

National Drought Management Authority

KAJIADO COUNTY

DROUGHT MONITORING AND EARLY WARNING BULLETIN – OCTOBER 2017



A Vision 2030 Flagship Project



OCTOBER EW PHASE



Early Warning Phase Classification

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

Drought Situation & EW Phase Classification

Biophysical Indicators

- ✓ October rains onset delayed. Some off season rains received during the 1st and 2nd dekads of the month.
- ✓ Vegetation condition deteriorated further with Kajiado central at severe vegetation deficit.
- ✓ Pasture is depleted in Olgulului, Mosiro, Magadi, Mbirikani, Lenkism, and Ewuaso requiring close monitoring.
- ✓ The 3-month VCI indicates the County is still at moderate vegetation deficit with some deteriorating trend.

Production and Access Indicators

- ✓ Cattle are emaciated across all livelihoods.
- ✓ Household have no food stocks in all livelihoods.
- ✓ 90% of livestock have migrated, others are back due to pasture depletion in fall back areas, deaths incurred on the way back.

Access indicators

- ✓ Water inadequate and distance increased, 40km at Torosei. Quality declined and pressure on existing sources rose.
- ✓ ToT at 27 unfavourable to pastoralists and still declining.
- ✓ Milk production is negligible and consumption low.

Utilization Indicators

- ✓ Majority (73%) of households were either consuming poor diet or were at borderline, increase for 70% in September.
- ✓ The risk of malnutrition for under-fives increased to 17.60 %.

Biophysical Indicators	Observed Value/Range	Normal Range/LTA
State of water	Inadequate	Adequate
County 3-Monthly VCI	23.09	35 – 50
Kajiado central 3-Monthly VCI	19.07	35 – 50
Forage condition	Depleted	Good
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	27	46
Milk Consumption	Negligible	2 - 3 lt
Distance to water source	Livestock	10.28 km
	Household	6.4 km
5.90 km		
Utilization indicators	Value	Normal
MUAC (% <135 mm)	17.60%	12.30%
Coping Strategy Index	9.1	6.0

<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 meteorological department had projected by consensus a near normal short rain with the onset in the 3rd – 4th weeks of October; peaking in November and subsiding in December.
- Unfortunately, by the end of October rains had not started:-this indicates a shorter rainfall period not suitable for agricultural activities therefore, farmers may need to plant short maturing crops.
- The normal onset of short rains (October – December) in the county is in mid-October.
- However, some off season rainfall were received during the 2nd and 3rd dekads of the month at 3.257mm and 12.146mm respectively (Figure 1). The rains were concentrated in Kajiado North areas of Ngong and parts of Kiserian, Oloitikoshi, Kitengela and Isinya.

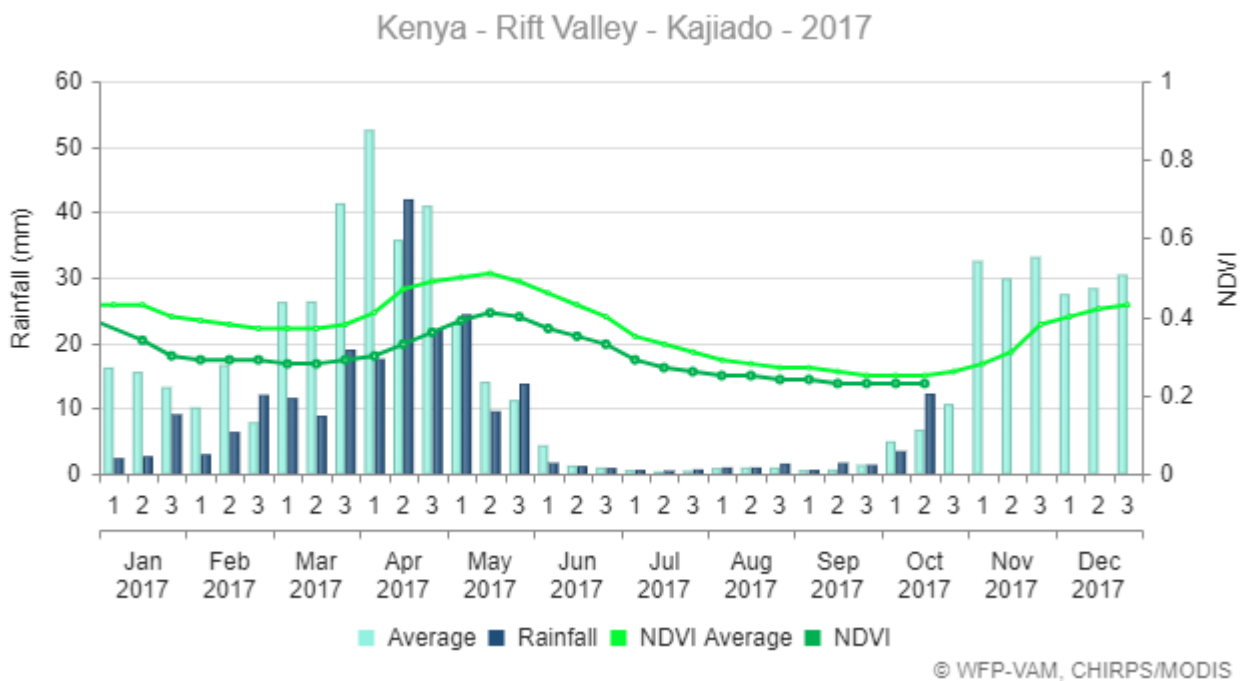


Figure 1: Rainfall performance for Kajiado County

Data source: World Food Programme; October, 2017

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

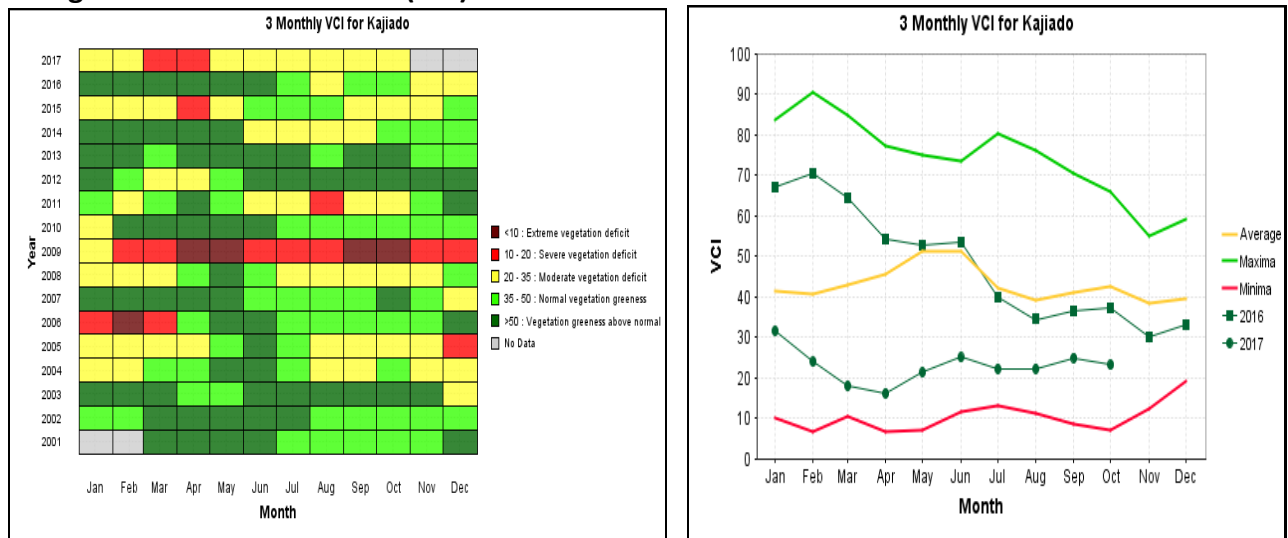


Figure 2: Kajiado County Vegetation Condition Index: October 2017 VCI Matrix & Chart

- The matrix indicates that VCI remained at moderate vegetation deficit same as September, the chart shows that the county experienced deterioration in its vegetation cover (Figure 2).The current county VCI is at 23.09 a reduction from the previous month record of 24.86.
- Improvement was observed in Kajiado North where the off season rains concentrated recording VCI of 35.32 from 19.09 of the previous month while Kajiado south reduced to a VCI of 22.84 from 32.92 in September. Kajiado Central remains the sub county with greatest vegetation deficit (Severe) with a VCI recording of 19.07.
- Normally, at this time of the year the county would be at normal vegetation greenness, however the situation is expected to improve if the onset kicks off in November.

2.1.3 Pasture

- Pasture remained poor to total depletion in both pastoral and agro-pastoral livelihood zones. Depletion of pasture in the pastoral livelihood zones of Magadi, Mosiro, Ewuaso, Lenkism, Mbirikani , Olgulului, Meto, Olkeri and Shompole remains as of last month as no rains have been received in these areas.
- Pasture improvement is expected in Kajiado North and parts of East due to the off season rains and minimal improvements in parts of Isinya ,Kaputien North and part of west, Kiserian areas as they equally received some rains.

- Dry season grazing areas of Chyulu, Ewuaso Nyiro, Kenyawa-Poka have experienced tremendous deterioration of pasture, animals are coming back leading to mortalities on the way.
- With the short rains anticipated in November across the entire county, pasture and browse regeneration is expected in the next 2 to 3 weeks.

2.1.3 Browse

- Browse remained poor with continued deterioration since last month in all livelihood zones.
- Ngong, Kekonyokie, Kiserian, Kaputiei North browse have begun regeneration due to the off season rains.
- Significant regeneration of browse across the county would be expected at this time of the year if short rains had started normally.

2.2 WATER RESOURCE

2.2.1 Sources

- The county is currently water stressed with boreholes (54%) and shallow wells (23%) being the major sources of water for both domestic and livestock use (Figure 3). Other water sources (piped water, water trucking) increased from 10% to 14% due to increased water trucking in Magadi, Mbirikani and Olgulului wards.
- Due to limited water sources, high pressure continued to be exerted on existing boreholes leading to frequent breakdowns. Currently some boreholes at Olkeri, Lenkobei, Olobelbel, Ilposat and Enkaroni are broken down.
- Strategic boreholes in Matapoato, Lenkism, Elangata Ewuaso and Kinyawa Porka have increased pressure from livestock, human beings and wildlife.
- The situation remains below normal compared to same period during the previous year, improvement is however expected as short rains begin in November.

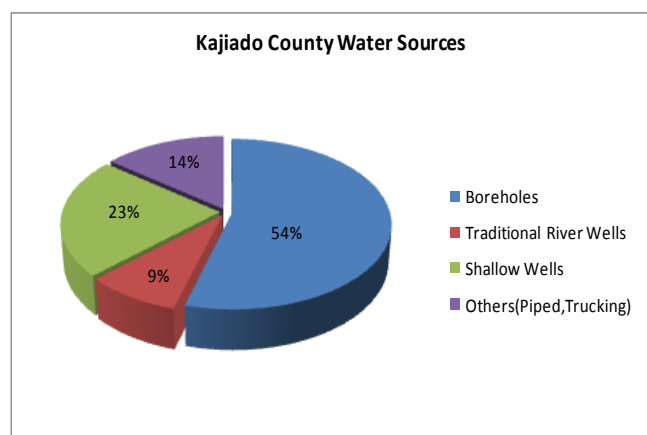


Figure 3: Main water sources in October 2017

2.2.2 Households Access and Utilization

- Communities relied mainly on permanent water sources (boreholes and shallow wells) for domestic use. Distance to water points therefore remained stable at 6.4 km (Figure 4).
- Kajiado West Magadi, Singiraine, Olkeri and Mosiro had trekking distance of over 15 km while Mbirikani reported trekking distance of over 10 km to get water.

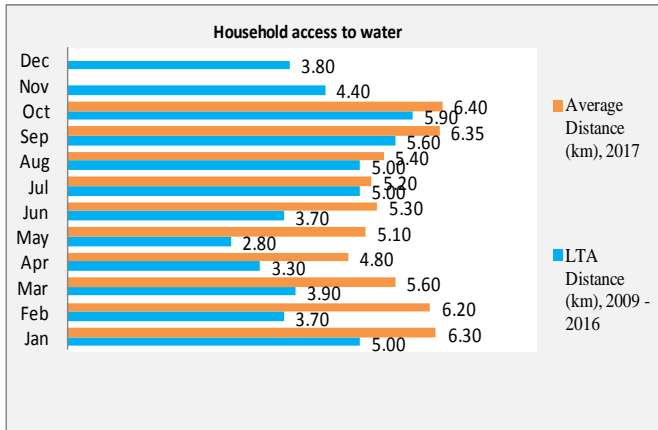


Figure 4: Return distance from household to water sources

- Average household water consumption reduced slightly to 2-6 litres per person in the pastoral livelihood zone while in agro-pastoral consumption was 5-10 compared with a normal of 20 litres in both livelihood zones.

- Water trucking continued to be done in Magadi, Ewuaso and Mbirikani mainly by county government.
- Waiting time at water source was 8, 4 and 1 hours for pastoral, agro-pastoral and mixed farming zones respectively, the situation is expected to improve with the coming short rains in November.

2.2.3 Livestock Access to Water

- Average return distances covered by livestock from the grazing areas to main water sources stabilized at 10.28 km, this is because only permanent water sources are in use (Figure 5).

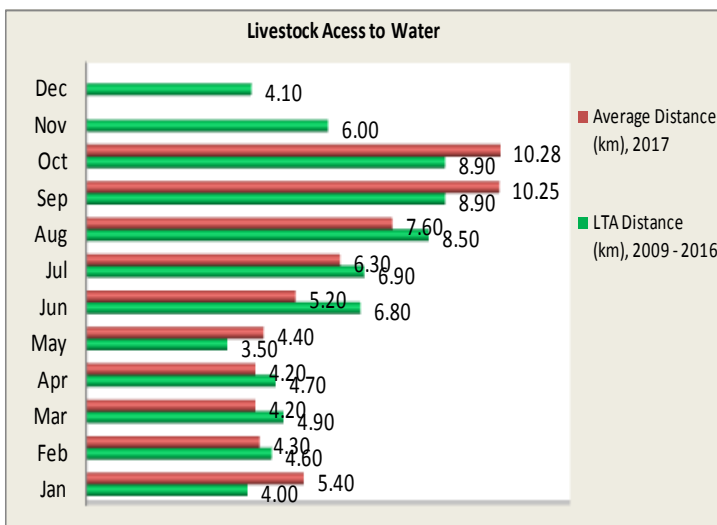


Figure 5: Return distance from grazing areas to water sources

- The pastoral areas (Mbirikani, Torosei, Mosiro, and Eselenkei) recorded the highest return trekking distances of 40 km to watering points while in Chyulu it was nearly 30 km, almost four times the county average.
- Water trucking continued in Mbirikani, Magadi, Chyulu and Olgulului.

3. PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- The Cattle left during migration and those that are back due to depletion of pasture in some fall back grazing areas were Emaciated (Emaciated, little muscle left) with depressed immunity in both pastoral and agro-pastoral livelihood zones.
- Support (pasture, water and therapeutic treatments) needs to be provided to the emaciated, sick and very weak animals for the period until pasture regenerates; otherwise the situation is likely to worsen further if no actions are taken.
- Body condition for shoats was moderate in mixed farming; they were neither fat nor thin and poor in agro-pastoral /pastoral livelihood zones, intra-migration of shoats was reported in Kajiado west, East and Central.
- The National Drought Management Authority (NDMA) is scheduled to start distributing the second consignment of 5,000 bags of animal feeds (Pellets) across the county from 4th November 2017.

3.1.2 Livestock Diseases

- Both secondary mortality due to low immunity and mortality associated with drought continued to be reported across the county. The expected rains are likely to pose more threat to the weak animals.
- Cattle that went to Mau are have reported deaths due to trachoma especially in Mosiro, those from Makueni and Nakuru have reported FMD.
- Supportive therapeutic treatments, CCPP, Sheep and Goat pox vaccinations by the County government with support from National Drought Management Authority came to an end on 20th October 2017. A total of 756 households benefited, 50,022 goats and 61,619 sheep were vaccinated.
- With the expected rains, RVF, Anthrax, Blue Tongue diseases are probable due to flash floods especially in Kaputiei, Amboseli, Bissil and Namanga areas.
- The county must be on Alert due to carcasses being spread all over with the rains expected, cases of cholera, diarrhoea and other water born disease could be reported.

3.1.3 Milk Production

- Milk production was negligible in most households; the cattle are weak and emaciated for any productive output.
- The current situation is below normal range; in October 2016 household milk production was 2.4 litres.

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

- Planting of maize, beans, Irish potatoes is on-going in the rain-dependant Kajiado South while irrigated areas of Kimana, Namelok, Ngurumani maize, tomatoes and onion cropping had been done.
- In Kajiado East vegetables: Kales, tomatoes and Onions cropping had been done.
- Fertilizers were issued to the NCPD in preparation for the Oct-Dec SR 2017 rains under subsidized fertilizer program to farmers at Ksh 1, 800.

3.3 IMPLICATION OF THE ABOVE INDICATORS TO FOOD SECURITY

- With rains projected at near normal and a shorter rain period, farmers may need to be advised to plant drought tolerant early maturing crops, otherwise there could be a possibility of low harvest.

4. MARKET PERFORMANCE

4.1 Livestock Marketing

4.1.1 Cattle Prices

- The average cattle price continued in the decline to Ksh 10,000 from Ksh 11,000 during the previous month (Figure 6).
- Farmers are selling to buy seeds, disposing in an effort to reduce loss due to mortality, again sale of livestock still

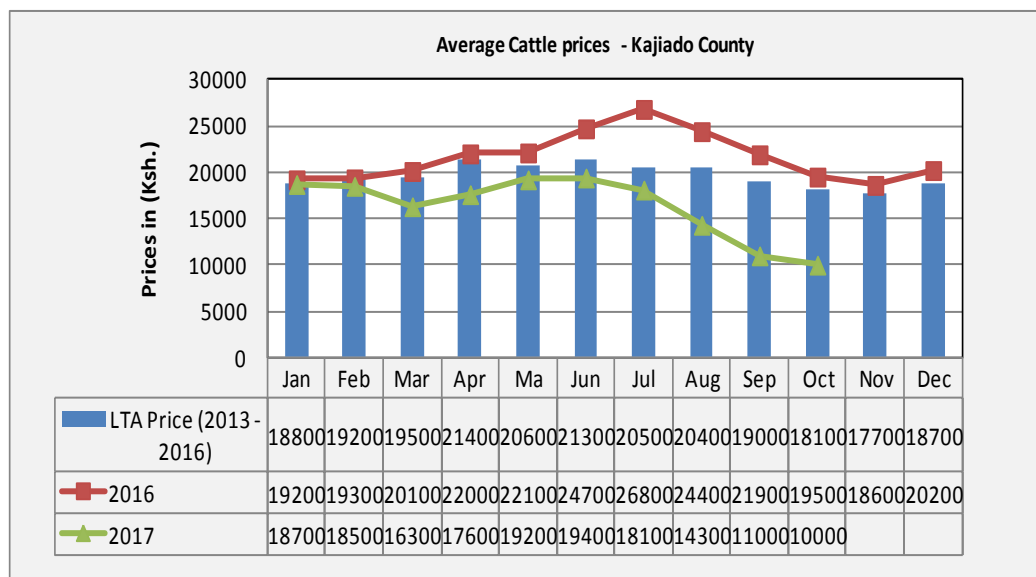


Figure 6: Trends in cattle prices, October 2017.

remains the main source of income for purchase of household commodities as household maize stocks have depleted.

- The highest prices were recorded in Mixed farming livelihood zone at Ksh 15,000 and the lowest in the Pastoral livelihood zones at an average of Ksh 1000.
- In pastoral livelihood zones, farmers are disposing their cattle for as low as Ksh 1000 – Ksh 500.
- Cattle prices are projected to stabilize at low prices in the next one month ;the body condition are not expected to improve before December if it was to rain in November.
- Though market operations were normal, livestock prices were 45% below-normal as markets are flooded with emaciated animals with low demand.

4.1.1.1 Other outstanding observations

- More farmers in pastoral areas of Magadi, Mosiro, Lenkism, Olgulului, Ewuaso, and Rombo were disposing their livestock for as low as Ksh. 500 just to avoid loss due to death and /or to cater for other pressing household needs.

4.1.2 Goat Prices

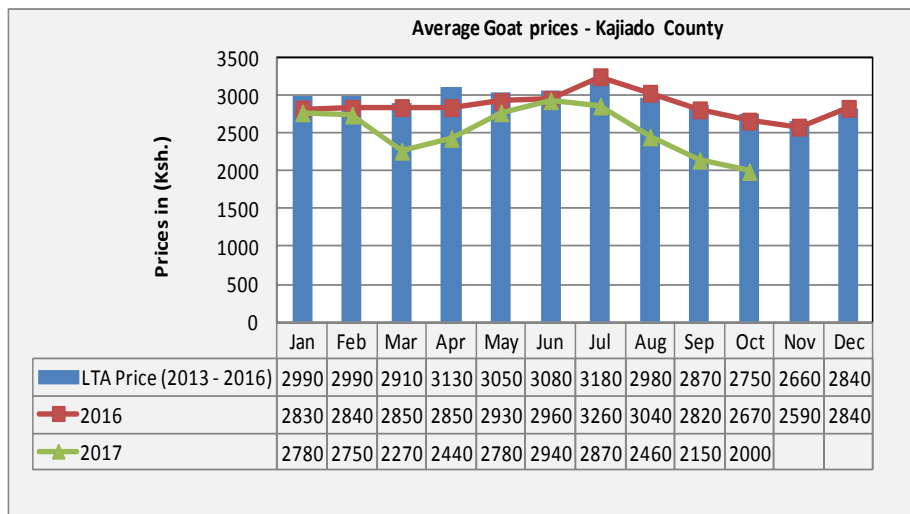


Figure 7: Trends in Goat prices, October 2017.

- Decline in goat prices continued from Ksh 2150 in the previous month to Ksh 2000 the lowest since 2010 (Figure 7).
- Goat prices are projected to stabilize at low prices in the next one month before body conditions improve.

- There were no significant variations in prices of goats across livelihoods in the month of October.
- On average, goat prices were 27% below the normal.

4.2 CROP PRICES

4.2.1 Maize Prices

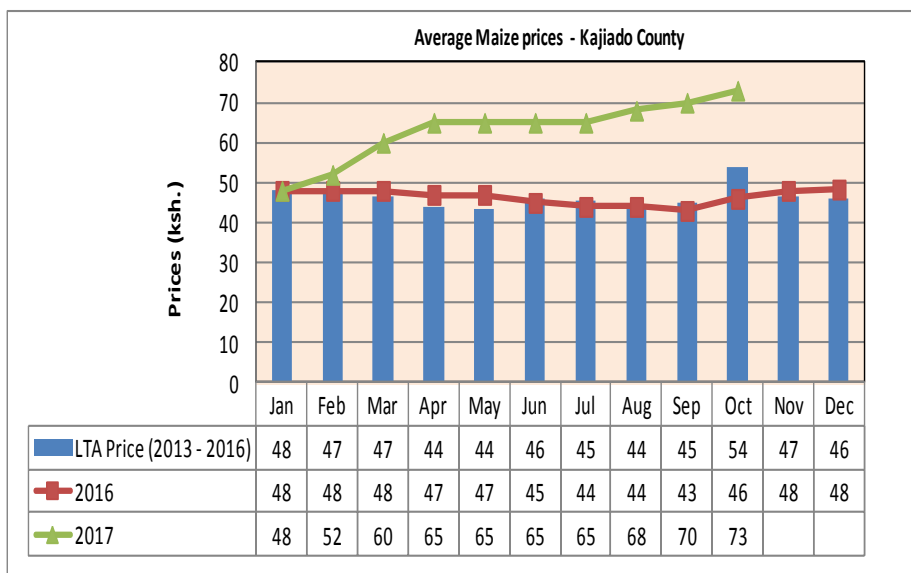


Figure 8: Trends in Maize prices, October 2017.

- The average prices of maize increased to Ksh. 73 per kilogram from Ksh. 70 recorded in the previous month (Figure 8). The continuous price increase was due to consistent scarcity of the commodity across all livelihood zones resulting to high demand against low supply.

- Highest prices of maize were reported in pastoral areas of Mosiro at Ksh. 160 per kilogram while lowest prices were reported in mixed farming areas of Kimana at Ksh 60 per kilogram.

- Further increase in maize prices is expected in November as there was no milk production to supplement the household food demand.
- The current maize prices are 35% above the long term average at Ksh 54.

4.2.2 Beans Prices

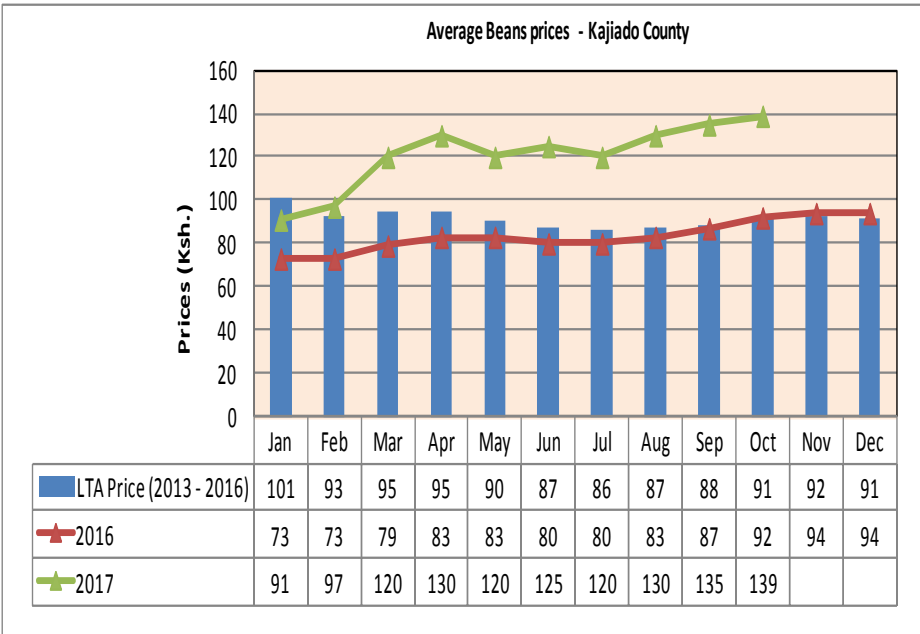


Figure 9: Trends in Maize prices, October 2017.

- The pastoral zone recorded the highest beans price of Ksh. 160 while the lowest price of Ksh. 110 was reported in mixed farming livelihood zones.
- Current beans price has increased by 53% compared with LTA.

- The current average price was Ksh 139 up from Ksh 130 recorded in September (Figure 9).
- Prices are projected to increase gradually until the next harvest following depletion of household stocks and reliance in market supplies for food commodities.

4.3 Prices of Milk

- Average milk price was Ksh.80 per litre at the market with no sale at household levels which constrained household food access. Much of the milk sold within the county in the markets was from outside the county.
- Price of milk was expected to improve by late November if it were to rain as regeneration of pasture and browse would improved availability of water that would lead to increased milk production.
- Current price are above the normal range of Ksh 50.

4.4 Livestock Terms of Trade (ToT)

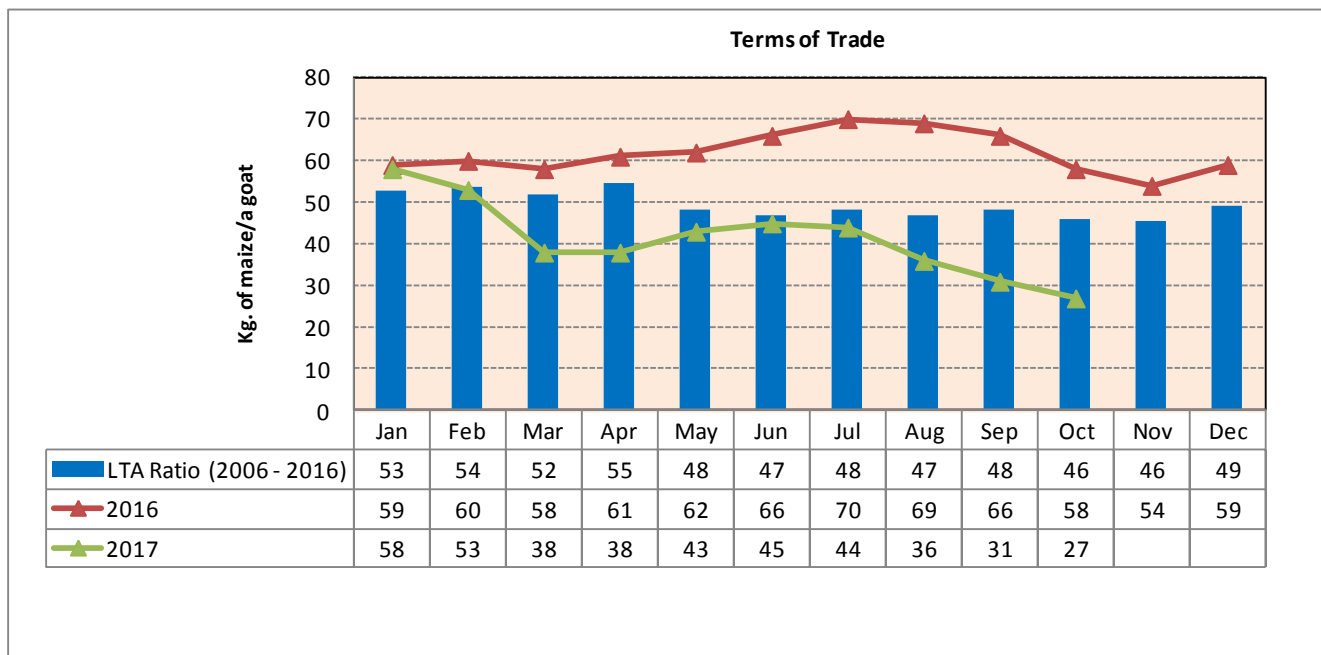


Figure 10: Trends in ToT ratio, October 2017.

- The terms of trade (ToTs) were unfavourable to livestock producers in October since the proceeds from the sale of a goat could purchase 27 kg of maize compared with the LTA of 46 kg (Figure 10).
- The declining trend was attributed to continuous increase in maize prices against reducing goat prices thus limiting household food access particularly in the pastoral livelihood and agro-pastoral areas.
- The trend was expected to continue until January next year.
- The ToTs were 41 percent below the long term mean of 46 compared to the previous year when it was 26 percent above the long term mean.

4.5 Implication of the above indicators to food security

- Frequency of meal consumption has been affected in all livelihood zones as the purchasing power of the pastoralists have been reduced thus affecting food security.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk Consumption

- Milk production declined further due to continued worsening of livestock health and body conditions in the pastoral and agro-pastoral zones.
- Milk consumption was expected to improve by early December as water and pasture become available.
- In a normal year the daily household milk consumption ranged between 2 - 3 litres.

5.2 Food Consumption Score

- During the month of October, approximately 27%, 44% and 29% of the households had acceptable, borderline and poor food consumption respectively (Figure 11).

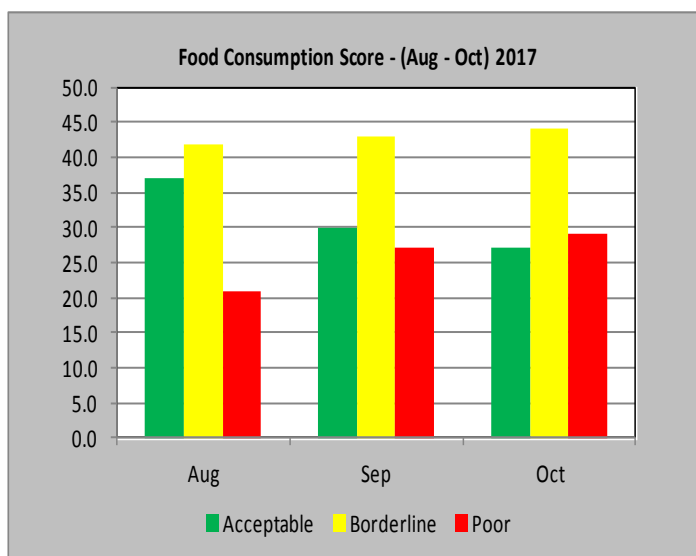


Figure 11: Food Consumption Score, Kajiado County.

- There was a reduction in the proportion of households with acceptable food consumption from 30 percent during the last month and an increase in that with borderline and poor consumption from 43 and 27 percent Consumption scores respectively (Figure 11).
- Households diet in terms of meal frequency, dietary diversity; nutritional value and amount have declined further.

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

- The proportion of children at risk of malnutrition based on MUAC<135mm rose further to 17.60 percent from 16.30 percent recorded during the last month (Figure 12).
- Outreaches were ongoing supported by RED Cross, KUIKA, FEED the Children, NIA, UNICEF, WHO and County Government; malnutrition cases in Kajiado West was the worst.
- Average for malnourished as reported from the outreaches in Kajiado west sub-county was 21%. County average for severely malnourished was at 4%, Moderate malnutrition was 17% and 22%

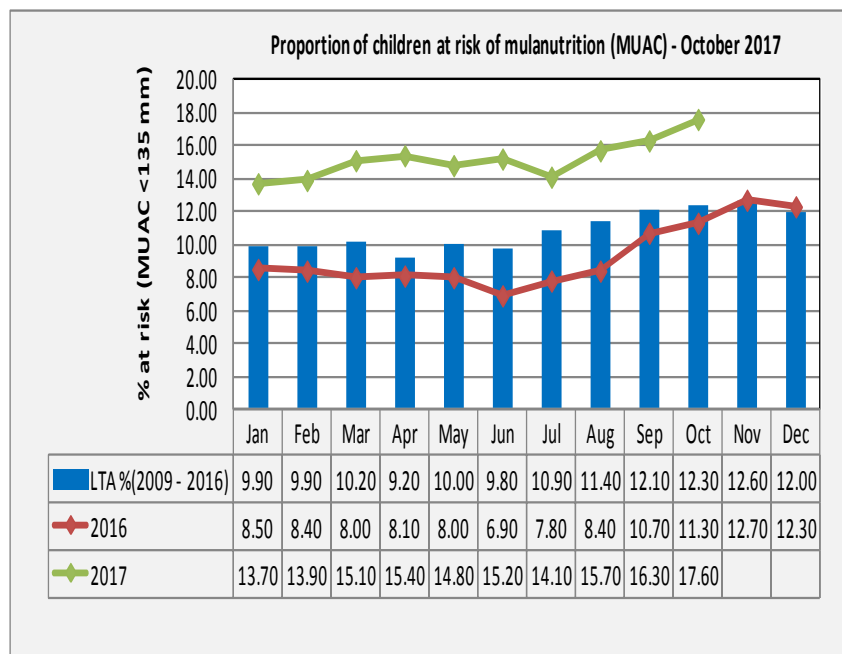


Figure 12: Proportion of children at risk of malnutrition – Kajiado county

for West sub-county, Pregnant and lactating mothers were at 36% malnourished, 46% in West sub-county

- The nurse’s strikes had worsened the situation in addition to lack of food at household levels leading to delays in recovery of the malnourished.
- The proportion of children at risk of malnutrition was 43 percent above the long term mean.

- Food relief distributions were on-going supported by the National Government, County Government, SACDEP and The Kenya Red-Cross. However, the food relief was inadequate as 90,000 household are in need of relief food assistance as per the County Steering group.

5.3.2 Human Diseases

- Confirmed cases of cholera were reported in Mosiro Kajiado West and Rongai Kajiado North; however health services have been affected by the on-going strike.

5.4 COPING STRATEGIES

- In October, the coping strategy index was 10.7 and 7 in pastoral and agro-pastoral livelihood zones respectively. The county average was at 9.1.
- Common consumption- related coping strategies employed by households included reduction in the number of meals and meal portions and to limit the amount of food taken by adults. Other areas like Mbirikani, Mosiro, Magadi it’s mainly skipping meals for the entire day.

6. CURRENT INTERVENTIONS MEASURES

6.1 NON-FOOD INTERVENTIONS

- Distribution of 5,000 bags of drought meal animal feeds (Pellet) across the county: By National Drought Management Authority.
- Relief food distribution with priority given to household with identified case of malnutrition: National Government, County Government, SACDEP and The Kenya Red-Cross.
- Livestock treatment and vaccination of CCPP, Sheep/Goat Pox across the county: By County Government and National Drought Management Authority.
- Emergency water trucking in Kajiado West and South: By County Government and National Government.
- Integrated health and nutrition outreaches in hard to reach areas of Kajiado South and West: By County Government - Ministry of Health supported by Kenya Red-Cross Society, FEED the Children, Neighbours Initiative Alliance, UNICEF and WHO.
- A plant wise program meant to help farmers monitor and control pest and diseases: By County Government – Department of Agriculture.
- Procurement of stand by vaccines against RVF, Blue Tongue and Anthrax: By County Government – Veterinary Department.

7. EMERGING ISSUES

7.1 Migration

- Migration of livestock was as early as June to the neighbouring counties which was not normal.
- Livestock from Ewaso migrated to Mai Mahui , Kajiado central to Maparasha towards Chulu, Kajiado East towards Mashuru, Chulu, Makueni, Kajiado South towards to Chulu. Livestock in Rombo have migrated to Tsavo west and Tanzania.
- Dry season grazing areas of Chyulu, Ewaso Nyiro, Kenyawa-Poka have poor to depleted pasture, animals are coming back leading to mortalities on the way.
- Livestock are moving towards Taita Taveta and other coastal counties, which is likely to result in break-out of Foot and Mouth Disease (FMD), East Coast Fever (ECF) and Trypanosomiasis.

7.2 FOOD SECURITY PROGNOSIS

- With the projected near normal performance of the short rains, modest rejuvenation of pasture and browse is expected across all livelihood zones and thus the body condition of livestock is expected to improve.
- Goat prices will increase slightly until end of December as supply in the market declines. Therefore, the terms of trade are most likely to be favourable to the livestock farmers.
- However, due to the delay of the onset of short rains, the rain period would be short and hence recovery time, keeping in mind the adverse effect of the current drought. The county must be on alert and preparedness mode.

8. RECOMMENDATIONS FOR ACTION

- Continued provision of livestock feeds mainly pellets, hay and concentrates. *Action by National Drought Management Authority, County Government and State Department of Livestock.*
- Support strategic boreholes with fuel subsidy. *Action by National Drought Management Authority in collaboration with the County development partners.*
- Livestock vaccination to curb possible outbreak of livestock diseases. *Action: County Government with support from National Drought Management Authority.*
- Introduction of Hunger Safety Nets programme in Mosiro, Mbirikani, Magadi and Lenkism wards. *Action: National Drought Management Authority and other players with mandate in food security.*
- Sensitize community to harvest water, proper usage and provision of water storage tanks to critical facilities: *Action: County Government and partners.*
- Provision of relief food : *Action: County Government, National Government and partners*