

National Drought Management Authority

KAJIADO COUNTY DROUGHT MONITORING AND EARLY WARNING BULLETIN FEBRUARY 2021



A Vision 2030 Flagship Project



FEBRUARY EW PHASE		Early Warning Phase Classification			
Drought Status: NORMAL  Shuhull ya 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 ✓ February is usually a dry month. However, this year, the County received some good off-season rains in January and February. The state of water was now fair and the County vegetation greenness was above normal for this time of the year. ✓ Forage condition was good in most parts of the County. Production Indicators ✓ Livestock all species appeared smooth, fat and in good health. Their prices were above the short-term average while milk production was near normal. ✓ Maize yields in mixed farming zones was projected to be near the long-term average. ✓ Following the off-season rains, livestock were now returning to their normal grazing fields. Access indicators ✓ The terms of trade and milk consumed by household were above normal for this time of the year. ✓ On the other hand, distances to water sources for both livestock and households reduced below their long-term averages for similar period of the year. Utilization Indicators ✓ The proportion of under-five children at risk of malnutrition was 5.2%. This is nearly half-lower than the long-term average. ✓ Households used less stressful means to cope with lack of food such as eating less preferred food with no household with food consumption score less than 21.		Biophysical Indicators	Observed Value/Range	Normal Range/LTA	
		Rainfall (% of normal)	211	80 - 120	
		3-monthly VCI	52.28	>35	
		State of water	Fair	Fair	
		Forage condition	Good	Fair	
		Production Indicators	Observed Value/Trend	Normal Range	
		Maize crop condition	Fair	Good	
		Livestock body condition	Good	Moderate	
		Household milk production per day	3.1 litres	>3.6 litres	
		Livestock Migration	Return migration	Minimal out migration	
		Access Indicators	Observed Value	LTA	
		Terms of trade (kg of maize for a goat)	122	71	
		Household milk Consumption per day	2.6 litres	2.4 litres	
		Distance to water sources	Livestock	5.0 km	6.8 km
			Household	4.6 km	6.3 km
Utilization indicators	Value	LTA			
MUAC (% <135 mm)	5.2 5%	10.6%			
CSI	5.2	<10			
FCS	Borderline- 62%; Acceptable- 38%				

<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

- In January and February, the County is usually dry with only very few places like Ngong and Loitokitok receiving some showers.
- This year the County had some fair off-season rains in January and February. In February, alone the County got 72.3 mm of rainfall. This was far above the long term mean of 34.2 mm (Figure 1).
- The rainfall distribution in February was nearly even while spatial distribution was fair with each week having not less than three rainy days.

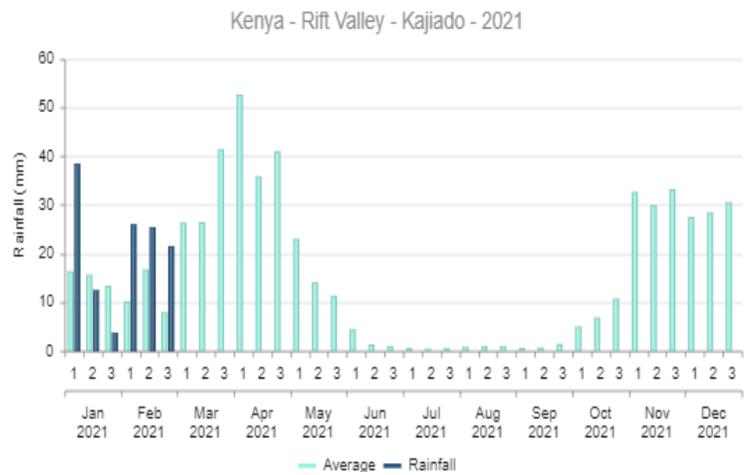


Figure 1: Rainfall performance; Kajiado

2.0 IMPACTS ON VEGETATION AND WATER

2.1 Vegetation Condition

- The County had normal vegetation greenness in January and February this year. The 3-monthly vegetation condition index in January was 50.08 and 52.28 in February (Figure 2).
- The vegetation condition in the County was likely to remain normal in the next three months due to the off-season rain that the County got in January and February.

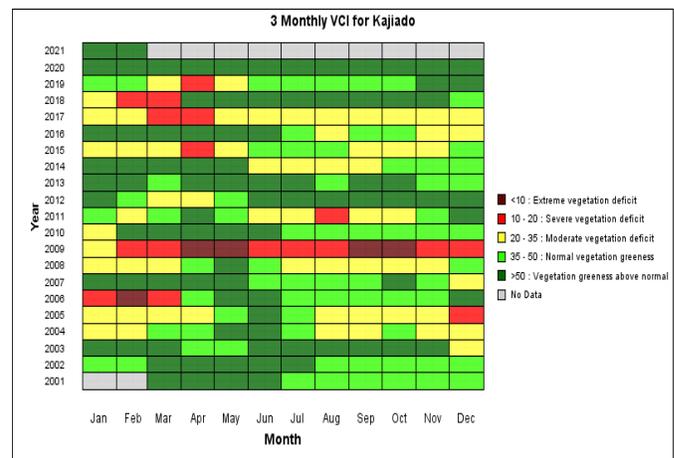


Figure 2: 3-monthly VCI matrix; Kajiado 2001-2021

2.2 Pasture and Browse Condition

- Following the off-season rains in January and February, forage regeneration was now evident across the County.
- Both pasture and browse was now good and above normal in terms of quality and quantity compared to normal forage condition during this time of the year.

- Invasive weeds including Ipomea, Mathenge and the Mexican flower have equality regenerated and pose great threat to pasture access mainly in Pastoral central (Dalalekutuk, Matapato north, Matapato south and Purko), Pastoral west (Kamukuru, Kora and Olkilamatian), and in Mixed farming (Loitokitok) zones respectively.
- The available pasture and browse would still last up to April even if it does not rain in March.

2.3 Water Sources

- Figure 3 shows the number of communities among 24 communities interviewed in February who reported various sources of water being among three main sources of water in for the community. For instance, 21 communities reported pan/dams as one of their three water sources in February.

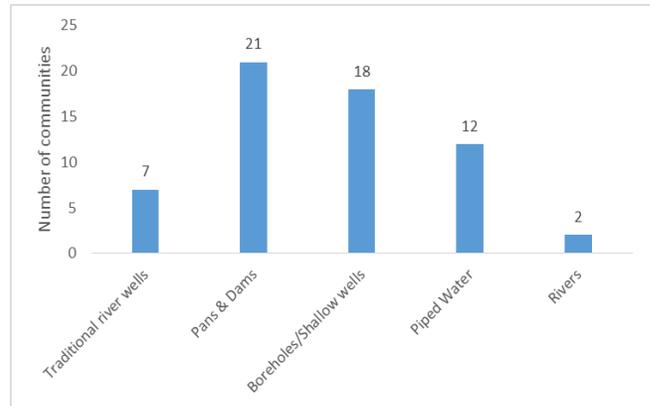


Figure 3: Water sources; Kajiado, February 2021

- Usually boreholes/shallows wells are the main sources of water at this time of the year.

However, the off-season rains during January and February recharged pan/dams fairly and were now the main source of water especially for livestock.

- Water trucking especially for domestic use was reported in Magadi despite the area receiving some fair rains. The ward is facing structural challenges in climate-proof water infrastructures such as pans.

2.4 Households Water Access and Utilization

- For household water access, one key observation for January-February period was that the average distance that people travelled to get water was shorter than the long-term average. In February, this distance was 4.6 kilometres while the long-term average distance for similar months is 6.3 kilometres (Figure 4). A number of households probably were able to harvest water during the off-season rains. Others were able to get water from traditional river wells which otherwise would be dry at this time of the year.
- Secondly, there was reduction of distance travelled between January and February that was probably because of the County receiving more and evenly distributed rains in February compared to January.

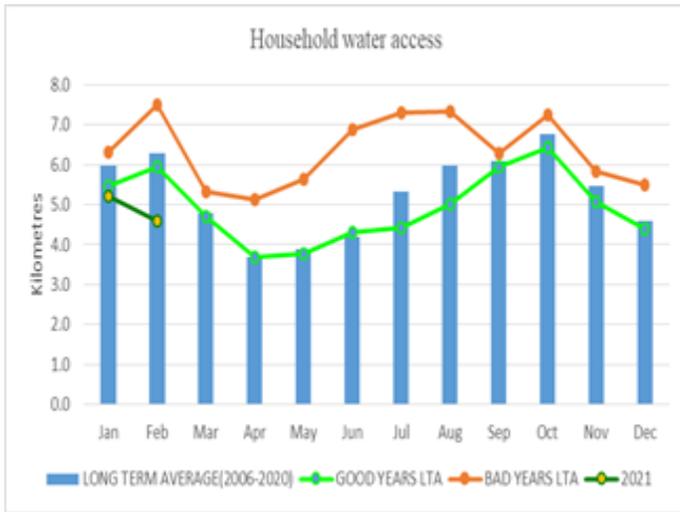


Figure 4: Average return distance from homesteads to water sources; Kajiado 2009 -2021

- Some pastoral areas such as Injacta and Mbirikani, however, people travelled more than 10 kilometres to and from water points.
- Agro-pastoral households (Kaputiei North) consumed about 90 litres of water per day while those in pastoral south especially Mbirikani consumed about and 25 litres a day.
- The average cost of a 20-litre Jerican of water ranged from Ksh.5 in mixed farming zones to Ksh 20 in pastoral areas particularly Magadi and Mbirikani.

- Majority (65%) of households interviewed made sure that the water was safe for drinking by boiling.

2.5 Livestock Access to Water

- Figure 5 shows the average distances travelled by livestock from grazing fields to the watering points. The general trend between January and February is similar to the long-term average trend.

The distances for January and February this year were shorter than the long-term averages. For instance in February, the return distance travelled by livestock from the grazing fields to the watering points was 5.0 kilometres with minimal variations across the County while the long-term average for the same month is 6.8 Kilometres.

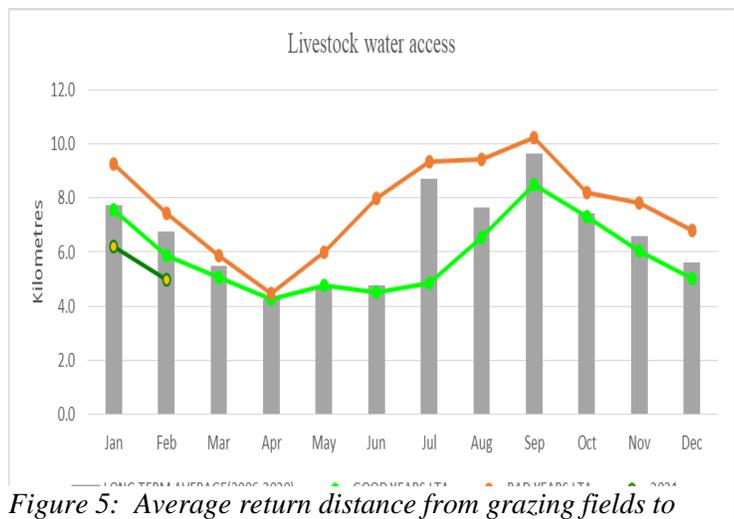


Figure 5: Average return distance from grazing fields to water sources; Kajiado, 2009-2021

- The reduction of distances that livestock travelled to get water this time of the year was because of the off-season rains. Currently water was available in pans in all parts of the County and livestock all species across the County were taking water nearly daily.
- Distance covered by livestock in search of water from grazing areas was likely to remain stable if the 2021 long rains starts normally.

3.0 PRODUCTION INDICATORS

3.1 Livestock Body Condition

- Livestock all species body conditions improved from fair in January to good in February. They now appear smooth and fat across all livelihoods.
- Normally, livestock body condition for all species would be fair and deteriorating at this time of the year. The current good livestock body condition was because of availability of good pasture, browse and water at this time of the year following the off-season rains.

3.2 Livestock Diseases

- In February, Ewuaso reported cases of Foot & Mouth and Lumpy Skin Diseases while Cases of Contagious Caprine Pleuropneumonia (CCPP), Contagious Bovine Plueropneumonia (CBPP) and worms continued to be reported across Kajiado West Sub-County.

3.3 Livestock Migration

- Internal return migration to normal grazing areas was observed in February. Livestock from Oldonyonyokie were moving back from Kamukuru and Naserian areas while those from Isilale were moving back from Isinya and Sultan Hamud areas. Those from Purko and Matapato south that had previously moved towards Matapato north have also returned.

3.4 Milk Production

- There was a slight increase in household milk production between January and February from 2.8 litres to 3.1 litres a day respectively. The average long-term household milk production in February is 3.6 per day.
- The increase in milk production between January and February this year was associated with improved livestock body condition during the said period.
- Milk production in February varied among livelihoods with pastoral households producing about 4 litres and those in agro pastoral producing 2.8 litres a day. Pastoral households have more livestock compared to agro-pastoral households.

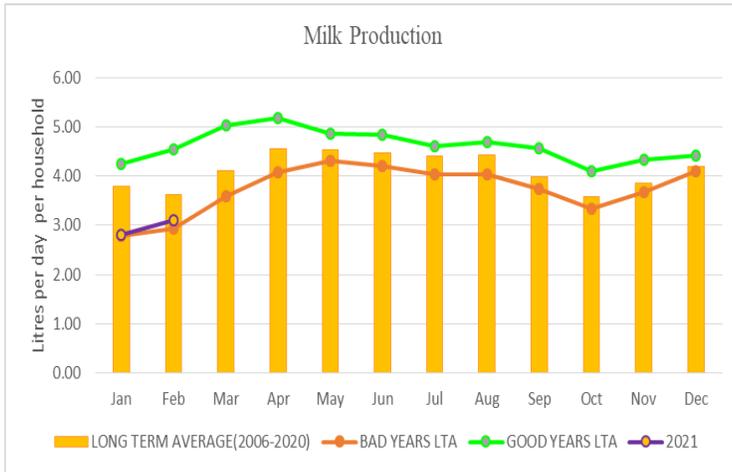


Figure 6: Average milk production; Kajiado, 2006-2021

- Household milk production was likely to increase steadily for the next three months if the 2021 long rains performs well.

3.5 Rain-fed Crop Production

- In agro pastoral areas, crops suffered moisture stress and withered. In mixed farming areas of Loitokitok, maize was now maturing. It was supported by January-February off-season rains and the yield for the crop was expected to be near normal.

4.0 MARKET PERFORMANCE

4.1 Livestock Marketing

- All the major livestock and food commodities markets namely Shompole, Kiserian, Ibbisil, Kimana and Rombo operated normally in the month of February.

4.2 Cattle Prices

- In January and February this year, the average price of cattle was Ksh. 42,000 and 41,200

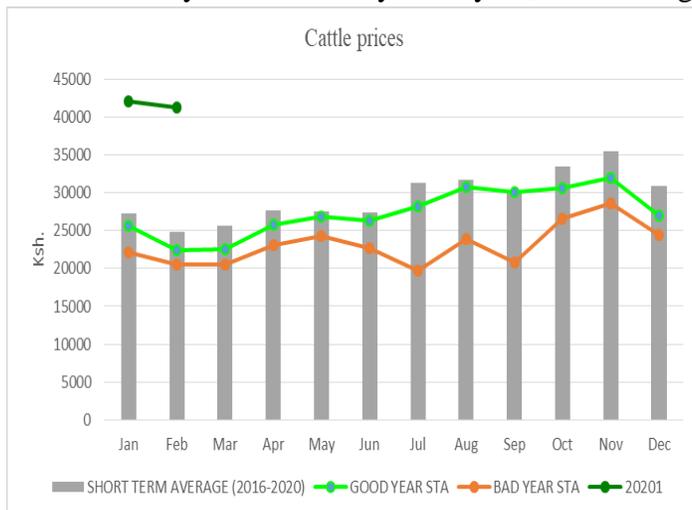


Figure 7: Average cattle prices; Kajiado, 2016-2021

respectively (Figure 7). Since March last year, cattle maintained exceptionally high prices. This trend seemed to continue this year.

- High prices of cattle was because of low supply at market arising from restricted movements since the outbreak of COVID-19. Their body condition was also good throughout the said period.

- The average price of a mature bull in February for the last five years is Ksh. 24,800.
- There were no significant variations of cattle prices across livelihood zones in the month of February.
- Prices of cattle were likely to remain stable for the next three months, as their body condition was would probably remain good.

4.3 Goats Prices

- Like cattle, goats maintained high prices since March last year and early this year. In January and February, the market price of a medium size goat was Ksh. 6,500 and Ksh. 6,350 respectively (Figure 8). Similar forces to that of cattle were behind unusually high prices of goats last year and early this year.

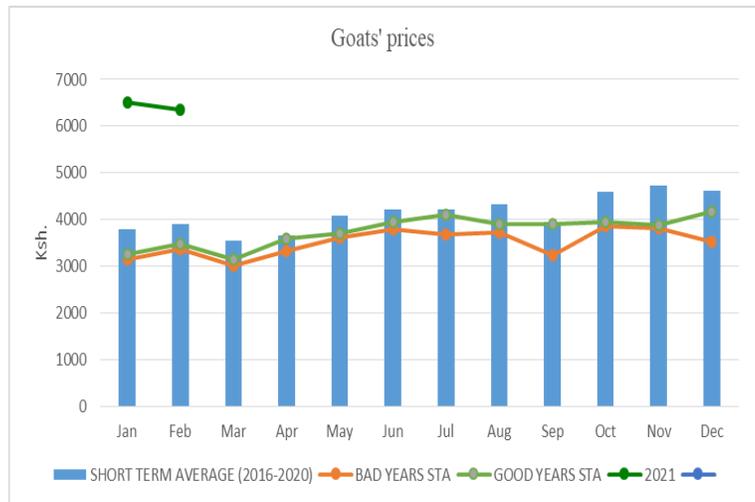


Figure 8: Average goats' prices; Kajiado, 2016-2021

- There were no significant livelihood variation in prices of goats in February.
- For the past five years, the average price of a medium size goat in February is Ksh. 3,890.
- Prices of goats were likely to remain stable for the next three months, as they are likely to maintain their good body condition.

4.4 Maize Prices

- The average price of maize reduced from Ksh. 55 per kilogram in January to Ksh 52 per kilogram in February this year (Figure 9).
- This reduction was because of increased supply in the market especially the supply of green maize that was available from other Counties. Other related foodstuffs were also available in

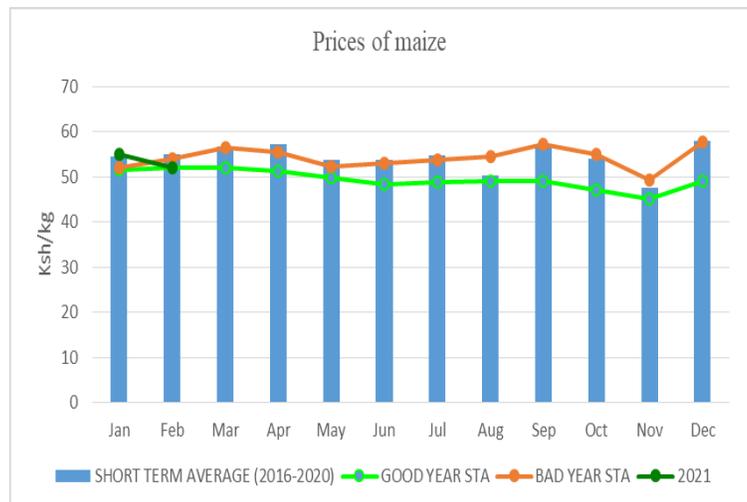


Figure 9: Average maize prices; Kajiado, 2016-2021

the market and was likely to stabilize prices of maize.

- The average price of maize for the previous five years in February is Ksh. 55.
- In pastoral west (Ewuaso, Kamukuru), maize was sold at Ksh. 60 per kilogram while in mixed farming zone of Loitokitok, a kilogram of maize was sold at Ksh. 30. Pastoral west is usually served with poor roads and market infrastructures.
- Prices of maize was likely to remain stable at least for the next three months, as food is generally available in the market.

4.5 Beans Prices

- The average market price of a kilogram of beans in January was Ksh. 96 and Ksh. 92 in February.

For the past five years' the average price of beans in February is Ksh. 97 per kilogram (Figure 10).

- This reduction of prices of beans was because of increased supply in the market after harvesting the crop in December last year.

- In pastoral West (Kamukuru, Ewuaso, Magadi), however, a kilogram of beans was selling at Ksh 120 while in mixed farming areas of Loitokitok and

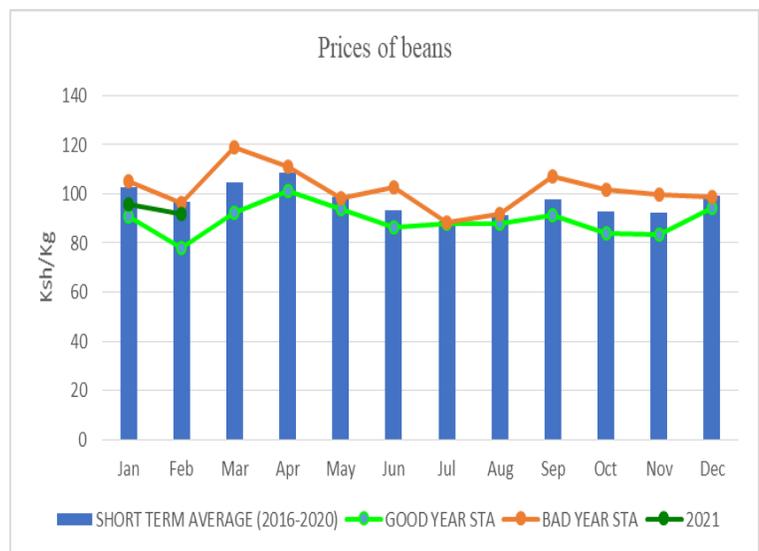


Figure 10: Average beans prices; Kajiado, 2016-2021

Kimana a kilogram of beans was sold at Ksh. 65. Loitokitok and Kimana are close to the border and have access to foodstuff from the neighbouring republic of Tanzania as well.

- Like prices of maize, that of beans was likely to stabilize at least for the next three months, because food is generally available in the market.

4.6 Milk Prices

- The average price of milk was stable between January and February at Ksh. 52 per litre and Ksh. 50 per litre respectively. This was the normal price at this time of the year.

4.7 Terms of Trade

- Figure 11 shows the trends of terms of trade for the County. One notable feature of this year's trend is unusually high level of terms of trade in January and February. This level was sustained from around May last year when prices of goats increased steadily compared to that of maize. Goats have maintained that high prices up to now.

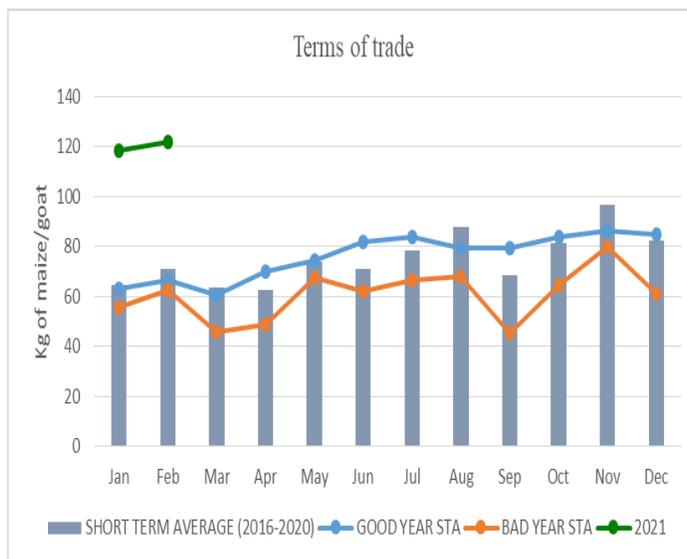


Figure 11: Trends in ToT; Kajiado 2016-2021

- The other feature is increase in ToT from 118 kg of maize /goat in January to 122 kg of maize/goat February. During this period, the price of maize reduced faster at five percent compared to that of goat that declined at two percent.
- For the last five years, the terms of trade averages 71 kilograms of maize for a medium size goat.
- In pastoral west, people exchanged a medium size goat for 105 kg of maize while in mixed farming areas of Loitokitok they exchanged a similar size goat for 212 kg of maize.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk Consumption

- The average household milk consumption in January was 2.5 litres a day and 2.6 litres a day in

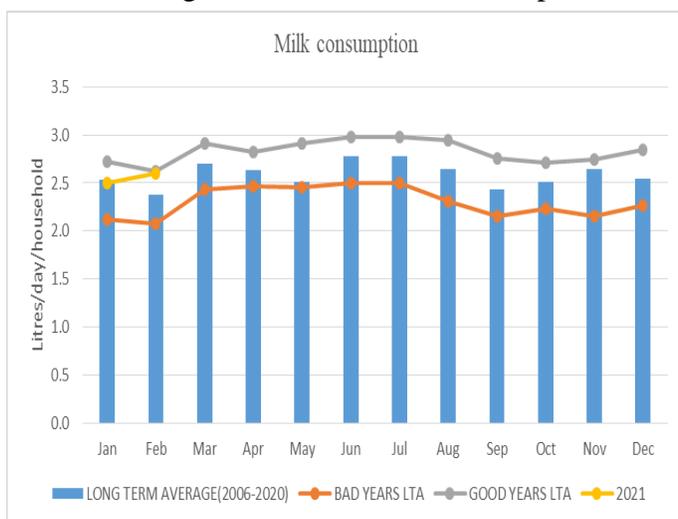


Figure 12: Household milk consumption; Kajiado, 2006-2021

February (Figure 12). The long-term average consumption is 2.4 litres a day.

- Consumption varied across the livelihood zones with households in the pastoral livelihood zone consumed about 3 litres per day while agro pastoral households consumed about 2 litres a day.

5.2 Food Consumption Score

- Households in Kajiado west were worse of in terms of access to dietary diversity compared to other sub-Counties. The area is served with poor roads infrastructure and has usually higher prices of foodstuffs compared to other parts of the County. Figure 13 shows food consumption score for the sub County for January and February this year.
- The proportion of households consuming poor diet reduced from 4.7 in January to zero in February. Probably this would be due to reduction of prices of foodstuffs in February compared to January.

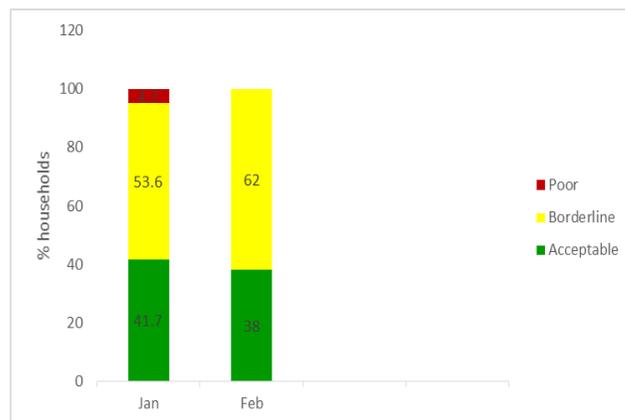


Figure 13: Food consumption score; Kajiado west Jan-Feb, 2021

5.3 Nutrition Status of Children aged 6-59 Months

- The proportion of under-five children at risk of malnutrition based on MUAC (125-134 mm) was 5.0 percent (Figure 14) in February. In January, this proportion was 6.5 percent.
- Reduction in the proportion of children at risk of malnutrition between January and February reflected improvement in terms of trade, food consumption and coping strategies during that period.
- Areas marked for higher risk of malnutrition include; Mbirikani, Lorn'osua, Meto, Lenkism, Mashenani, Esineti, Oloirero, Magadi, Ewuaso and Mosiro.

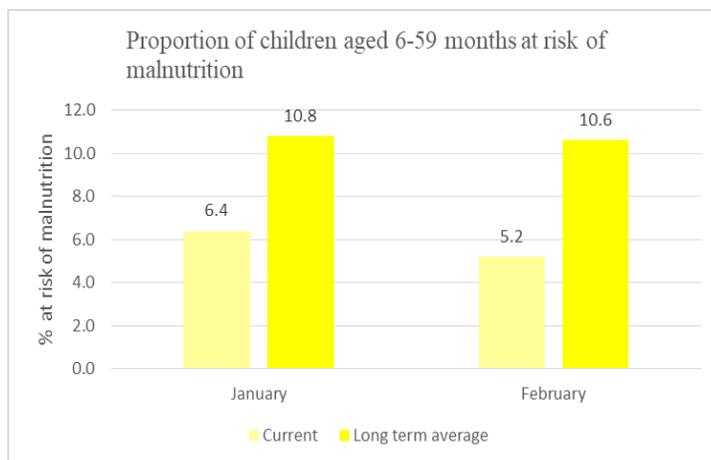


Figure 14: Risk of malnutrition for children aged 6-59 months; Kajiado, Jan-Feb 2021

5.4 Coping Strategies

- Households were employing less stressful mechanisms to deal with lack of food or money to buy food. The coping strategy index (CSI) in January was 5.3 and 4.8 in February.

- Among the coping strategies that households employed in February to deal with lack of food include selling small stocks in exchange for cereals and eating less preferred food.
- The CSI varied across the livelihood zones with pastoral livelihood zone recording CSI of 5.3 while agro-pastoral livelihood zone recorded CSI of 3.9.

6.0 EMERGING ISSUES

6.1 Locusts Invasion

- Desert locusts invaded the County by mid-February. The hotspots include Kajiado east and Kajiado south that border Machakos and Makueni Counties to the east where the locust is said to invade from.
- The County formed the Locust Monitoring Team consisting of community representatives, the administration and agriculture extension officers who relays the information to the Desert Locust Contact person at the County by 7 pm every day for action.
- Once a swam of locusts has been located, the team provide the coordinates, assess the accessibility, map out settlements such as homesteads and schools, and infrastructure such as water points.
- Depending on the situation, the swam is sprayed using an aircraft or Vehicle Mounted Sprayers (VMS). So far, three-air spray missions and several ground spray missions have been successfully conducted.

7.0 FOOD SECURITY PROGNOSIS, CURRENT INTERVENTIONS AND RECOMMENDATIONS

7.1 Food Security Prognosis

- The January-February off-season rains improved surface water availability and consequently pasture regeneration. Water, pasture and browse was now available and would last for the next month.
- Livestock productivity including their body condition, prices and milk production would probably be good and stable for a period not less than three months.
- Maize yields in mixed farming zones of Loitokitok was projected to be near long-term average. Harvesting of the crop in this area is done between February and March.
- Prices of foodstuffs were also likely to be stable and near the long-term average for the next three months. Food was now available from other parts of the Country.

- With availability of food and improved livestock productivity, levels of malnutrition was likely to improve.
- Desert locusts are known for their immense destruction of forage and crops. Their invasion is a great threat to forage and consequently food security in the County.

7.2 Non-Food Interventions

- Desert locust control – *by County government in collaboration with Food and Agricultural Organization and other stakeholders*
- Installation of drip irrigation water works for Mbirikani Integrated Livelihood Project in Mbirikani - *by National Drought Management Authority.*
- DRR refresher training in Matapato North and South – *by Feed the Children in Collaboration with National Drought Management Authority.*
- Capacity building on utilization and post-harvest handling of crop produce – *by County government in collaboration with KEPHIS.*
- Vitamin A Supplementation/Deworming, Growth Monitoring, Iron and Folic Acid Supplementation (IFAS) by - *by County Government and partners.*

7.3 Recommendations for Action

- Continued financial and technical support for locust surveillance and control including community sensitization n; *by all stakeholders.*
- Livestock vaccination; *By County Governments in collaboration with partners.*
- Enhanced immunization practices and Vitamin A supplementation coverage; *By County Government (Ministry of Health) in collaboration with National Drought Management Authority and UNICEF.*
- Supply of storage tanks and hand wash facilitates in market centers, bus stops and primary schools; *By County Governments in collaboration with partners.*
- Capacity build communities on pasture production and conservation including control of ipomea species to make grass available to livestock; *By National and County Governments in collaboration with partners.*