

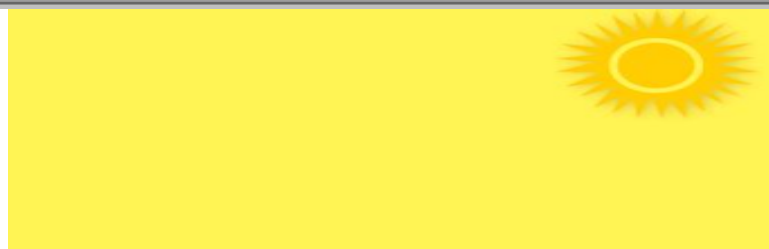
National Drought Management Authority
MAKUENI COUNTY
DROUGHT EARLY WARNING BULLETIN FOR FEBRUARY 2017



A Vision 2030 Flagship Project



FEBRUARY EW PHASE



Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Mixed farming coffee/dairy	Alert	Worsening
Mixed farming Food Crop/Livestock	Alert	Worsening
Marginal Mixed Farming	Alert	worsening
County	Alert	Worsening
Biophysical Indicators	Value	Normal Ranges
VCI-3Month	38.06	>35
Production indicators	Value	Normal
Crop Condition	N/A	Good
Livestock Body Condition	4-Moderate	6-Normal
Milk Production	1.45L	1.8 Litres
Livestock Migration Pattern	Normal	Normal
Livestock deaths (from drought)	No death	No death
Access Indicators	Value	Normal
Terms of Trade (ToT)	84	>80
Milk Consumption	1.25 L	1 litres
Return distance to water sources	3.8 Km	3.4 Km
Cost of water at source (20 litres)	KSh 2-5	KSh 2
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	6.8	<12.9
Coping Strategy Index (CSI)	10.5	<10

Drought Situation & EW Phase Classification

Biophysical Indicators

- Generally the month was hot and dry except from some light showers which were experienced around the fourth week of the month.
- The average VCI for the county was 38.06, an indication of normal vegetation greenness.
- The quantity and quality of pasture ranged from fair to poor while that of browse was fair to good.
- Water supply was adequate since major water sources still had water for both livestock and domestic use but this is fast depleting due to the souring heat and losses due to evaporation.

Socio Economic Indicators (Impact Indicators)

- Generally the body condition for cattle was moderate (neither fat nor thin) and at borderline in MMF while that of shoats was good across all the three livelihood zones.
- Terms of trade was favorable at 84 implying that from a sale of one goat a farmer would get 84kg of maize
- The proportion of children at risk of malnutrition was 6.8% an increase from 5%.
- CSI for the County was 10.5 implying high coping mechanisms.

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

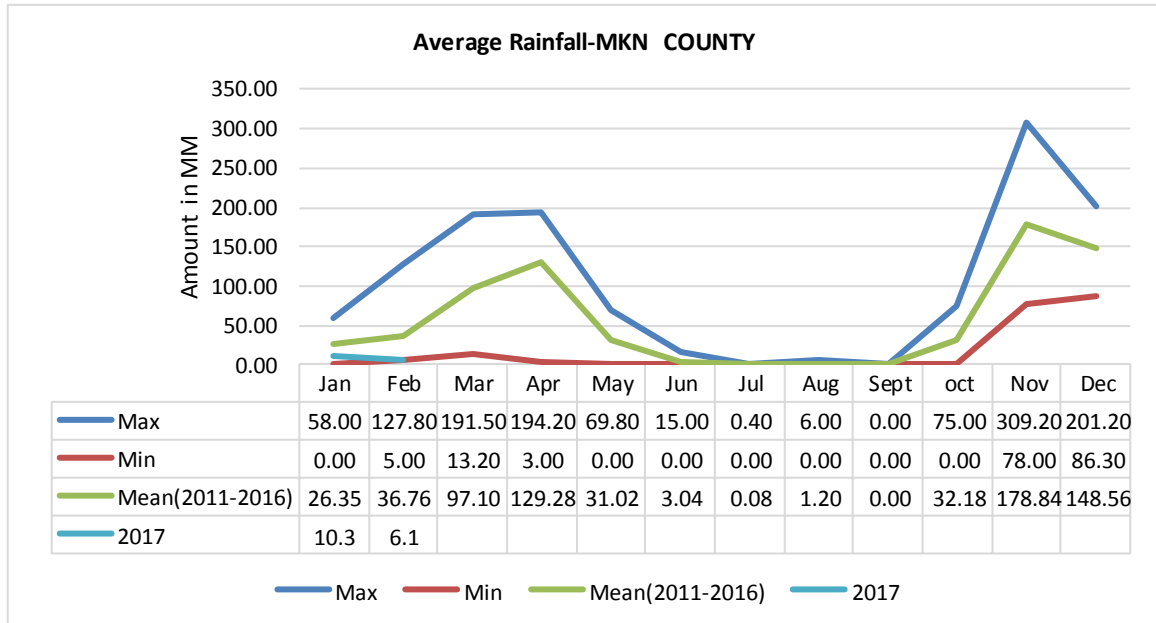
1. CLIMATIC CONDITIONS

1.1 RAINFALL PERFORMANCE

- Some very light showers which were experienced.

1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

- The county had an average of 6.1 mm of rainfall.
- Makindu in the Marginal Mixed Farming Livelihood zone received 5.9mm of rainfall in five days. Nzau in the Mixed farming (food crop/livestock) livelihood zone received 6mm in 1 day. Ilima in the Mixed Farming (coffee/dairy) Livelihood zone received 6.5 mm in 1 day.



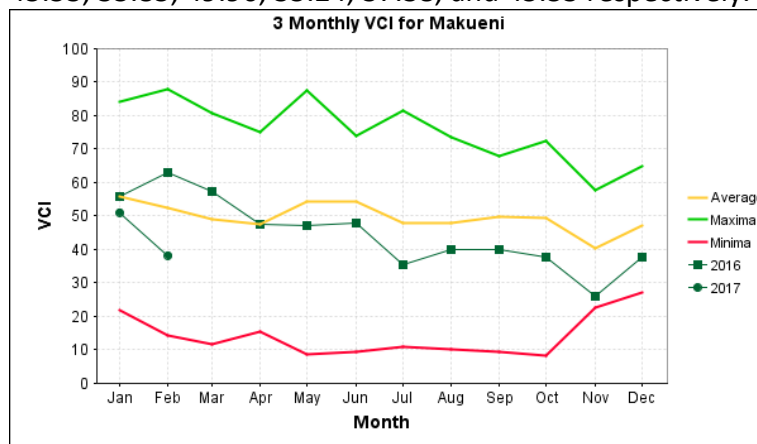
2. IMPACTS ON VEGETATION AND WATER

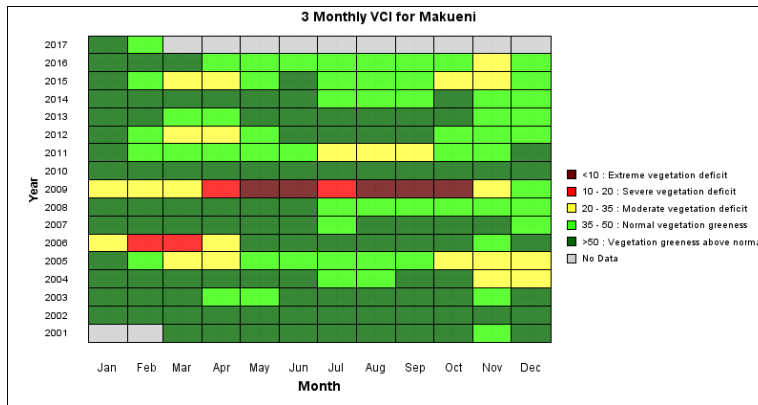
2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

The County recorded an average VCI index of 38.06, an indication of normal vegetation index.

The sub-counties recorded similar indices indicating normal vegetation greenness. Makeni, Kilome, Kaiti, Kibwezi West and Kibwezi East and Mbooni recorded indices of 45.53, 35.85, 49.96, 35.24, 37.38, and 45.53 respectively.

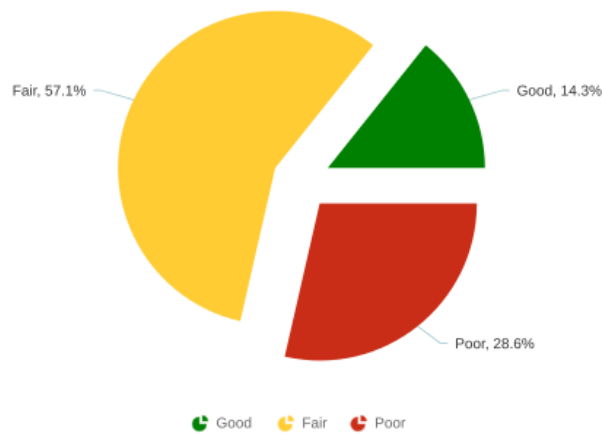




2.1.2 Pasture and Browse

- The quantity and quality of Pasture and browse ranged from fair to good in the mixed farming livelihood zone while in the marginal mixed farming zone it ranged from fair to poor.
- The available pasture and browse is expected to last until the onset of the MAM rains.
- Should the onset of MAM rains delay the condition is expected to deteriorate more mostly in the marginal mixed farming zone.

Makueni Pasture Condition
(Feb 2017 - Feb 2017)

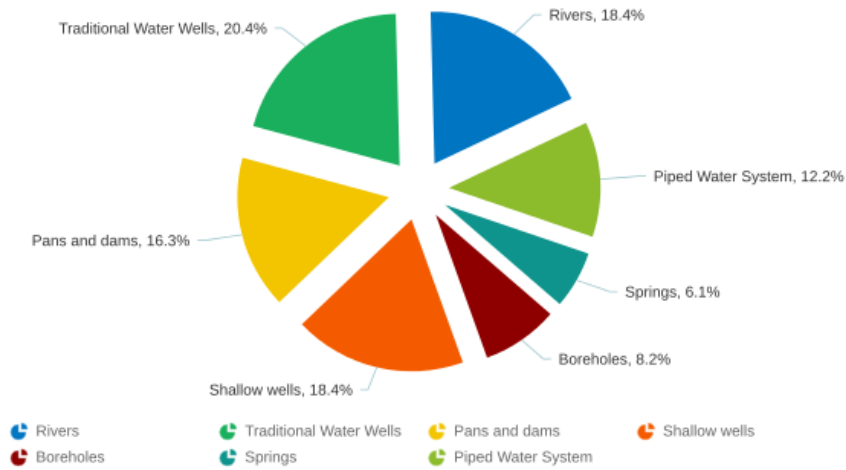


2.2 WATER RESOURCE

2.2.1 Sources

- Main sources of water for the county during the month under review were: traditional river wells at 20.4%, Rivers 18.4%, pan and dams 16.3%, shallow wells 18.4%, boreholes 8.2%, springs at 6.1 and piped water schemes at 12.2%

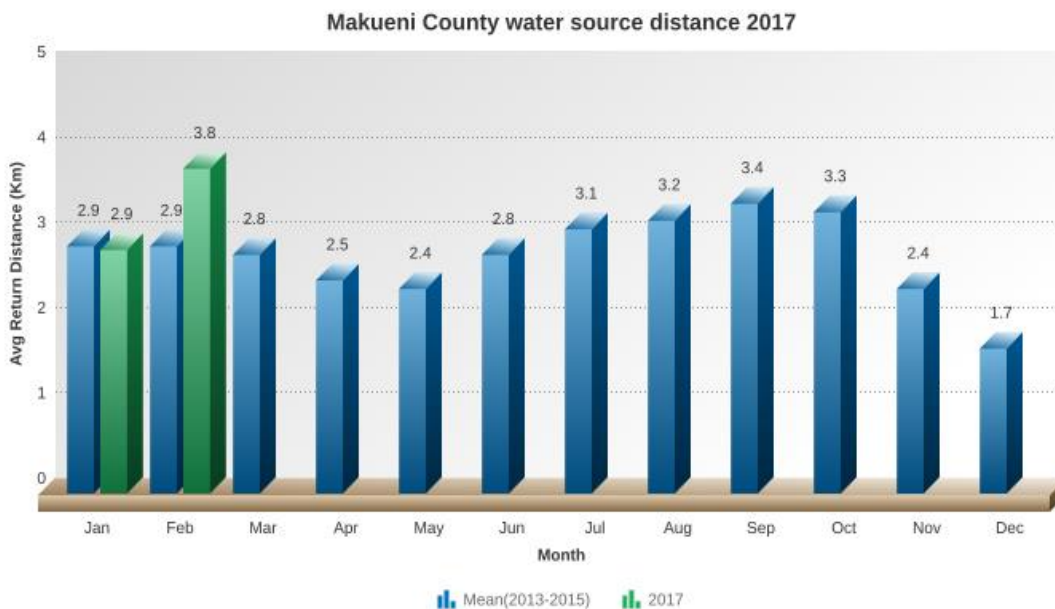
**Makueni County Water sources
(February 2017)**



- The water sources were normal apart from some areas like Yinthungu where the boreholes had broken down and most household had to walk for longer distances in search of water.
- Cost of a 20 litre Jerry was between 3 - 5 Shillings at the water kiosks.

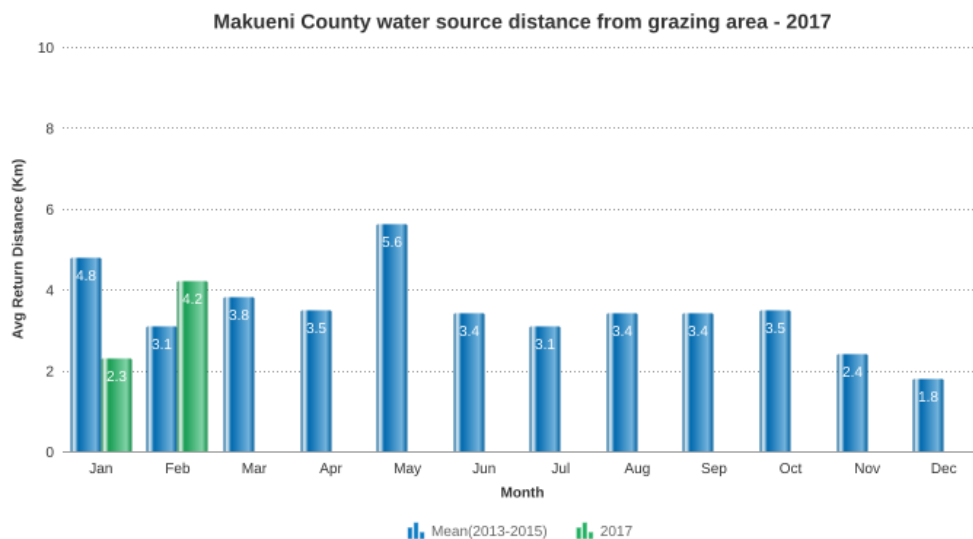
2.2.2 Household access and Utilization of water

- **Distances to water sources for household consumption**



- The average household return distance increased from 2.9Km to 3.8Km. compared to a similar time last year the distances had increased by 1Km and slightly higher than the long term average of 3.4Km

2.2.3 Livestock access to water



- Distances to water sources for livestock use increased from 2.3Km to 4.2Km against the normal of 1.7Km. Compared to a similar month last year the distances had increased by 1km.

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 at the borderline, 12th and 13th rib visible (Body score of 4) mostly in Kibwezi East, Kathonzweni and Kalawa. However, in the Mixed farming Livelihood zones, the body condition ranged from fair to good while that of shoats was generally good across all the three livelihood zones.

3.1.2 Livestock Diseases

- No major livestock disease outbreaks reported during the month under review.

3.1.3 Milk Production

Milk availability

- Availability of milk in all the livelihood zones was 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 worsened due to the declining pastures and increase in water distances.

Marginal mixed Farming zone:

- Majority of Households in this zone were relying on goats' milk whose yield was between 100-250mls per day. Local Zebu also produced significant amounts of between 1-2ltrs per day though not in all families.

Mixed farming (Food Crop/Livestock):

- In this zone 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 to 1 litre per day against a normal of 1litre.

3.2 RAIN-FED CROP PRODUCTION

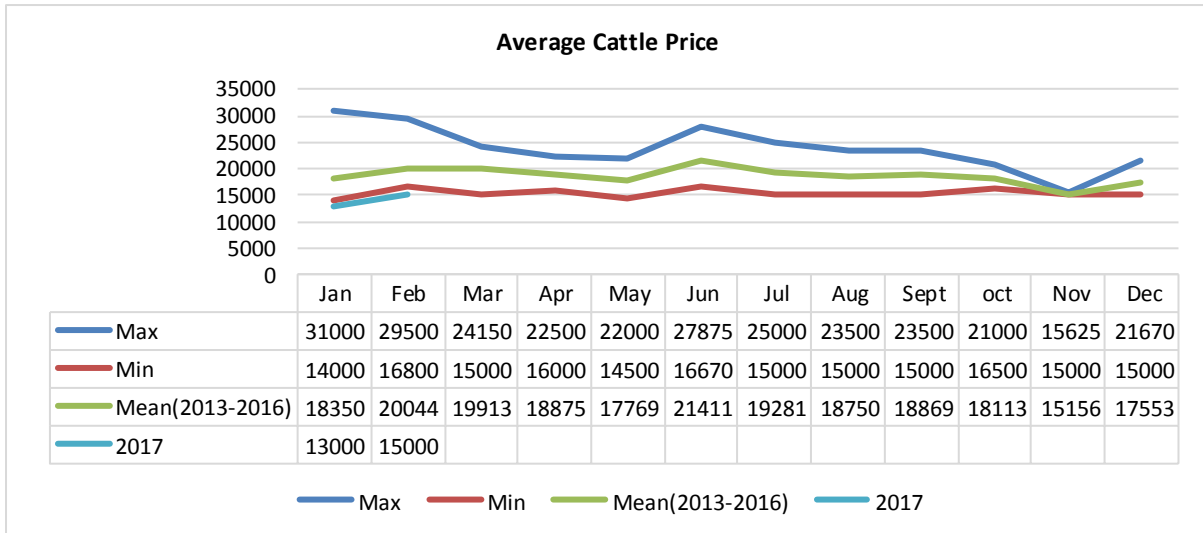
3.2.1 Stage and Condition of food Crops

- Main agricultural activity was harvesting of green grams (mostly in mixed farming livestock/Food Crop and marginal mixed farming zone) and land preparation across all the livelihood zones.

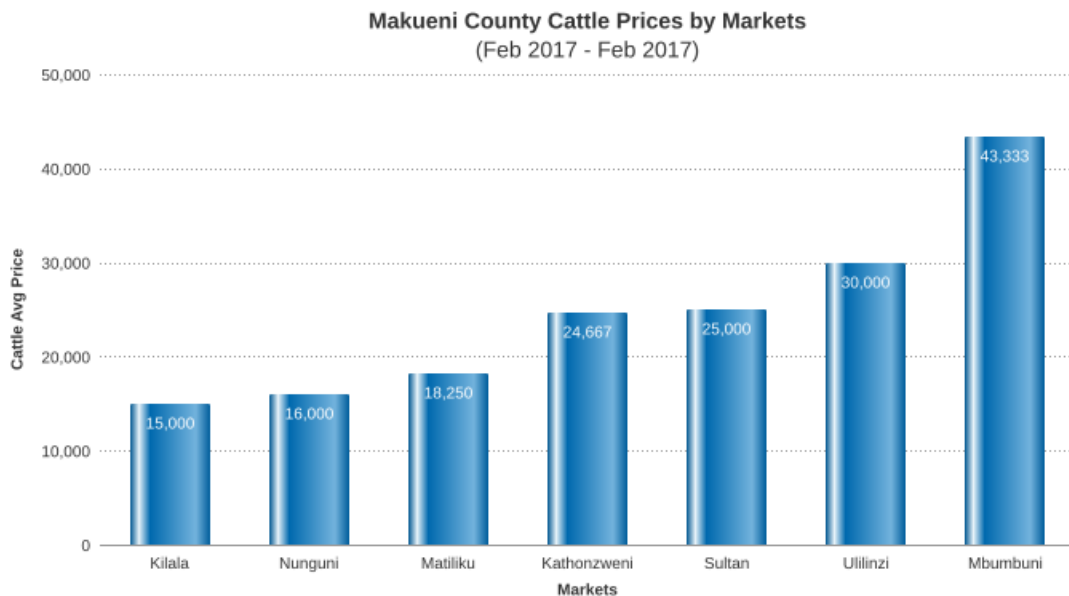
4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

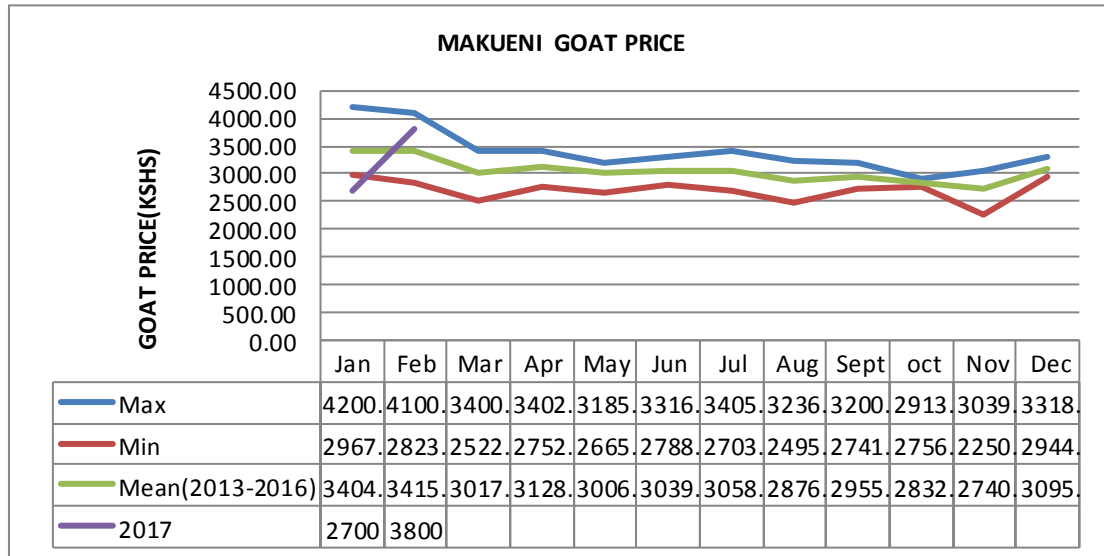
4.1.1 Cattle Prices



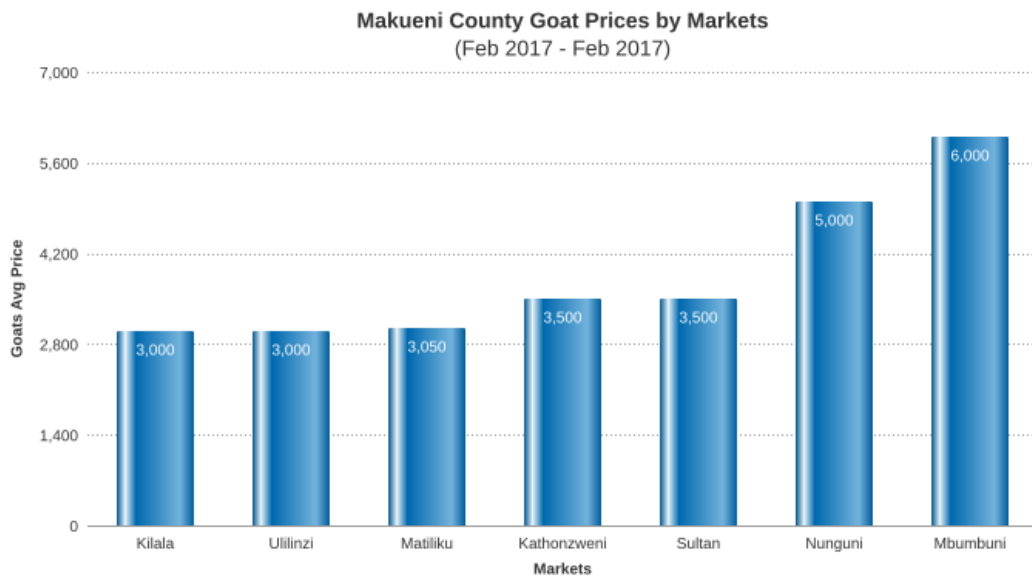
- Average farm gate prices of cattle increased slightly from KSh13000 to Ksh15000. Compared to a similar time last year and the long term mean the prices have been declining and this can be attributed to the decline in size of cattle.
- Market prices of cattle at different markets in the county were as follows:



4.1.2 Goat Prices

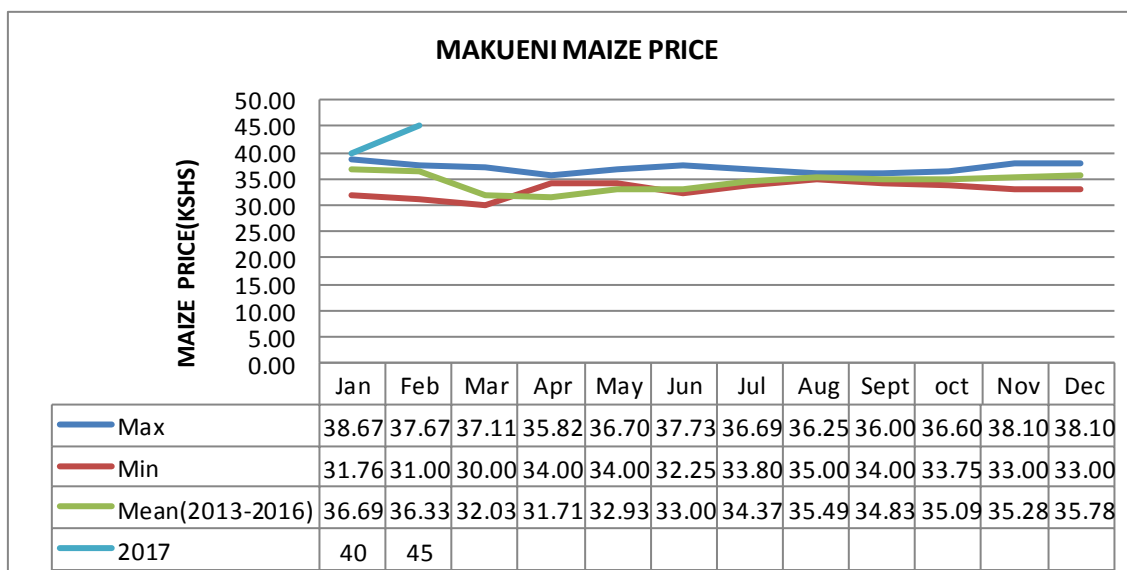


- The average farm-gate price of a goat increased to Ksh3800 from Ksh2700 and was relatively high than the long-term mean. This can be attributed to the good body condition of the shoats due to the availability of browse.
- Average goat market price was as follow in various markets across the county.



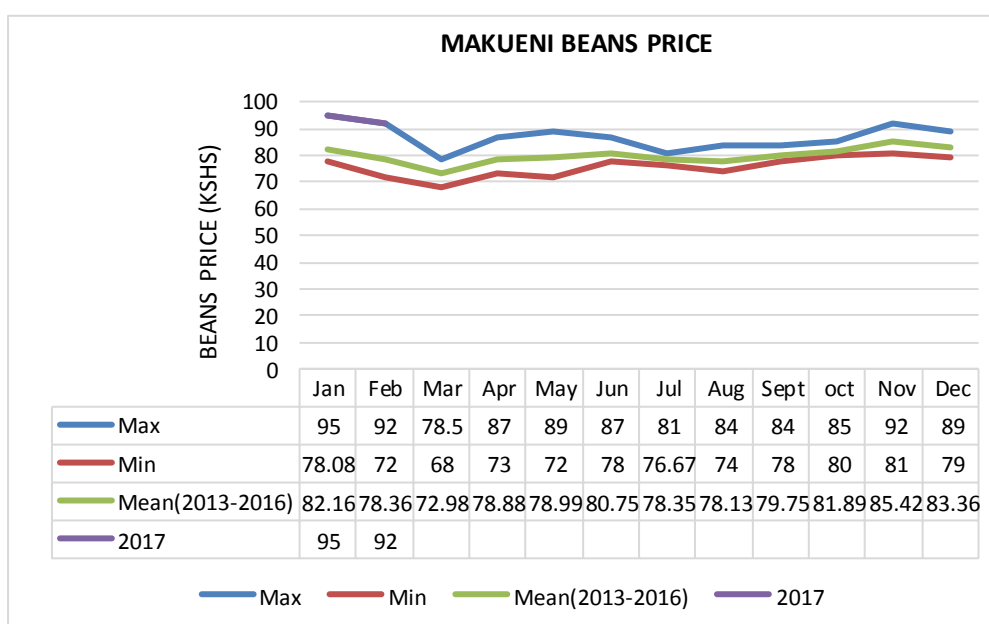
4.2 CROP PRICES

4.2.1 Maize



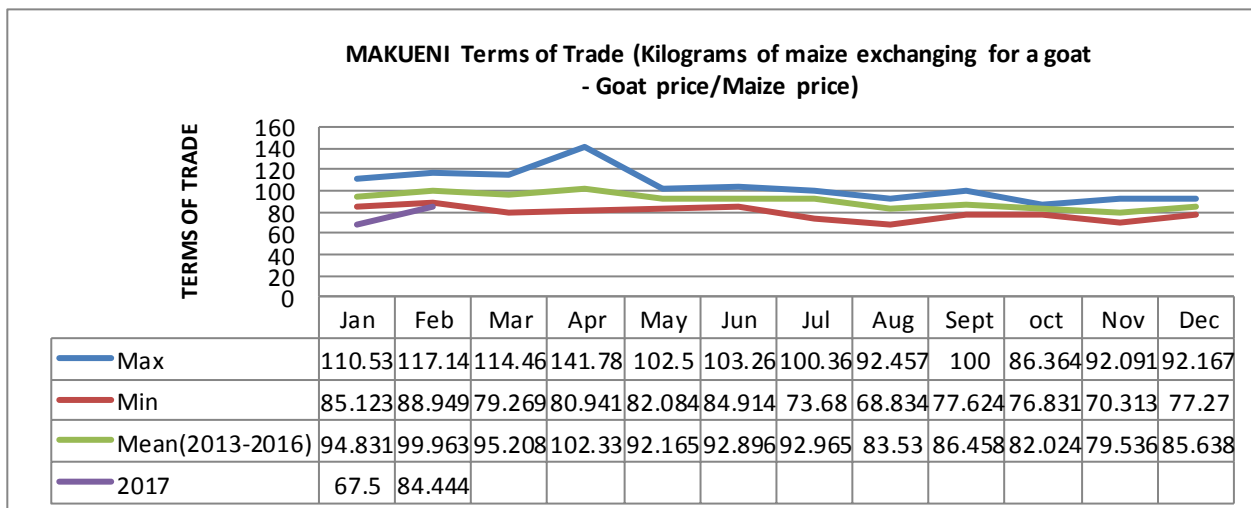
- The average market price of maize increased from Ksh40 to Ksh45. The increase in prices can be attributed to the diminished household stocks hence reliance on imports.
- Compared to the long term mean, the price is high and this is not normal at this time of the year.

4.2.3 Beans



- The average price of beans decreased by ksh2 from Ksh95 to Ksh92. The high prices are as a result of diminished stocks in households due to poor harvest. Compared to the long term average the price was relatively high.

4.3 Livestock Price Ratio/Terms of Trade



- Terms of trade was favorable at 84.4 implying that proceeds from a sale of one goat could purchase 84.74Kg of maize.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

Marginal mixed Farming zone

- Milk production was relatively equal to milk consumption in this zone, an average of 300-350mls (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).

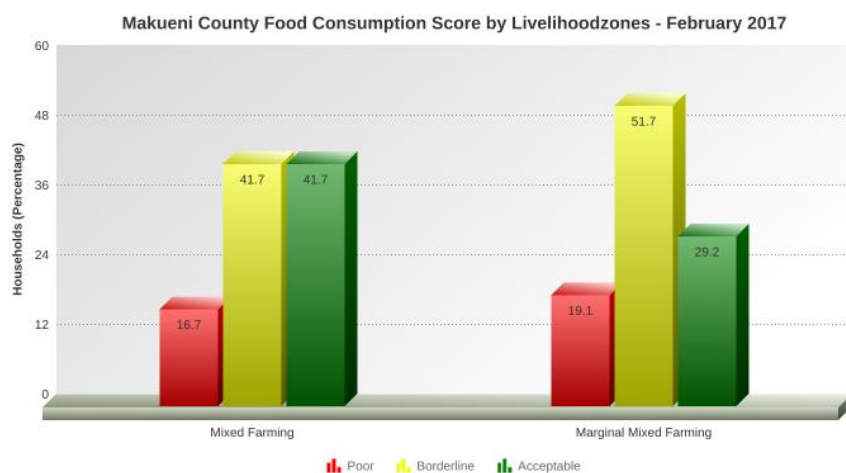
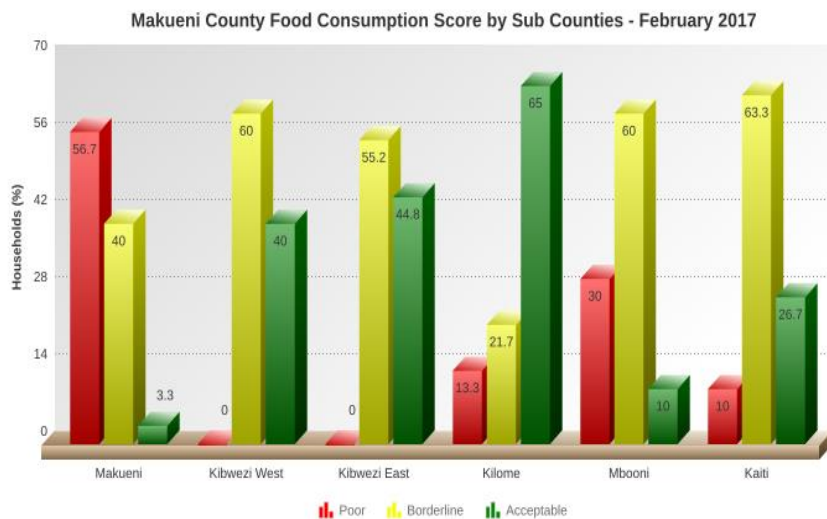
- Milk consumption per day in this zone was between 300mls to 500mls which was below normal.
- The current milk price is between Ksh55 to Ksh60 against the normal of Ksh50.

Mixed Farming Zone (Coffee/Dairy)

- Milk consumption is about 500mls to 700mls which is below normal. The average milk price was Ksh48 to Ksh60 against the normal of Ksh45.

5.2 FOOD CONSUMPTION SCORE

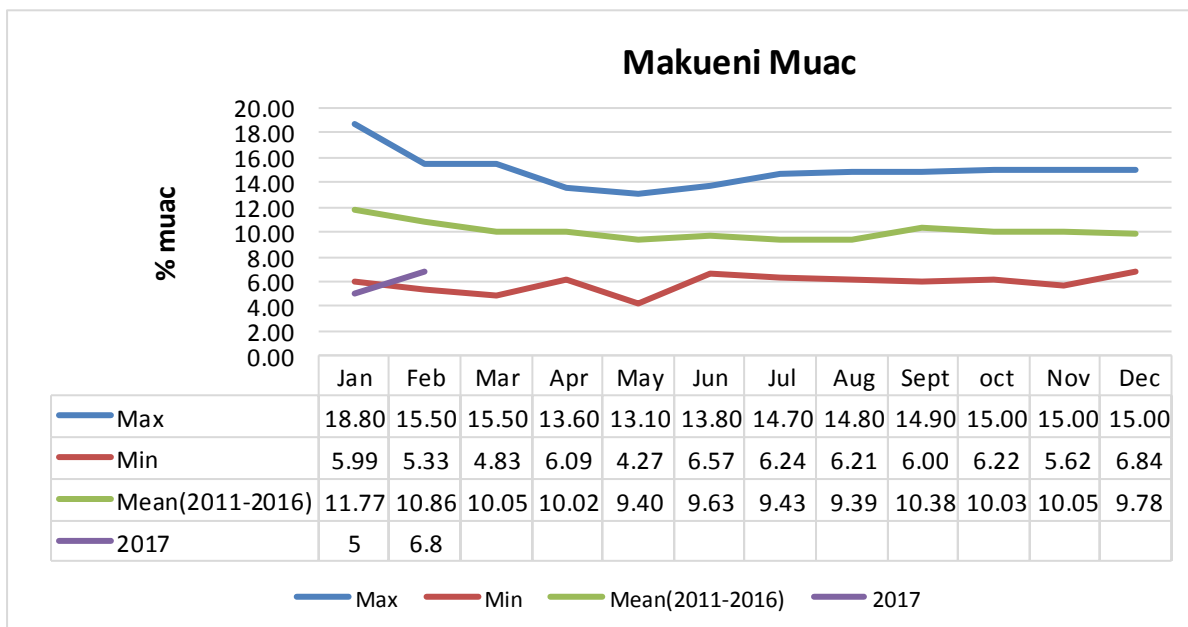
- From the 210 households sampled during the month of February, 37 of the households were found to have a poor consumption score, 96 were found to be at the borderline while 76 had an acceptable Food consumption score.



5.3 HEALTH AND NUTRITION STATUS

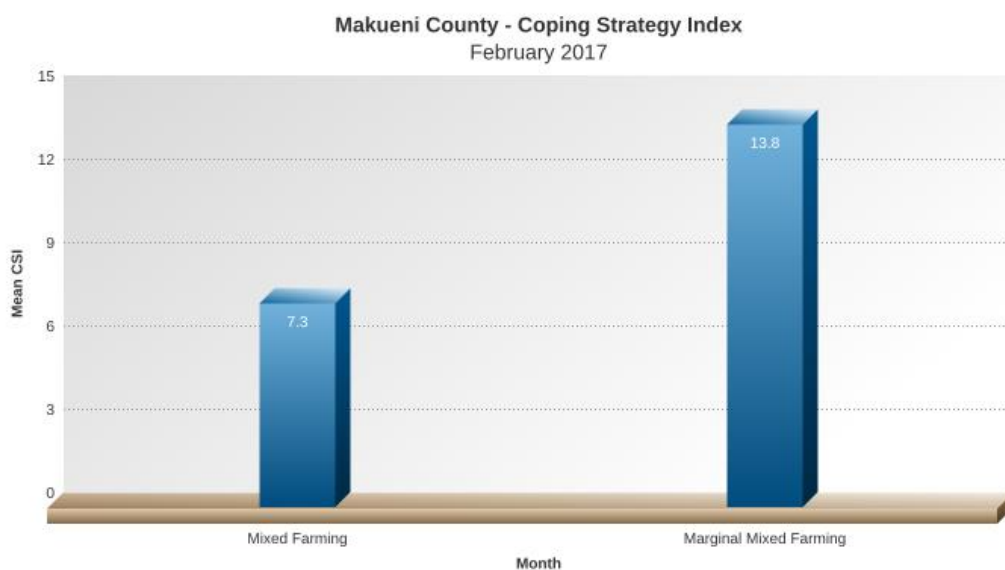
5.3.1 Nutrition Status

- The average percentage of children at risk of malnutrition slightly increased from 5 percent to 6.8 percent but remained within the normal ranges.
- The increase in malnutrition can be attributed to the decrease in dietary diversity mostly and the reduction in the amount of milk consumed mostly by the under-fives.
- The situation is expected to get worse as drought continues to set in.



5.3 COPING STRATEGIES

- In the Marginal Mixed Farming zone the CSI was 13.8 while that of Mixed Farming livelihood zone was 7.3, this implies that the food insecurity in the mixed farming was minimal compared to the marginal mixed farming zone.
- Most households were employing livelihood based coping strategies.



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.
- Harvesting and bailing of available pastures and making it accessible to farmers.
- Poultry vaccination in kathekani, Kalawa, Ngaamba and Mavindini.
- Poultry market linkage by GOM in conjunction with ASDP.
- Vaccination against CCPV was ongoing.

6.2 FOOD AID

- Food aid was received and distributed during the month under review. 4500(50) kg bags of maize, 555(90kg) bags of beans, 1500(50 kg) bags of rice 165(6×3), 150(24×0.5) litres are currently on distribution under the County Commissioner's office.

7. EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

- No human-wildlife conflict cases reported.

7.2 Migration.

- No migrations reported.

7.3 FOOD SECURITY PROGNOSIS

The increase in maize prices coupled with low purchasing power (average wage rate is between Ksh 200-300) has affected the food security situation negatively. The good livestock prices and the bumper green gram and cowpeas harvest have helped in cushioning the community at this time. The onset of the MAM rains will play a big role in reducing the grazing and watering distances which have been on an increase. According to Meteorological Department, onset of rainfall is expected to be as from second to third week of March. Should this be the case, the drought situation is set to improve since pasture will regenerate and the already dry planted seeds will germinate. However, should the onset delay, farmers could experience losses as some of them have already prepared their farms for planting in anticipation of the said onset. In such a scenario, where onset is delayed the county could experience an early alarm drought phase.

8. RECOMMENDATIONS

- Enhance livestock disease surveillance.
- Provision of drought tolerant seeds.
- Need for merchandize Agriculture.
- Capacity building on CA/GAPS (Zaipits, terraces, tree pits etc.)
- Promotion of Value Addition Crops (green grams and mangoes)