

National Drought Management Authority

MAKUENI COUNTY

DROUGHT EARLY WARNING BULLETIN FOR MAY 2017



A Vision 2030 Flagship Project



MAY EW PHASE



Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Mixed farming coffee/dairy	Normal	Stable
Mixed farming Food Crop/Livestock	Normal	Worsening
Marginal Mixed Farming	Alert	Worsening
County	Alert	Worsening
Biophysical Indicators	Value	Normal Ranges
VCI-3Month	33.52	>35
State of Water Sources	5	5
Production indicators	Value	Normal
Crop Condition	Podding/Tarselli ng-cob formation	Good
Livestock Body Condition	4-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	>80
Milk Consumption	1.2 L	1.2 litres
Return distance to water sources	4.5Km	3.4 Km
Cost of water at source (20 litres)	KSh 3-5	KSh 3
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	7.0	<12.9
Coping Strategy Index	14	<10

Drought Situation & EW Phase Classification

Biophysical Indicators

- The onset of the MAM rains was poor and progression has ranged from fair to good.
- The month of May was characterized with hot and rainy days.
- The County recorded an average of 93.8 mm of rainfall in 7 wet days.
- The County experienced moderate vegetation deficit(VCI of 33.52)
- The quantity and quality of pasture was good in the Mixed farming zone while in the Marginal mixed farming zone it was fair.
- The state of water sources in rivers, pans and dams was good mostly in the Mixed farming while in the Marginal mixed farming zone it was fair.

Socio Economic Indicators (Impact Indicators)

- The body condition for livestock ranged from fair to good across the county.
- Terms of trade were unfavorable at 58 which is below normal.
- The percentage of children at risk of malnutrition was 7 which is within the normal range.
- CSI for the County was 14 implying high coping mechanisms.

Seasonal Calendar

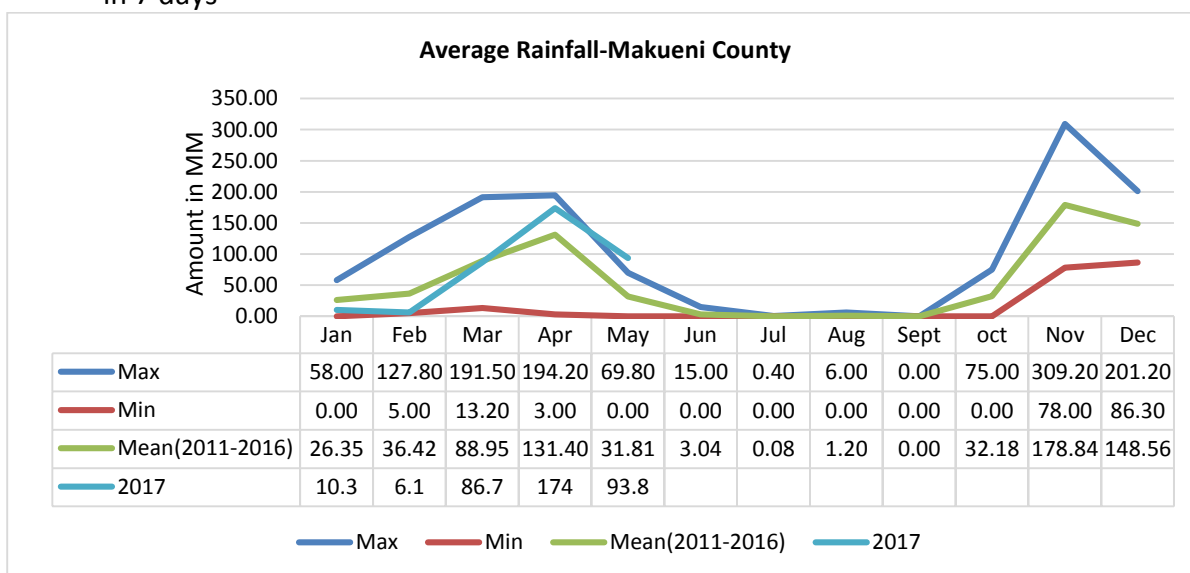
<ul style="list-style-type: none"> ▪ Short rains harvests ▪ Short dry spell ▪ Reduced milk yields ▪ Increased HH Food Stocks ▪ Land preparation 	<ul style="list-style-type: none"> ▪ Planting/Weeding ▪ Long rains ▪ High Calving Rate ▪ Milk Yields Increase 	<ul style="list-style-type: none"> ▪ Long rains 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

AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

- **Mixed Farming (coffee/dairy/irrigation):** Ilima received 80.2 mm in 8 days while Tulimani received 92.6 mm in 7 days. Average of 86.4 mm in 10 days for the Livelihood zone.
- **Mixed Farming (cotton/livestock/food crop):** Makuli received 57.1 mm in 8 wet days.
- **Marginal Mixed Farming (MMF) Zone:** Kalawa received 46 mm in 2 days, Kathonzweni received 80.1 mm in 6 days, Makindu received 92.5 mm in 3 days, and Kibwezi received 16.5 mm in 3 wet days. Average of 54.7 mm in 4 wet days for the livelihood zone.
- The average amount of rainfall received in the county during the month of May is 66.4 mm in 7 days



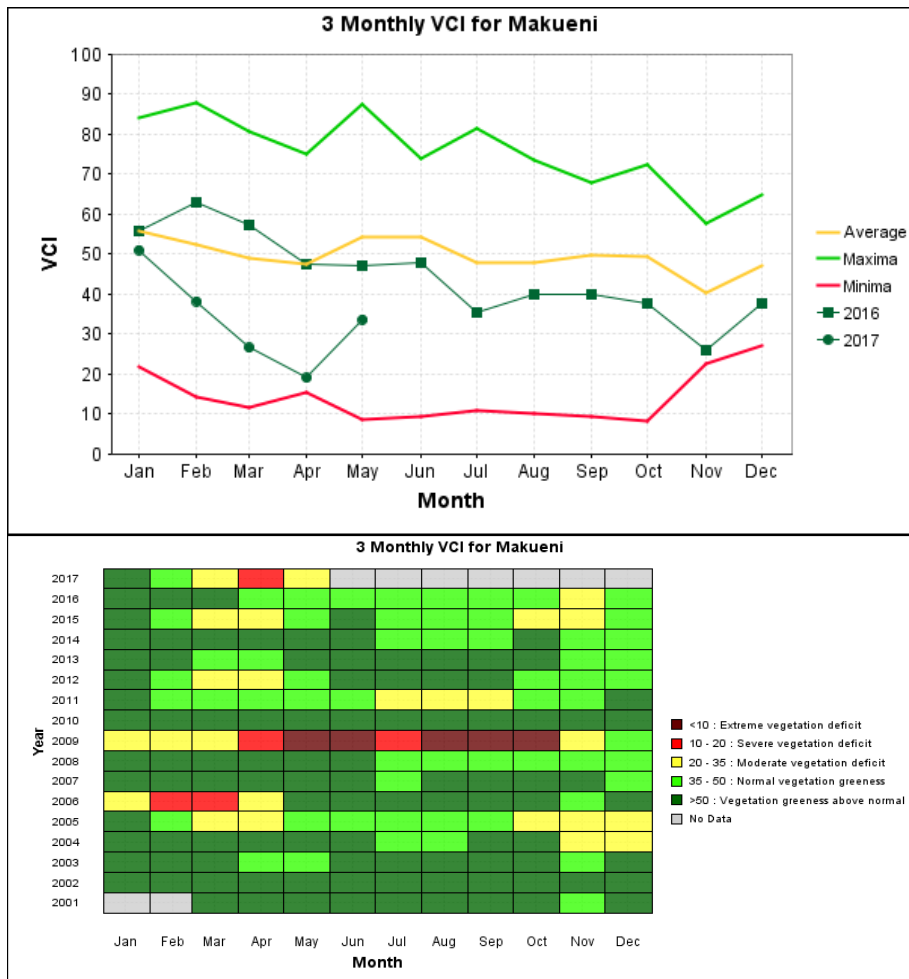
- Although the rainfall received was above average, the temporal distribution was poor since a lot of rain was received within a short duration of time. Spatially, the rain was fairly distributed.

2. IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index(VCI)

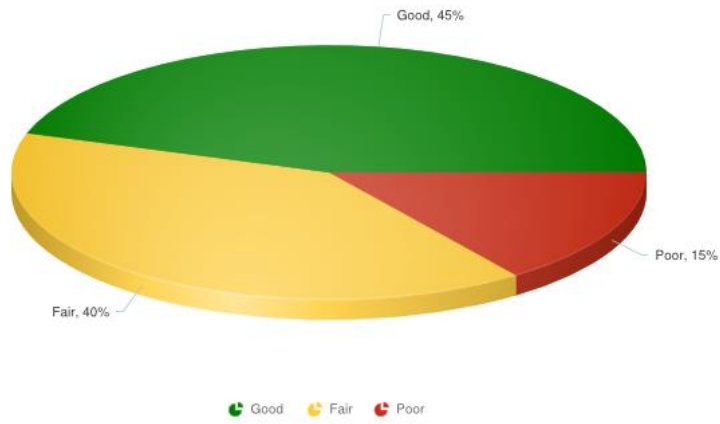
The 3-month average VCI for the County was 33.52 implying moderate vegetation deficit for the County. The improvement in VCI was triggered by the rains received during the month under review.



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 the condition of pasture was fair.
- Browse condition was good across all the livelihood zones in the county.

Makueni Pasture Condition
(May 2017 - May 2017)

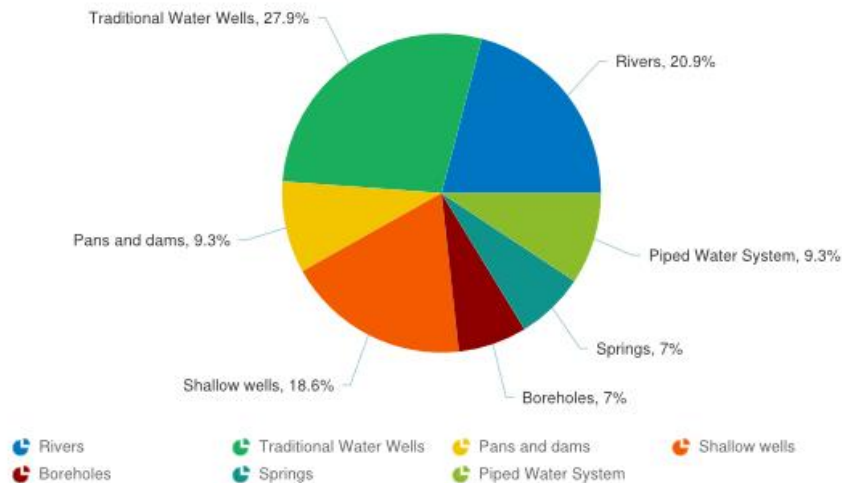


2.2 WATER RESOURCE

2.2.1 Sources

- Main sources of water for the month under review were: traditional River wells at 28%, rivers at 21%, shallow wells at 19%, piped water schemes at 9%, boreholes and springs each at 7%.

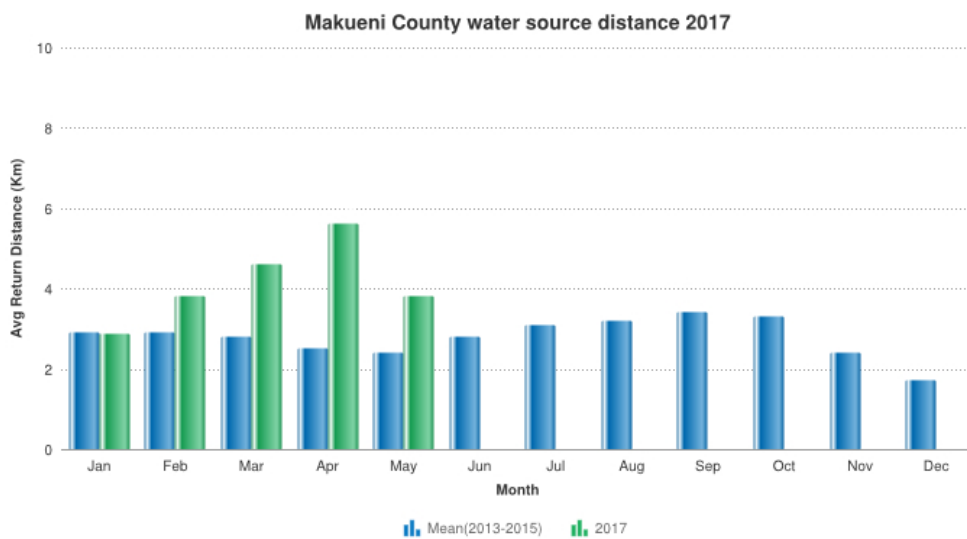
Makueni County Water sources
(May 2017)



- Recharge of surface water sources was adequate both in the Mixed farming and most parts of the marginal mixed farming livelihood zone.
- Residents in a few areas in the marginal mixed farming zone mostly along the Athi belt had to walk for longer distances in search of water.
- Average cost of a 20 litre Jerry can at the water kiosks was between 3 to 5 Shillings.

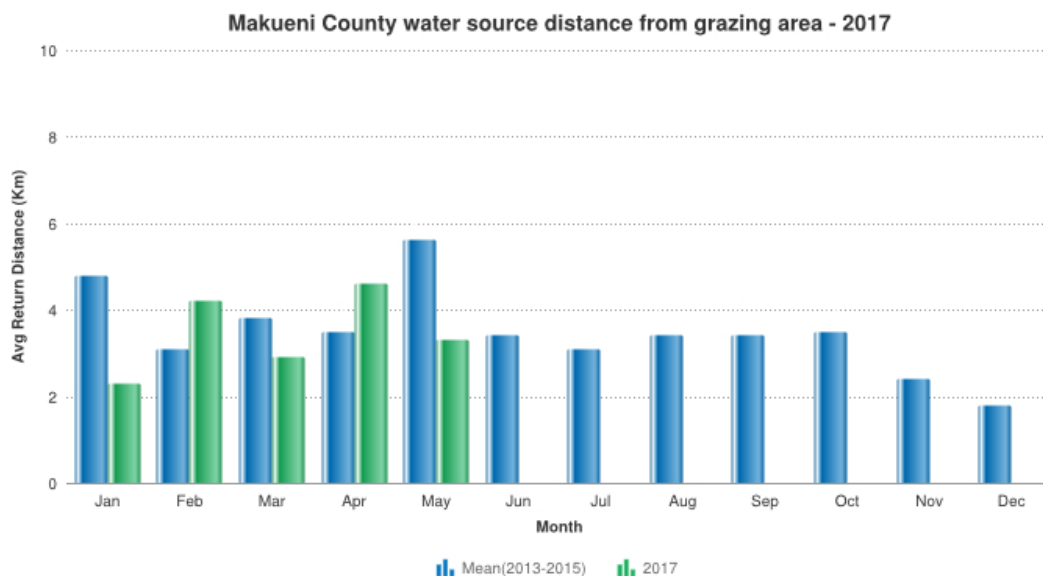
2.2.2 Household access and Utilization of water

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



- The average household return distance decreased from 5.6Km to 3.8Km compared to a similar time last year the distances were slightly higher.
- Compared to last month, the situation had improved since water sources both underground and surface had been recharged well.

2.2.3 Livestock access to water



- Distances to water sources for livestock had greatly decreased from 4.6km to 3.3km and this was a result of the rains received.
- This distance was less than the (2013-2015) long-term average of 5.8km.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- The current livestock body condition for cattle is borderline; fore-ribs not visible and good to fair for goat across in all the livelihood zones. This body condition is expected to improve more following the reduction in water distances and availability of pasture and browse.

3.1.2 Livestock Diseases

- No major livestock disease outbreaks reported.

3.1.3 Milk Production

Milk availability

- Milk availability in all the livelihood zones was low but normal.
- Compared to last month the situation is better but is expected to improve more due to the decrease in watering distance and the availability of pasture mostly in the Mixed farming livelihood zone.

Marginal mixed Farming zone:

- Most Households in this zone rely on goats’ milk whose yield was between 100-250mls per day. Local Zebu also produced 100 to 200mls but the situation is expected to improve in the next one month due to availability of pasture.

Mixed farming (Food Crop/Livestock):

- In this zone Zebu cattle and crossbreeds accounted for most milk produced. Availability was approximately 400mls-600mls compared to a normal of 500mls.

Mixed Farming (Coffee/Dairy):

- The production of milk per day per household ranged from 0.75litres to 1.5 litre per day against a normal of 1litre.

3.2 RAIN-FED CROP PRODUCTION

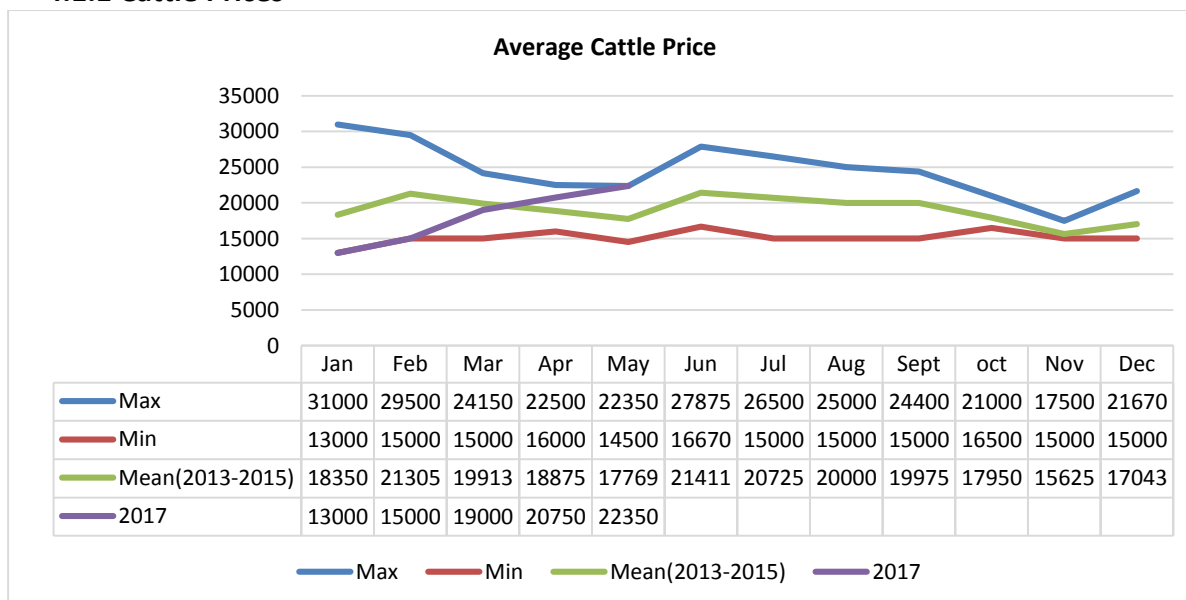
3.2.1 Stage and Condition of Food Crops

- Main agricultural activity in the marginal mixed livelihood zone was weeding and crops were at their various vegetative stages of growth. Cereals like maize were at the tussling and cob formation stage in most areas across the county, while legumes were at podding and others at flowering stage. In the hilly masses in areas such as Kitaingo in Kilome, both cereals and legumes were at grain-filling stage.
- Although above-average rainfall was received, we expect the harvest to be below average. This is due to the late onset and poor temporal distribution of the rain that caused many farmers in the mid and lower zones not to plant.
- Some measures had been taken to control the cases and the spread of the army worms which had reported in some parts of the County.

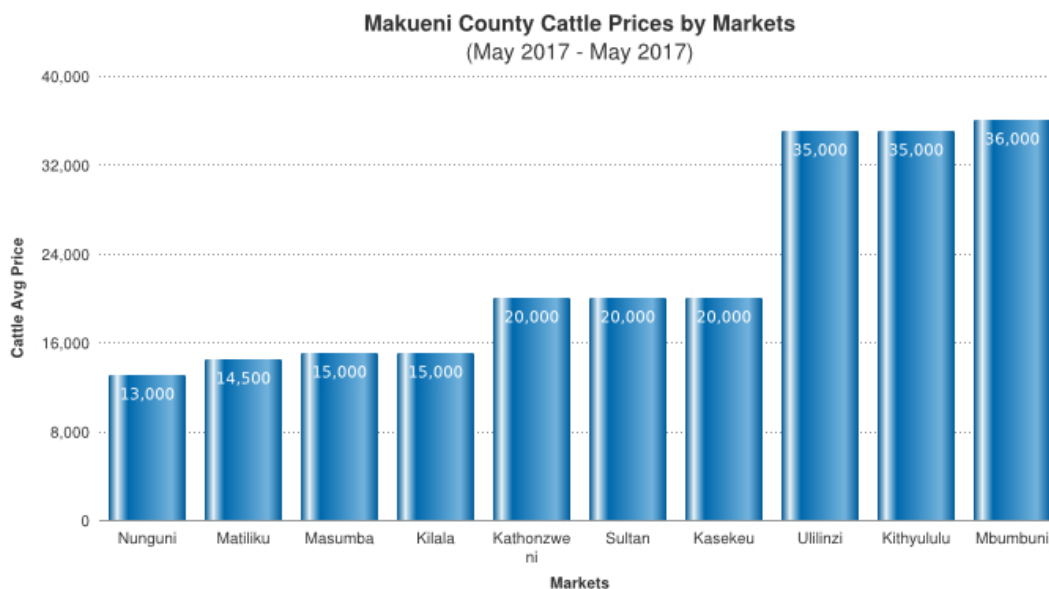
4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

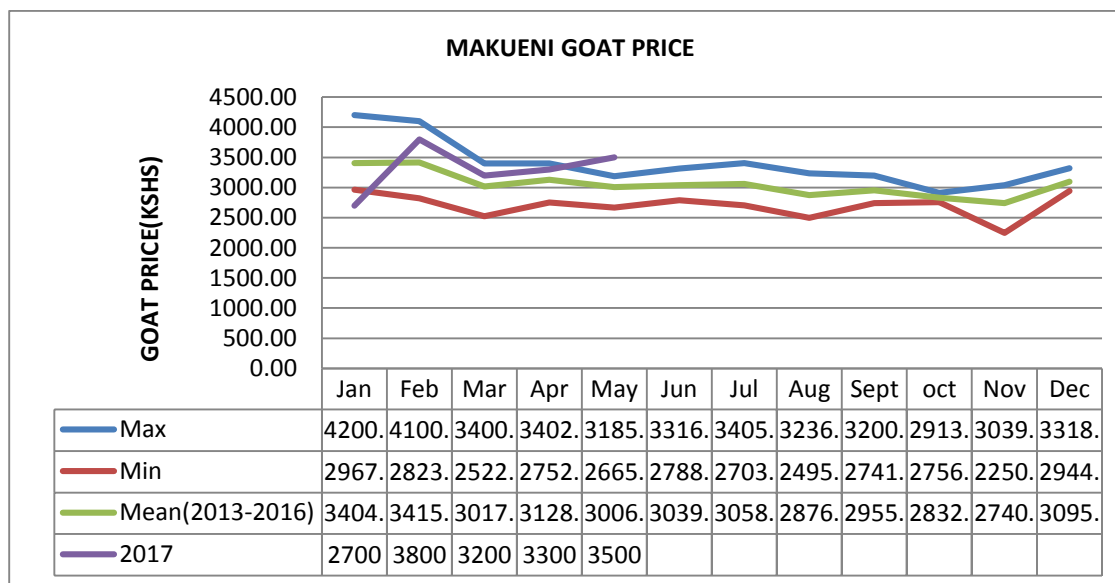
4.1.1 Cattle Prices



- Average farm gate prices of cattle increased from KSh20750 to Ksh22350. Compared to the (2013-2015) long term average, the current price was higher than that of last month. This was attributed to the improvement in body condition due to the availability of pasture and water for livestock.
- The price of cattle at different markets was as follows.

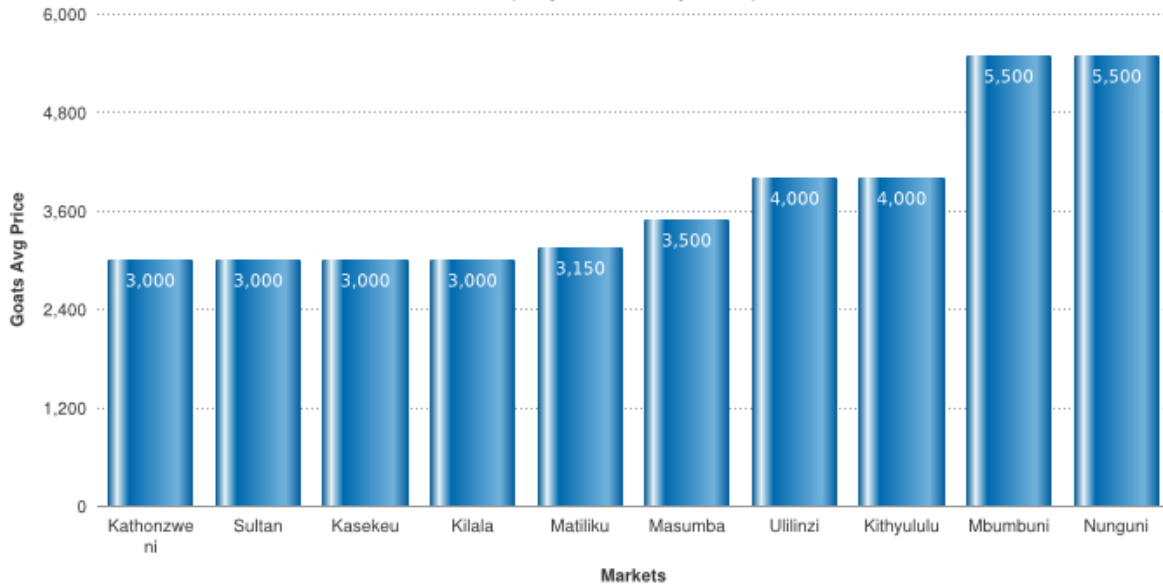


4.1.2 Goat Prices



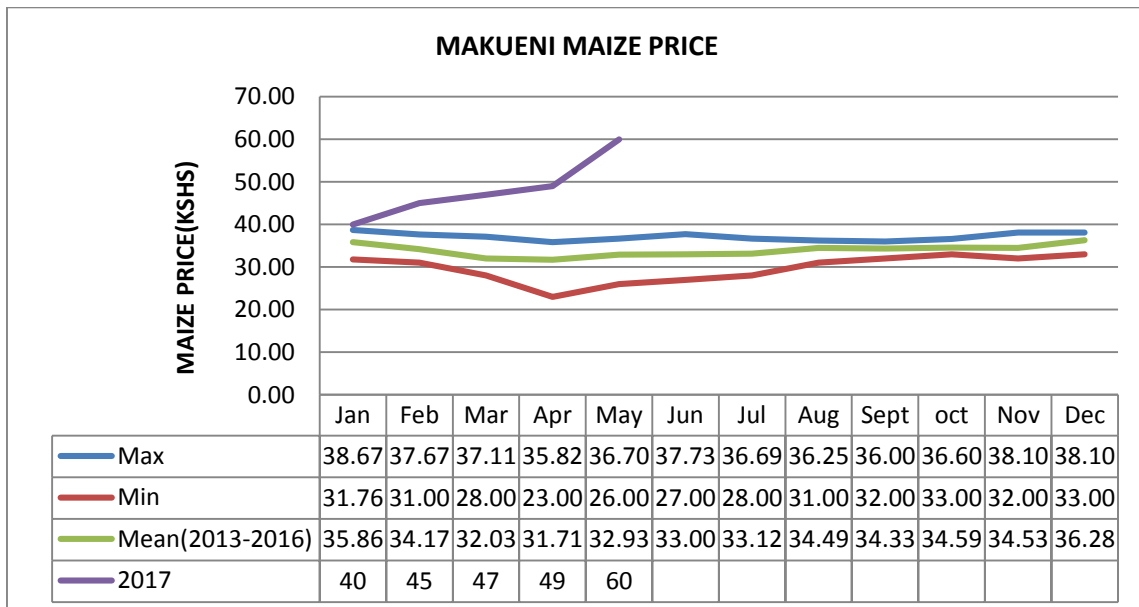
- The average farm-gate price of a goat increased from Ksh3300 to Ksh3500 and was higher than the (2013-2016) long-term mean and that of last month. This can be attributed to the good body condition of shoats due to the availability of browse.
- Average goat market price was as follows in various markets across the county.

Makueni County Goat Prices by Markets
(May 2017 - May 2017)



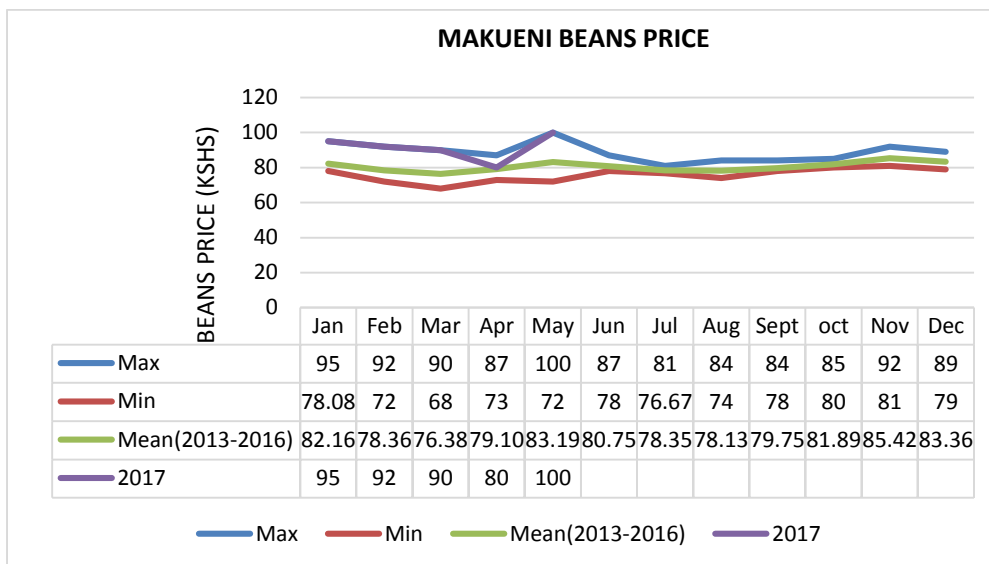
4.2 CROP PRICES

4.2.1 Maize



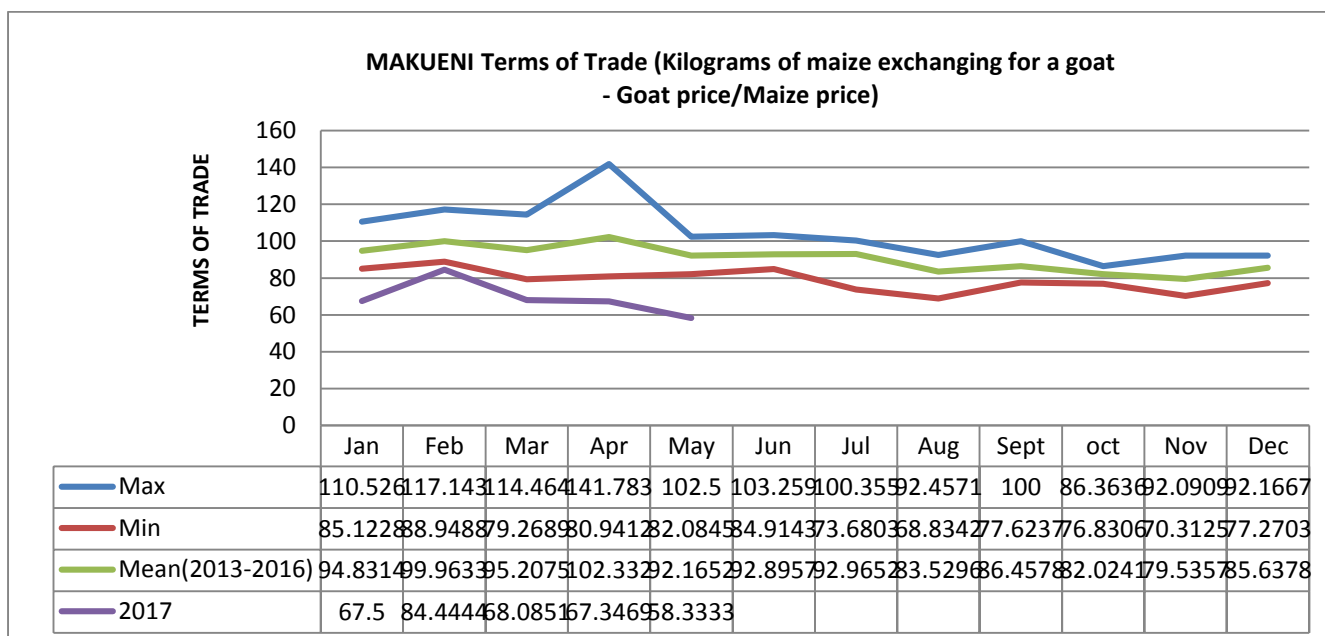
- The average market price of maize increased from Ksh49 to Ksh60 from the previous month. The price remained way higher than the (2013-2016) long-term average and that of last month. The high prices was attributed to the shortage of the product and the high demand for the product.
- Compared to the 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 was Ksh100 in most parts of the County. The high prices are as a result of the shortage of the commodity and the increased demand for the same.

4.3 Livestock Price Ratio/Terms of Trade



- Terms of trade reduced from 67 the previous month to 58 implying that from the sale of one goat, a farmer could purchase 58Kg of maize. The ToT remained relatively low due to the high maize prices.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

Marginal mixed Farming zone

- Milk produced was equivalent to milk consumed in this zone, an average of 350-450mls (Which was below normal).
- Current milk price was between Ksh60 to Ksh70 per litre against the normal of Ksh55 and this has limited accessibility to majority of the households.

Mixed farming Zone (Food crop/Livestock).

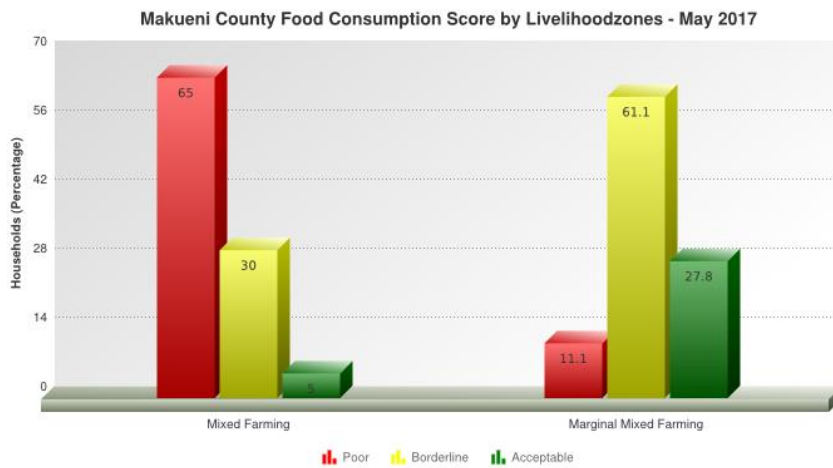
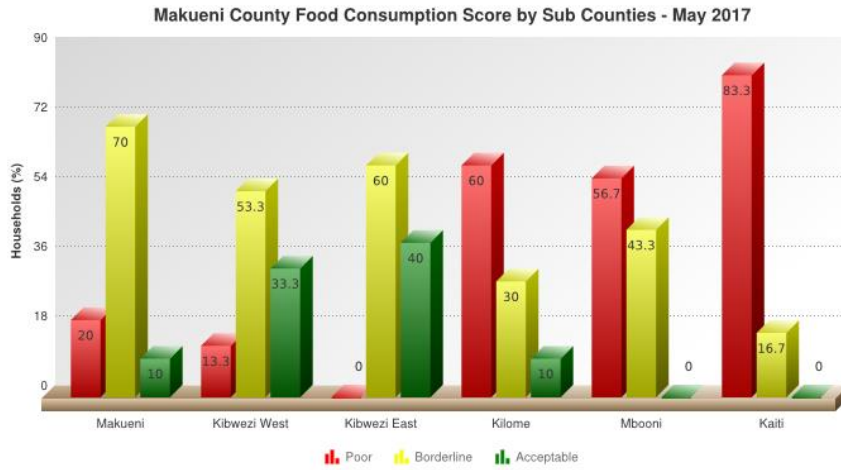
- Milk consumption per day in this zone was between 300mls to 500mls which was below normal.
- The current milk price is between Ksh55 to Ksh60 against the normal of Ksh50.

Mixed Farming Zone (Coffee/Dairy)

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

5.2 FOOD CONSUMPTION SCORE

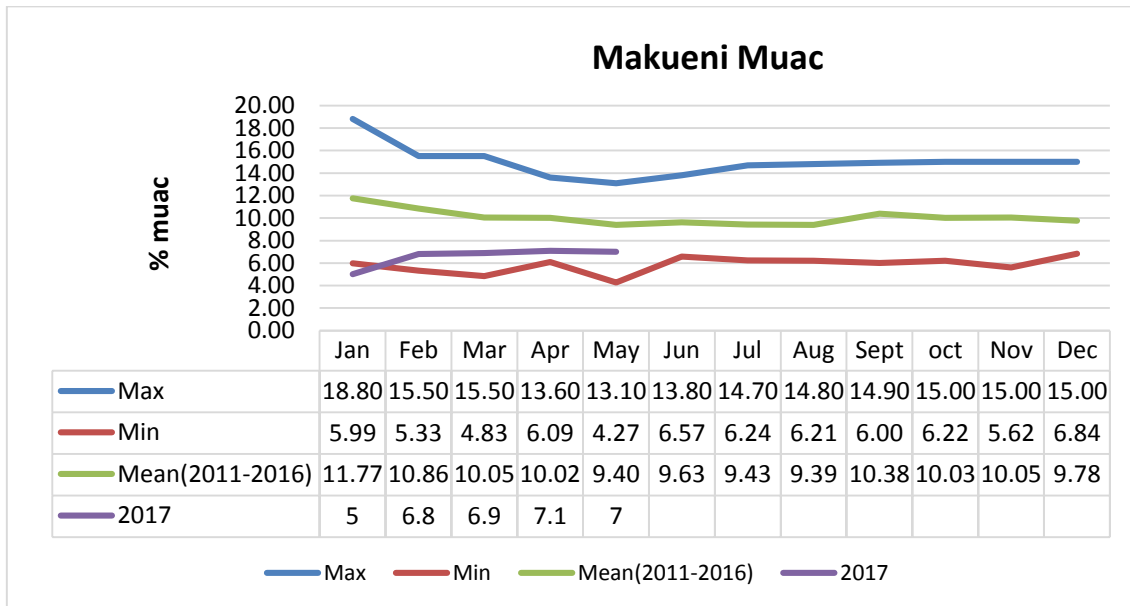
- From the 210 households sampled, 88 were found to have a poor consumption score, 91 were found to be at the borderline while 31 had an acceptable Food consumption score.



5.3 HEALTH AND NUTRITION STATUS

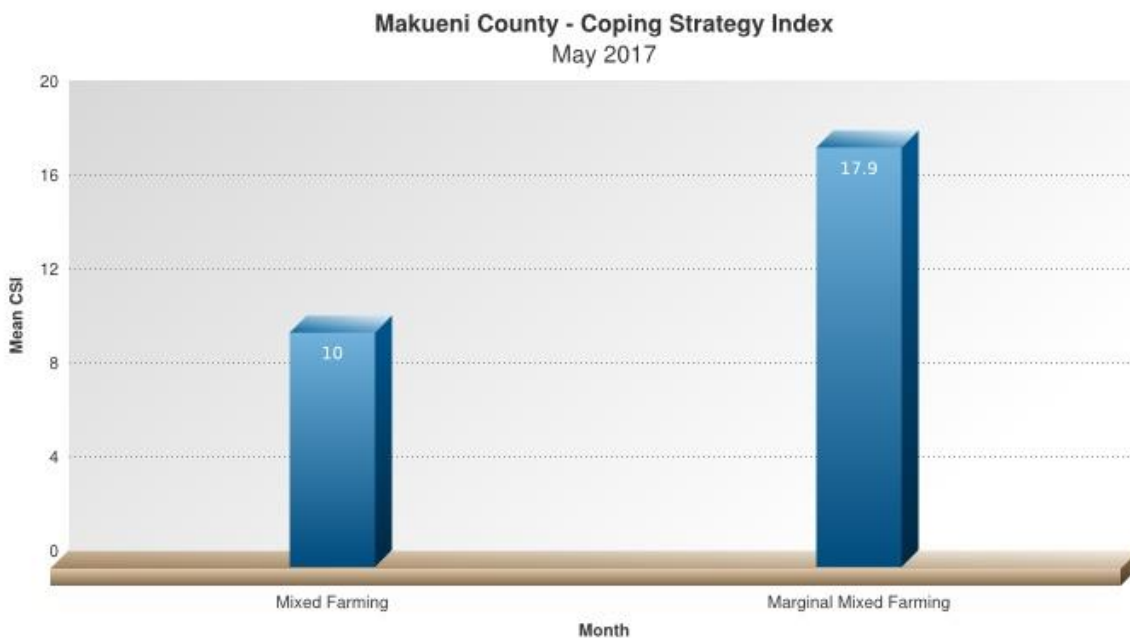
5.3.1 Nutrition Status

- The average percentage of children at risk of malnutrition slightly decreased from 7.1 percent to 7.0 per cent but remained within the normal ranges.
- The situation is expected to improve with the availability of 'kunde' and availability of milk due to the MAM long rains.



5.3 COPING STRATEGIES

- The CSI in Mixed farming livelihood zone was 10 while in the Marginal mixed farming zone it was 17.9 implying that more coping mechanisms were being employed in MMF zone than MF zone.
- Most households were employing livelihood based coping strategies.



6.0 CURRENT INTERVENTION MEASURES (ACTION)

6.1 NON-FOOD INTERVENTIONS

- Promotion of water harvesting technologies by County Government of Makueni.
- Asset Creation Projects by GoK/ WFP, World Vision, Kenya Red Cross Society and NDMA.
- Mango, green grams and indigenous chicken value chain promotion and market linkage by County Government of Makueni in conjunction with ASDP.

6.2 FOOD AID

- Food aid was received during the month under review. 800 bags (50kg) bags of maize, 200 bags (90 kg), 50 cartons (6×3 litres) and 20 bales (25kg) of nutrition supplements were received under the Ministry of Special Programmes and are currently being distributed by 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

Other than the increase in maize and bean prices, all other indicators have shown improvement over the last one month. Water sources have been recharged adequately. Although above-average rainfall was received, we expect the harvest to be below average. This is due to the late onset and poor temporal distribution of the rain that caused many farmers in the mid and lower zones not to plant. Browse and pasture has adequately regenerated and this is already evident in the improved body condition of livestock. No livestock disease outbreak has been reported so far. The situation should remain relatively stable for the next two months. However, a close eye should be kept on market prices for foods.

8. RECOMMENDATIONS

- Promotion of growth of Traditional High Value Crops (THVCs) which are best suited to grow in the area and have a good harvest.
- Enhancement of water harvesting technology to include structures that run round the clock (season to season).