

National Drought Management Authority
KAJIADO COUNTY
DROUGHT MONITORING AND EARLY WARNING BULLETIN – JUNE 2017



A Vision 2030 Flagship Project



JUNE 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

Biophysical Indicators

- ✓ Normally, the June is a dry month for the County.
- ✓ The vegetation condition was moderate across all the sub-Counties.
- ✓ Water was inadequate for both livestock and for people due to poor recharge of water sources during the rainy season.

Production and Access Indicators

- ✓ Household daily milk production as well as consumption in June was far below the long-term average.
- ✓ The terms of trade improved slightly during the month but remained below the long-term average.
- ✓ The harvest from 2017 long rains was less than 10% of the normal.

Utilization Indicators

- ✓ The risk of malnutrition for under-fives remained far above the long term average.
- ✓ Households consuming poor diet reduced from 15% in May to 13% in June.
- ✓ The TOT for June was improving but remained below the long-term average.

Biophysical Indicators	Observed Value/Range	Normal Range/LTA	
Rainfall	No rains	No rains	
State of water	Inadequate	Adequate	
3-Month VCI	23.83	35 – 50	
Production Indicators	Observed Value/Trend	Normal Range	
Livestock body	Poor	Good	
Milk production	2.6 lt	3-4 lt	
Migration pattern	30% outmigration	No migration	
Livestock deaths	No deaths	No deaths	
Crop harvest	< 10% of normal	Normal yields	
Access Indicators	Observed Value	Long Term Average	
Terms of trade	45	47	
Milk Consumption	1.7 lt	3 - 4 lt	
Distance to water sources	Livestock	4.4 km	3.5 km
	Household	5.3 km	3.7 km
Utilization indicators	Percentage	Normal Range/LTA	
MUAC (% <135 mm)	15.2%	9.8%	

<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"> ▪ Planting/Weeding ▪ Long rains ▪ 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

- The County did not receive any rain in June (Figure 1). This month is normally dry.
- The performance of 2017 long rains in most parts of the County was below normal (50% - 70% of the normal). Both spatial and temporal distribution of rainfall was poor with some areas such as Mosiro, Magadi, Ewuaso, Lenkism and Mbirikani wards received only traces for a few days.
- The performance of various sectors in June depended on long rains and will continue to do in the subsequent five months.

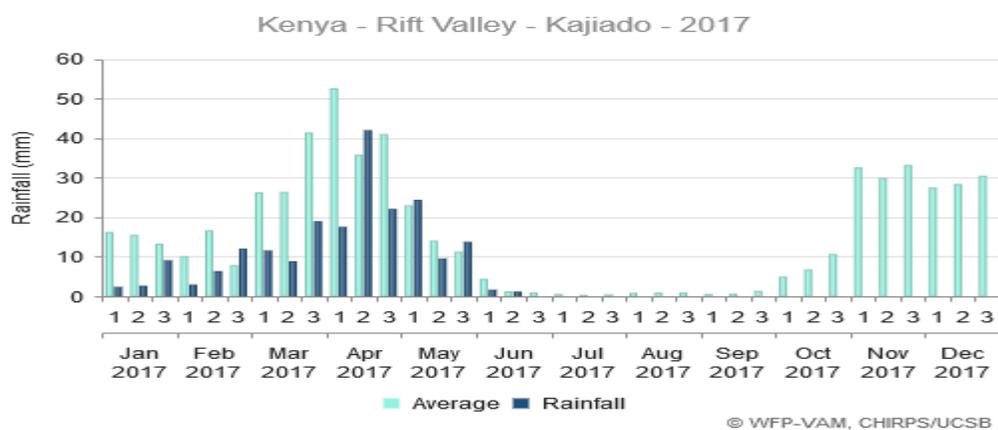


Figure 1: Rainfall performance for Kajiado County

Data source: World Food Programme; June, 2017

2.0 IMPACTS ON VEGETATION AND WATER

2.1 Vegetation Condition

- The County vegetation slightly improved between May and June due to the rains that the County experienced during the May.
- In June the County was in moderated vegetation deficit with a 3-monthly vegetation condition index (VCI) of 23.83. In May the County 3-monthly VCI was 21.27.

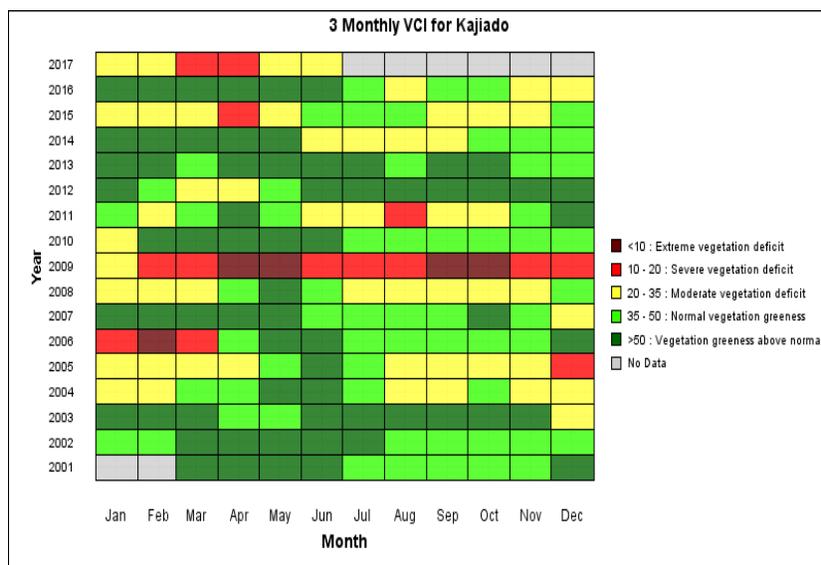


Figure 2: VCI matrix for Kajiado County, 2001 – 2017

- The County vegetation condition was expected to deteriorate in the coming four months. In June the 1-month VCI shows that Kajiado Central was in severe vegetation deficit with a VCI of 17.72.

2.2 Pasture and Browse Situation

- Pasture was poor across all the livelihoods due to below normal rainfall performance during the long rains season.
- In Magadi, Mosiro, Ewaso, Lenkism and Mbirikani wards, pasture failed to regenerate during the long rains season. These areas received only traces of rainfall for a few days.
- Browse was fair in most parts of the County with no livelihood variations. It was expected that the current browse would last for the next two months.

2.3 Water Sources

- The use of dams/pans as the source of water reduced from 51% in May to 43% in June. During the same period, the use of boreholes and shallow wells increased from 33% to 39% (Figure 3).
- Other sources of water include piped water, rivers/streams and traditional river wells.

- Recharge of pans during the long rains was about 10%. Most of them have since dried up.
- Strategic boreholes were likely to start experiencing pressure from livestock by July. This situation was likely to last for four months till the start of the short rains.

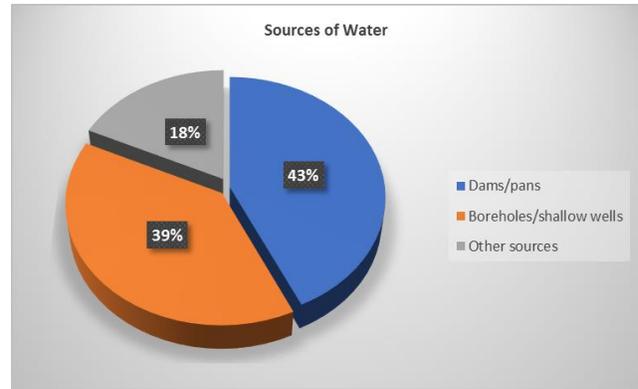


Figure 3: Main water sources; Kajiado County, June 2017

2.4 Households Access to Water

- In June, about 70% of the households draw water for domestic use from boreholes/shallow. Other sources of water for domestic use were traditional river wells, piped water and rivers/streams.
- The average return distance covered by households to get water averaged 5.3 km in June and 5.1 km in May (Figure 4). This distance was expected to remain stable for the next two months.

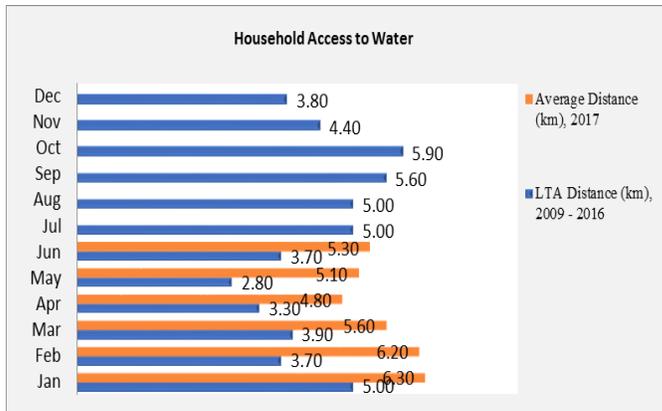


Figure 4: Average return distance from households to water sources; Kajiado County, 2009 – 2017

- Magadi and Mosiro are served with few boreholes. The return distance that households travel to get water in these areas was over 10 km. Water tankering was reported in Magadi ward as early as in June.

2.5 Livestock Access to Water

- In May, dams and pans were the main source of water for livestock. In June boreholes and shallow well were the main source of water for livestock after drying up of pans.
- The distance that livestock travelled from grazing fields to water sources increased from 4.4 km May to 5.2 km in June (Figure 5).

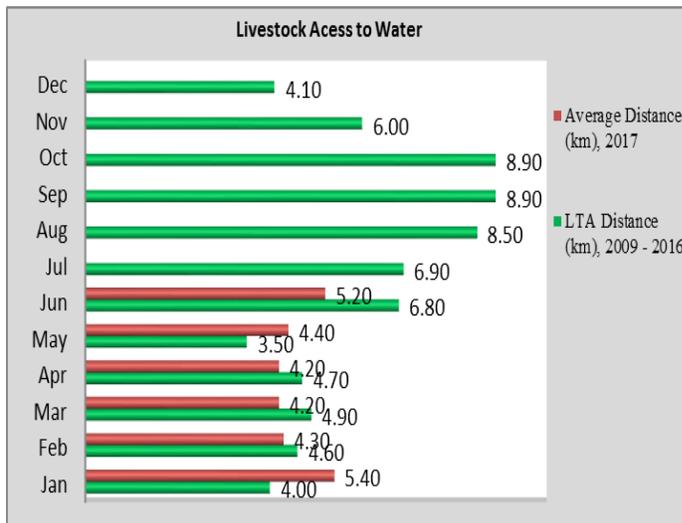


Figure 5: Return distance from grazing areas to water sources; Kajiado County, 2009 – 2017

- Livestock in Mosiro, Magadi and Mbirikani were covering over 20 km in search of water.
- The distance trekked by livestock in search of water was likely to increase further as livestock move in search of pasture. The watering interval will also increase.

3. PRODUCTION INDICATORS

3.1 Livestock Body Condition

- Cattle body condition was poor and in deteriorating trend across all livelihoods. Cattle in Magadi and Mosiro were more affected compared to other parts of the County.
- Deterioration of cattle body condition reflected deterioration of pasture condition.
- Goats' body condition was fair with no significant variation across livelihoods. Their body condition was expected to remain stable for a month as browse is available for at least a month.

3.2 Livestock Diseases

- Cases of Contagious Bovine Pleuropneumonia (CBPP) were reported along the livestock migratory corridors while clinical evidence of Contagious Caprine Pleuropneumonia (CCPP) being observed in various parts of the County.
- Vaccination against CBPP was now ongoing in Magadi, Kinyawa Poraka and Loitokitok.

3.3 Milk Production

- The average milk production per day per household declined from 3 litres in May to 2.6 litres in June as cattle body condition deteriorated. Cattle are the main source of milk in the County.
- In a normal year, the household milk production range between 4 litres to 5 litres.
- Households in Pastoral livelihood produced about 3.1 litres per day compared to 2.3 litres in Agro-pastoral livelihood.
- Milk production was expected to continually decline for the next four months as livestock body condition deteriorate.

3.4 Migration of Livestock

- Early migration of livestock in search of pasture were reported in June. About 30% of cattle have moved to Chylu hills from Mbirikani and Kuku wards. Close to 40% of cattle from Magadi were now in Tanzania.
- Movement of livestock in search of pasture will continue for a couple of months before the short rains. In a normal year, migration starts in September.

3.5 Rain-fed Cropping

- Beans were harvested by late May. The harvest was less than 10 percent of the normal.
- Most of maize dried out before maturity due to moisture inadequacy. The 2017 long rains was temporally distributed. The onset was late and the cessation was early.

4. MARKET PERFORMANCE

4.1 Livestock Marketing

- The main livestock markets in the County are Shompole, Ilbisil, Kimana, Rombo and Kiserian. In June these markets were operating normally.

4.1.1 Prices of Cattle

- The prices of cattle remained nearly stable between May and June. In June the prices of an average mature bull was Ksh. 19,400 compared to Ksh. 19,200 in May (Figure 6).
- The current price of cattle was below the long term average of Ksh. 21,300 during similar month of the year. There was no variation of prices of cattle by livelihoods during May-June period.

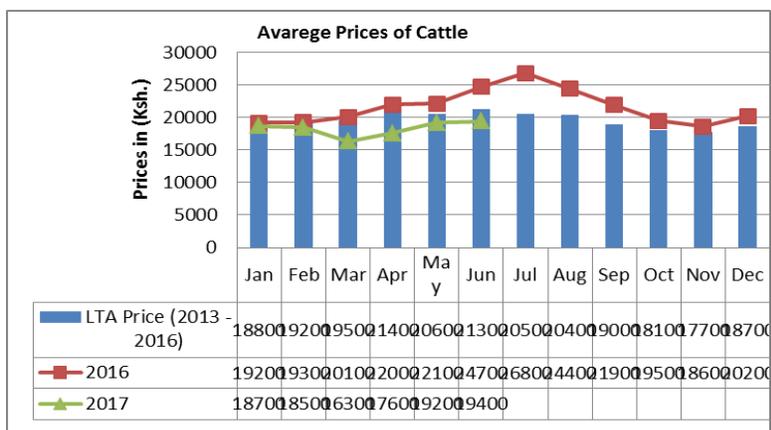


Figure 6: Average price of cattle; Kajiado County, 2013 - 2017

- As cattle body condition deteriorate continually in the next four months, so will be their prices.

4.1.2 Prices of Goats

- On average the price of goats improved from Ksh. 2,780 in May to Ksh. 2,940 in June (Figure 7).

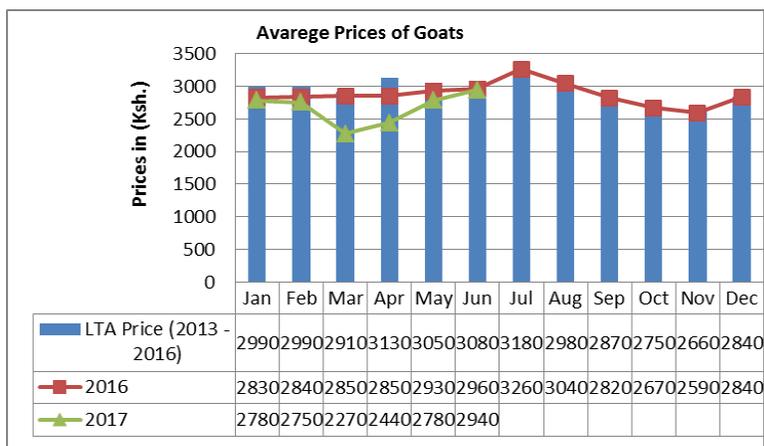


Figure 7: Trends of goats' price; Kajiado County, 2013 - 2017

- There were no significant livelihood variations in prices of goats in June.
- Prices of goats were expected to remain nearly stable for a month as their body condition was still fair.

4.2 Prices of Cereals and Legumes

4.2.1 Prices of Maize

- The average price of maize remain stable at Ksh 65 per kilogram since April this year(Figure 8). The slight improvement of livestock prices coupled with government intervention on sifted maize checked the possible increase in prices of food stuffs.
- In Mosiro (in Kajiado West) a kilogram of maize was selling at Ksh. 120 and Ksh. 60 in Rombo (in Loitokitok).

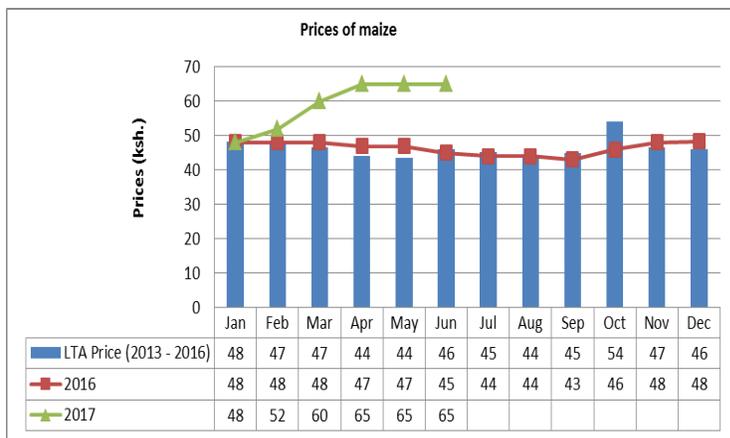


Figure 8: Trends of price of maize; Kajiado County, 2013 – 2017

- The market price of maize was likely to remain stable but at a high price in the next month due to government interventions on sifted flour.

4.2.2 Prices of Beans

- Although the harvest of beans for the long rains was low, it was able to push a slight reduction of the prices from Ksh 130 per kilogram in May to Ksh 125 per kilogram in June (Figure 9).
- In Rombo, a kilogram of beans was cheaper at Ksh. 90 due to the supply from Tanzania. In Ewuaso (Kajiado West), a kilogram of beans was selling at Ksh. 140.

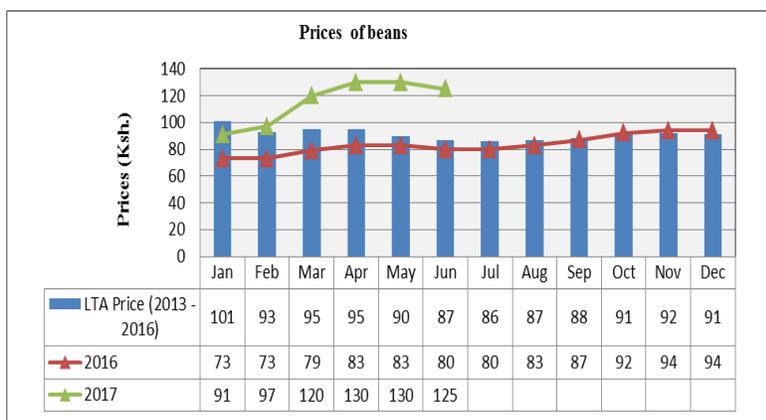


Figure 9: Trends of beans' prices; Kajiado County, 2013 - 2017

- The price of beans was likely to improve but remain relatively above the long-term price for the next two months.

4.3 Prices of Milk

- On average, a litre of milk was costing Ksh. 75 in June up from Ksh. 70 in May. There was no livelihood variation in prices of milk in June.
- Milk prices were expected to remain high due to low productivity in the next four months.

4.4 Livestock Terms of Trade

- The increase in prices of livestock and stability of prices of food stuffs during May – June period resulted to improvement in terms of trade for pastoralists.
- The terms of trade improved from 43 kilograms of maize per goat in May to 45 kilograms of maize per goat in June (Figure 10).

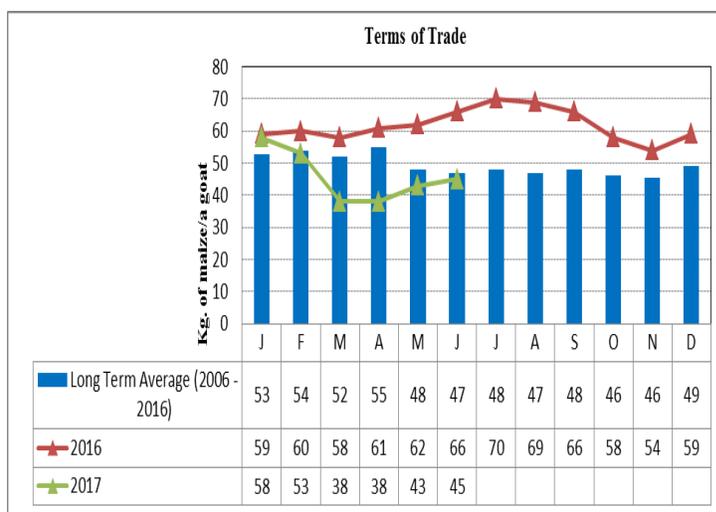


Figure 10: Trends of terms of trade; Kajiado County, 2006 - 2017

- Goat prices were expected to remain stable in the next one month and so did the prices of food stuffs. In this case, the terms of trade were expected to remain stable for a month.

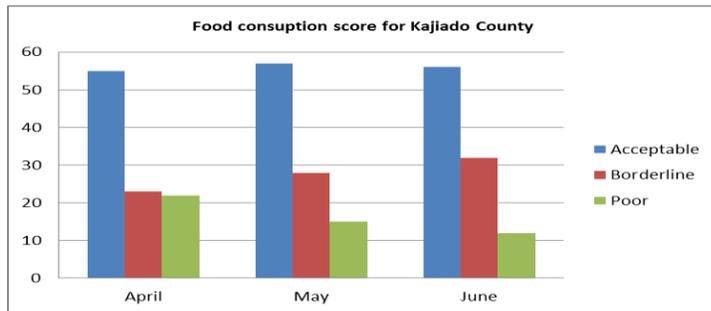
5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk Consumption

- The average household milk consumption per day was 1.7 litres due to low production. In a normal year, the daily household milk consumption in May is 3-4 litres.

5.2 Food Consumption Score

- The number of households consuming poor diet was 15% in May and 13% in June (Figure 11).
- However, it is worth noting that a large proportion of households were at borderline (32%). This proportion was expected to drop by July due to, among other factors, low milk production.

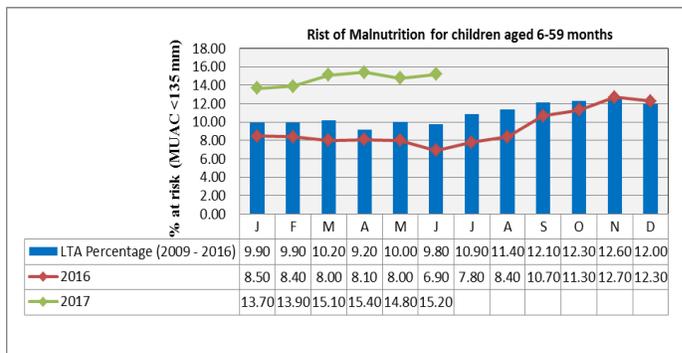


- There are also areas where food is not easily available due to poor road network that makes transportation difficult.

Figure 11: Food consumption score; Kajiado County, March – May 2017

5.3 Nutritional Status of Children aged 6-59 Months

- The risk of malnutrition for under-fives remained far above the long term average since January this year (Figure 12) mainly due to consumption of poor diet.



- Malnutrition among under-fives will remain high for a couple of months.
- Areas marked for higher risk of malnutrition for under-fives include; Rombo, Lenkism, Mbirikani, Magadi and Mosiro

Figure 12: Percentage of children aged 6-59 months at risk of malnutrition; Kajiado county, 2009 – 2017

5.3.2 Human Diseases

- There was no report of human disease outbreak in the County in June.

6 FOOD SECURITY PROGNOSIS, CURRENT INTERVENTIONS AND RECOMMENDATIONS

6.1 Food Security Prognosis

- The 2017 long performance was below normal (50% - 70%) with poor temporal and spatial distribution.
- Pasture condition is poor and getting depleted fast in many parts of the County. The current pasture would last for at most a month.
- Water is inadequate after drying up of majority of pans. Boreholes were also poorly recharged (about 10%).
- Livestock productivity is deteriorating. Premature loss of crop is also evident in mixed farming and in agro-pastoral livelihoods. This means low, if any, household food stock in the next six months.
- Malnutrition among under-fives will remain high as household milk production remain low in the next four months.
- More environmental degradation was expected individuals continue with charcoal burning and sand harvesting as drought coping strategies.

6.2 Current Interventions

- Vaccination against Contagious Bovine Pleuropneumonia (CBPP) in Kajiado West and Kajiado South targeting 150, 000 cattle. The activity is supported by *Regional Pastoral Livelihood Resilience Programme* and Directorate of Veterinary Services at a total cost of about Ksh. 7 million.
- Installation of control panel and drop cables for Kunchu and Lesoit 2 boreholes at a cost of Ksh. 288,500. The boreholes serves about 4,800 households and 6,800 herds of cattle. The activity was carried out by National Drought Management Authority through the financial support from *European Union*.
- Integrated outreaches in 18 sites (Kajiado West – 7, Kajiado Central – 3, Kajiado South – 8). This drought nutrition response intervention was financed by Kenya Red Cross Society. Out of 2,222 children, pregnant and lactating mothers, 25% had acute malnutrition and were put under management.

6.3 Recommendations for Action

- Vaccination of goats against Contagious Caprine Pleuropneumonia (CCPP) in Kajiado West and Kajiado Central. *Action by National Drought Management Authority in collaboration with the County development partners.* The estimated cost is Ksh. 6 million.
- Mass screening and integrated outreaches in Kajiado Central, East, South and West. *Action by ministry of health in collaboration with other partners who have mandate on health and nutrition.* The estimated cost is Ksh 2 million.
- Targeted food security assessment in drought hotspot areas especially in Lenkism, Mosiro, Ewuaso and Magadi wards. *Action by National Drought Management Authority in collaboration with other stakeholders.* The estimated cost is Ksh. 800,000.
- Vaccination of livestock against Foot and Mouth Diseases (FMD) especially along the migration routes. *Action by County Government (Veterinary services) in collaboration with National Drought Management Authority and other partners.* The estimated cost is Ksh. 10 million.