National Drought Management Authority

KAJIADO COUNTY
DROUGHT MONITORING AND EARLY WARNING BULLETIN MAY 2022

A Vision 2030 Flagship Project

MAY EW PHASE

Early Warning Phase Classification

LIVELIHOOD ZONE	EW PHASE	TRENDS
PASTORAL	ALERT	DETERIORATING
AGRO-PASTORAL	ALERT	DETERIORATING
MIXED FARMING	ALERT	DETERIORATING
COUNTY	ALERT	DETERIORATING

Drought Situation & EW Phase Classification

Biophysical Indicators

- ✓ The month of May normally marks the cessation of the "Long Rains" season. This year the long rains performed below the normal at 65 percent of the normal.
- ✓ Vegetation condition index indicates that the County was in moderated drought situation.
- ✓ Pasture condition ranged from fair in west to poor in central and south parts of the County

Production Indicators

- ✓ Livestock body condition is fair in Kajiado west and poor in Kajiado south.
- ✓ Their prices were declining while milk production was far below the normal.
- ✓ Rain fed crops have withered due to lack of water and crop failure was expected in Agro-Pastoral zone and extremely low yields in Mixed Farming zone

Access indicators

- ✓ The terms of trade was above the short-term average but on declining trend.
- ✓ Distances to water sources were increasing and longer than the long term average for similar period of the year.

Utilization Indicators

- ✓ Proportion of under-five children at risk of malnutrition was below the long-term but on an increasing trend.
- ✓ Milk consumption was stable for April-May period but below the low term average.

Biophysical Indicators		Observed Value/Range	Normal Range/LTA
Rainfall (% of normal)		65	80 - 120
3-monthly VCI		33.08	>35
State Of Water		Fair	Adequate
Pasture condition		Fair - poor	Good
Production Indicators		**Observed Value/Trend**	**Normal Range**
Livestock body condition		Fair	Good
Household milk production per day		2.3 litres	>4.6 litres
Livestock migration		Intra-migration	None
Access Indicators		**Observed Value**	**LTA**
Terms of trade (kg of maize for a goat)		81	56
Household milk Consumption per day		1.7 litres	2.6 litres
Distance to water sources	Livestock	7.4 km	4.7 km
	Household	6.6 km	4.4 km
Utilization indicators		**Value**	**LTA**
MUAC (% <135 mm)		7.8%	10%
CSI		6.06	<10
FCS (% HH)	Pastoral	Borderline = 28.9	Acceptable = 71.1
	Agro - Pastoral	Borderline = 15.3	Acceptable = 84.7

▪ 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

- The month of May normally marks the cessation of the long rains season in the County more specifically during the third dekad of the month. During the first and second dekad the County received light showers spread over few places (Figure 1).

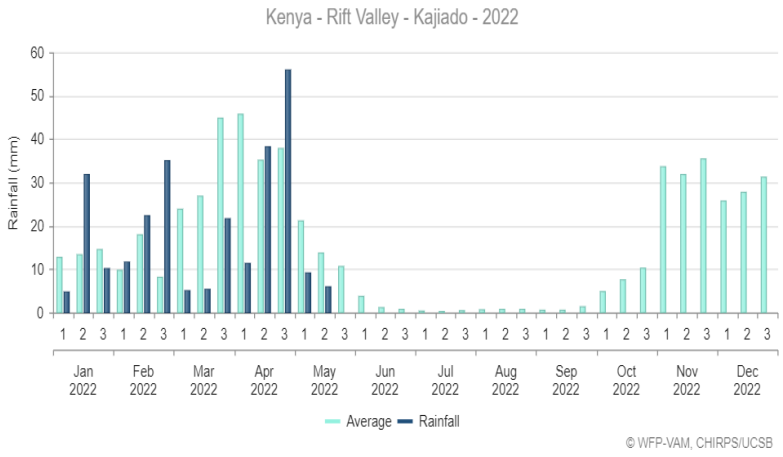

Figure 1. : Rainfall performance; Kajiado

- During the third dekad several parts of the County received fair rains.
- The cumulative rainfall between the second dekad of March and the second dekad of May was 147 mm, which is 65 percent of normal for the period that was rainfall poorly distributed both in time and in space.

2.0 IMPACTS ON VEGETATION AND WATER

2.1 Vegetation Condition

- The 3-monhtly vegetation condition index for the month of May was 33.08, which indicates that the County was in a moderate drought situation. In January - April period the vegetation greenness for the County was normal (Figure 2).

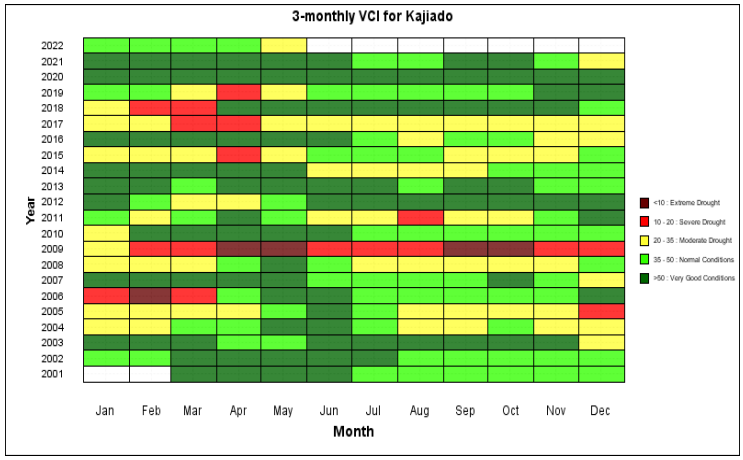

Figure 2. 3-monthly VCI matrix: Kajiado 2001-2022

- Deterioration of vegetation condition by May this year was due to poor performance of the long rains especially in Kajiado South and Central.
- Kajiado South is more hit with vegetation condition index of 20.47.

2.2 Pasture and Browse Condition

- In May, pasture situation varied across and among livelihood zones. In the western side of pastoral livelihood zone (Ewuaso, Loodokilani) and some part of Kajiado central sub-County (Matapato) which is still pastoral livelihood zone, pasture was fair while in the southern (Mbirikani, Kuku, Rombo, Lenkism) pasture was poor.
- In Agro pastoral zone (Kajiado east, Dalalekutuk in Kajiado central), pasture was fair but deteriorating fast.
- The current pasture was below normal for this time of the year due to poor regeneration after below normal rainfall performance during the long rains season.
- Browse condition was fair across the County.
- The available pasture would last at most one month while the browse would last for two months.

2.3 WATER ACCESS AND UTILIZATION

2.3.1 Water Sources

- The key informants were asked to report the three main sources of water used by their communities. The results are shown in Figure 3. In May, the main water sources were pan and shallow wells.
- These are normal water sources at this time of the year.
- Few pans were still holding water following heavy rains in the third week of April. These pans were likely to dry up by mid-June.

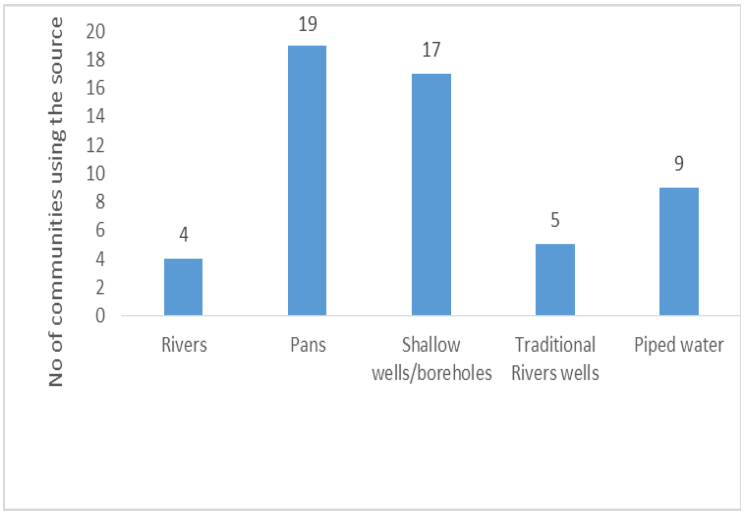

Figure 3. Water sources; Kajiado, May 2022

- In Agro-Pastoral zone, boreholes were the main source of water for domestic use and for livestock.

2.3.2 Households Water Access and Utilization

- Household access to water is described using the return distance from homesteads to water points and cost of water while utilization is described using consumption and treatment.

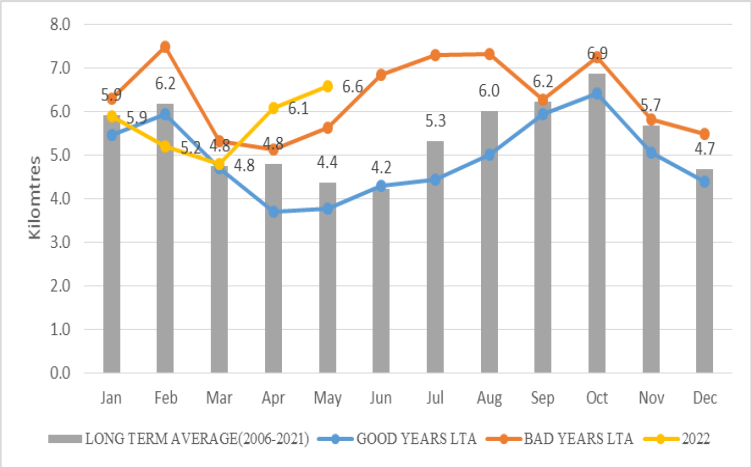

Figure 4. Average return distance from homesteads to water sources; Kajiado, 2006-2022

- The average return distance that people travelled from their homes to get water increased from 6.1 kilometres in April to 6.6 kilometres in May with the long-term distance in May averaging 4.4 kilometres (Figure 4).
- The increased distance between homesteads and water sources between April and May was probably due to drying up of seasonal rivers that are the main source of water during the months.
- The cost of 20-litre jerrycan at the source was Ksh 5, and between Ksh. 20 and Ksh 25 when supplied by a water vender with consumption in May averaging to 65 litres a day per households. Water consumption in Pastoral livelihood zone averaged 45 litres a day per household.
- About 30 percent of households boiled water for drinking as a means of treating it.

2.2.3 Livestock Access to Water

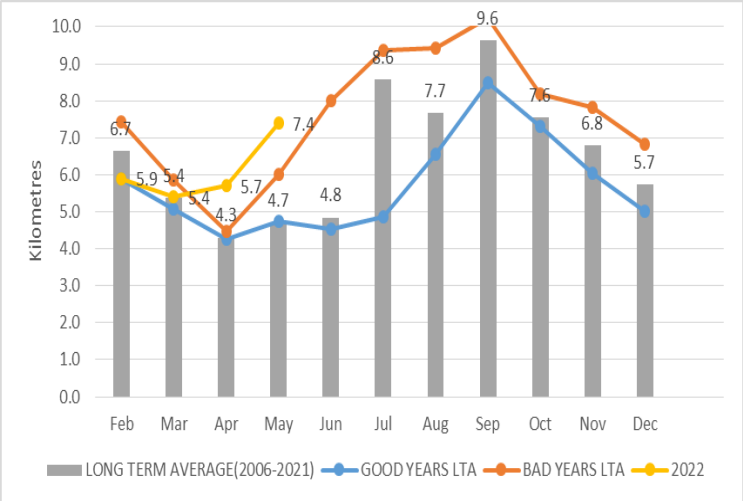

Figure 4. Average return distance from grazing fields to water sources; Kajiado, 2009-2022

- Livestock access to water is described by distance from the grazing fields to watering points. In May, the distance from the grazing fields to water sources was 7.4 kilometres and 5.7 kilometres in March. The long-term distance from the grazing fields to water points in May is 4.7 kilometres (Figure 5).
- Although the County received some rains by the end of April that recharged pans and ponds, most of ponds dried up

by mid-May forcing livestock to trek long distances to pans and boreholes to take water. In Kajiado South (Mbirikani), rainfall was low and so was the recharge of open water sources.

- Livestock in southern part of Pastoral livelihood zone (Mbirikani, Lenkism) travelled 14 kilometres from grazing fields to water points.
- Watering frequency for livestock varied from 7 days in a week in parts of Kajiado west (Loondakilani) to 3 days in a week in Kajiado south (Mbirikani).

3.0 PRODUCTION INDICATORS

3.1 Livestock Production

3.1.1 Livestock Body Condition

- Cattle body condition varied across the County. In Loondokilani (Pastortal zone in Kajiado west), and Matapato (Pastoral zone in Kajiado central) cattle body condition was fair and poor in Kajiado south and central (Pastoral zone). Loondokilani and Matapato received some good rains in April leading to fair regeneration of pasture while Kajiado south-received poor rainfall and pasture regeneration was poor.
- Body condition for goats and sheep was good across the County as they are more resilient and that browse was still fair.

3.1.2 Livestock Mortalities

- There were no reports of unusual deaths of livestock in the month of May.

3.1.3 Livestock Diseases

- Since January, cases of Foot and Mouth Disease, Lumpy Skin Diseases, Contagious Caprine Pleuropneumonia (CCPP), Contagious Bovine Pleuropneumonia (CBPP) and worms continue to be reported. The most affected areas include of Oldonyonyokie, Loondokilani and Ewuaso, which are in western side of Pastoral zone.

3.1.4 Livestock Migration

- There are rampant movement of livestock within the County in search of pasture. Livestock from Lenkism (Kajiado south) have moved to Matapato (Kajiado central) while those from Kenyewa-Poka (Kajiado east), Purko (Kajiado central) were migrating to Ilpolosat (Kaiado east) and Loodokilani (Kajiado west) respectively. Livestock from Mbirikani and Mashuruu were still in Chyulu hills.

Milk Production

- In May, milk production increased slightly to 2.3 litres per day per household from 2.0 litres per day per households in April. The average long-term milk production per household for similar period of the year is 4.5 litres (Figure 6).
- Milk production varied across livelihood zones with households in Pastoral zone producing on overage 1.8 litres per day while those in Agro-Pastoral produced 3.8 litres a day.

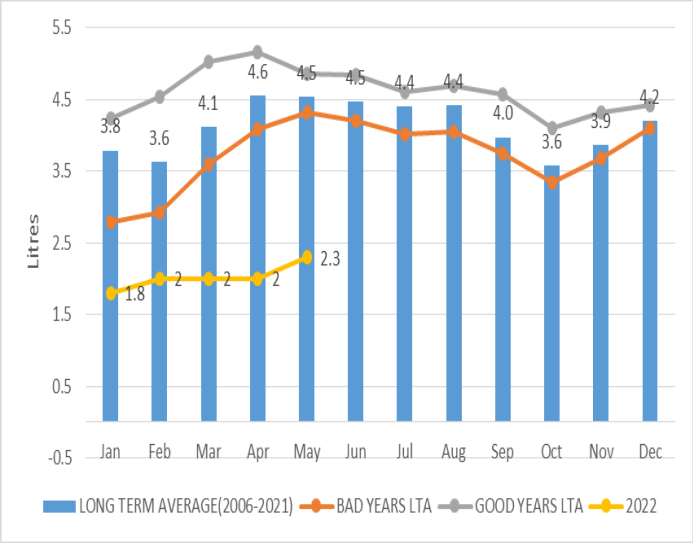

Figure 6: Average milk production; Kajiado, 2006-2022

3.1 Rain-Fed Crop Production

- Rain fed crops have already withered due to lack of water/rain. These crops were more likely not going to mature and thus farmers would experience total crop failure this season. In a typical year, maize would be tussling while beans would be maturing.

4.0 MARKET PERFORMANCE

4.1 Livestock Marketing

- Livestock markets in the County include Shompole, Kiserian, Ilbisil, Kimana and Rombo. These markets were all operating normally since January.

4.1.1 Cattle Prices

- The price of cattle continue to decline after March due to deterioration of their body condition.
- In May, a medium size bull was selling at Ksh. 30,600 and Ksh. 31,600 in March. The average price of similar cattle for the past five years is Ksh. 28,300 (Figure 7).

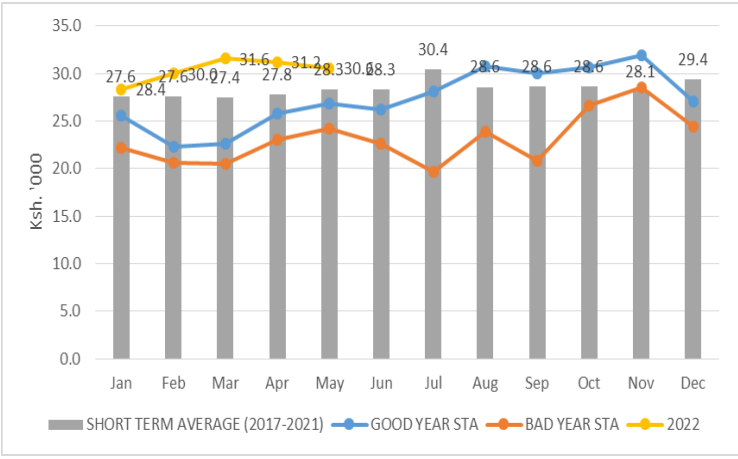

Figure 5: Average cattle prices; Kajiado, 2017-2022

- The average price of cattle in Pastoral zone was Ksh. 27,300 and Ksh. 39,300 in Agro-Pastoral zone. The variation is mainly a reflection of cattle body condition in the zones that is comparatively better in Agro-Pastoral zone.

4.1.2 Goats Prices

- Prices of goats continue to reduce after March with a medium size goat selling at Ksh. 4,870 in May and Ksh. 5,350 in March. The average price of a medium size goat for the last five years is Ksh. 4,060 (Figure 8).
- The reduction in price of goats between March and May was probably due to deterioration of their body condition during the period.

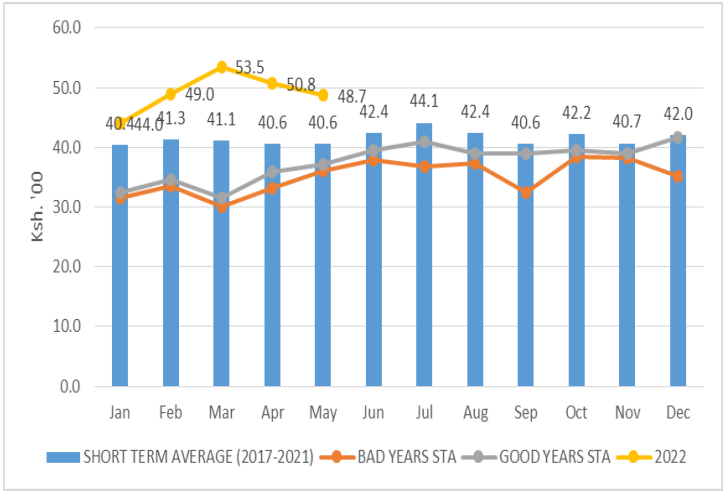

Figure 6. Average goats' prices; Kajiado, 2017-2022

- In Pastoral zone, a medium size goat was selling at Ksh. 4,690 and Ksh, 5,350 in Agro-Pastoral zone. Variation in prices of goats was due to variation in their body condition that was comparative better in Agro-Pastoral.
- Variation of prices of goats was also evident within livelihood. For instance in a Kamukuru (Pastoral in west), a goat was selling at Ksh. 6,400 while in Rombo (Pastoral south) it was selling at Ksh. 5,530.

4.2 Prices of Cereals and Legumes

4.2.1 Maize Prices

- On average, the price of maize increased continually between March and May. In May, a kilogram of maize was sold at Ksh. 60 and Ksh 48 per kilogram in March. The average price of maize for the last five years in May is Ksh. 54 per kilogram (Figure 9).
- The increase in prices of maize between

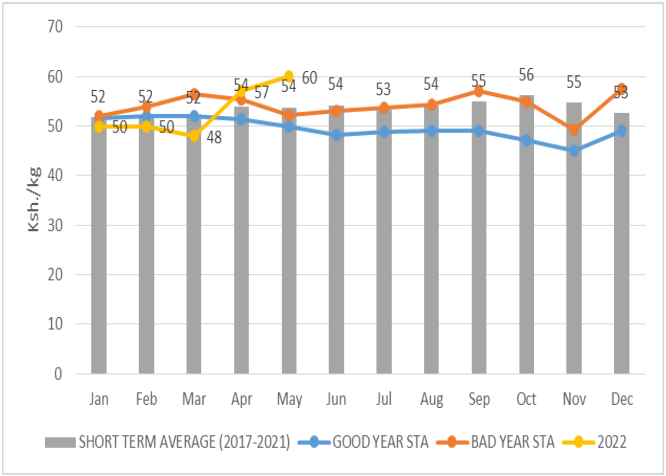

Figure 7. Average maize prices; Kajiado, 2017-2022

March and April was probably due to anticipation of poor yields of the crop for the long rains season.

- In Pastoral livelihood zone, a kilogram of maize was sold at Ksh.62 and Ksh. 56 in Agro- Pastoral zone. The variation would be associated to the accessibility of which most parts of Pastoral zone have very poor roads network.

4.2.2 Beans Prices

- The average market price of beans increased to Ksh. 120 per kilogram in May from Ksh.99 per kilogram in April. The average price of beans in May for the past five years is Ksh. 103 per kilogram (Figure 10).

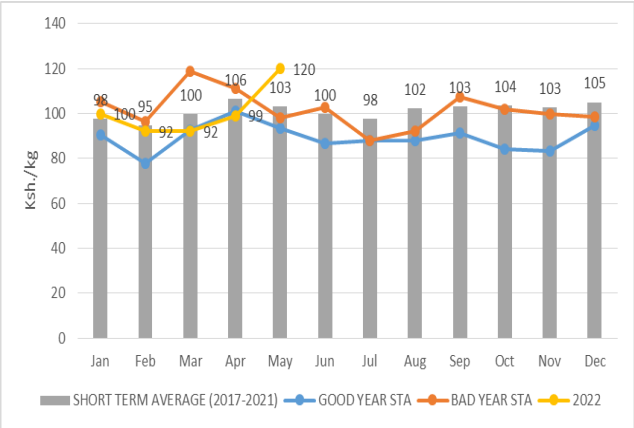

Figure 8. Average beans prices; Kajiado, 2017-2022

- The increase in price of beans at this time of the year was probably due to anticipated poor harvest of the crop during the long rains within the County and among the neighbouring counties.
- In Pastoral livelihood zones, a kilogram of beans was sold at Ksh. 128 and Ksh. 100 in Agro-Pastoral zone. Prices of beans also varied within same livelihood zone. For instance in Rombo (southern part of Pastoral zone) a kilogram of beans was selling at Ksh. 93 and Ksh. 112 in Kamukuru (western side of Pastoral zone).

4.3 Milk Prices

- The price of milk ranged from Ksh. 50 per litre in Kajiado east to Ksh. 60 in Kajiado south. In a typical year, the price of one litre of milk in May is about Ksh. 40.

4.4 Terms of Trade

- The terms of trade declined sharply between March and May with a medium size goat being exchanged with 111 kilograms of maize in March and a similar goat being exchanged with 81 kilograms of maize in May. The average terms of trade for the last five years is 56 kilograms of maize for a medium size goat (Figure 11).
- The declining trend in terms of trade implies reduction in purchasing power especially for pastoralists.

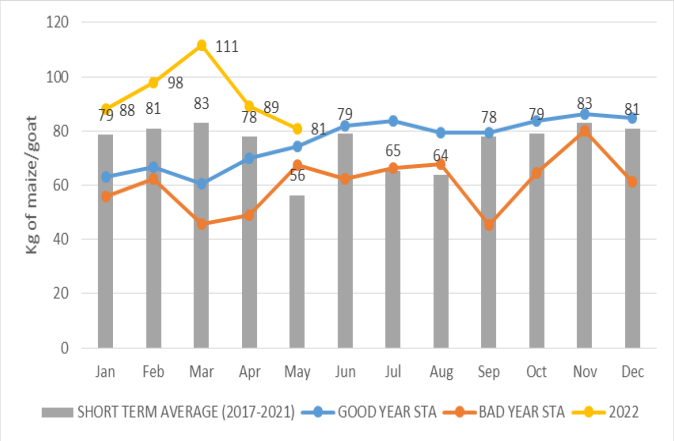

Figure 11: Average terms of trade; Kajiado, 2017-2022

- Further decline in terms of trade was likely in the coming months as the prices of food stuff were likely to increase while that of livestock was likely to reduce.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk Consumption

- The household milk consumption in April and May was 1.5 litres and 1.7 litres per day with historical average in May being 2.6 litres a day (Figure 12).
- During the month of May, there was no significant variation in milk consumption across livelihood zone. On average, households in Pastoral zone consumed 1.7 litres a day while those in Agro-Pastoral zone consumed 1.8 litres a day.

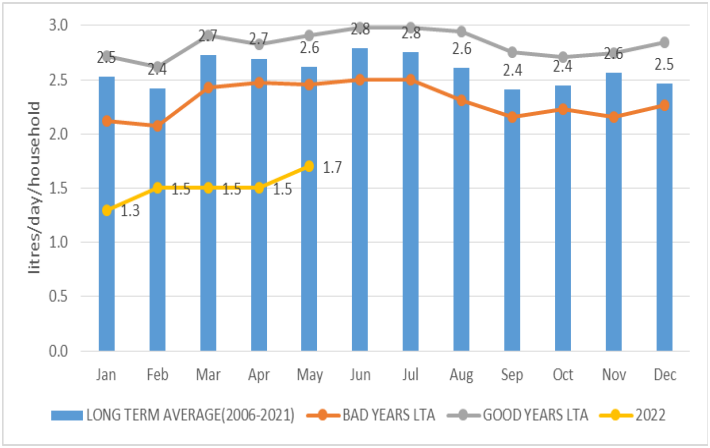

Figure 9. Household milk consumption; Kajiado2007-2022

5.2 Food Consumption Score

- Figure 13 shows the food consumption pattern between January and May 2022. The proportion of households whose food consumption score ranged between 21.5 and 35 (Borderline category) in Pastoral zone remained nearly the same during April-May period. This means that in Pastoral zone there was minimal changes in food consumption pattern between April and May.

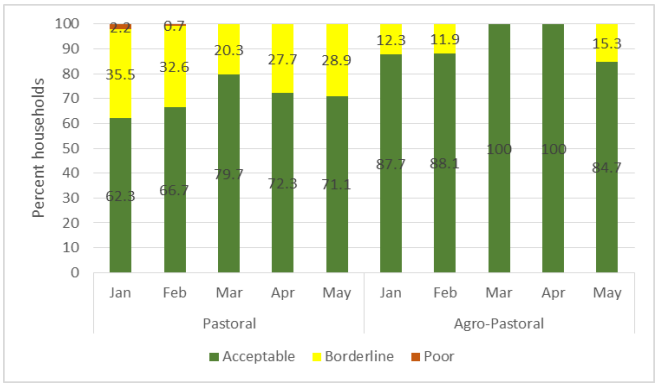

Figure 10. Food consumption score; Kajiado, Jan-May

- On the other hand, the proportion of households in Agro-Pastoral zone whose food consumption score was great than 35 (Acceptable category) dropped from 100 percent in April to 84.7 percent in May. This suggest possibility of 15.3 percent of households consuming less diversified food with lower frequency in the zone in May compared to April.

5.3 Nutrition Status of Children aged 6-59 Months

- The risk of malnutrition among the under-five children increased to 8.2 percent in May from 7.8 percent in April. The average risk of malnutrition for under five in May for the past five years is 9.4 percent (Figure 14).
- Hot spot areas for risk of malnutrition include Mosiro, Magadi, Ewuaso, Magadi, Oldonyonyokie, and Mbirikani wards as well as informal settlements.

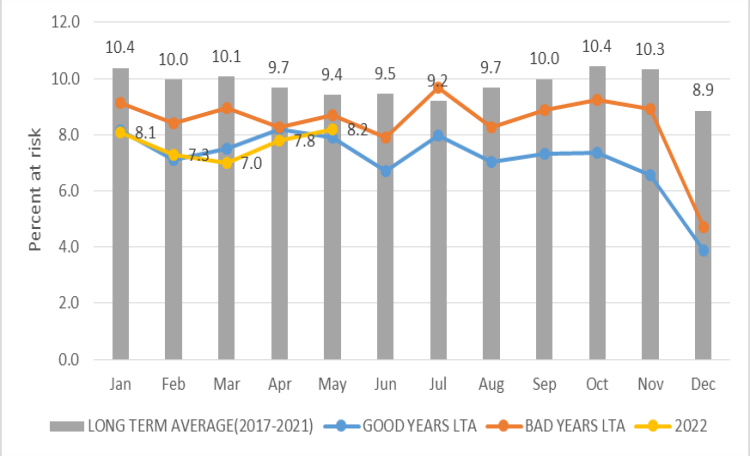

Figure 11 : Risk of malnutrition for children aged 6-59 months; Kajiado, 2017 - 2022

5.4 Coping Strategies

- Generally, the coping strategy index (CSI) fluctuated between 5 and 6 for the period between January and May this year.
- In May, the average CSI for the County was 6.06 compared to 5.06 in April. This means that households strained more to get food or money to buy food in May compared to April.
- Coping strategy index in Pastoral livelihood zone was 7.5 and 2.4 in Agro-Pastoral livelihood zone.
- This means households in pastoral zone used more stressful strategies to get food or money to buy food than those in Agro-Pastoral zone.
- Some of the coping strategies employed by households to deal with lack of food or money to buy food in May include eating less preferred foods.

5.5 Human Diseases

- There were no reports of unusual human disease in the month of May.

6.0 FOOD SECURITY PROGNOSIS, INTERVENTIONS AND RECOMMENDATIONS

6.1 Food Security Prognosis

Hazards and Vulnerability. Between the second dekad of March and the second dekad of May, the County received a total of 147 mm of rain, which is 65 percent of normal for the period. The rains were poorly distributed both in time and in space. This poor performance of the 2022 long rains will negatively affect various sectors including livestock, agriculture, water and health. Rampant migration of livestock in search of pasture poses potential risk of livestock disease outbreaks. There are also possibilities of increased human-wildlife conflict as livestock and wild animals compete for limited resources such as pasture and water. Households in Pastoral and Agro-Pastoral zones will be more vulnerable to drought during the long dry spell between June and September.

Food availability.

- Cattle body condition will continue deteriorating in absence of off-season rains. Pasture is already poor in most parts of the County and was likely to get depleted in the next one month.
- Also household milk production that is currently below the long-term average for similar period of the year was likely to decline even more during the dry spell between June and September.
- There is possibility of crop failure in Mixed Farming and Agro-Pastoral livelihood zones that will see the household food stock reduce significantly below normal for the next three months.
- Most surface water sources mainly pans have nearly dried up following poor recharge during the rainy season. Strategic boreholes will start experiencing high concentration of both human and livestock in the next one month with possibility of increased breakages.

Food accessibility.

- Prices of livestock was likely to continue deteriorating in the next six months due to deterioration of their body because of inadequate pasture and water.
- On the other hand, prices of foodstuffs were likely to increase because of poor harvest both in the County and in the neighbouring counties during the season.
- The terms of trade was thus going to decline further indicating continued reduction of purchasing power especially for pastoralists.
- Distances to water sources for both livestock and human being was likely to destabilize as communities turn to more permanent water sources mainly boreholes by next month after drying up of pans.

- The waiting time at water source was probably going to increase while the water quality was likely to be low as people, livestock and wild animals concentrate more at the same strategic boreholes

Food Utilization.

- Household milk consumption will continue to deteriorate in the next six months as the production continue to decline.
- By next month, households were also likely to reduce portions of food consumed per day to cope with lack of food or money to buy food.
- Households were also likely to have limit consumption of certain food or the frequency of consuming some food hence reducing their dietary intake that would further increase the risk of malnutrition.

Hot spots

- Food insecurity hot spots include mainly Pastoral (Rombo, Mbirikani, Lenkism, Purko, Indamat, Magadi, Ewuaso, Mosiro) and Agro-Pastoral (Dalalekutuk, Kenyawa Poka) zones

6.2 Non-Food Interventions

- Routine active and passive livestock disease surveillance - *Action by County Government.*
- Vitamin A, Zinc Supplementations and De-worming in health facilities - *Action by County Department of Health and partners.*

6.3 Food Interventions

- Provision of 200 bags (50 kg each) of rice and 360 bags (50 kg each) of beans to 1428 households in Kajiado central sub-County - *Action by County Commissioner*

6.4 Recommendations for Action

- Deworming, vaccination campaign against Contagious Bovine Pleuropneumonia (CBPP), Contagious Caprine Pleuropneumonia (CCPP) and Lumpy Skin Disease - *Action by County Government (Veterinary services) in collaboration with National Drought Management Authority and other partners.*
- Enhance livestock disease surveillance - *Action by County Department of Veterinary Services.*
- Food assistance to vulnerable households- *Action by County Government and partners.*