

National Drought Management Authority

KAJIADO COUNTY

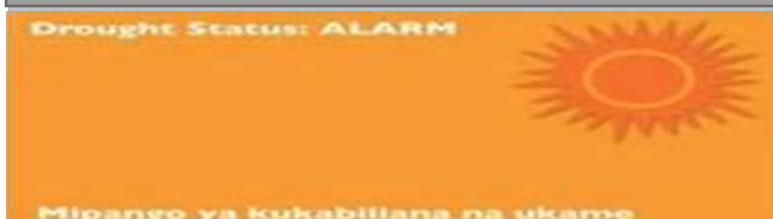
DROUGHT MONITORING AND EARLY WARNING BULLETIN DECEMBER 2022



A Vision 2030 Flagship Project



DECEMBER EW PHASE



Early Warning Phase Classification

LIVELIHOOD ZONE	EW PHASE	TRENDS
PASTORAL SOUTH	ALARM	IMPROVING
PASTORAL WEST	ALARM	WORSENING
AGRO-PASTORAL	ALARM	WORSENING
MIXED FARMING	ALARM	IMPROVING
COUNTY	ALARM	STABLE

Drought Situation & EW Phase Classification

Biophysical Indicators

The short rains performed poorly with both unclear onset in late October and unclear cessation in December.

- ✓ The County has remained in moderate vegetation deficit since May with Kajiado central being in severe drought since September.
- ✓ Pasture regeneration was poor and remains depleted across the County.

Production Indicators

- ✓ Cattle were emaciated and thus their productivity was far below the long-term average

Access indicators

- ✓ The TOT was below the short-term average for the month meaning household's purchasing power was below the average for the past five years.
- ✓ Distance to water points are long than the average for the month meaning less access to water by both livestock and people.

Utilization Indicators

- ✓ Milk consumption is insignificant due to low production that limits the household's dietary intake.
- ✓ The risk of malnutrition for under five continue to increase above the average risk for the last four months.
- ✓ Household diet is still limited with most of them consuming mainly carbohydrates. Over 30 % of the households had food consumption score less than 35.

Biophysical Indicators	Observed Value/Range	Normal Range/LTA	
3-monthly VCI	23.87	>35	
State of water	Inadequate	Adequate	
Pasture condition	Depleted	Good	
Production Indicators	Observed Value/Trend	Normal Range	
Livestock body condition	Emaciated	Fat	
Milk production	1.6 litres	>=4.2 litres	
Livestock migration	Rampant movement	No migration	
Access Indicators	Observed Value	LTA	
Terms of trade (kg of maize for a goat)	53	81	
Milk consumption	< 1.3 litres	2.5 litres	
Distance to water sources	Livestock	6.1 km	5.7 km
	Domestic	6.2 km	4.7 km
Utilization indicators	Value	LTA	
MUAC	11.1 %	< 10	
CSI	5.1	< 10	
FCS	Pastoral	Borderline = 47%	Acceptable = 52.1%
	Agro-Pastoral	Borderline = 30.5%	Acceptable = 69.5%

<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

- The 2022 short rains season was marked with unclear onset as well as unclear cessation.

Overall, the season performed poorly with below (Figure 1) normal rainfall, which was poorly distributed both in time and in space. Kajiado west Sub County that is mainly pastoral remains dry. By third week of December, only a few areas in Kajiado central and east sub Counties received some rains

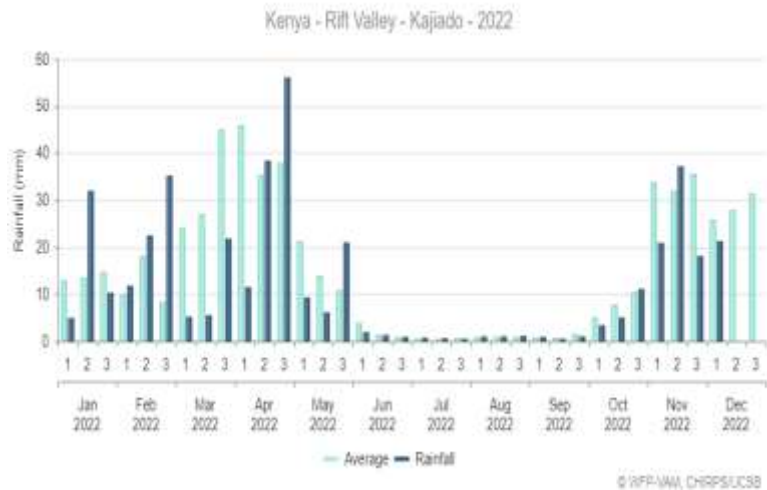


Figure 1: Rainfall performance, Kajiado; 1994 - 2022

with little impact on forage regeneration.

2.0 IMPACTS ON VEGETATION AND WATER

2.1 Vegetation Condition

- The County has been in moderate vegetation deficit since May, a situation that is reflected in

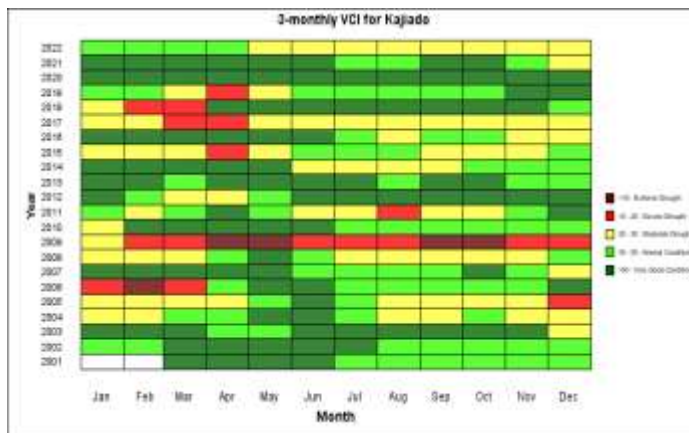


Figure 2: 3-monthly VCI; Kajiado, 2001 - 2022

2017 when the County had another severe drought (Figure 2).

- In December this year the Vegetation Condition Index (VCI) for the County was 23.87 meaning that on average the County was in moderate greenness. Kajiado central and

north sub Counties are in severe drought situation with VCI of 14.07 and 19.89 respectively.

2.2 Pasture and Browse Condition

- The County received below normal rainfall that was poorly distributed over time with insignificant impact on pasture regeneration.
- Kajiado west and part of Kajiado central (Matapato South and Matapato North) remain bare and dry while pasture regeneration in Kajiado east is far below the normal for this time of the year.
- This has led to migration of cattle from Kajiado west to Kajiado east while those in Kajiado south were mostly concentrated around Chylu hills.
- Browse is fair but below the normal at this period of the year and would last for about two months.

2.3 Water Access and Utilization

2.3.1 Water Sources

- The main sources of water and the number of communities using each source are shown in Figure 3.
- Out of 20 communities, 14 (70%) of them drew water from boreholes because during the season, the surface water sources such as ponds and rivers were poorly recharged.
- In a normal year, ponds and seasonal rivers are the main sources of water in December.
- Water from ponds was likely to last at most for two weeks and nearly all households will rely on boreholes by mid-January 2023. This means more pressure on boreholes as while as household's budget in order to access water. Distance to water sources were also likely to increase by this time.
- Provision of fuel subsidies to strategic boreholes would then assist communities' access water during the January-March dry period.

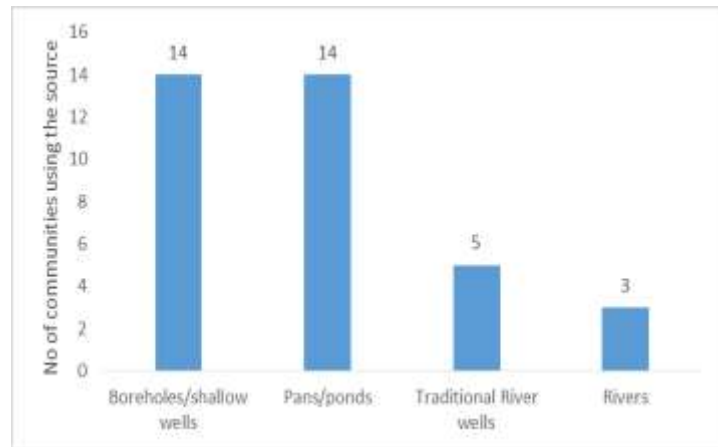


Figure 3: Water sources; Kajiado, Dec 2022

2.3.2 Households Water Access and Utilization

- The average return distance that people covered to get water for domestic use reduced from 6.9 km in October to 6.2 km in December (Figure 4). This was because some households were getting water even for domestic use from ponds that recharged although minimally during the rainy season.

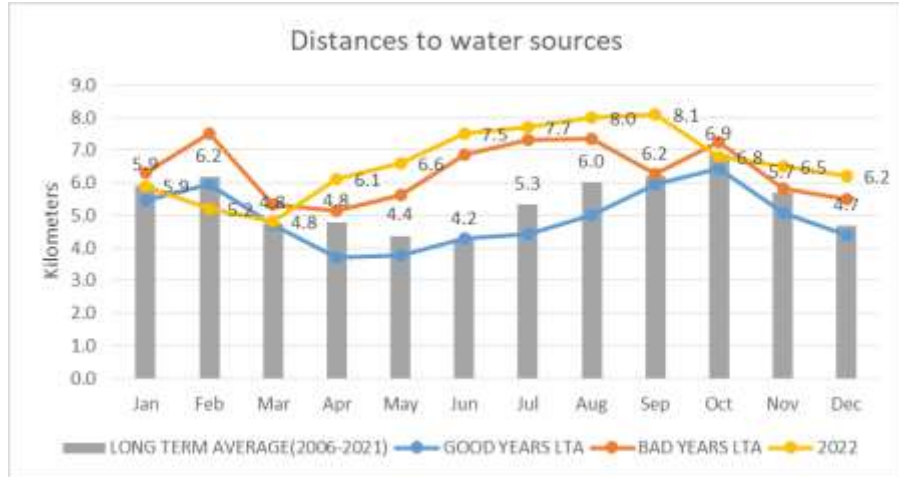


Figure 4: Distances to water sources from homesteads; Kajiado, 2006 - 2022

- The current return distance that people travelled to get water was longer than the average distance for December meaning less availability of water to households than normal for the period.

- The cost of water range from Ksh. 5 for a 20-litre Jerican from the source to Ksh. 20 when delivered by a water vendor. This was normal for this time of the year.
- Water tankering to critical institutions such as schools, health facilities and markets will thus be a response option under water sector in February – March period.

2.2.3 Livestock Access to Water

- On average, the return distance that livestock trekked from grazing fields to watering points reduced to 6.1 km in December from 7.8 km in October with long-term average for December being 5.7 km (Figure 5).

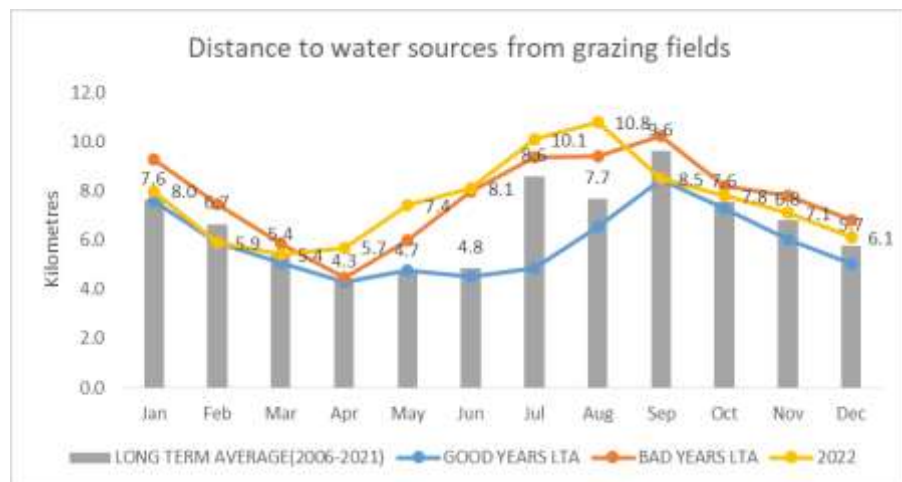


Figure 5: Distances to water points from grazing fields; Kajiado, 2006 - 2022

watering points from their grazing fields was because most livestock were getting water from surface water sources such as ponds following some rains in December.

- Water from ponds would last for the next two weeks and boreholes will be the main source of water for both livestock and for domestic use. Considering the drought situation that was likely to escalate in February- April period, provision of fuel subsidy to strategic boreholes especially in pastoral and Agro –Pastoral zone would assist households to access water for their livestock during this period.

3.0 PRODUCTION INDICATORS

3.1 Livestock Production

3.1.1 Livestock Body Condition

- There was no significant improvement in livestock body condition since October. Nearly 90 percent of the cattle across the County are emaciated. Their backbone, hip shoulders and all ribs are clearly visible while the tail head is recessed.

3.1.2 Livestock Mortalities

- The County has lost more than 50 percent of livestock due to drought between September and November that account for nearly 350,000 heads of cattle.
- Cases of cattle death due to lack of pasture continue to be reported in Kajiado west and central sub Counties.
- Accelerated commercial destocking would help pastoral and agro-pastoral households to reduce further loss of their livestock due to drought.

3.1.3 Livestock Diseases

- The commonly reported livestock diseases in the County including, Lumpy Skin Diseases, Contagious Caprine Pleuropneumonia (CCPP) and Peste des petits ruminants (PPR). It is, therefore, recommended to upscale the vaccination campaign that is currently ongoing in order to avert possible outbreak of these diseases.

3.1.4 Livestock Migration

- Livestock from Kajiado west and central sub counties have moved to Kajiado east Sub

County while those from Kajiado south have moved to Chylu hills and to Makueni, Machakos and Taita Taveta Counties in search for pasture. Such movement risks outbreak of transboundary livestock diseases. The County therefore need to strengthen their livestock disease surveillance and reporting system.

3.1.5 Milk Production

- Cattle are the main source of milk in the County whose productivity including milk production has remained poor since the beginning of the year.

- Milk production this year has not only been below the average but also negligible especially during the last six months.

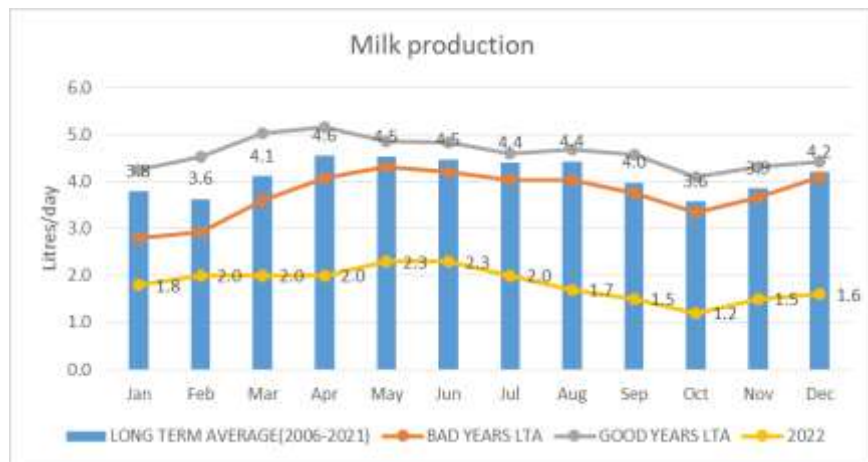


Figure 6: Milk production; Kajiado, 2006 - 2022

- Milk forms a major diet in addition to source of income to buy other food commodities

especially for pastoral livelihood zone. This means most pastoral households lacked access to their major diet as well as income to buy other foods.

- In December, the daily household’s milk production was 1.6 litres compared to a long-term average of 4.1 litres in a similar month (Figure 6).
- There was no significant variation in milk production between Pastoral and Agro-Pastoral livelihood zone this year.

3.2 Rain-Fed Crop Production

- Crops are behind the normal growth schedule for the season with maize being one to two feet high while beans have just started flowering. In a normal year, maize would have tussled while beans would have matured.
- Crops in mixed farming zone in Kajiado south have started withering due to moisture stress.

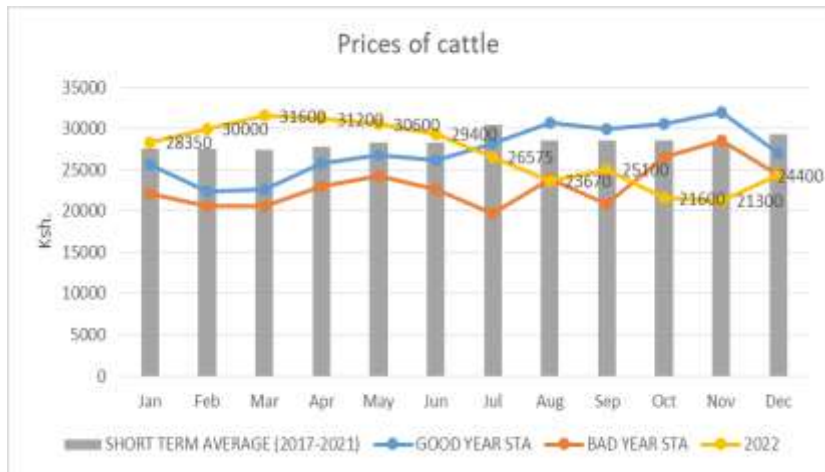
4.0 MARKET PERFORMANCE

4.1 Livestock Marketing

- The main livestock markets in the County include Shompole, Ewuaso, Ilbisil, Kimana, Rombo, Isinya and Kiserian. Although these markets have remained in operation, most of them do not have adequate WASH facilities.

4.1.1 Cattle Prices

- There was a slight increase in prices of cattle between November and December probably because pastoralists hoped that the short rains would do better in December and thus reduced their supply to the markets.



- In December, a medium size bull was selling at Ksh. 24,400 and Ksh. 21,300 in November (Figure 7). The average

Figure 7: Cattle prices; Kajiado, 2017 - 2022

price of cattle for the past five years in December is Ksh. 28,400.

- Some places such as Enkorika in Kajiado central, the market price of a medium size bull on average was Ksh. 4,000. Cattle from this agro-pastoral zone are greatly emaciated.

4.1.2 Goats Prices

- The average price of goats increased from Ksh. 3,800 in November to Ksh. 4,900 in December. The average price of a medium size goat in December for the last five years is Ksh. 4,200 (Figure 8).



Figure 8: Prices of goats; Kajiado, 2017 - 2022

- The increase in prices of goats

was probably due to rains that slightly improved the browse condition and thus anticipated improvement of their body condition coupled with demand for goat meat compared to that of cattle that are now emaciated.

- Like cattle, the prices of goats was lowest at Ksh. 3,830 in Agro- Pastoral areas of Enkorika in Kajiado central sub County.

4.2 Prices of Cereals and Legumes

4.2.1 Maize Prices

- The average price of maize seem to stabilize but at a high price of Ksh. 93 and Ksh. 92 per kilogram in October and December respectively with December average being Ksh 53 per kilogram (Figure 9).



Figure 9: Prices of maize; Kajiado, 2017 - 2022

- In Kamukuru market in Kajiado west, a kilogram of maize was selling above the County average price at Ksh. 107. The western side of the County is served with poor road network and limited livelihoods which explains the skewed high prices of foodstuffs.

4.2.2 Beans Prices

- The average price of beans remained stable but at high prices between August (Ksh. 130) and December (Ksh.129) (Figure 10).
- For the last five years, the price of beans in December is Ksh. 105 per kilogram.



Figure 10: Prices of beans; Kajiado, 2017 - 2022

- In Kajiado west, the prices of beans ranged from Ksh. 140 to Ksh. 150 per kilogram. Similar factors to that of maize contribute to higher price of beans in Kajiado west relative to other parts of the County.

4.3 Milk Prices

- Much of the milk getting into the markets within the County is from outside the County. One litre of milk was selling at Ksh. 120, which was more than twice the price for a normal year.

4.4 Terms of Trade

- Although the terms of trade increased slightly between November and December, it was far below the short-term average.
- In December, the average terms of trade was 53 kg of maize for a sale of a medium sized goat while the short-term average terms of trade is 81 kg of maize for a sale of similar goat (Figure 11).
- Provision of food assistance to the most vulnerable households would cushion them against the current drought.



Figure 11: Terms of trade; Kajiado, 2017 - 2022

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk Consumption

- The daily household's milk consumption remained less than 2 litres a day since June due to low production (Figure 12).
- Most of the households are now buying milk from the markets that is quite costly.

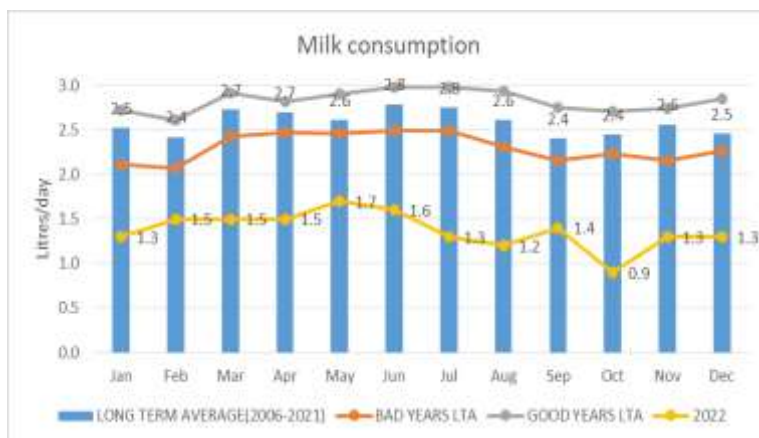


Figure 12: Milk consumption; Kajiado, 2006 - 2022

5.2 Food Consumption

- The proportion of the households under various food consumption category are shown in Figure 13. From the figure, the general trend is that the number of households falling in acceptable food consumption category has increased between November and December probably due to humanitarian interventions carried out by various partners in November and December.
- Scaling up these interventions, therefore, will be important in the next six months when the drought situation is likely to worsen.

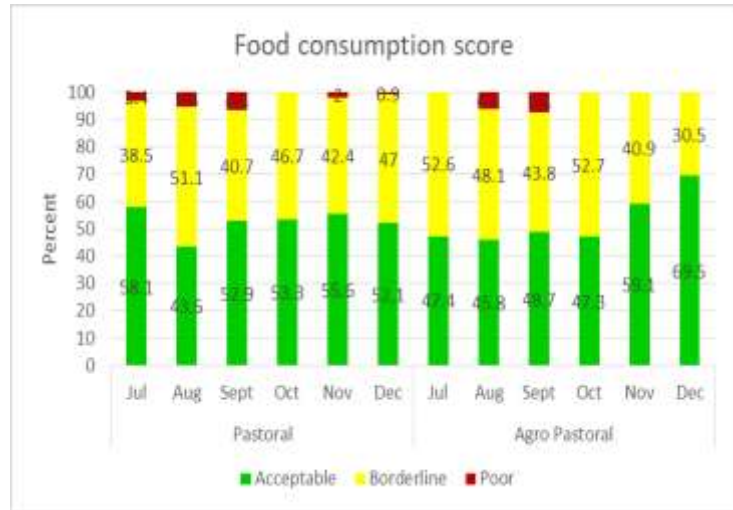


Figure 13: Food consumption score; Kajiado, Jul -Dec 2022

5.3 Nutrition Status of Children aged 6-59 Months

- The proportion of children aged below 5 years who are at risk of malnutrition did not only remains above 10 percent since July but also above the long-term (Figure 14).
- This reflects of household's poor access to food including milk, poor hygiene practices and health seeking behavior.
- Dalalekutuk, Purko, Matapato north and south, Lenkism, Mbirikani, Rombo, Kenyewapoka, Imaroro wards and informal settlements are the hotspot areas for malnutrition.
- Upscaling community health outreaches and provision of therapeutic foods are some of the key response option proposed for health sector in the next six months.



Figure 14: % of under-fives at risk of malnutrition

5.4 Coping Strategies

- The coping strategy index (CSI) for the month of December was 5.1 compared to 10.1 in November meaning some improvement in the way households struggled to get food. This would be because of many interventions that were carried by various stakeholders in the month of December.
- Pastoral household are use more stressful ways to get food or money to buy food with CSI of 8.1 and 3.1 respectively.

5.5 Human Diseases

- There were no reports of human disease outbreaks in the month of December.

6.0 EMERGING ISSUES

- There are reported cases of Army worm invasion in Kajiado east especially in Kenyawa-Poka ward that is now damaging both crops and pasture.

7.0 FOOD SECURITY PROGNOSIS

- The 2022 short rains was marked with unclear onset as well as unclear cessation. The amount of rainfall was less than 60 percent of normal and was poorly distributed both in time and in space.
- Two sub-Counties (Central and North) are in severe drought situation with depleted pasture and inadequate water for livestock and human beings. Crops are behind the growth schedule for the season and have started withering due to inadequate moisture.
- Considering January-March period is normally a dry season, and in the absence of off-season rains, the County was more likely to slip into an emergency drought phase by January that would be characterized by;
 - ✓ Massive further loss of remaining livestock, poor market performance especially increased prices of foodstuffs against low prices of livestock.
 - ✓ Increased cases of malnutrition among children, women and elderly, increased cases of both human and livestock diseases
 - ✓ Water scarcity

8.0 INTERVENTIONS AND RECOMMENDATIONS

8.1 Interventions Done in December

Intervention	By Who	Area	No of Beneficiaries
Livestock vaccination	County Gvt, FAO & Vetworks	All sub counties except Ngong	170,000 goats and sheep vaccinated against PPR
			60,000 goats vaccinated against CCPP
			50,000 cattle vaccinated against LSD
Repair of Lorngosua, Omotoroki, Sitonik and Olorera boreholes	Kenya Wildlife Service	Matapato north and south wards	Estimated 200 households, 4,000 cattle and 8,00 goats and sheep; and wildlife
Desilting of Olmayian water pan		Olmayian village	
Provision of 10,000 litres water tanks in Enkujero school and Emasomburo in Mili Tisa		Mili Tisa	Estimated 480 pupils
Food assistance to vulnerable households		Matapato North and South wards	450 households benefited each with 10 kg of CSB floor
Cash transfer to vulnerable households	World Vision	Kajiado central, east and south sub Counties	4049 households each receiving Ksh 6,180
Integrated outreaches			34 cites/villages
Distributions of water tanks			35 health facilities and communities

7.2 Recommendations interventions

- Urgently update the County contingency and response plans; Action by National Drought Management Authority, County Government and partners
- Provision of humanitarian assistance including food aid, cash transfers and water treatment chemicals; Action by County government and partners
- Slaughter destocking; Action by National government and partners
- Livestock vaccination and treatment; Action by County government and partners
- Integrated health outreaches and availing therapeutic foods for malnourished children; Action by County government and partners