National Drought Management Authority

KAJIADO COUNTY

DROUGHT MONITORING AND EARLY WARNING BULLETIN – AUGUST 2017

A Vision 2030 Flagship Project

AUGUST EW PHASE

Early Warning Phase Classification

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

Drought Situation

Biophysical Indicators

- ✓ August is normally a dry month. No rains were received during the month.
- ✓ Vegetation condition in the county was deteriorating with Kajiado central and east having severe vegetation deficit.
- ✓ Water was inadequate and strategic waterpoints were under pressure from livestock, human being and wildlife.

Production and Access Indicators

- ✓ Households in pastoral zone face food insecurity due to low livestock productivity as a result of depleted forage.
- ✓ In mixed farming zone, household have no food stock due to crop failure during the last two consecutive seasons.

Utilization Indicators

- ✓ Majority (63%) of households were either consuming poor diet or were at borderline.
- ✓ Milk consumption was limited by insignificant production.
- ✓ Consumption of acceptable diet especially in pastoral zone was due to poor terms of trade.
- ✓ The risk of malnutrition for under-fives remained increasingly far above the long term average.

Biophysical Indicators		Observed Value/Range	Normal Range/LTA
Rainfall		No rains	No rains
State of water		Inadequate	Adequate
County 3-Monthly VCI		22.18	35 – 50
Kajiado central and East 3-Monthly VCI		< 20	35 – 50
Production Indicators		**Observed Value/Trend**	**Normal Range**
Cattle body condition		Emaciated	Good
Milk production		Negligible	3-4 lt
Out migration pattern		Early migration in June	Migration in September
Livestock deaths		Deaths reported	No deaths
Access Indicators		**Observed Value**	**Long Term Average**
Terms of trade		36	47
Milk Consumption		Negligible	2 - 3 lt
Distance to water sources	Livestock	7.6 km	8.5 km
	Household	5.5 km	5.0 km
Utilization indicators		**Percentage**	**Normal Range/LTA**
MUAC (% <135 mm)		15.7%	11.4%

▪ Short rains harvest ▪ Short dry spell ▪ Reduced milk yields ▪ Increased HH food stock			▪ Planting/Weeding ▪ Long rains ▪ 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

- In August the County did not receive rains (figure 1). This was normal as July-September is usually a dry period.

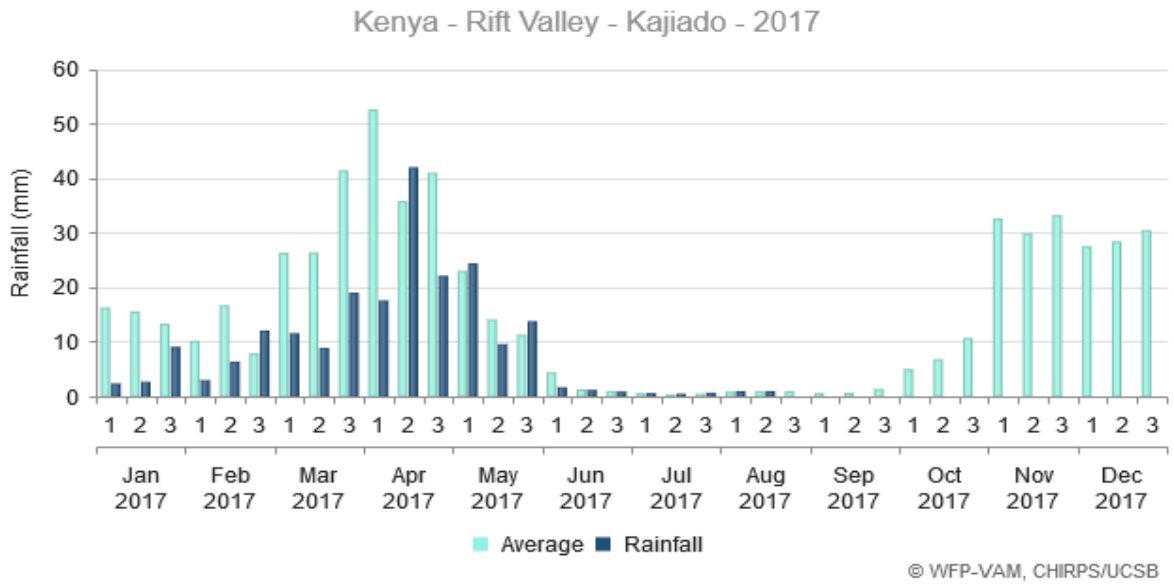


Figure 1: Rainfall performance for Kajiado County

Data source: World Food Programme; August, 2017

2.0 IMPACTS ON VEGETATION AND WATER

2.1 Vegetation Condition

- The County has sustained vegetation deficit since January this year (Figure 2a) with Kajiado Central experiencing severe vegetation deficit in July and August (Figure 2b). Kajiado West was also in severe vegetation deficit in August.
- In August this year, the County vegetation condition index (VCI) was 22.18 while that of Kajiado Central and Kajiado West was 16.26 and 18.97 respectively.
- Consequently households in pastoral livelihoods were experiencing food insecurity due to scarcity of forage for livestock while those in mixed farming zones had no stock due to poor yields during the long rains season.
- The County vegetation condition was expected to deteriorate further in the coming two months.

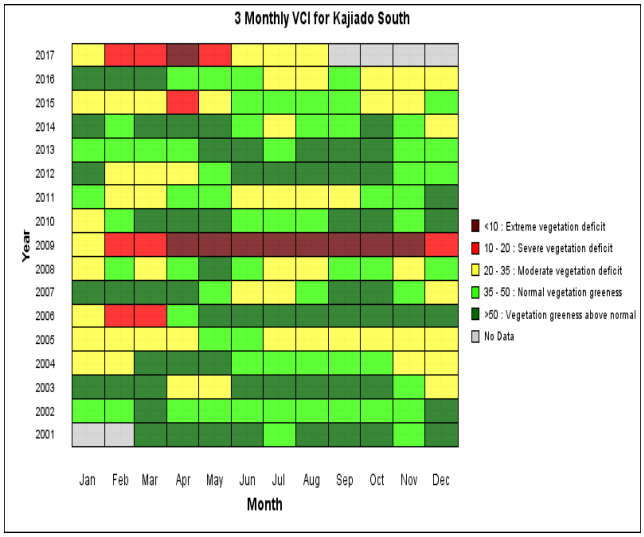


Figure 2a: VCI matrix for Kajiado County, 2001 – 2017

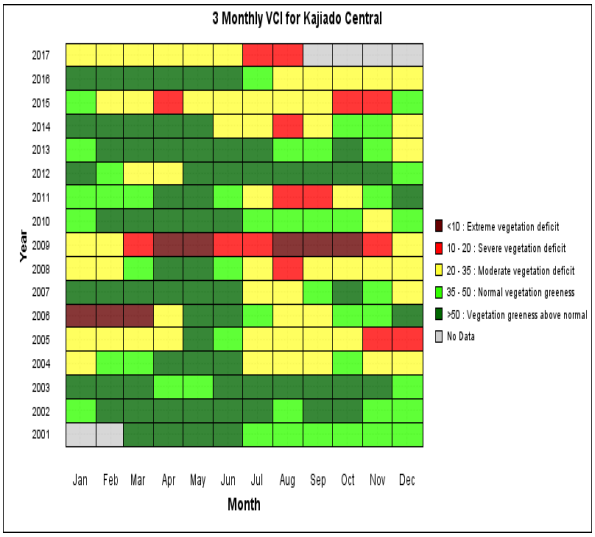


Figure 2b: VCI matrix for Kajiado Central, 2001 – 2017

2.2 Pasture and Browse Situation

- By August this year, pasture was depleted across the county. This was due to the failure of rainfall during the previous two consecutive seasons.
- Depletion of pasture as early as July put cattle at high risk of mortality due to drought.
- Browse was poor and fast deteriorating across all the livelihood zones. It was expected that the current browse would last for at most a months.

2.3 Water Sources

- Boreholes/shallow wells were the main source of water for livestock and for domestic use since July. Other water sources include piped water, traditional river wells and water tankering.
- In July and August, boreholes/shallow wells accounted for 73% and 76% of the water sources (Figure 3) respectively.
- Pans had dried up as early as June as a result of low (less than 10%) recharge during long rains.
- Strategic boreholes especially in Matapoato, Lenkism, Elangata wuas and Kinyawa Porka were now under pressure from livestock, human beings and wildlife.

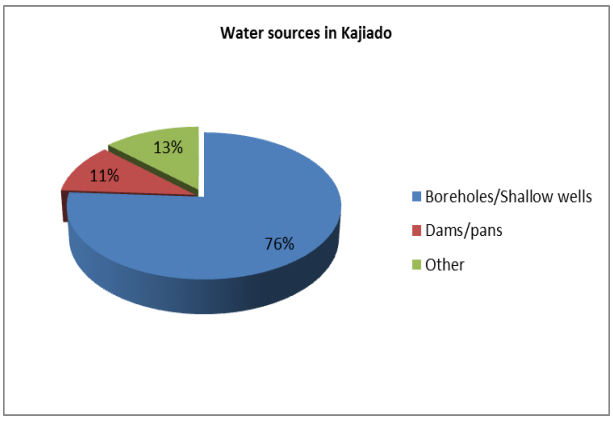


Figure 3: Main water sources; Kajiado County, August 2017

2.4 Households Access to Water

- In July, households travelled 5.2 km and in August they travelled 5.4 km to fetch water (Figure 4).

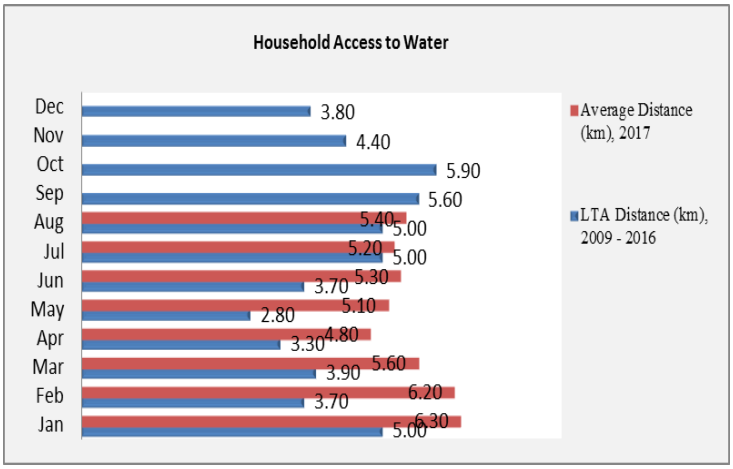


Figure 4: Average return distance from households to water sources; Kajiado County, 2009 – 2017

- Variation exist in terms of household access to water.
- In Magadi the main source of domestic water was trucking while in Mosiro households cover over 10 km to get water.
- The main source for domestic water since June were the permanent water sources mainly boreholes/shallow wells. In this case, the distance coverd by households to fetch water remain relatively stabe since then.

2.5 Livestock Access to Water

- The distance covered by livestock from grazing fields to watering points was on increase since June as a result of livestock migration in search of pature coupled with drying up of pans.
- In August, the average return distance trekked by livestock to watering point from the grazing fields was 7.6 km while in June it was 6.3 km (Figure 5).

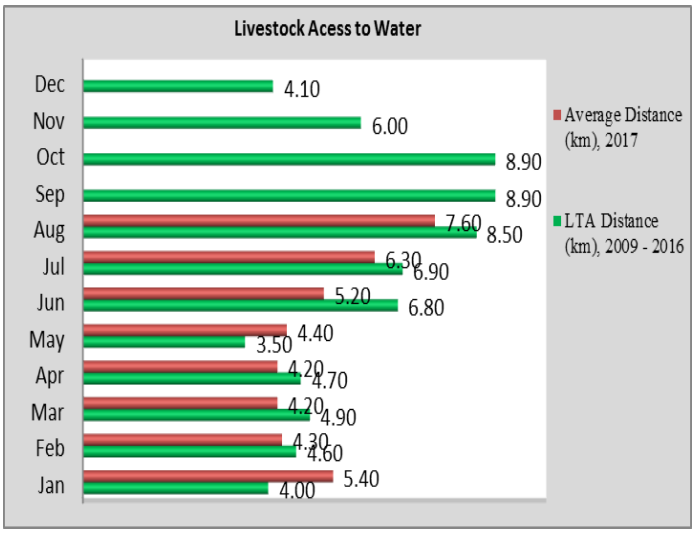


Figure 5: Return distance from grazing areas to water sources; Kajiado County, 2009 – 2017

- Livestock access to water varied depending on the point of concetration. In Chulu for instance, livestock covered nearly 30 km to and from the watering point. Water trucking for livestock was also common in Mbirikani
- The watering frequency ranged between 3 and 2 times a week.

3. PRODUCTION INDICATORS

3.1 Livestock Body Condition

- Cattle body condition was poor and in deteriorating trend across all the livelihoods. In Mosiro, Ewuaso, Meto and Dalalekutuk livestock were now emaciated due to lack of pasture.
- Cases of weak cattle that were not able to walk were reported across the County.
- Goats' body condition was fair with no significant variation across livelihoods. Their body condition was expected to start deteriorating by next month.

3.2 Livestock Diseases

- Clinical evidence of Contagious Caprine Pleuropneumoia (CCPP) was reported acros the County since June.
- Suspected cases of tse-tse fly related disease (Trypanosomiasis) were reported in Magadi and Chulu hills while Foot and Mouth Disease (FMD) was reported in Chulu hills.

3.3 Livestock Mortalities

- Households across the county reported to have lost 2-3 cattle due to emaciation and wasting related to drought. Mosiro was the most affected. Pastoralists were likely to loose more livestock if no response interventions were carried by September.

3.4 Milk Production

- Household milk production dropped to negligible in August from 1.8 litres per day in July with no livelihood variation.

3.5 Migration of Livestock

- Early Migration of livestock to the neighbouring counties was reported in June. These counties are also in drought situation with no pasture. Weak cattle were being ferried back. Some die on the way and those who survive were being fed using livestock feeds.
- Current areas of livestock concetration include Chulu hills, southern part of Lenkism, Matapato, Ewuaso Nyiro swamp, Mile 46 and Kinyawa Porka.

4. MARKET PERFORMANCE

4.1 Livestock Marketing

- The main markets include; Shompole, Ilbisil, Kimana, Rombo and Kiserian. All these markets were in operation since Janaury. However, the market performance was depressed which was evidenced by low prices of livestock.

4.1.1 Prices of Cattle

- The market price of an average bull in August was Ksh. 14,300 compared to Ksh. 18,100 in July (Figure 6). There was no notable livelihood variations of prices of cattle in August.

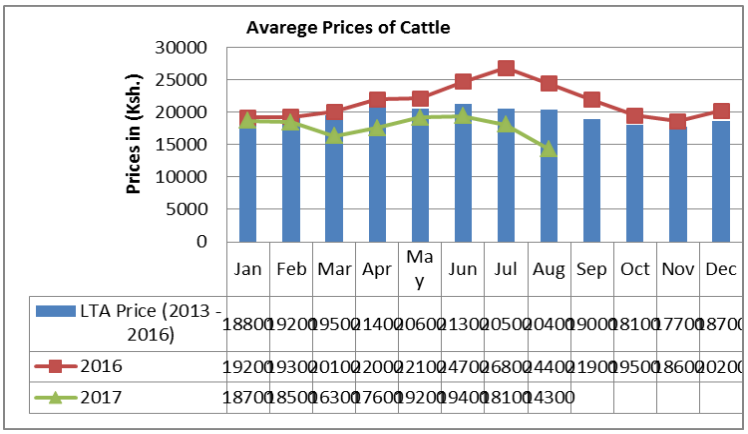


Figure 6: Average price of cattle; Kajiado County, 2013 - 2017

- This year, the prices of cattle continuously remained below the long term average since January due to their poor body condition
- As cattle body condition deteriorate in the next two months so shall be their prices.

4.1.2 Prices of Goats

- The average market price of goat reduced from Ksh 2,870 in July to Ksh. 2,460 in August(Figure 7).

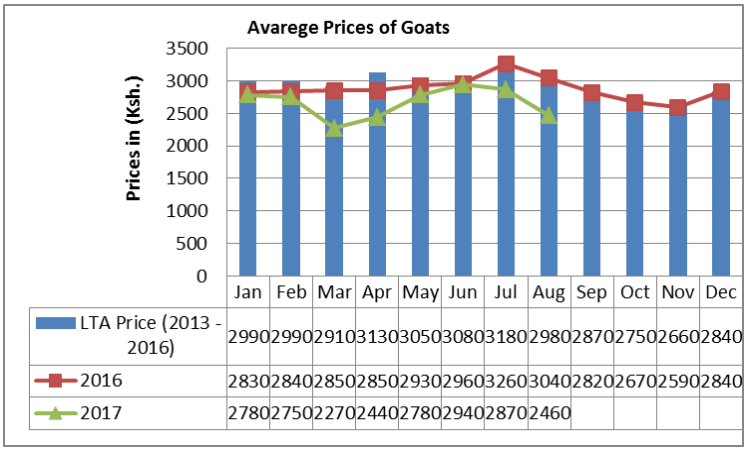


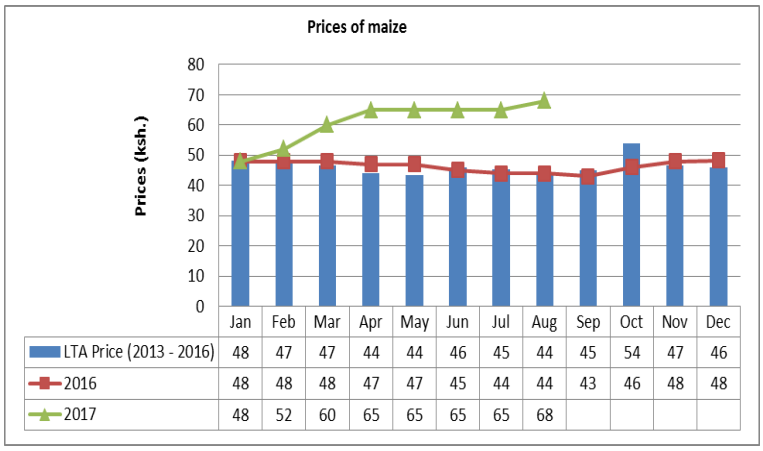
Figure 7: Trends of goats' price; Kajiado County, 2013 - 2017

- There were no significant livelihood variations in prices of goats in August.
- Further reduction of prices of goats were expected in September due to high supply in the market compared to cattle and sheep.

4.2 Prices of Cereals and Legumes

4.2.1 Prices of Maize

- The average prices of maize increased to Ksh. 68 per kilogram in August from Ksh. 65 in July(Figure 8). The increasing trend since April was due to low supply compared to the demand.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
LTA Price (2013 - 2016)	48	47	47	44	44	46	45	44	45	54	47	46
2016	48	48	48	47	47	45	44	44	43	46	48	48
2017	48	52	60	65	65	65	65	68				

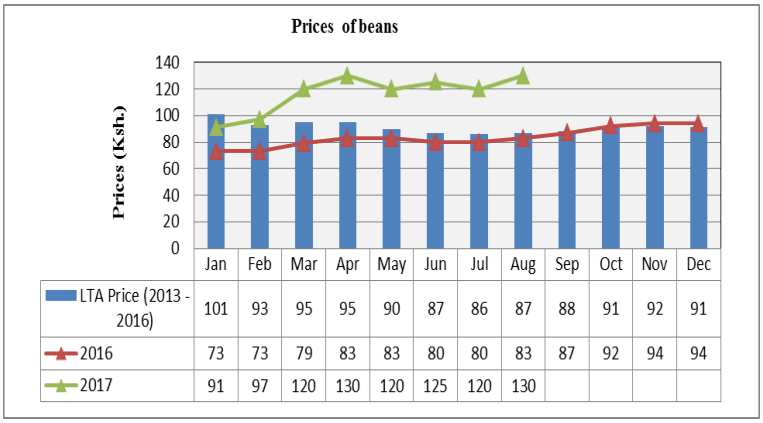
- There were variations in prices of maize within the county depending accessibility of the area. Highest prices of maize were observed in Mosiro where a kilogram of maize was selling at Ksh. 130.

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

- Further increase of the prices of maize was expected in the next three months as a result of the anticipated scarcity.

4.2.2 Prices of Beans

- In August the average price of beans increased to Ksh. 130 per kilogram from Ksh. 120 per kilogram in July (Figure 9). This increase was associated to scarcity of the commodity.
- In Mosiro, a kilogram of beans was selling at Ksh. 150 due to inaccessibility of the place.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
LTA Price (2013 - 2016)	101	93	95	95	90	87	86	87	88	91	92	91
2016	73	73	79	83	83	80	80	83	87	92	94	94
2017	91	97	120	130	120	125	120	130				

- The prices of beans were likely to be pushed further higher in September since households especially in mixed and agro-pastoral zones have so far exhausted their stock.

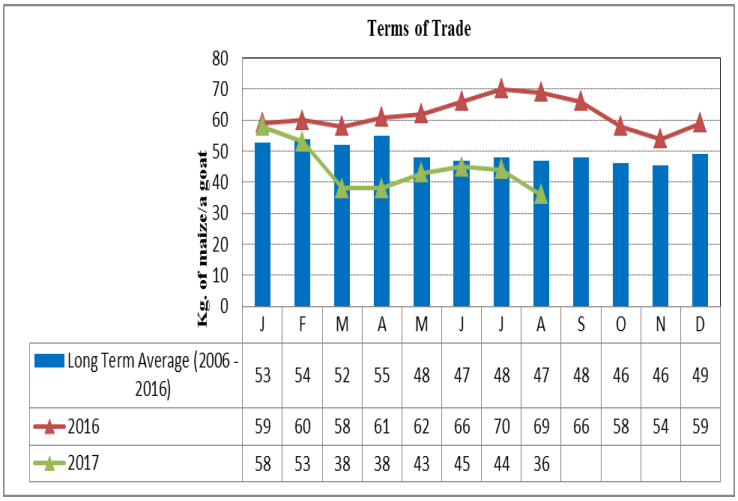
Figure 9: Trends of beans' prices; Kajiado County, 2013 – 2017

4.3 Prices of Milk

- Much of the milk sold within the county especially in the markets was from outside the county. The average market price was Ksh. 75 per litre since June.
- In a normal year, households would be producing and selling their own milk in August. A litre of milk would cost Ksh. 50 per litre.

4.4 Livestock Terms of Trade

- The declining prices of livestock against the increasing prices of food stuffs in August resulted in reduction of the terms of trade for pastoralists.
- In August, one would exhange a goat for 36 kilograms of maize compared to July when one would buy 44 kilograms of maize by selling a goat (Figure 10).
- It was worth noting that the terms of trade for pastoralists was below the long term average since January this year.



	J	F	M	A	M	J	J	A	S	O	N	D
Long Term Average (2006 - 2016)	53	54	52	55	48	47	48	47	48	46	46	49
2016	59	60	58	61	62	66	70	69	66	58	54	59
2017	58	53	38	38	43	45	44	36				

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

- It was anticpated that the price of goat will reduce further in September while maize prices was expected to increase. In this case, the purchasing power of pastoralists was expected to decline further.

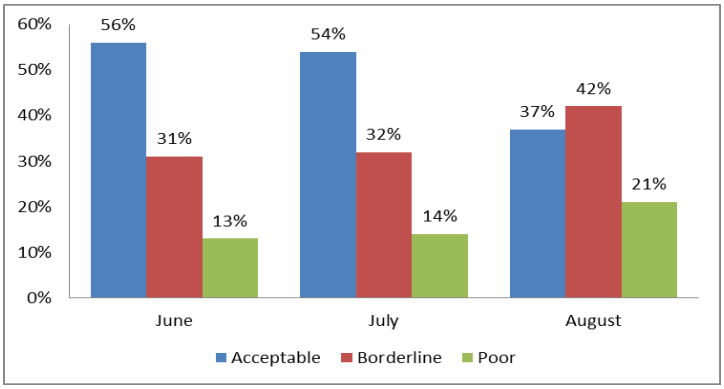
5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk Consumption

- Milk production was insignificant and so was the consumption. Milk was now being consumed as condiment. In a normal year the daily household milk consumption range between 2 - 3 litres.

5.2 Food Consumption Score

- In August, the proportion of households consuming poor diet was 21% compared to 14% in July and 13% in June(Figure 11).

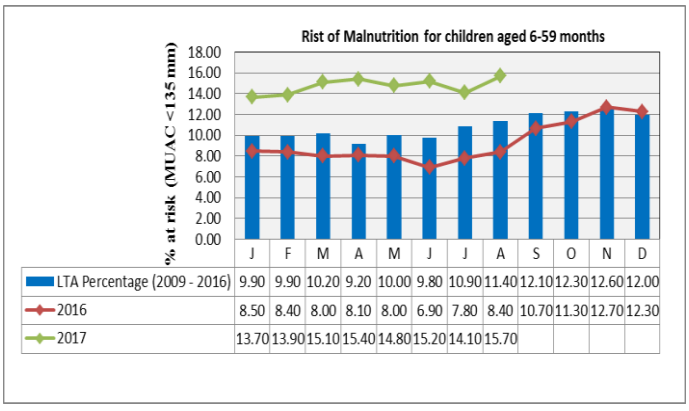


- Food accessibility was limited mainly by low purchasing power. Areas such as Mosiro, food availability was hampared by poor road network that makes transportation difficult.

Figure 11: Food consumption score; Kajiado County, June-August 2017

5.3 Nutritional Status of Children aged 6-59 Months

- The malnutrition of under-fives remained above the long term average since January this year. In July the percentage of under-fives at risk of malnutrition was 15.7 and 14.1 in July(Figure 12)



- Malnutrition among under-fives will remain high for a couple of months owing to lack of milk and low purcahing power.
- 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 reports human disease outbreak in August.

6 FOOD SECURITY PROGNOSIS, CURRENT INTERVENTIONS AND RECOMMENDATIONS

6.1 Food Security Prognosis

- Failure of rainfall for last two consecutive seasons severely affected productive sectors in many wasys.
- Pasture has depleted in all livelihoods. Cattle which is the main source of income for pastoralists had poor body condition and was fetching very low prices. Traditional coping mechanism mainly migration to the neighbouring counties was not working as these counties were also affected by the drought. Consequently cases of drought-related mortalities have been reported.
- Households in pastoral livelihood were therefore faced with food insecurity due to their inability to purchase food stuffs coupled with poor livestock productivity such as insignificant milk production.
- In mixed farming livelihoods, households food security was threated by lack of stock following premature loss of crops.
- Malnutrition among under-fives remained increasingly high whch was a further manifestation of household food insecurity.

6.2 Current Interventions

- Vaccination of cattle against Contagious Bovine Pleuropneumoia (CBPP) in Kajiado South at a cost of about Ksh. 1.1 million. By Kenya Agricultural and Livestock Research Organization was done in July.
- Construction of livestock market at Sultan-Humud at a cost of Ksh 10,000,000: by County government in collaboration with Regional Pastoral Livelihood Resilience Project.

6.3 Recommendations for Action

- Provision of livestock feeds mainly pellets, hay and concetrates. *Action by National Drought Management Authority, County Government and State Department of Livestock.*

- Vaccination of goats against Contagious Caprine Pleuropneumoia (CCPP) in Kajiado West and Kajiado Central. *Action by County Government in collaboration with National Drought Management Authority.*
- 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.*
- Water trucking for livestock in Mbirikani and to critical institutions. *Action by National Drought Management Authority in collaboration with the County development partners*.
- Support strategic boreholes with fuel subsidy. *Action by National Drought Management Authority in collaboration with the County development partners.*
- Pilot slaughter destocking. Acion by *County Government in collaboration with development partners in the County.*
- Mass screening and integrated outreaches in Kajiado Central, East, South and West. *Action by ministry of health in collaboration with other partiners who have mandate on health and nutrition.*
- Provision of school meals across the County*. Action by the National government.*
- Provision of relief food aid for most vulnerable households. *Action by National Government and other stakeholders.*