diseases surveillance; *by County government through department of veterinary in collaboration with partners.*