

National Drought Management Authority
MAKUENI COUNTY
DROUGHT EARLY WARNING BULLETIN FOR JANUARY 2017



A Vision 2030 Flagship Project



JANUARY EW PHASE



Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Mixed farming coffee/dairy	Alert	Stable
Mixed farming Food Crop/Livestock	Alert	Worsening
Marginal Mixed Farming	Alert	worsening
County	Alert	Worsening
Biophysical Indicators	Value	Normal Ranges
VCI-3Month	50.94	>35
Production indicators	Value	Normal
Crop Condition	Poor	Good
Livestock Body Condition	5-Moderate	6-Normal
Milk Production	1.5L	1.8 Litres
Livestock Migration Pattern	Normal	Normal
Livestock deaths (from drought)	No death	No death
Access Indicators	Value	Normal
Terms of Trade (ToT)	67.5	>80
Milk Consumption	0.8 L	1 litres
Return distance to water sources	4.6 Km	3.4 Km
Cost of water at source (20 litres)	KSh 3-5	KSh 2
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	5	<12.9
Coping Strategy Index (CSI)	12	<15

Drought Situation & EW Phase Classification

Biophysical Indicators

- There was no rainfall received during the month of January.
- Generally crop production was poor since there was maize failure (over 80 %) and little harvest of green grams and Cowpeas is expected
- The average 3 month VCI for the county was 50.94
- Quantity and quality of pasture and browse ranged from fair to poor in the marginal mixed farming zone and was fair in the Mixed Farming livelihood zone.
- The state of water sources was normal in most areas across the county since underground water sources were recharged during the OND rains. Pans were at 50% level.

Socio Economic Indicators (Impact Indicators)

- Generally the body condition for cattle was fair (neither fat nor thin) while that of shoats was good.
- Terms of trade was unfavorable at 67.5 to the livestock keepers implying that from a sale of goat one would get 67.5kg of Maize.
- The proportion of children at risk of malnutrition decreased slightly from 6.9% to 5% which is within the normal range.

Seasonal Calendar

<ul style="list-style-type: none"> ▪ Short rains harvests ▪ Short dry spell ▪ Reduced milk yields ▪ Increased HH Food Stocks ▪ Land preparation 	<ul style="list-style-type: none"> ▪ Planting/Weeding ▪ Long rains ▪ High Calving Rate ▪ Milk Yields Increase 	<ul style="list-style-type: none"> ▪ Long rains harvests ▪ A long dry spell ▪ Land preparation ▪ Increased HH Food Stocks ▪ Kidding (Sept) 	<ul style="list-style-type: none"> ▪ Short rains ▪ Planting/weeding 								
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

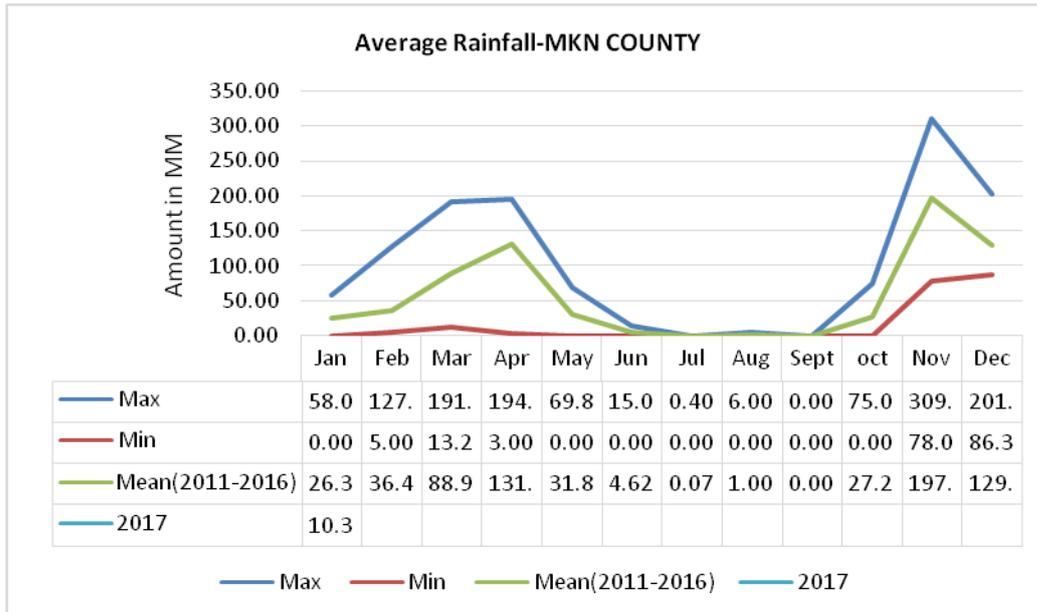
1. CLIMATIC CONDITIONS

1.1 RAINFALL PERFORMANCE

- Some light rain was experienced on the last day of January.

1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

- The month was characterised by hot sunny days across all the livelihood zones.
- Except for the last day where some light showers were experienced across all the livelihood zones

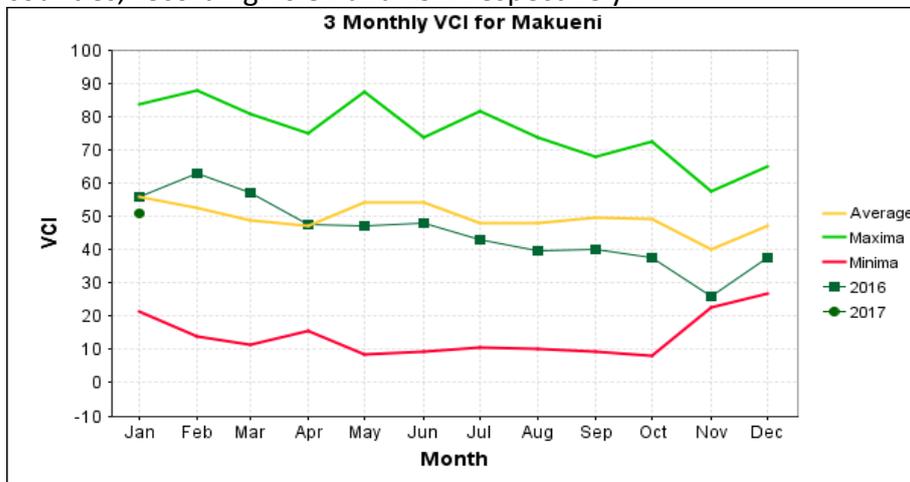


2. IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

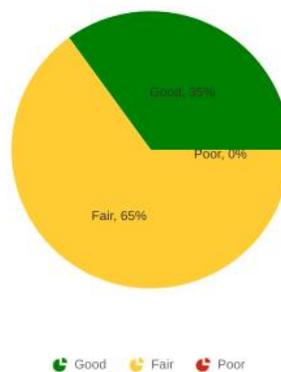
- The 3-month average VCI for the county was 50.94, an indication of above average vegetation greenness. Kilome and Kibwezi West had the lowest indices of the six sub-counties, recording 46.32 and 49.1 respectively.



2.1.2 Pasture and Browse

- The quantity and quality of Pasture was fair to good in the mixed farming livelihood zones while in the marginal mixed farming livelihood zone it ranged from fair to poor while that of browse was good across all the livelihood zones.
- The available pasture expected to last for the next one to two months while that of browse until the onset of the MAM rains.

Makueni Pasture Condition
(Dec 2016 - Dec 2016)

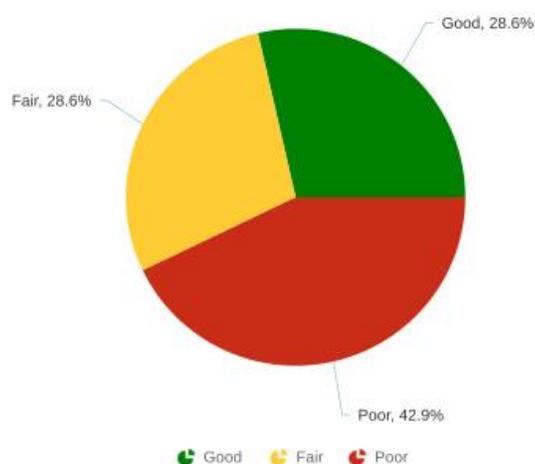


2.2 WATER RESOURCE

2.2.1 Sources

- Main sources of water in the County were traditional river wells, shallow wells, dams, pans, natural rivers, springs, boreholes, sand dams and piped water schemes.

Makueni Pasture Condition
(Jan 2017 - Jan 2017)

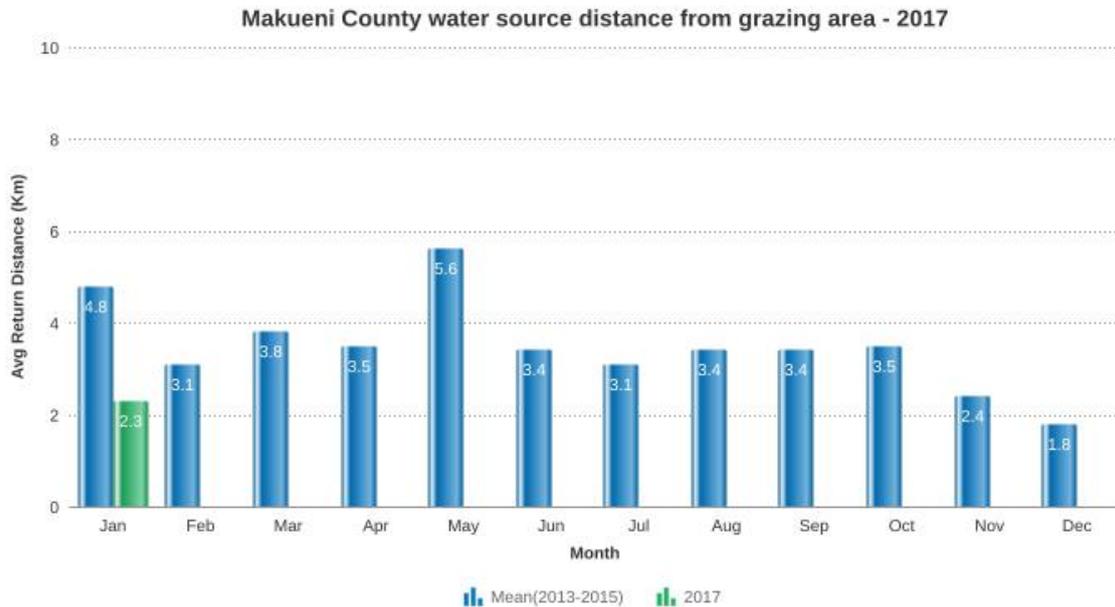


- The current available water sources are normal at this time of the year across all the three livelihood zones.
- The cost of water for a 20 litre Jerry can was between 3 - 5 Shillings at the water kiosks. However, higher cost of Ksh.30-40 per 20 litre Jerrican was witnessed in urban areas e.g. Nunguni market attributed to water vending and rationing. In Ilima, Kola,

Mukuyuni, Kikima, Nthangathini, Miangeni, Mukuku, Kwakiliu, Mavindini, Kanthuni the cost was between Ksh.15-20 per 20 litre Jerrican.

- The volume of water in Pans and dams had reached 50% level. The persisting hot and dry conditions are rapidly reducing these levels as a result of evaporation.

2.2.2 Household access and Utilization of water



- Distances to water sources for domestic use (one way) decreased from 2.5 Km to 2.3Km between relatively high compared to the normal of 1.7Km.
- Water Consumption in Households was normal with the exception of marginal mixed farming (Kibwezi East, Kibwezi West and part of Makueni sub counties) which was below normal i.e. 10-15 Litres per person per day.

2.2.3 Livestock access to water

Marginal mixed Farming zone

- The average return distance to water sources in this zone was 5-10km i.e. in Kalawa, Mavindini, Kitise, Kikumbulyu, Masongaleni, Ulilanzi and Kithyululu against the normal of 4.

Mixed farming (livestock/food crop) Zone

- The average return distance was 5-10 Km compared to the normal of 4km. Main sources includes dams, boreholes, rivers, and shallow wells. The situation is normal for this period.

Mixed Farming (coffee/dairy) Zone

- The current sources of water for livestock in this zone are dams, springs in the hilly masses, bore holes, streams and piped water projects. Currently the sources are normal in this zone at an average of 2-3km.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Generally, the body condition for cattle in the marginal mixed farming livelihood zones was between moderate and borderline, 12th and 13th rib visible (Body score of 4-5) mostly in Kibwezi West and East, Kalawa and Kitise-Kithuki. However, in the Mixed farming Livelihood zones, the body condition was fair to good.
- Body condition of shoats was generally good across all livelihood zones.
- It's projected that the body condition is likely to deteriorate in the next one to two months with the depletion of pastures and the decline of water for livestock.

3.1.2 Livestock Diseases

- Cases of FMD in Kathonzi and New castle and fowl typhoid for chicken were reported.

3.1.3 Milk Production

Milk availability

- Milk availability in all the livelihood zones was still low but normal for this time of the year and compared to the same period last year, the situation was almost similar.
- Compared to last month the situation has deteriorated with the decline of pastures for livestock. Data from milk traders indicate smaller volumes compared to same time last year ago and hardly any wastes are reported.
- Generally, milk access is affected by a trend where prices have remained comparatively high across seasons.
- The prices for consumers was high in the mixed farming zones (ksh 50-60). The Mixed farming (coffee/dairy)Livelihood zones areas such as Nunguni, Mbooni and parts of Nzau (Matiliku, Mbitini) where it had remained relatively low(Ksh 40-50).

Marginal mixed Farming zone:

Households in this zone relied mostly on goats' milk whose yield was between 150-250mls per day. Local Zebu also produced significant amounts of 1-2ltrs per day though in fewer families.

Mixed farming (Food Crop/Livestock):

Zebu cattle and crossbreeds accounted for most milk produced. Availability was approximately 350mls-500mls compared to a normal of 500mls.

Mixed Farming (Coffee/Dairy):

The production of milk per day per household ranged from 0.75litres-1 litre per day against a normal of 1litre.

3.2 RAIN-FED CROP PRODUCTION

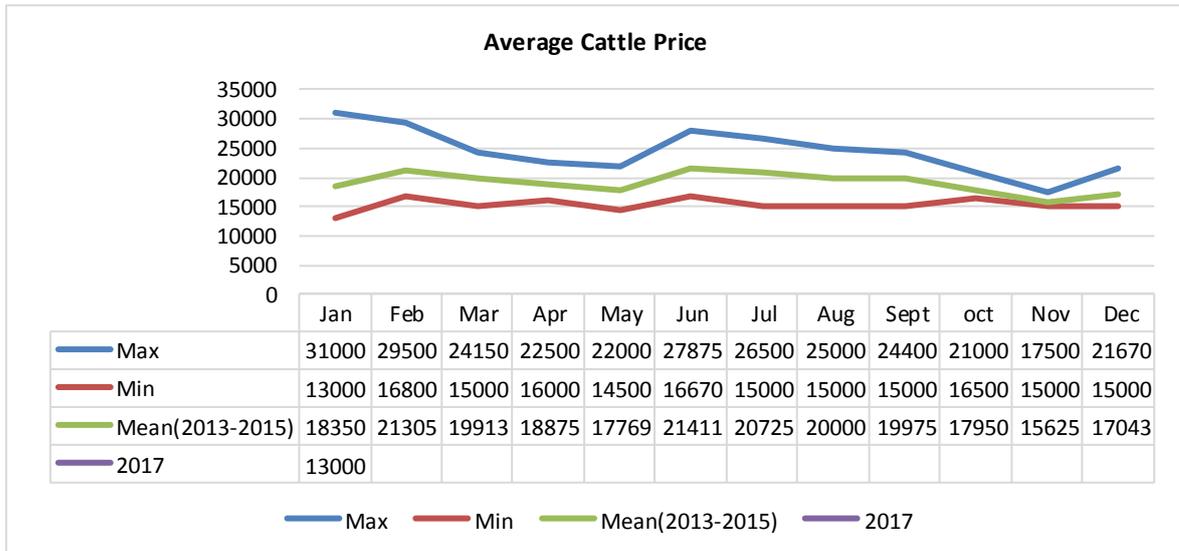
3.2.1 Stage and Condition of food Crops

- Cowpeas and green grams are currently in the harvesting stage.
- Pigeon peas are in the vegetative stage.
- Maize crop has experienced failure across the county (over 85%).
- In Kibwezi east (Nzambani/Ivingoni, Thange, Mtito Andei and Masongaleni), Kibwezi west and parts of Mbooni (Kalawa, Sakai and Nthangathini) and Makueni (Kitise-Kithuki) crops were severely affected by moisture stress due to the poor rainfall performance hence minimal yields.

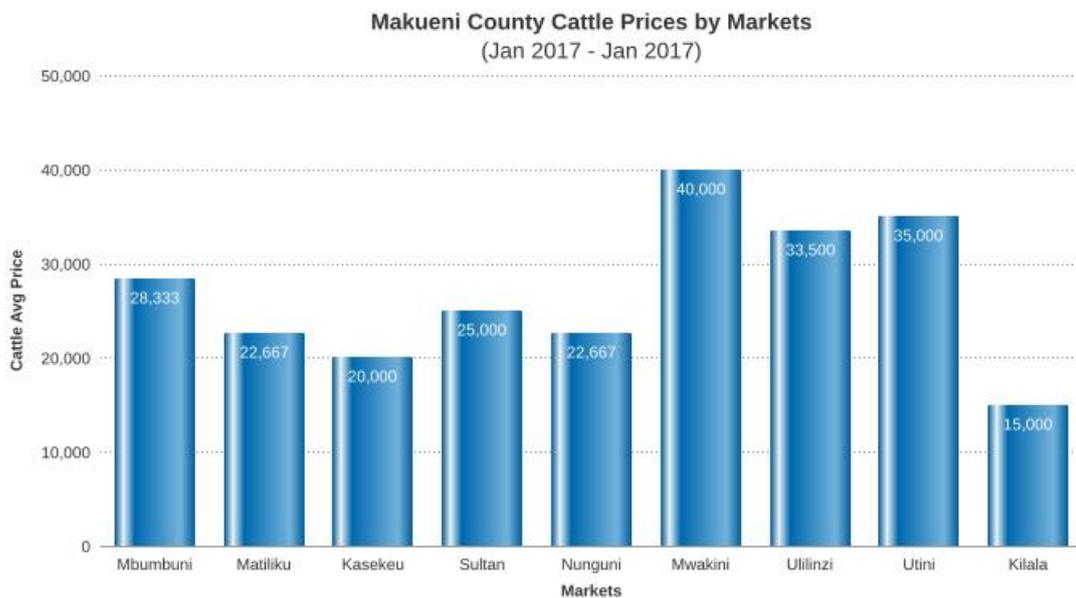
4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

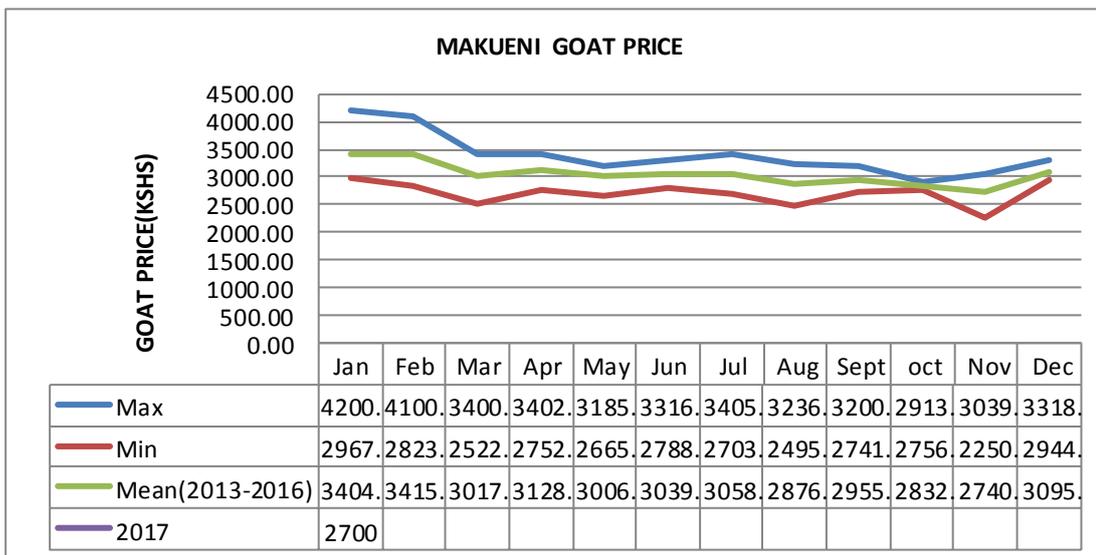
4.1.1 Cattle Prices



- Average farm gate prices of cattle decreased further to Ksh13000. The decrease in prices can be attributed to the worsening condition of pasture and browse hence decline in body condition, early destocking, need for school fees as well as need for cash to purchase food at household level.
- The price was below the (2013-2015) long term average.
- Market prices of cattle at different markets in the county were as follows:



4.1.2 Goat Prices

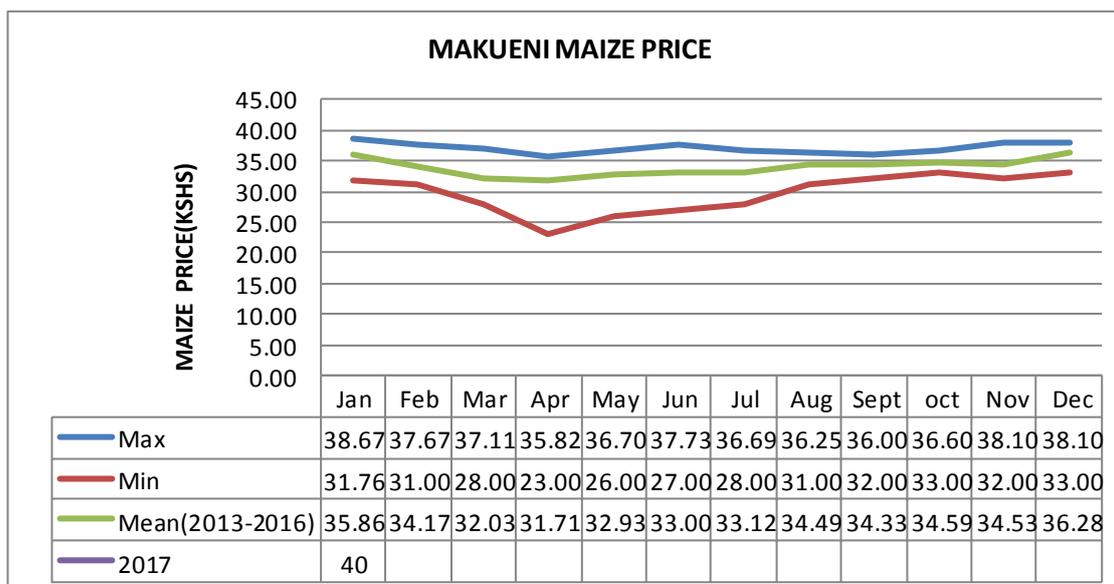


- The average goat farm-gate price decreased from Ksh3095 to Ksh2700 but remained relatively low than the long-term mean. This can be attributed need for school fees as well as need for cash to purchase food at household level.
- Average goat market price was as follow in various markets across the county.



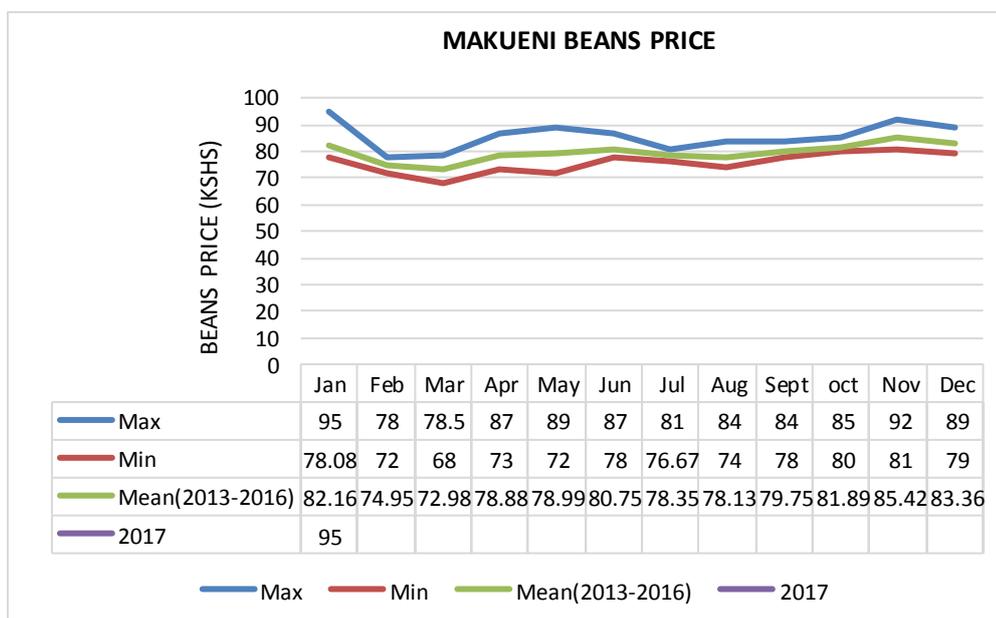
4.2 CROP PRICES

4.2.1 Maize



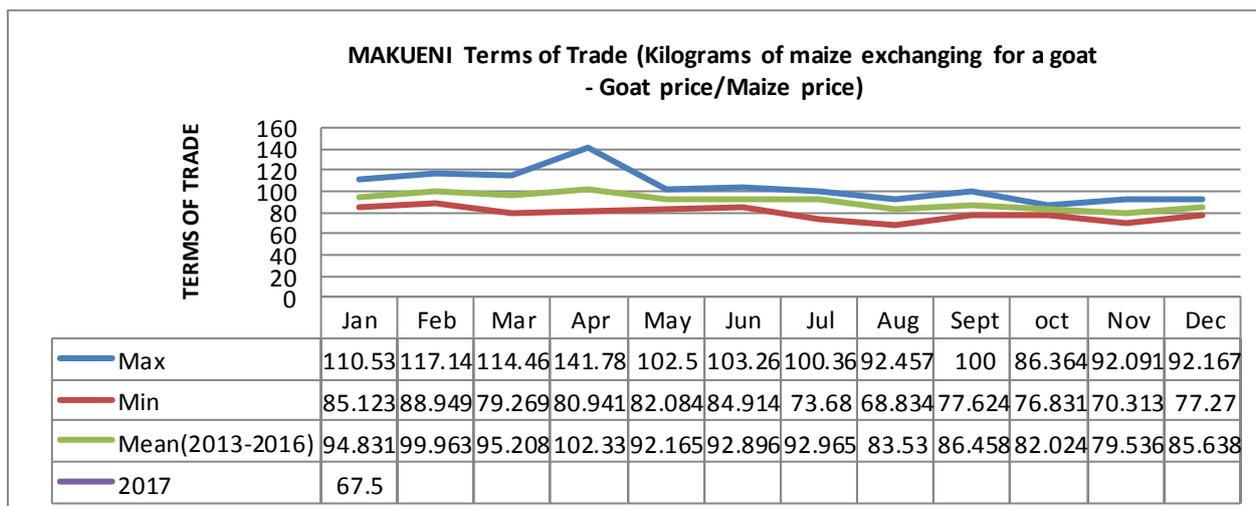
- The average market price of maize per kilo was Ksh40, an increase from Ksh36 that of last month. The high prices can be attributed to the failed maize crop coupled with the diminished household stocks.
- Compared to the long term mean, the price is high and this is not normal at this time of the year.

4.2.3 Beans



- The average price of beans increased from Ksh83 to Ksh95. The high prices are as a result of diminished stocks. Compared to the long term average the price was relatively high.

4.3 Livestock Price Ratio/Terms of Trade



- Terms of trade worsened from last month. This is attributed to the dipping goat prices and rising maize price.
- This implied that proceeds from a sale of one goat one could purchase 67.5kg of maize.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

Marginal mixed Farming zone

- The average amount of milk produced was relatively equal to that consumed, an average of 450mls (Which is below normal).
- The current milk price was Ksh60-70 per litre against the normal of Ksh55 and this has limited accessibility to majority of the households.

Mixed farming Zone (Food crop/Livestock).

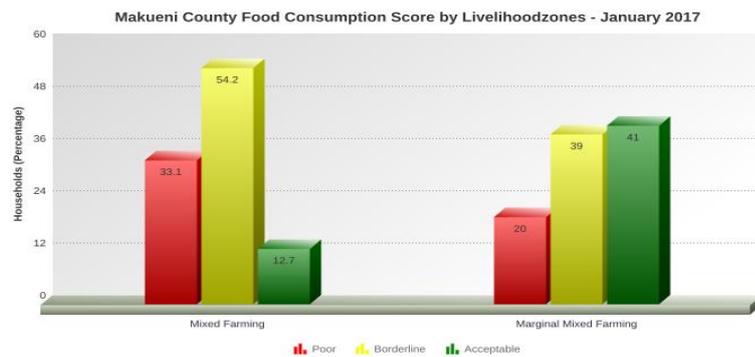
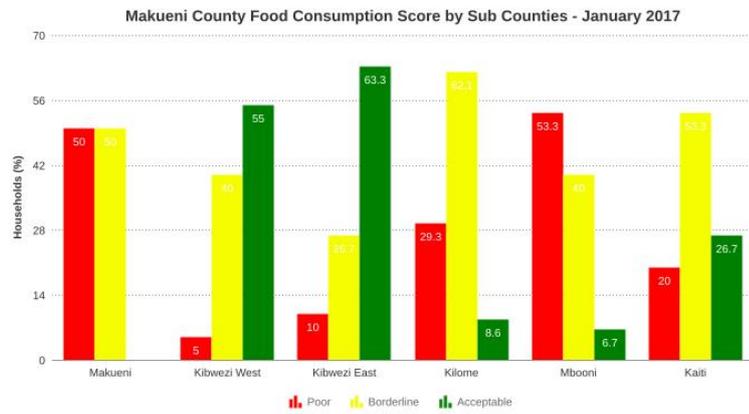
- Milk consumption per day in this zone was between 700mls to 800mls which was below normal.
- The current milk price is between Ksh60 to Ksh70 against the normal of Ksh50.

Mixed Farming Zone (Coffee/Dairy)

- Milk consumption is about 800mls to 1000mls which is below normal. The average milk price was Ksh50 to Ksh60 against the normal of Ksh45.

5.2 FOOD CONSUMPTION SCORE

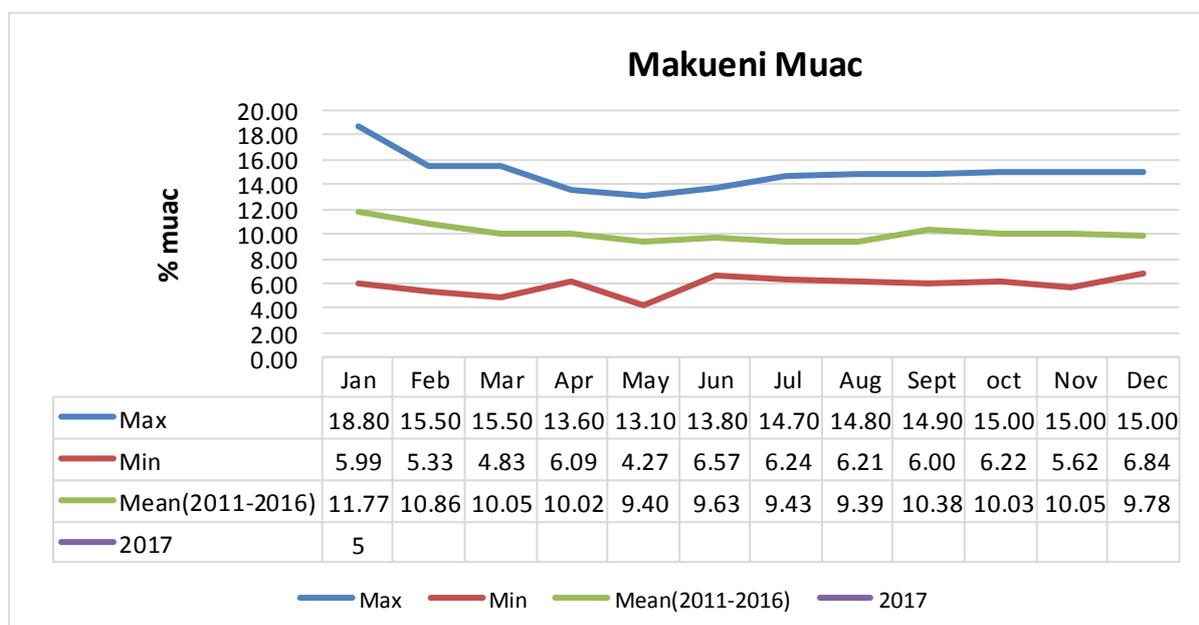
- From the 211 households sampled, 95 households were found to have a poor consumption score, 84 were found to be at the borderline while 32 had an acceptable Food consumption score.



5.3 HEALTH AND NUTRITION STATUS

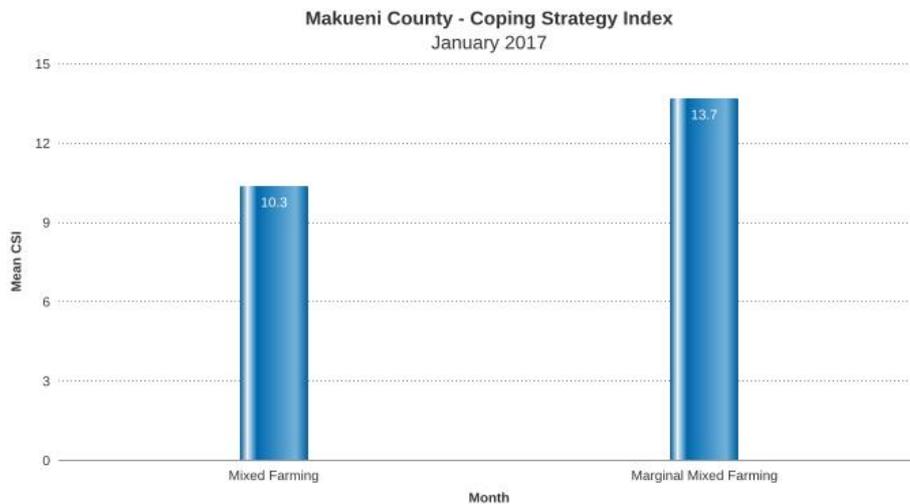
5.3.1 Nutrition Status

- The average percentage of children at risk of malnutrition slightly decreased from 6.9 percent to 5 percent but remained within the normal ranges.
- The malnutrition decrease could be attributed partly to the nutrition interventions being carried for the under-fives.
- The slight decrease recorded could also be attributed to the availability of Kunde, cowpeas and green grams which has improved the dietary diversity mostly amongst the under-fives.



5.3 COPING STRATEGIES

The CSI for Marginal Mixed Farming zone was 13.7 while that of Mixed Farming LZ was 10.3, an implication of less food insecurity in the sampled households in the Mixed Farming LZ.



6.0 CURRENT INTERVENTION MEASURES (ACTION)

6.1 NON-FOOD INTERVENTIONS

- Asset Creation Projects by GoK/ WFP, World Vision, Kenya Red Cross Society and NDMA.
- Livestock disease surveillance and Vaccination.

6.2 FOOD AID

- Food aid was received and distributed during the month under review. The food was received from the Ministry of Devolution and Planning - Special Programmes and distributed to the community through the County Commissioner’s office. The rations received were: 900 cartons of cooking oil (24x0.5l), 270(90kg)bags of maize, 1,800 bales of nutrition supplements.

7. EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

- No wildlife-human conflict cases reported.

7.2 Migration.

- No major migrations reported.

7.3 FOOD SECURITY PROGNOSIS

Harvests for short –term growing crops such as cowpeas and green grams was good. Maize failed totally for those farmers who were dependent on rainfall thus leading to the increase in maize prices. Water was prices were high in urban areas (ksh 30-40 per 20 litre jerrican) and ksh 2-5 in rural areas. Maize prices have been on the increase and goat prices on a decline thus worsening the terms of trade (67.5). The available pasture is expected to last for the next 1-2 months (MAM rains onset). Should the MAM rains perform well, then the situation should improve. However, should the rains fail, some intervention might be required since the animal body condition will have deteriorated further. The water in the

earthdams (50% full) and pans is adequate enough to last until the beginning of the MAM. However, the ongoing hot and dry conditions have seen losses due to evaporation increase leading to faster reduction in the surface water sources levels.

8. RECOMMENDATIONS

- Water for irrigation-farm ponds, boreholes, earth dams, piping, sand dams etc.
- Capacity building on CA/GAPs – (Zai-pits etc.)
- Market linkage for both irrigated vegetables and other products
- Value addition (green grams, mangoes, cowpeas)
- Mechanized agriculture(provision of tractors to assist in farming their lands)
- Road infrastructure to be improved(feeder roads to Athi river)
- Relief food and safety net
- Relief seeds –Drought tolerant
- Livestock disease control
- Enhanced livestock disease surveillance