


National Drought Management Authority

KAJIADO COUNTY DROUGHT MONITORING AND EARLY WARNING BULLETIN MAY 2021



A Vision 2030 Flagship Project



MAY EW PHASE		Early Warning Phase Classification			
<p>Drought Status: NORMAL</p>  <p>Shughuli za kawaida</p>		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	Observed Value/Range	Normal Range/LTA	
<p>Biophysical Indicators</p> <ul style="list-style-type: none"> ✓ The March-May rainfall had delayed onset and poor spatial and temporal distributions. ✓ Vegetation greenness declined though still above normal and water was fairly available and accessible for both livestock and domestic use. <p>Production Indicators</p> <ul style="list-style-type: none"> ✓ The rain fed crops condition was fair due to poor rainfall distribution thus suffered moisture stress. ✓ Livestock body condition was good with no unusual diseases. ✓ Livestock prices reduced though remains above short-term average. Milk production improved but still below the long-term average probably due to low tropical livestock units. <p>Access indicators</p> <ul style="list-style-type: none"> ✓ The terms of trade was above five-year average while the amount of milk consumed by households increased above five-year average consumption for similar period of the year. ✓ Household distances to water sources was slightly longer than long-term averages for similar period of the year. <p>Utilization Indicators</p> <ul style="list-style-type: none"> ✓ The risk of malnutrition for under-fives was stable below the five-year average for similar month. ✓ Households used the normal coping strategies such as selling small stocks to get food or money to buy food. ✓ 30.4% household in pastoral livelihood zone fell within the borderline food consumption score. 		3-monthly VCI	63.43	>35	
		State of water	Fairly adequate	Adequate	
		Forage condition	Good to fair	Good	
		Production Indicators	Observed Value/Trend	Normal Range	
		Livestock body condition	Good	Good	
		Milk production	3.9 litres	>4.59 litres	
		Livestock Migration	None	None	
		Access Indicators	Observed Value	LTA	
		Terms of trade	115.38 kg/goat	73.84 kg/goat	
		Milk consumption	3 litres	2.5 litres	
		Distance to water sources	Livestock	4.3 km	4.71 km
			Household	4.7 km	3.89 km
		Utilization indicators	Value	LTA	
		MUAC (% <135 mm)	5.1%	10.0%	
		CSI	5.0	<10	
		FCS	Pastoral	69.7% acceptable, 30.4% borderline	
			Agro pastoral	100% acceptable	

<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

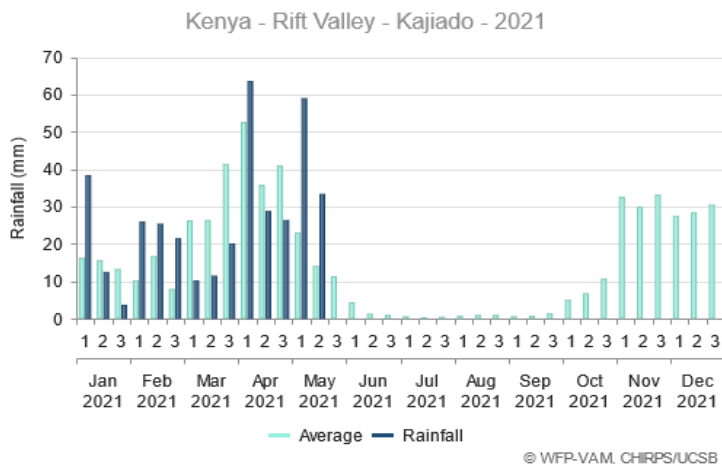


Figure 1: Rainfall performance; Kajiado

previous month.

- The delayed season onset and overall poor temporal and spatial distribution in March - May rain are of significant concern as substantial rainfall lasts around two months. This could affect crop and livestock productions.

- In May, the County was wet mainly during the first and second dekads with average rainfall amounts of 58.8 mm and 33.2 mm respectively (Figure 1).
- The long rain was more than long-term average in Kajiado North and West-sub counties while the rest of the County was near there long term averages.
- The total rain received during the month was however, lower compared to the

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index

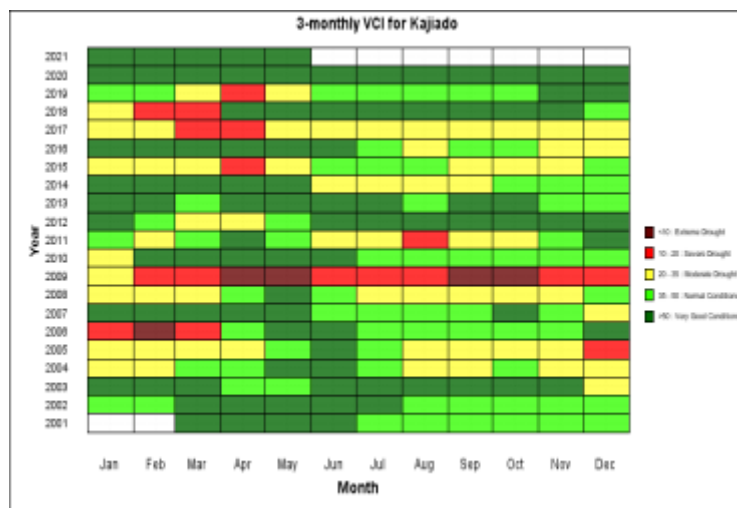


Figure 2: 3-monthly VCI matrix; Kajiado 2001-2021

- The vegetation greenness in the county remained above normal during April-May period (Figure 2).
- Currently, the average 3-monthly vegetation condition for the County was 63.43, in April the vegetation condition index was 70.95 and 68.25 in March indicating a declining trend.
- Further decline in the vegetation greenness is likely as the rains continued to reduce.

2.1.2 Pasture and Browse Condition

- Pasture ranged between fair to poor in Kajiado South and Central, Kajiado West and North sub-Counties had good pasture, these areas received substantial amounts of rain.
- Browse remained good and above normal in all parts of the county for the March-May season.
- Considering the low tropical livestock units in the county, the available pasture would last for the next one to two months while browse would last for three to four months.

2.2 WATER SOURCES

2.2.1 Sources

- The water sources were the same for the period between March-May; in May, 35% of the communities reported pans/dams as the main source of water (Figure 3).
- Other sources of water during the month were rainwater harvesting, piped water systems, boreholes and traditional river wells. These were the normal sources at this time of the year.

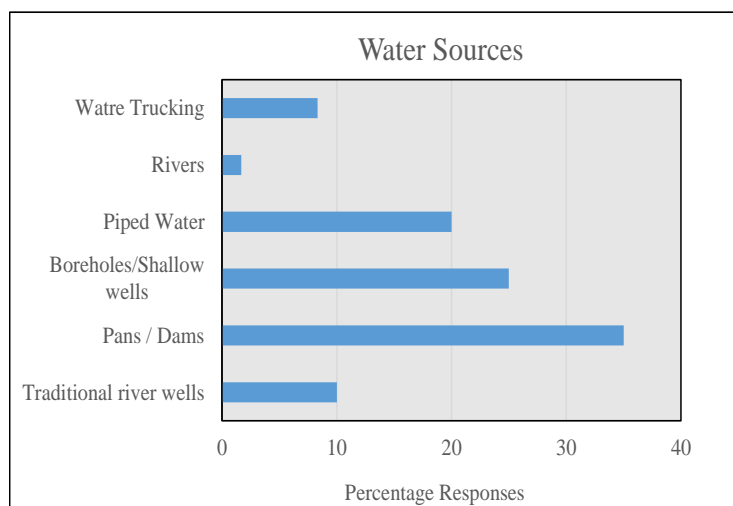


Figure 3: Water sources; Kajiado, May 2021

- The available pans are expected to last for about a month due to mixed performance of the rains.

2.2.2 Households Water Access and Utilization

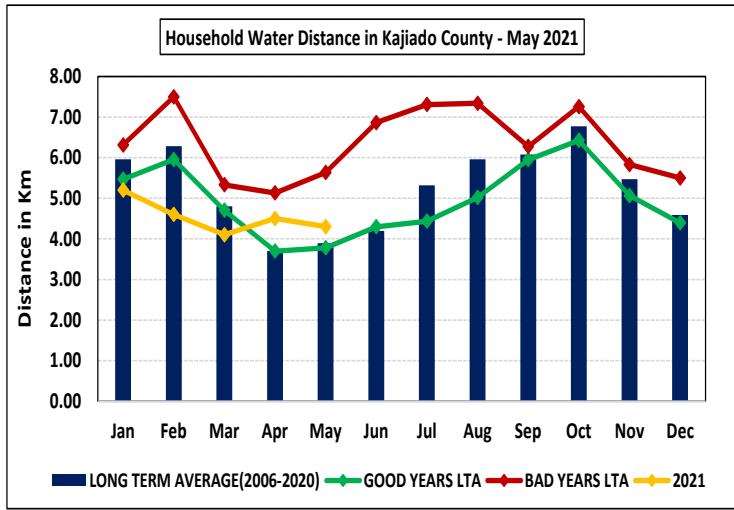


Figure 4: Average return distance from homesteads to water sources; Kajiado 2009 -2021

- No significant change was observed in the households return distance to water sources, in May the distance was 4.3 km and 4.5 km in April (Figure 4).
- The average water consumption per person per day was 6.1 litres in pastoral livelihood zone and 11.3 litres in agro-pastoral.
- The cost of water for domestic use range from Ksh. 5 per 20-litre jerrican in Kaputiei North to Ksh.20 per 20-per litre jerrican in Mbirikani respectively.

- 37% of the households treated there water mainly through boiling (70%), other water treatment methods included filtration (17%) and use of chemicals (13%).

2.2.3 Livestock Access to Water

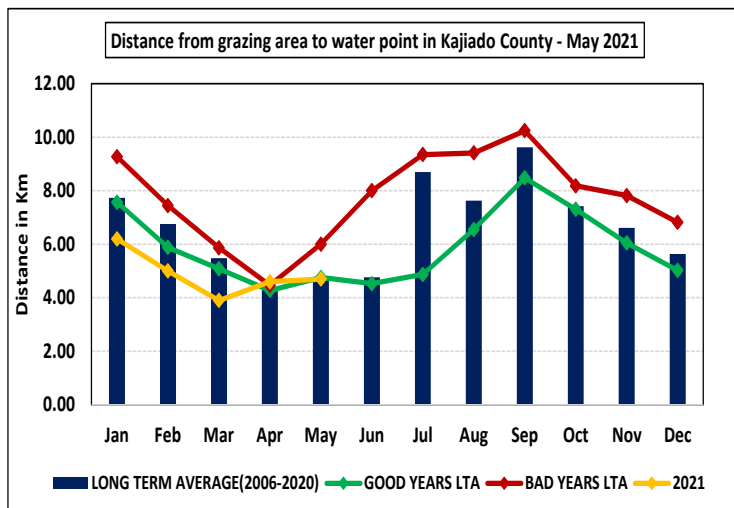


Figure 5: Average return distance from grazing fields to water sources; Kajiado, 2009-2021

Kajiado South recorded below normal rainfall performance during March-May period.

- During the March-May period, pans/dams and ponds were the main source of water for livestock. These sources remained the same as of previous month with an average return trekking distance of 4.7 km from grazing areas to watering points (Figure 5). The current distance is equal to long-term average for similar time of the year.
- Kajiado South, Mbirikani had the highest return distance from grazing area to water points of 9 km. Kajiado South recorded below normal rainfall performance during March-May period.

- The distance was likely to increase in the next one month considering below normal recharge of the open surface water sources.
- Livestock were still taking water on daily basis. This is normal for this time of the year.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Body condition for all species of livestock in May was good and smooth in appearance. No livelihood variations in livestock body condition was observed during the month.
- Due to current availability of pasture, browse and water, livestock body condition was likely to remain stable in the next two months. This is normal for this time of the year.

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 Milk Production

- The average daily household milk production in May was 3.9 litres; in April, milk production was 3.6 litres per day (Figure 6).

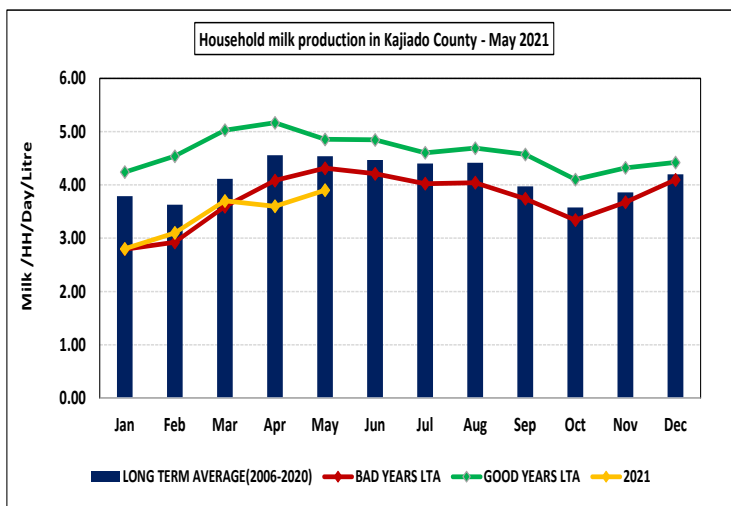


Figure 6: Average milk production; Kajiado, 2006-2021

- The current milk production was 14% below the long-term average for similar period. Livestock tropical unit is still low.
- Reduction in milk production 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 maize and beans were at tussling and flowering stages respectively. However, both crops were fair, as they had suffered moisture stress. Kajiado South received below normal long rains. The rains had delayed onset with poor spatial and temporal distribution.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

- Shompole, Kiserian, Ibisil, Kimanaand Rombo are the main livestock markets in the county. In May, these markets were in normal operation.

4.1.1 Cattle Prices

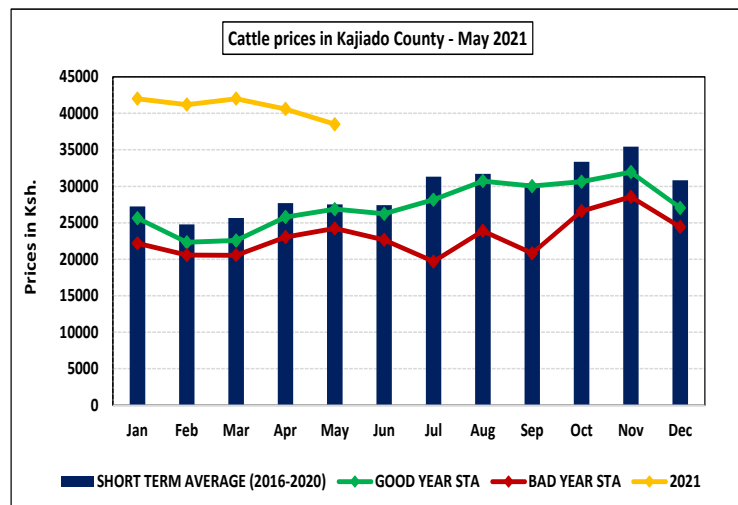


Figure 7: Average cattle prices; Kajiado, 2016-2021

The short-term average for the month is Ksh. 27,514, which is 40% below the current price.

- Lowest price was recorded in Ewuaso kidong at Ksh. 28,000; this was attributed to high supply due to overreliance on livestock as source of income.
- Cattle prices were probably going to reduce further due to expected decline in pasture and water availability and the crash 2021 school calendar.

4.1.2 Goats Prices

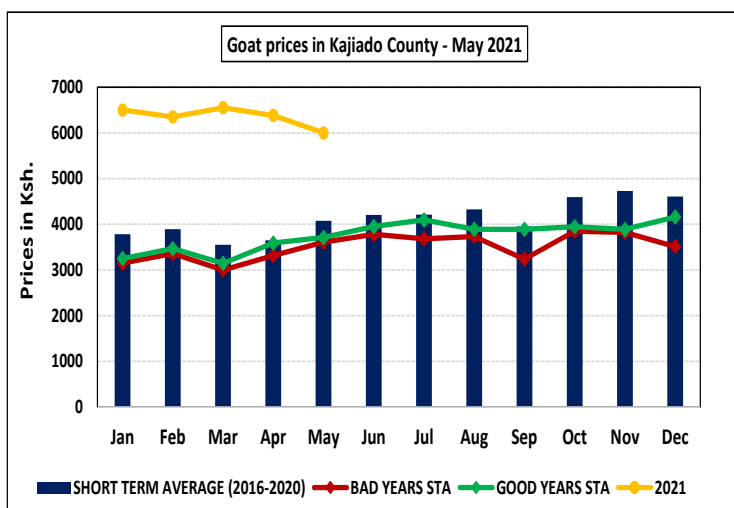


Figure 8: Average goats' prices; Kajiado, 2016-2021

- On average, the market price of a mature bull was Ksh. 38,500 in May compared to Ksh. 40,600 in April (Figure 7).

- The 5% decrease was probably due to high supply at market as parents sold to cater for school related demands as children were back for mid-term break. Normally, prices would have remained stable or increased. The

prices would have remained stable or increased. The

- The average market price of medium size goat declined by 6% to Ksh. 6,000 in May from Ksh. 6,380 in April (Figure 8). The decline was attributed to high supply at market in exchange for foodstuff and other basic household needs.

- Goat prices were however still 47% above the short term average of

Ksh. 4,074 for such a time of the year.

- The lowest price of Ksh 5,000 was observed in Mbirikani while the highest price of Ksh 7,000 was sold in Kamukuru.

4.2 PRICES OF CEREALS AND LEGUMES

4.2.1 Maize Prices

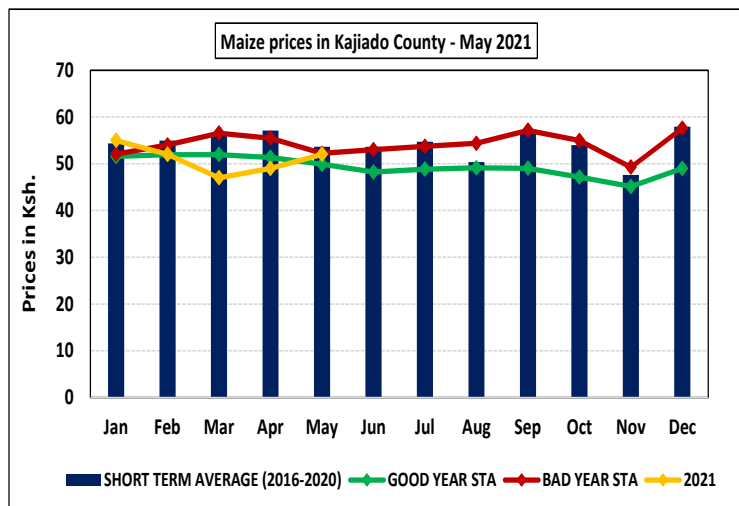


Figure 9: Average maize prices; Kajiado, 2016-2021

- The average retail price of maize ranged from Ksh. 40 per kilogram in Loitoktok to Ksh. 65 per kilogram in Ewuaso and Mosiro.
- The county average price of maize in May was Ksh. 52 per kilogram, which was a 6% rise from Ksh 49 in April (Figure 9). This was attributed to high demand at market due to increased demand for foodstuff.

- The short-term average price of maize for the month was Ksh. 54 per kilogram.
- The average price of maize is expected to stabilize below the short-term average due to supply support from neighbouring Narok and cross-border trade from Tanzania and price reduction in the next two months as harvesting commences.

4.2.2 Beans Prices

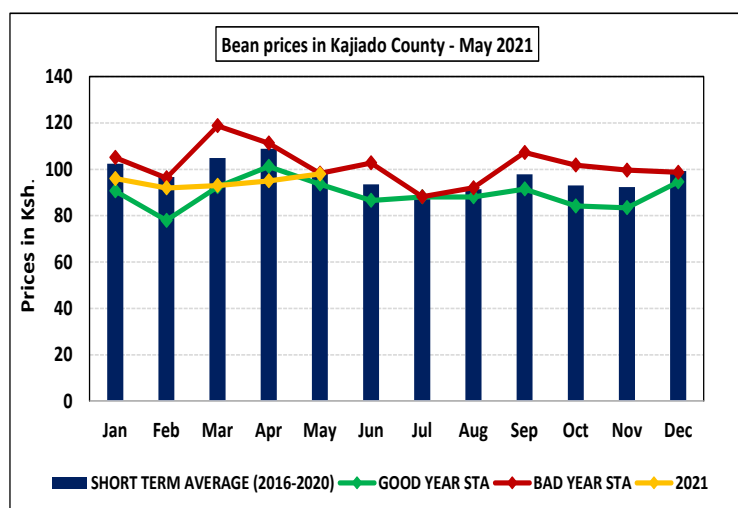


Figure 10: Average beans prices; Kajiado, 2016-2021

- The average market price of beans increased during April-May period. In May, a kilogram of beans was selling at Ksh. 98 and Ksh. 95 in April (Figure 10). The increased price was attributed to increased demand for the foodstuff. Households' stock of beans in May was below the long-term average.
- The current price is similar to the

short-term average for such a time of the year.

- Average beans prices varied across livelihood zones with lowest price of Ksh. 75 per kilogram sold in mixed farming Loitoktok to highest price of Ksh. 120 per kilogram in pastoral Kamukuru.
- A possible reduction in beans prices is expected in June when farmers harvest the crop.

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. Stability of milk prices reflected minimal change in supply at the market from households as much of the milk produced was mainly consumed at household level.

4.4 Terms of Trade

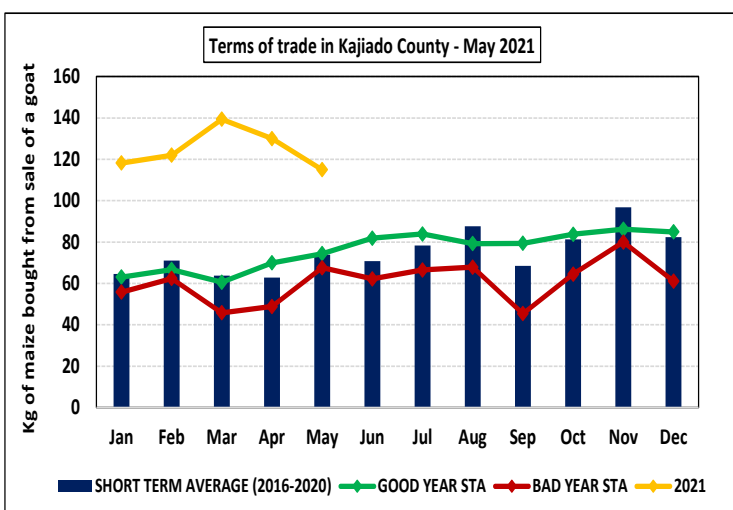


Figure 11: Trends in ToT; Kajiado 2016-2021

- The lowest terms of trade was reported in Kajiado West at 107 kg of maize per sale of a goat while the highest was in Kajiado East at 140 kg of maize per sale of a goat.

- Decline in livestock prices against increased maize prices resulted in 11.24% reduction in terms of trade (ToT) from 130 kg of maize per sale of a goat in April to 115.38 kg of maize per sale of a goat in May (Figure 11).
- The current ToT was above the short-term average ToT for such a time of the year by 56.2%.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk Consumption

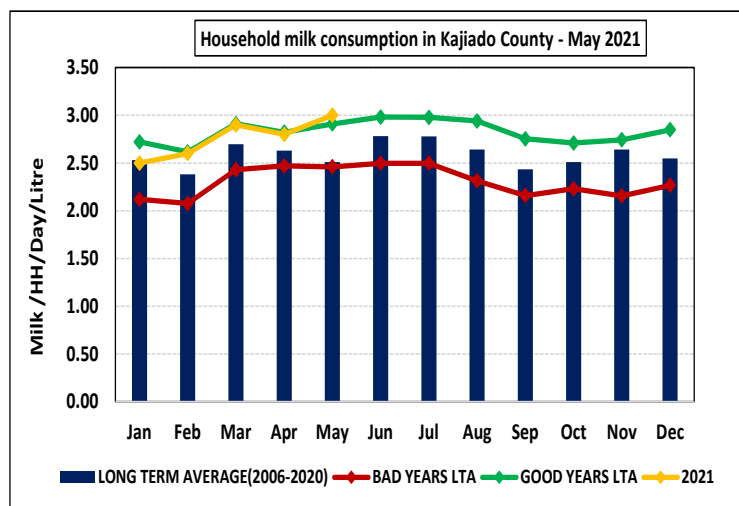


Figure 12: Milk consumption; Kajiado, 2006-2021

consumption was probably due to effects of COVID-19 restrictions and high prices of foodstuffs.

- Both production and consumption of milk was expected to decline in June as water and pasture availability reduce due to below average performance of the long rains.

5.2 Food Consumption Score (FCS)

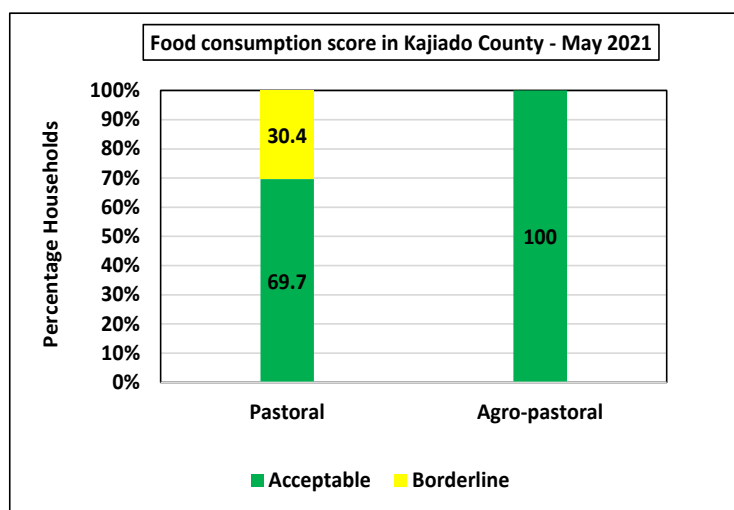


Figure 13: Food consumption score; Kajiado May 2021

over-reliance on livestock thus affecting exposure to dietary diversity.

- The acceptable food consumption scores were likely to shrink while the borderline expanded. Early migration of livestock considering below average rainfall performance would reduce consumption, milk availability and equally affect terms of trade.

- The average household milk consumption per day in May improved slightly to 3.0 litres from 2.8 litres in April (Figure 12). The increase is attributed to the calving and kidding currently being observed.

- The long-term average milk consumption per household during this time of the year is 2.5 litres per day.

The above long term milk

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status of Children aged 6-59 Months

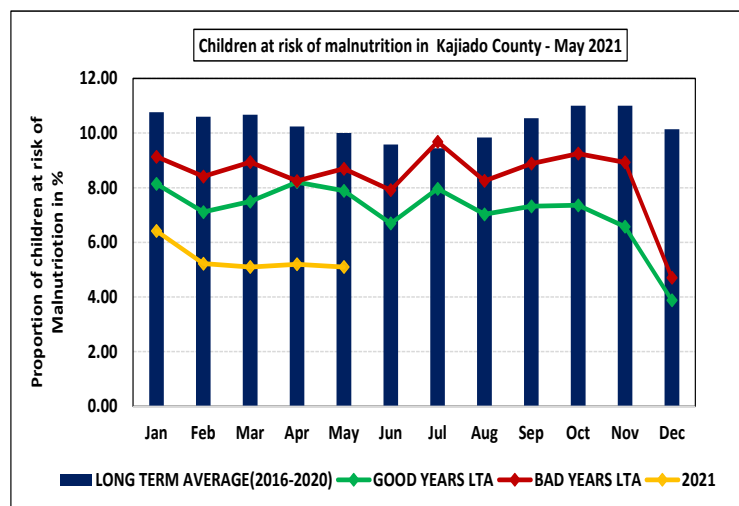


Figure 14: Risk of malnutrition for children aged 6-59 months; Kajiado, 2016-2021

- The five-year average for May was 10.00% indicating that malnutrition rates have been on decline.
- Pastoral South recorded the highest proportion at 9.7. Percentage children at risk of malnutrition while agro pastoral east reported 3.2%.
- Mbirikani, Esineti, Magadi, Ewuaso and Mosiro need close monitoring due to continuous high levels of malnutrition. These areas are pure pastoral characterized by low rainfall amounts, high prices of foodstuffs and poor road networks.

5.3 Coping Strategies (CSI)

- The ability of the households to cope with stress due to lack of food or money to buy food improved since the beginning of 2021.
- In May, the average household coping strategy index (CSI) was 5.0 with some livelihood variations. The CSI index for pastoral livelihood zone was 6.7 compared to 1.7 for agro-pastoral.
- The common coping strategies employed by households across the livelihood zones in May included purchasing food on credit and selling small stock in exchange for other foodstuffs.

- The proportion of under-fives at risk of malnutrition has been stable below the five-year average since January 2021. In May, the proportion of children at risk of malnutrition was 5.1 % (Figure 14). Most of the households could afford variety of foodstuffs as terms of trade had been in favour of the pastoralists' in addition to improved milk availability.

6.0 FOOD SECURITY PROGNOSIS, CURRENT INTERVENTIONS AND RECOMMENDATIONS

6.1 Food Security Prognosis

- The 2021 long rain came to cessation during the third week of May. Its performance was characterized by delayed onset, poor temporal and spatial distribution.
- Vegetation greenness was already on the declining trend thus forage and water situation will possibly get depressed in the next one month onward if the County does not get off-season rains. Consequently, livestock productivity was likely to decline below normal and an expected early migration of livestock in search of pasture and water around July.
- Malnutrition among under-fives will most likely increase as household milk production reduce in the next two months.
- The long rains season harvest will probably be below normal due to delayed onset, poor spatial and temporal distribution. Locally produced foodstuffs were therefore likely to be minimally available with reliance on import from outside the County thus affecting prices upwards. This will likely affect the dietary intake and subsequently the nutritional status of under-fives.
- Corona Virus is 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*
- Monitoring and surveillance of desert locust; by *County government in collaboration with Food and Agricultural Organization and other stakeholders*
- 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

- Updating the county contingency plans and response plans; by *National Drought Management Authority and partners.*
- 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 partner.*

- Sensitization on pasture conservation and eradication of Ipomoea weed across the entire county;
Livestock production department
- 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.*