A Vision 2030 Flagship Project

National Drought Management Authority

KAJIADO COUNTY
DROUGHT MONITORING AND EARLY WARNING FEBRUARY 2022

FEBRUARY EW PHASE

Early Warning Phase Classification

LIVELIHOOD ZONE	EW PHASE	TRENDS
PASTORAL WEST	ALERT	IMPROVING
PASTORAL CENTRAL	ALERT	IMPROVING
PASTORAL SOUTH	NORMAL	STABLE
AGRO-PASTORAL	NORMAL	STABLE
MIXED FARMING	NORMAL	STABLE
COUNTY	NORMAL	STABLE

Drought Situation & EW Phase Classification

Biophysical Indicators

- ✓ Off-season rains received above average for the period.
- ✓ The County vegetation greenness improved within the normal band category.
- ✓ Forage condition was fair and improving in pastoral West and Central zones and good in mixed farming areas and South.

Production Indicators

- ✓ Livestock all species ranged from good to moderate while milk production improved but remained below the long-term average.
- ✓ Crop condition was good in Mixed farming areas of South. Beans harvest was ending while maize is to be harvested in March.
- ✓ There was return migration of livestock from South pastoral.

Access indicators

- ✓ The terms of trade were very good, above five-year average.
- ✓ The amount of milk consumed by households was below long-term average for similar period of the year.
- ✓ Distances to water sources for both livestock and domestic reduced below the long-term averages for similar month of the year.

Utilization Indicators

- ✓ Proportion of under-five children at risk of malnutrition reduced and remained stable below long-term average.
- ✓ Households were obtaining food with less difficulty as indicated by low CSI.
- ✓ Households with no money to buy food opted for less preferred foods or borrowing.
- ✓ Most households, 86% were consuming required food varieties at required frequency.

Biophysical Indicators		Observed Value/Range	Normal Range/LTA
3-monthly VCI		41.55	≥35
State of water		Adequate to fair	Adequate
Forage condition		Good to fair	Good
Production Indicators		**Observed Value/Trend**	**Normal Range**
Livestock body condition		Good to Moderate	Good
Household milk production per day		2 litres	≥3.6 litres
Livestock Migration		Return migration	None
Access Indicators		**Observed Value**	**LTA**
Terms of trade (kg of maize for a goat)		98	≥81
Household milk Consumption per day		1.5 litres	≥2.42 litres
Distance to water sources	Livestock	5.9 km	≤6.7 km
	Household	5.2 km	≤6.2 km
Utilization indicators		**Value**	**LTA**
MUAC (% <135 mm)		7.3	≤9.96
CSI		6.09	≤6.75
FCS		Acceptable=86% Poor = 1.1%,	Acceptable≥ 85% Poor=0%

▪ 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

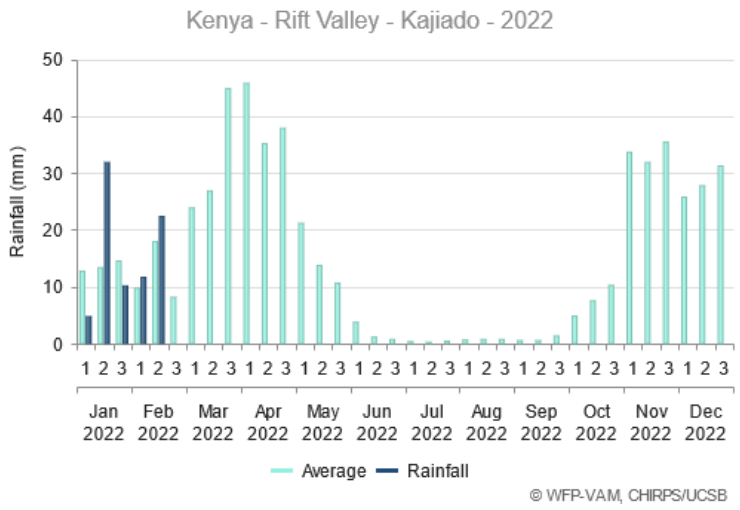

Figure 1: Rainfall performance; Kajiado – February 2022

- February is normally a short dry spell in anticipation of the long rains onset in mid-March. However, for this period, the county received off-season rainfall amounts above average for similar time of the year (Figure 1). The rains were spread across the county but more enhanced in Kajiado South and West sub-counties especially in third and fourth weeks of the month.
- The cumulative effects of both the January and February off-season rains had significant impact on water availability and pasture growth, this was not normal for this time of the year.

2.0 IMPACTS ON VEGETATION AND WATER

2.1 Vegetation Condition Index

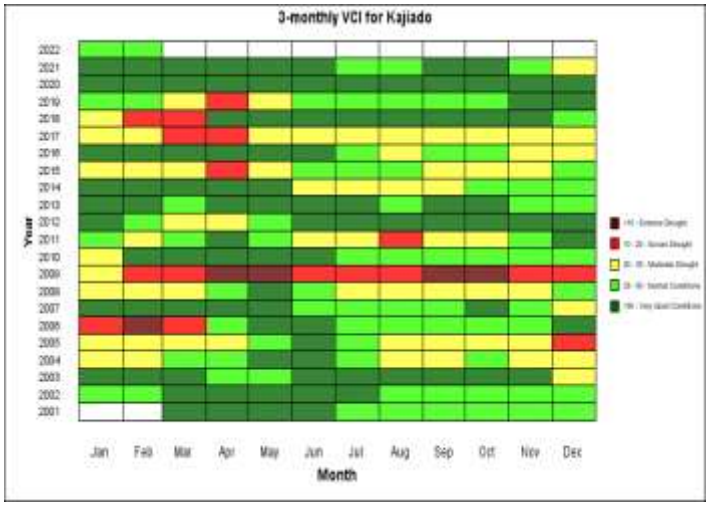

Figure 2: 3-monthly VCI matrix; Kajiado 2001-2022

- The average county 3 months vegetation condition index (VCI), was 41.55 compared with 35.54 recorded in the previous month (Figure 2). This indicates an improvement in vegetation greenness in the county attributed to the cumulative effects of off-season rains received between January and February.
- Though Kajiado West and Central sub-counties recorded improved vegetation greenness, they were still at moderate vegetation deficit category with an average index of 34.3 and 34.4 respectively.
- The vegetation condition is expected to improve further with the onset of long rains in mid-March.

2.2 Pasture and Browse Condition

- The pasture condition varied across the county in both quality and quantity. Pasture was fair to poor in pastoral West and Central while mixed farming, agro pastoral and pastoral South livelihood zones had good pasture conditions.
- Kajiado West and Central reported below normal pasture regeneration as they did not receive meaningful rainfall during the short rain season and were relying on the off-season rains of February.
- The available pasture was projected to last for one to one and half months.
- Currently, browse is good across the county and was expected to last for the next two to three months.

2.3 Water Sources

- Main water sources were Pans/Dams (28%), boreholes (26%) and piped water (24%) as reported by the 28 key informants interviewed (Figure 3).
- Improvement was observed on the water situation during the month of February following the off-season rains; use of pans/dams mainly by livestock increased from 18% in January to 28% in February.

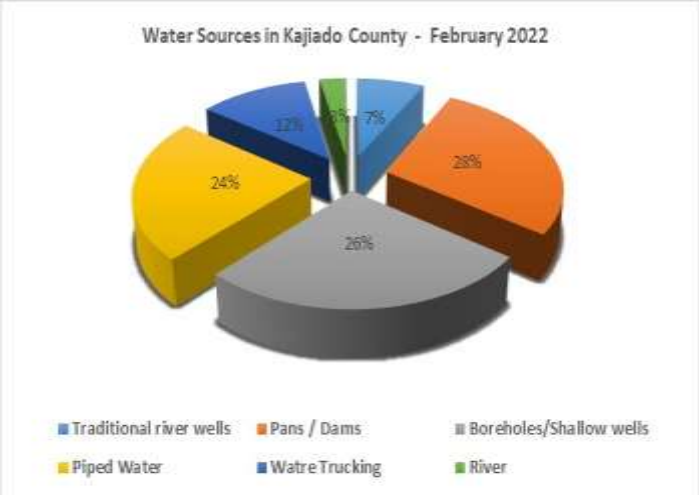

Figure 3: Water sources; Kajiado, February 2022

- Notably, concentration of livestock at strategic boreholes was slowly easing in the county due to recharge of open surface water sources thus reducing pressure on them.
- The current available water sources are expected to last until the onset of long rains.

2.4 Households Water Access and Utilization

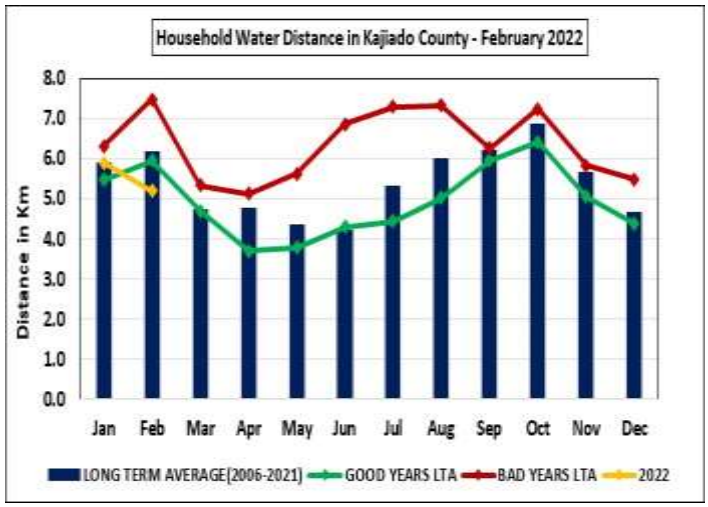

Figure 4: Average return distance from homesteads to water sources; Kajiado 2009 -2022

- In February, households were drawing water for domestic use mainly from boreholes, piped water, traditional river wells and rainwater harvesting**.**
- The average return distance from the households to water points for the month reduced by 12% to 5.2 km due to the off-season rains.
- This was below the long-term average of 6.2 km for similar period of the year (Figure 4).
- Longer distance to water points was observed in pastoral areas at 4.9 km, in agro-pastoral the distance was 3.9 km.
- On average, water consumption improved ranging between 15-25 liters/person/day across all livelihood zones.
- The price of water varied between Ksh. 5 in Ewuaso to Ksh. 10 in Mbirikani per 20-Litre Jerrican**.**
- Waiting time reduced from the normal 15-20 minutes to 10-15 minutes as most livestock were returning to their normal grazing areas thus reducing pressure on boreholes in addition to rainwater harvest and roadside pools.

- Only minority (32 percent), of the households interviewed were treating drinking water mainly through boiling, other methods employed included water treatment chemicals and filtration.

2.5 Livestock Access to Water

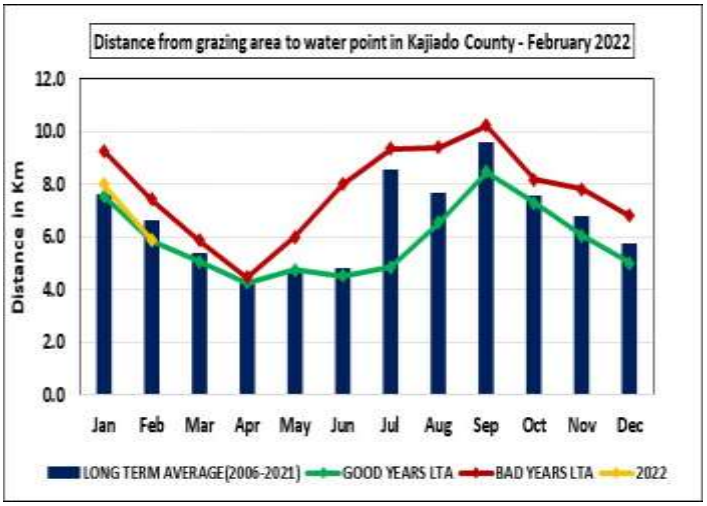

Figure 5: Average return distance from grazing fields to water sources; Kajiado, 2009-2022

- Water access by livestock reduced by 26.3% in February following significant off-season rains that recharged pans and dams.
- On average, the return distance from the grazing fields to water point in February was 5.9 km similar to that of a good year (Figure 5).
- The current distance was below the long-term average of 6.2 km for similar period of the year.
- In pastoral livelihood zones, the livestock return distance to watering points was about 2.7 km while in agro-pastoral livelihood zone it was 3.4 km. Pastoral West and South received significant off-season rains in February.

3.0 PRODUCTION INDICATORS

3.1 Livestock Body Condition

- Livestock body condition for cattle ranged from good to moderate. The impact of the off-rains rains is yet to be felt in terms of livestock productivity especially in Kajiado West and Central sub counties. Livestock body condition is expected to improve in the month of March due to continued regeneration of pasture and browse as long rains season begins with livestock back at home.

3.2 Livestock Mortalities

- No cases of unusual livestock mortalities were reported in the County during the month.

3.3 Livestock Diseases

- Cases of Foot & Mouth Disease (FMD), Contagious Caprine Pleuropneumonia (CCPP) and Contagious Bovine Plueropneumonia (CBPP) continued to be reported across the County.

3.4 Livestock Migration

- Return migration was rampant during the month. Livestock that had migrated in Kajiado South, Chyulu hills, Amboseli and Tsavo National Park were were observed retuning back home.

3.5 Milk Production

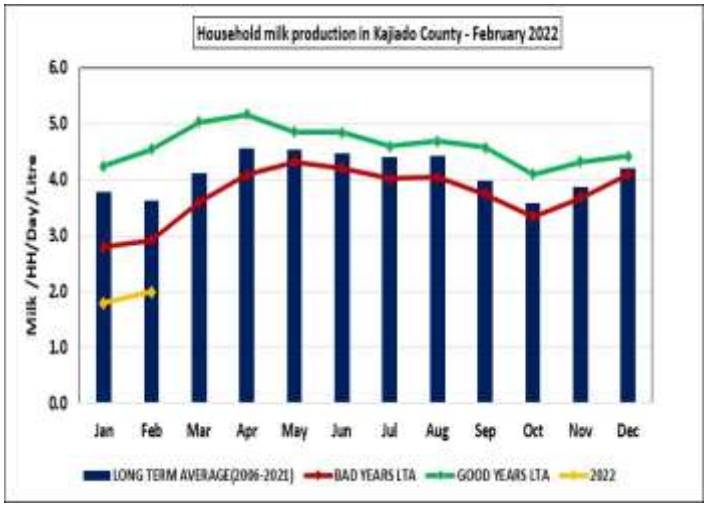

Figure 6: Average Milk production; Kajiado, 2006-2022

- Though household daily milk production improved to 2 litres in February from 1.8 litres, it was still 45% below the long-term average for the month (Figure 6). The increase was attributed to reduced distances to water sources and return migration.
- On average, pastoral zone daily milk production per household was 1.5 litres and 2.8 litres in Agro-pastoral.

3.6 Crop Performance

- Both maize and beans crops were in good conditions. As at the time of transect dive, beans harvest was near completion while majority of maize were ready for harvest.

4.0 MARKET PERFORMANCE

4.1 Livestock Marketing

- All the major livestock and food commodities markets namely Shompole, Kiserian, Ilbisil, Kimana and Rombo were in normal operation's in all the livelihood zones in the month of February.

4.1.1 Cattle Prices

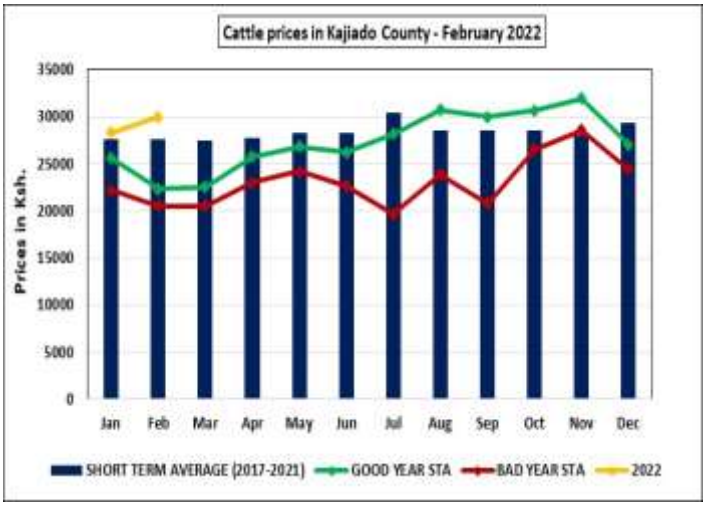

Figure 7: Cattle prices; Kajiado, 2017-2022

- The average price of a mature bull in the county was above the five-year short-term average by 9% at Ksh.30, 000 in February (Figure 7). In January, the price was Ksh. 28,350.
- The increase in price is attributed to low volume at market and expected recovery in body condition following improved pasture and water situation.
- The highest price was reported in Kaputiei North at Ksh 55,000 while lower price of Ksh. 17,000 was reported in Ewuaso.
- Cattle price is expected to improve further in the next month due to improved pasture and water as onset of long rains season kicks in.

4.1.2 Goats Prices

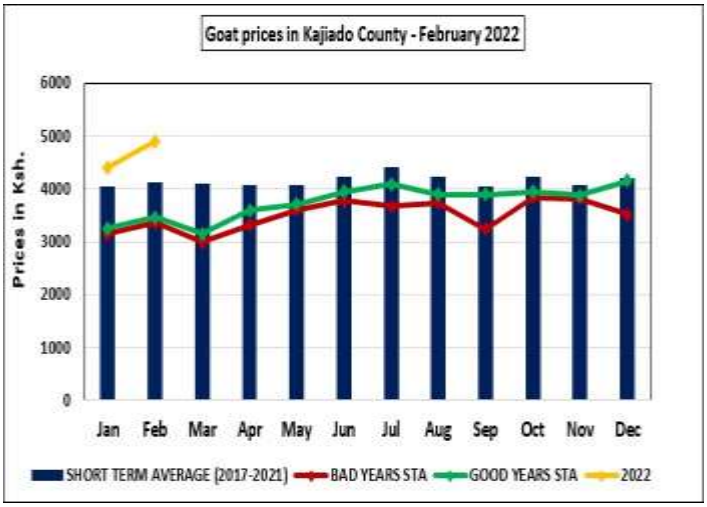

Figure 8: Goats' prices; Kajiado, 2017-2022

- The average market price of a medium sized goat was Ksh. 4,900 in February, in January the price was Ksh. 4,400.
- The current price is 19% above the five-year average for similar period of the year.
- This was attributed to good body condition due to continued availability of browse and low supply at market (Figure 8).

- There was notable variation in prices of goats across the County with lower price of Ksh. 3,500 sold in Ewuaso and higher price of Ksh. 7,000 sold in Kamukuru.
- Goat prices is expected to remain above five-year average due to availability of browse resulting in sustained good body condition across all livelihood zones.

4.2 Prices of Cereals and Legumes

4.2.1 Maize Prices

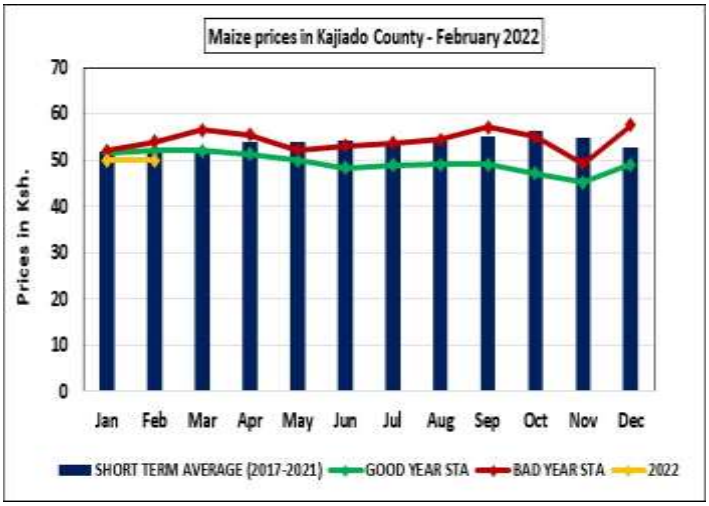

Figure 9: Average prices of Maize; Kajiado, 2017-2022

- In February, the average market price of maize remained stable at Ksh. 50 per kilogram (Figure 9). The current price is 3.5% below the five-year average.
- The stability in maize price was attributed to good supply from neigbouring counties, Tanzanian traders and expected good harvest in the next month.
- In mixed farming areas of Loitoktok a kilogram of maize was selling at Ksh. 35 and Ksh. 60 in Pastoral West, Ewuaso.
- Pastoral West usually records higher food prices, as it is purely pastoral with poor roads unlike the south, which is adjacent to the mixed farming zone and is accessible by traders.

4.2.2 Beans Prices

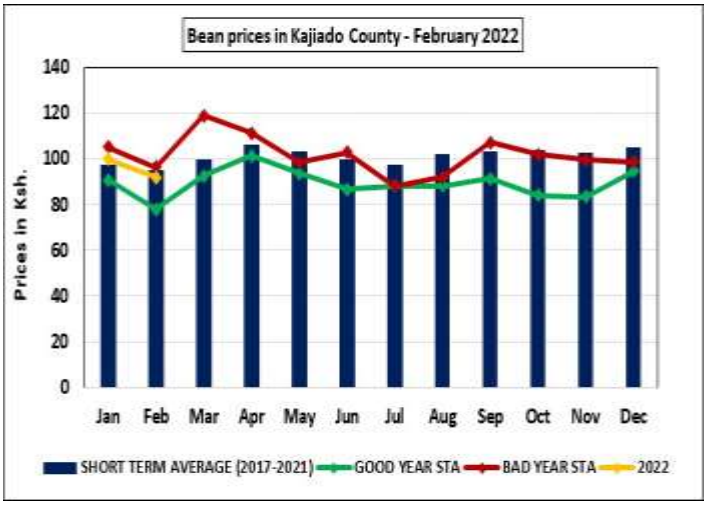

Figure 10: Average prices of beans; Kajiado, 2017-2022

- Beans prices reduced by 3% below the five-term average for similar period of the year. In February, average market price of beans was Ksh. 92 from Ksh. 100 in January (Figure 10).
- The observed reduction in beans price was due to the concluding good harvest in the mixed farming zones.
- The beans price ranged from Ksh.100 per kilogram in Ewuaso, pastoral west to

Ksh.80 per kilogram in Loitoktok, mixed farming south.

4.3 Prices of Milk

- Though milk production increased by about 11%, the average farm gate price of milk remained at Ksh. 60 per litre with no significant livelihood variations attributed to low supply, livestock productivity is yet to recover.
- The five-year average milk price at this time of the year is Ksh. 57 per litre.

4.4.1 Terms of Trade

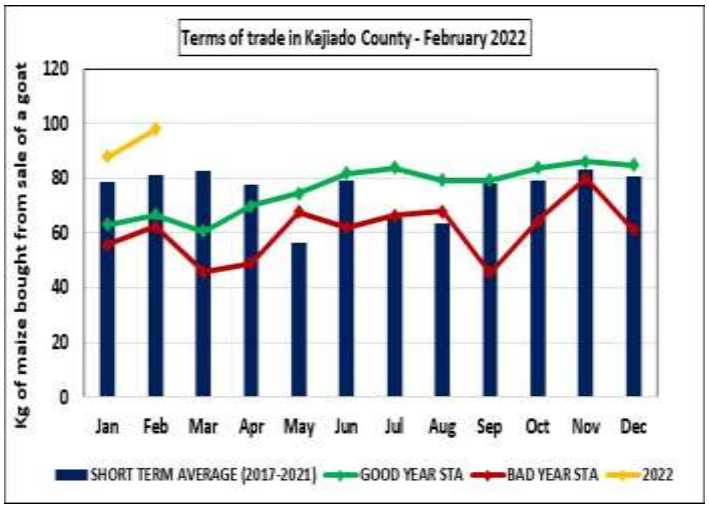

Figure 11: Trends in ToT; Kajiado 2017-2022

- Terms of trade (ToT) improved in favour of the livestock keepers as households could purchase 98 kilograms of maize with the sale a medium-sized goat, which was 21% above the five-year average (Figure 11). In January, ToT was 88 kilograms of maize per sale of a medium-sized goat.
- The rise in ToTs was due to improvement in goat prices compared to stable maize price.
- Terms of Trade is expected to remain stable above five-year average in March due to expected further improvement in goat prices against reduced maize price as harvest of the crop commence during the month.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS AND DISEASE

5.1 Milk Consumption

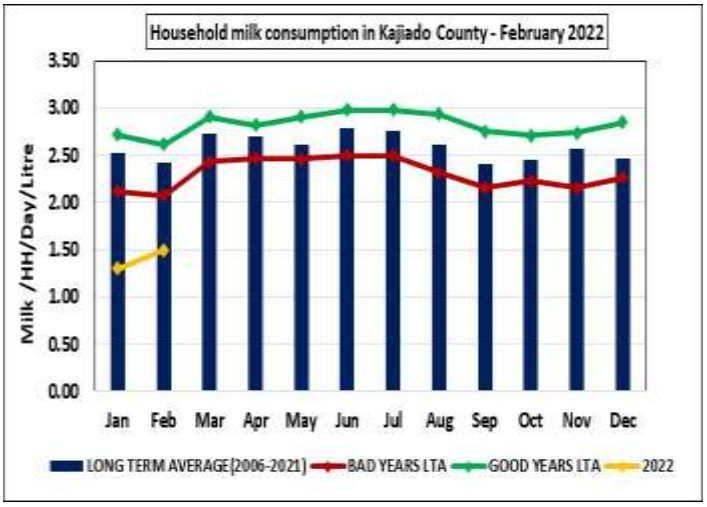

Figure 12: Trends in Milk Consumption; Kajiado 2006-2022

- Milk consumption at household level increased slightly to 1.5 litres per day in February from 1.3 litres in January (Figure 12). Notably, the current daily milk consumption is still 28% below the bad year average.
- Increase in milk consumption was attributed to return migration and increased water availability while the notable low consumption was due to reduced stock levels since 2017.
- Kajiado East recorded the highest daily milk consumption of 2.2 litres while in Kajiado West the consumption was lowest at 1.5 litres.
- The long-term average milk consumption for such a time of the year is 38% above the current value.

5.2 Food Consumption Score

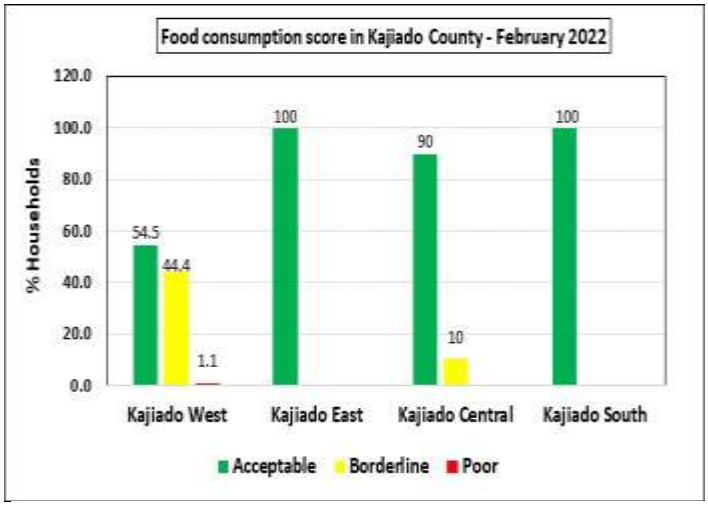

Figure 13: Food consumption score; Kajiado, February 2022

- From figure 13, there was a general improvement in household food frequency and diversification compared to January. About 1.1% of households in Kajiado West sub-county were still consuming poor diet; however, this was a reduction from 3.6% in January.
- The decrease in poor consumption category was attributed to the beans harvest, return migration and improved livestock prices; thus, households were able to improve diversity of their diets.

- It should be noted that the 1.1% in poor food consumption score from Kajiado Wets need close monitoring.

5.3 Coping Strategies

- The average main copying strategy index (CSI) for the County has reduced from 6.46 in January to 6.09 in February. The five-year mean for similar period is 6.8.
- In the pastoral livelihood zone, CSI was 7.6 while in the agro-pastoral livelihood zone the CSI was low and stable at 2.3. Agro-pastoral and mixed farming areas were harvesting beans.
- Main coping mechanisms employed by households during the month were eating less preferred food and borrowing food.

5.4 Nutrition Status of Children aged 6-59 Months

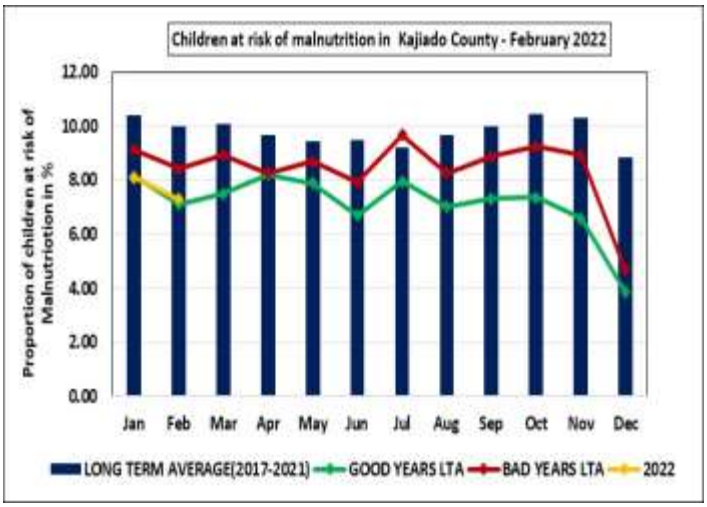

Figure 14: Risk of malnutrition for children aged 6-59 months; Kajiado, 2017-2022

- The proportion of children aged 6-59 months at risk of malnutrition in February was 7.3%; this is 27% below the five-year average for the period indicative of improved health and nutrition status (Figure 14). In January, children under five years of age at risk of malnutrition were 8.1%.
- The reduction in the risk of malnutrition is attributed to better household access to food due to favourable terms of trade and improved availability of milk consumption.
- Mosiro, Magadi, Ewuaso, Lenkism and Mbirikani wards as well as informal settlements remain hotspots areas for mulnutrition requring close monitoring.

5.5 Human Diseases

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- No major human health issues were reported during the month, however, COVID -19 Virus remains a threat and members of the public must continue taking necessary preventative measuures.

6.0 FOOD SECURITY PROGNOSIS, CURRENT INTERVENTIONS AND RECOMMENDATIONS

6.1 Food Security Prognosis

- The general food security situation in the county has improved and expected to remain stable with the beans harvest and expected above average maize harvest, thus improved cereals access in the next 3 months.
- Cumulatively, the county received off-season rains during January –February period above long-term average for the period.
- Consequently, water situation with the recharge of pans and pasture regeneration has since improved across the county and would last past the long rains season.
- Distances to water sources are expected to reduce tremendously in the next 3 months and surface water sources expected to fully re-charge following the expected onset of long rains in mid-March.
- Livestock return migration was observed during the month with no external migrations expected in search of pasture and water during this period. Milk production and livestock prices have improved against reduced cereal prices in favour of the livestock keepers.
- Malnutrition rates have recorded a reduction and this trend is expected to continue in the next three months due to favourable terms of trade, which has improved food access at market.
- The food consumption score of households is also expected to improve due to diverse foodstuff.

6.2 On going Interventions

- Routine active and passive disease surveillance - *Action by County Government.*
- Vitamin A, Zinc Supplementations and De-worming in health facilities - *Action by County Department of Health and partners.*
- Development of the Ward County Contingency Plans (Kajiado South and East sub counties) - *Action by National Drought Management Authority and partners.*

6.3 Recommendations for Action

- Deworming and vaccination campaign against Contagious Bovine Pleuropneumonia (CBPP), Contagious Caprine Pleuropneumonia (CCPP), Foot & Mouth Disease and Lumpy Skin Disease - *Action by County Government (Veterinary services) in collaboration with National Drought Management Authority and partners.*
- Provision of water treatment Kits and water harvesting equipment's to institutions – *Action by department of Water, National Drought management Authority and partners.*

- Hay production and preservation especially now when pasture and browse is expected to improve and encourage grazing fields' management – *Action by department of Livestock and partners.*
- Provision of subsidized fertilizers and drought tolerant seeds to rain-fed farmers in mixed farming – *Action by department of Agriculture and partners.*