

National Drought Management Authority

MAKUENI COUNTY

DROUGHT EARLY WARNING BULLETIN FOR JANUARY 2018



A Vision 2030 Flagship Project



JULY EW PHASE

Drought Status: **NORMAL**



Shughuli za kawaida

Drought Situation & EW Phase Classification

Biophysical Indicators

- There was no significant amount of rainfall recorded and this is normal at this time of the year.
- The quantity and quality of Pasture and browse ranged from fair to good across the Mixed farming livelihood zones and was worsening in the Marginal mixed farming livelihood zone due to a weed infestation (an invasive ipomoea species).
- Water availability was normal across the county though with a declining trend. Waiting times at most watering points were normal

Socio Economic Indicators (Impact Indicators)

- The Livestock body condition ranged from fair to good across the Mixed Farming livelihood zones. However, in the MMF livelihood zone, the condition was declining availability of feed resources owing to the infestation by the weed.
- Milk production and consumption remained fair attributed to the available pasture and water for livestock.
- Terms of trade were above average at 113.6 in favour of livestock keepers as a result of the prevailing good body conditions and hence good prices.
- Average distances to watering sources for livestock was 4.7Km an increase from 3.9 Km attributed to diminishing water sources as a result of breached dams and drying up of small water pans and seasonal rivers.
- The percentage of children at risk of malnutrition remained relatively stable from the previous month.
- The County CSI was within the normal an implication that most households were food secure.

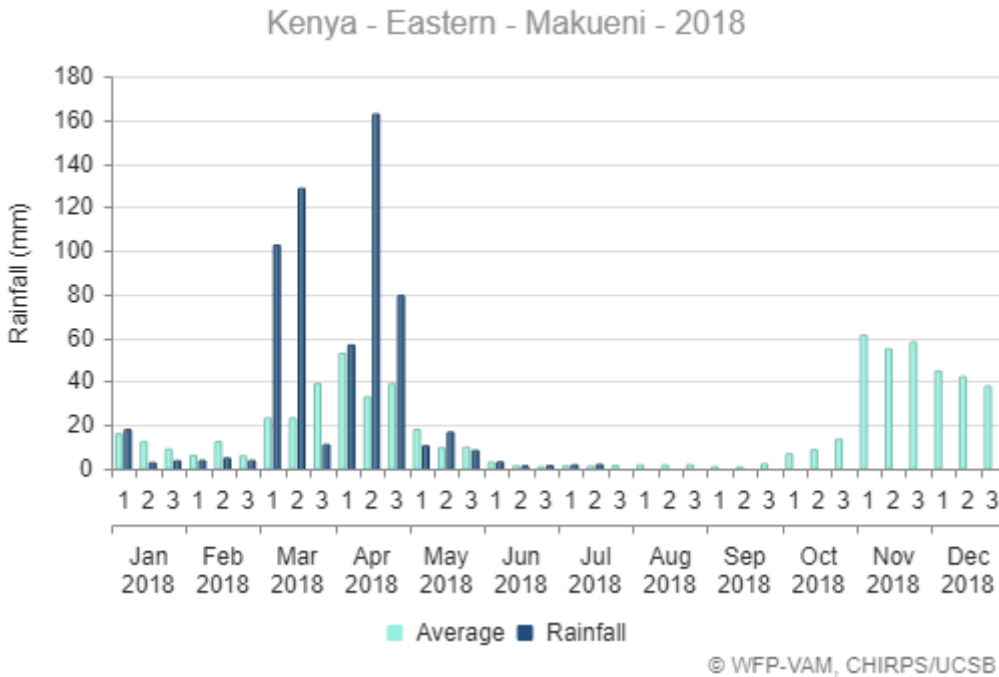
| Livelihood Zone | Phase | Trend |
|--|----------|----------------------------------|
| Mixed farming coffee/dairy | Normal | Stable |
| Mixed farming Food Crop/Livestock | Normal | Worsening |
| Marginal Mixed Farming | Normal | Worsening |
| County | Normal | Worsening |
| Biophysical Indicators | Value | Normal Ranges |
| Rainfall (% of Normal) | Nil | Nil |
| VCI-3Month | 98.29 | 47 |
| State of Water Sources | 5 | 5 |
| Production indicators | Value | Normal |
| Crop Condition | | Fair |
| Livestock Body Condition | 6-Normal | 6-Normal |
| Milk Production | 1.6 | 1.8 Litres |
| Livestock Migration Pattern | Normal | In migration from Kajiado county |
| Livestock deaths (from drought) | No death | No death |
| Access Indicators | Value | Normal |
| Terms of Trade (ToT) | 113.6 | 93 |
| Milk Consumption | 1.1 | 1.2 litres |
| Return distance to water sources | 4.1Km | 3.1 Km |
| Cost of water at source (20 litres) | Ksh 3-5 | Ksh 3 |
| Utilization indicators | Value | Normal |
| Nutrition Status, MUAC (% at risk of malnutrition) | 9.4 | 6.7 |
| Coping Strategy Index (CSI) | 3.4 | <10 |

| | | | | | | | | | | | |
|--|---|---|--|-----|-----|-----|-----|------|-----|-----|-----|
| <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 harvests ▪ Planting/weeding | | | | | | | | |
| | | | | | | | | | | | |
| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec |

1. CLIMATIC CONDITIONS

1.1 RAINFALL PERFORMANCE

- There was no significant amount of rainfall during the month under review as illustrated below. Only slight drizzles were experienced during the month.



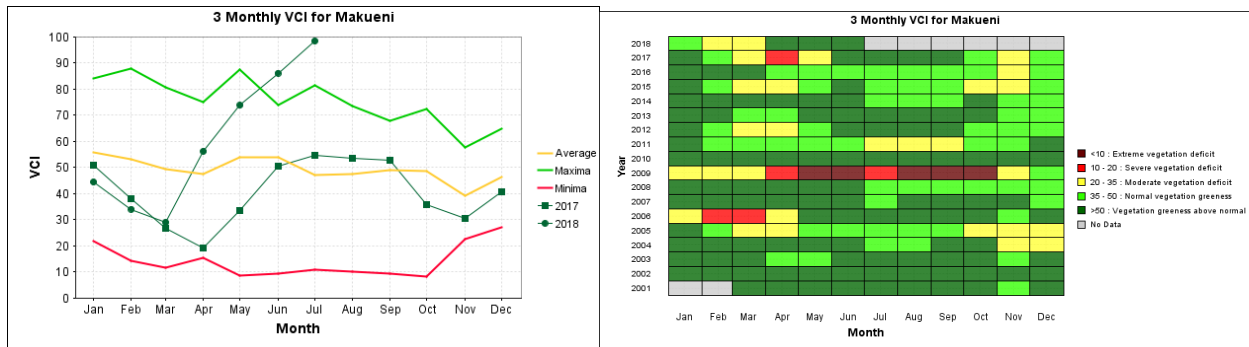
© WFP-VAM, CHIRPS/UCSB

Figure 1: Makueni July average rainfall

2. IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index(VCI)



The vegetation condition has tremendously improved since the April rains. The County recorded an average VCI of 98.29. A VCI of 85.98 was recorded the previous month. This was a result of the slight drizzles experienced during the month under review.

Figure 2: Makueni July VCI matrices

2.1.2 Pasture and Browse

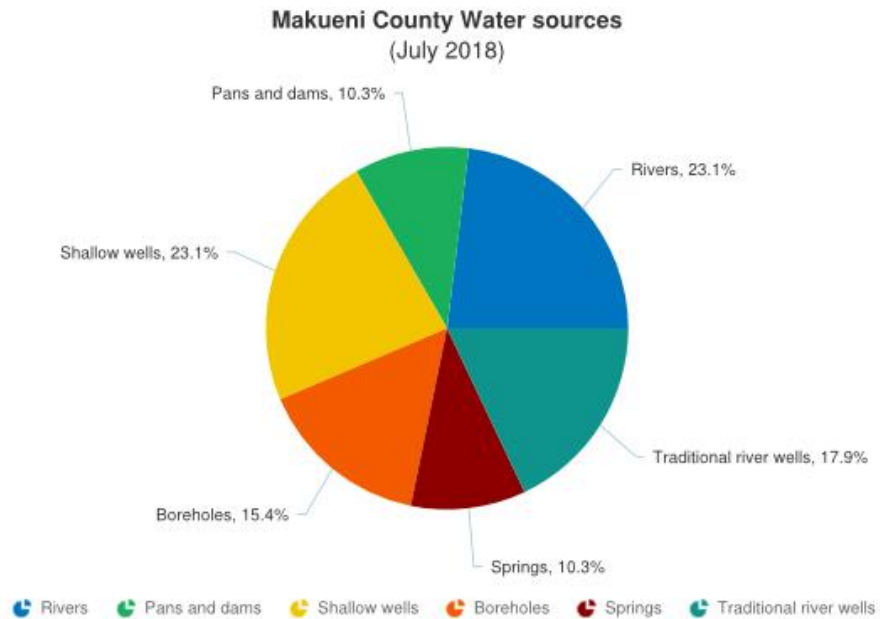
- The quantity and quality of Pasture and browse ranged from fair to good across the mixed Farming Livelihood zones. In parts of the Marginal Mixed Farming livelihood zones, the hot and dry conditions

have resulted in a deteriorated pasture quality, coupled with invasion of a weed (the unpalatable, invasive ipomoea species) that has deterred the growth of the grass.

- The available pasture is expected to last the county until the onset of the OND short rains.

2.2 WATER RESOURCE

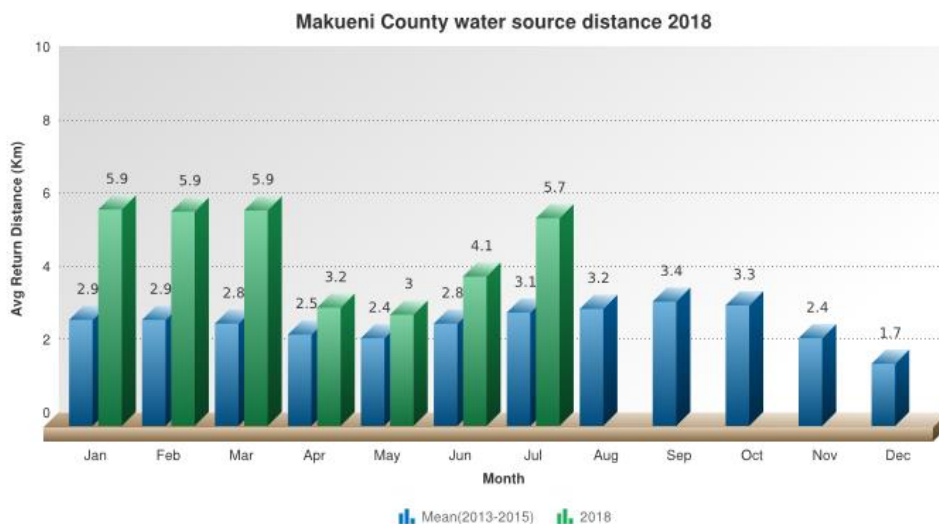
2.2.1 Sources



- Main sources of water in the county during the month were: rivers, shallow wells, traditional river wells, boreholes pan & dams and springs. Other water sources included piped water schemes mainly in major urban centres.
- Small dams and pans in the Marginal mixed
- Average cost of a 20 litre Jerrycan at the water kiosk ranged from Ksh3 to Ksh5 against the Normal price of Ksh3 across all the three livelihood zones.

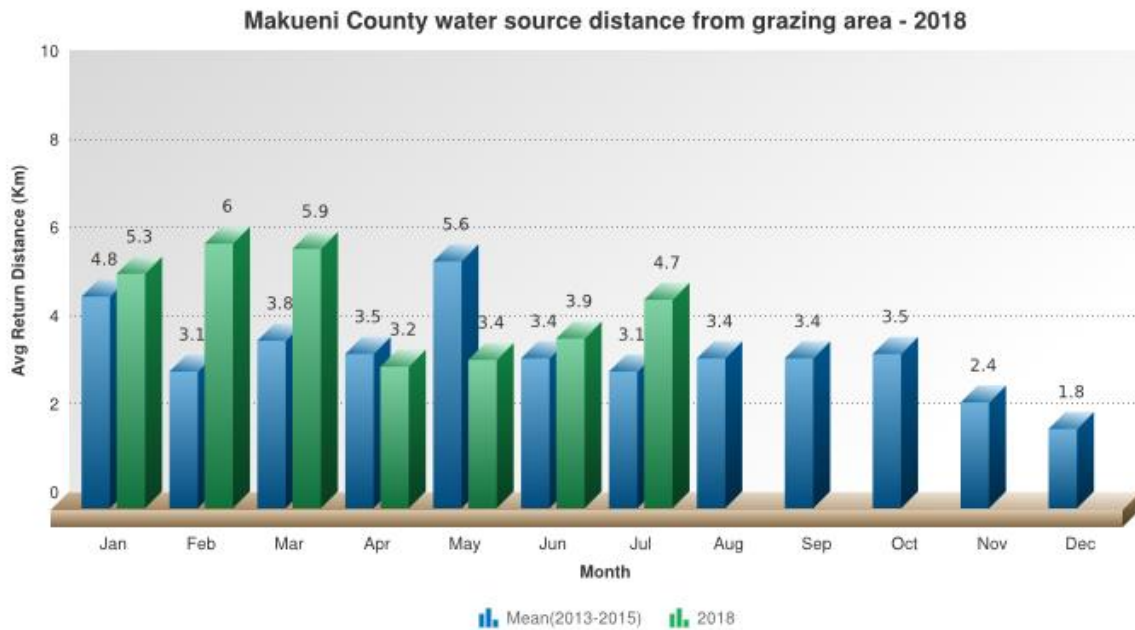
2.2.2 Household access and Utilization of water

Distances to water sources for household consumption



- Average household return distances increased from 4.1Km to an average of 5.7Km. The increase is attributed to change in alternative water sources given that most open water sources were damaged by floods and the ones which had little water had dried up.

2.2.3 Livestock access to water



- Average return distances to water sources had increased by 0.8Km from 3.9Km to 4.7Km. This was attributed to the breached dams and drying up of open sources which had little water hence use of alternative available sources of water.
- The distances are expected to increase until the onset of the OND short rains.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Current livestock body condition for cattle in most parts of the county ranged from fair to good.
- Majority of the livestock around 70% had a smooth good appearance a body score of 6 while the remaining 20% had moderate appearance; neither fat nor thin body condition and this normal at this time of the year.
- The good livestock body condition is expected to continue for the next one to two months and is attributed to the availability of pasture, water and crop residues.

3.1.2 Livestock Diseases

- No major livestock disease outbreaks.

3.1.3 Milk Production

Milk availability

- Milk availability was fair to good in mixed farming livelihood zone and is expected to remain stable with the availability of pasture and water for livestock.

Marginal mixed Farming zone:

- Households in this zone were more reliant on goat milk whose yield was between 500-750mls per day against a long term of one litre per day. Local Zebu also produced 500-750mls.

Mixed farming (Food Crop/Livestock):

- In this livelihood zone, Zebu cattle and crossbreeds accounted for most milk produced. Availability was approximately 750-1000mls compared to a normal of 1000mls.

Mixed Farming (Coffee/Dairy):

- The production of milk per day per household ranged from 1000-1500mls per day against a normal of 2 litres.

3.2 RAIN-FED CROP PRODUCTION

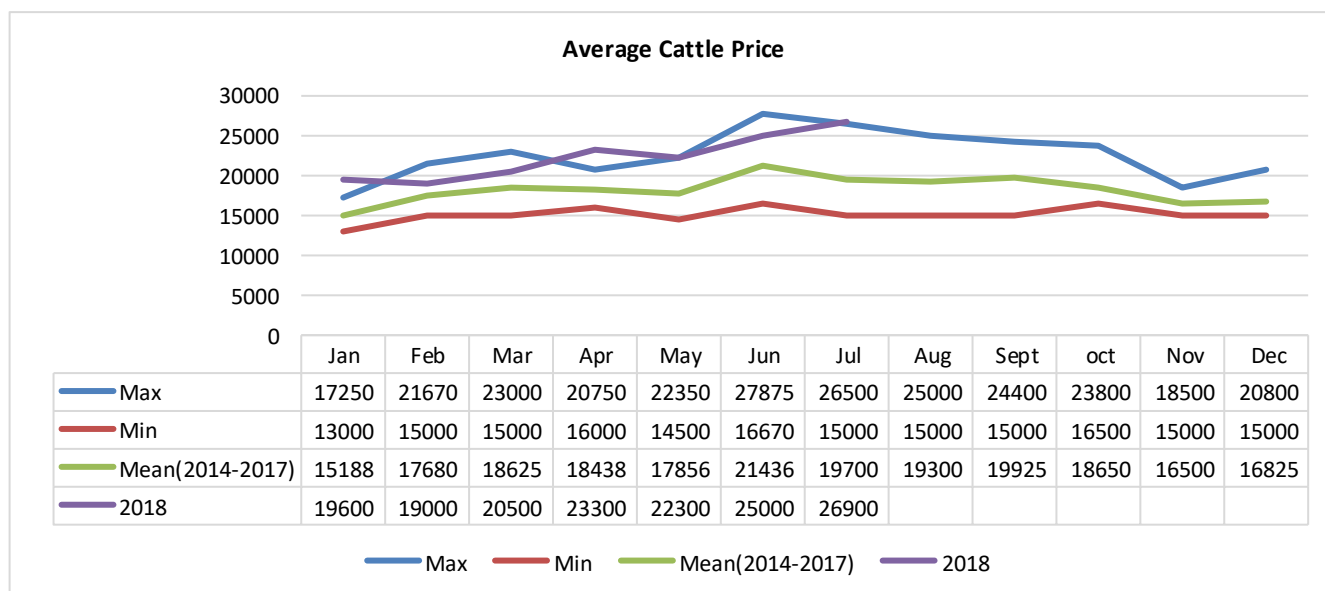
3.2.1 Stage and Condition of food Crops

- Main agricultural activity was harvesting of maize, green grams and cowpeas in most parts of the county. Harvesting of green grams awaits about a month in most areas although some areas in the county were already harvesting.
- There have been reduced yields in the hilly masses especially in Kilome. Crops such as beans, tomatoes, French beans and pigeon peas have suffered delayed growth period due to the cold temperatures. Tomatoes for instance took 5 months instead of the usual 3 without yielding quality produce.

4.0 MARKET PERFORMANCE

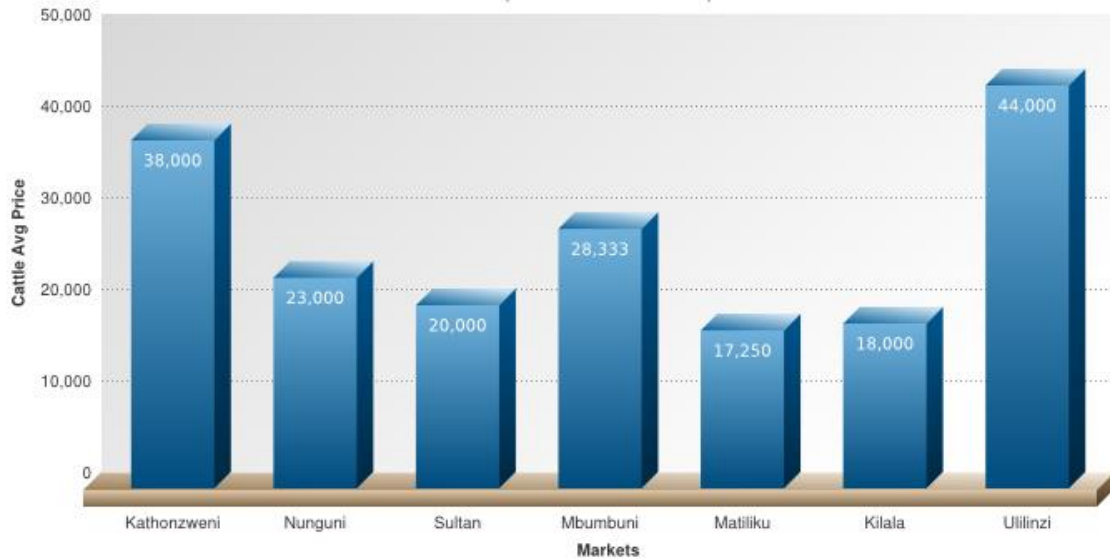
4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices

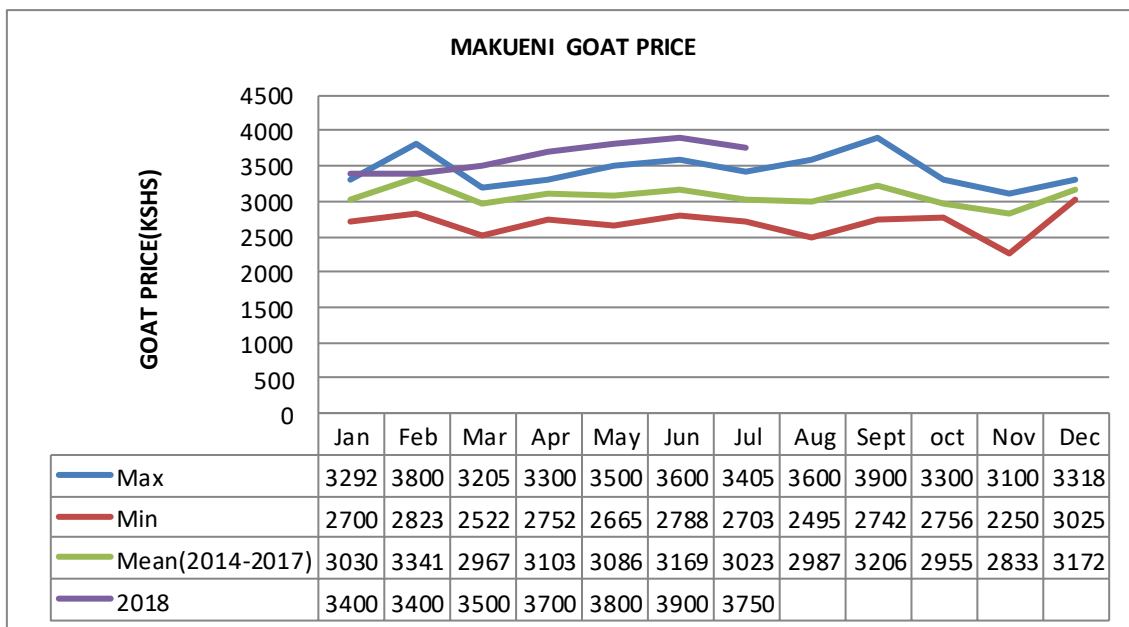


- Average farm gate prices of cattle (2-3 year old bull) increased from Ksh25,000 to Ksh26,900. Compared to (2014-2017) long term average the current price was above normal.
- The increase in price is attributed to the good body condition of livestock and the low supply in the market.
- The prices of cattle at different markets were as follows:

Makueni County Cattle Prices by Markets
(Jul 2018 - Jul 2018)

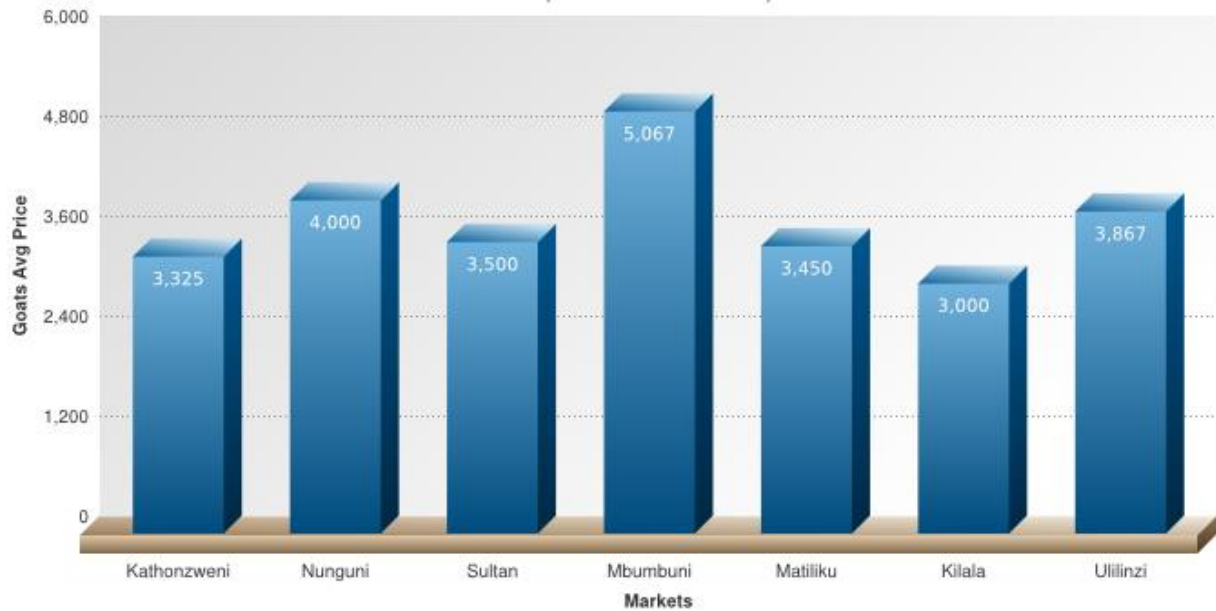


4.1.2 Goat Prices



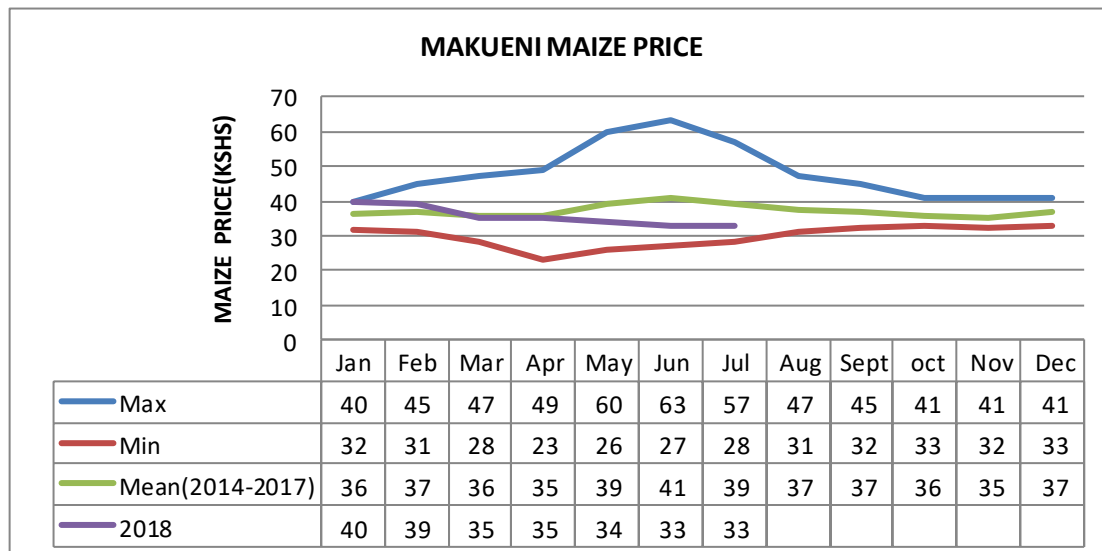
- The average farm-gate price of a goat decreased from Ksh3,900 to Ksh3,750.
- Compared to the 2014-2017 long term mean the price remained relatively high.
- The good price is attributed to the prevailing good body condition while the slight decrease is attributed to the body size of the goat.
- Average goat market prices were as follows in the various markets.

Makueni County Goat Prices by Markets
(Jul 2018 - Jul 2018)



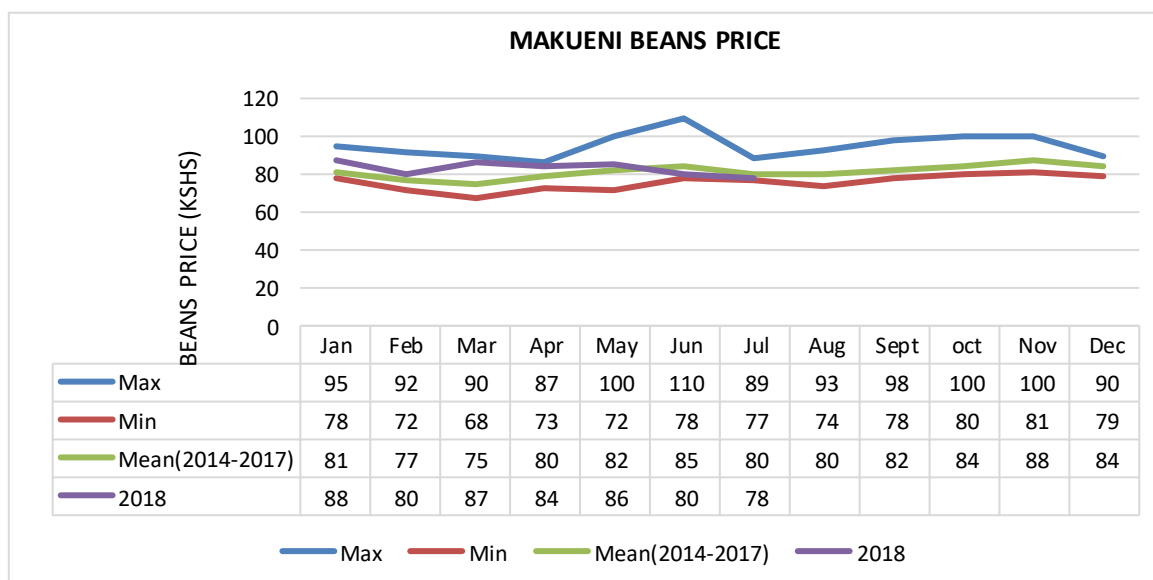
4.2 CROP PRICES

4.2.1 Maize



- The average market price of maize remained stable at ksh33 per kilogramme and this is attributed to the ongoing harvest though that have ensured supply of the staple in the market.
- It's expected that the price will remain stable for the next one to two months since the commodity is readily available in the local market.

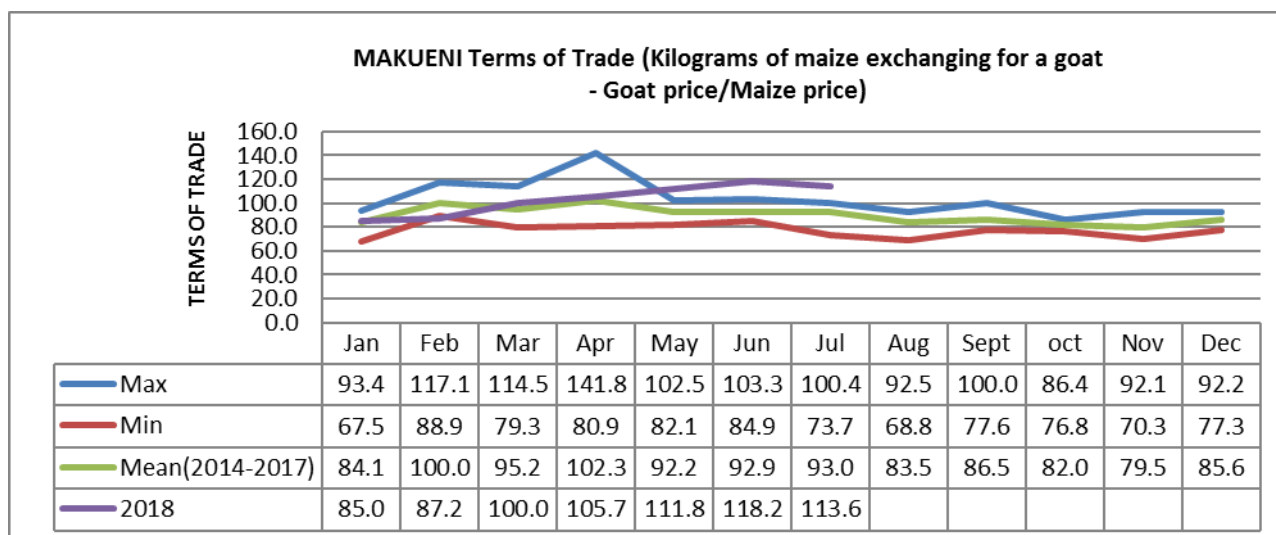
4.2.3 Beans



- The average price for beans during the month of July was KSh78 a decrease from Ksh80. This is attributed to the ongoing harvests that have increased the commodity in the market.
- The prices varied from one market to another.
- The decrease in price is attributed to the availability of alternative cereals like pigeon peas and cow peas.
- Compared to the long term mean the current prices was slightly below normal (by 2.56 percent).

4.2.3.1 Other outstanding observations.

4.3 Livestock Price Ratio/Terms of Trade



- Terms of trade were above average at 113.6 in favour of livestock farmers as a result of the prevailing good body conditions and the low maize prices as the harvest season goes on. This implies that from a sale of one goat, a farmer could purchase 113.6 Kg of maize.
- The Terms of Trade have declined by four percent from the previous month.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

Marginal mixed Farming zone

- Milk consumption per day in this zone was between 500mls to 750mls against the long term of 750mls to 1000mls.
- The prices were high at Ksh 55-60per litre against the normal of Ksh55.
- Milk consumption is expected to improve even more with the availability of pasture and water for livestock.

Mixed farming Zone (Food crop/Livestock).

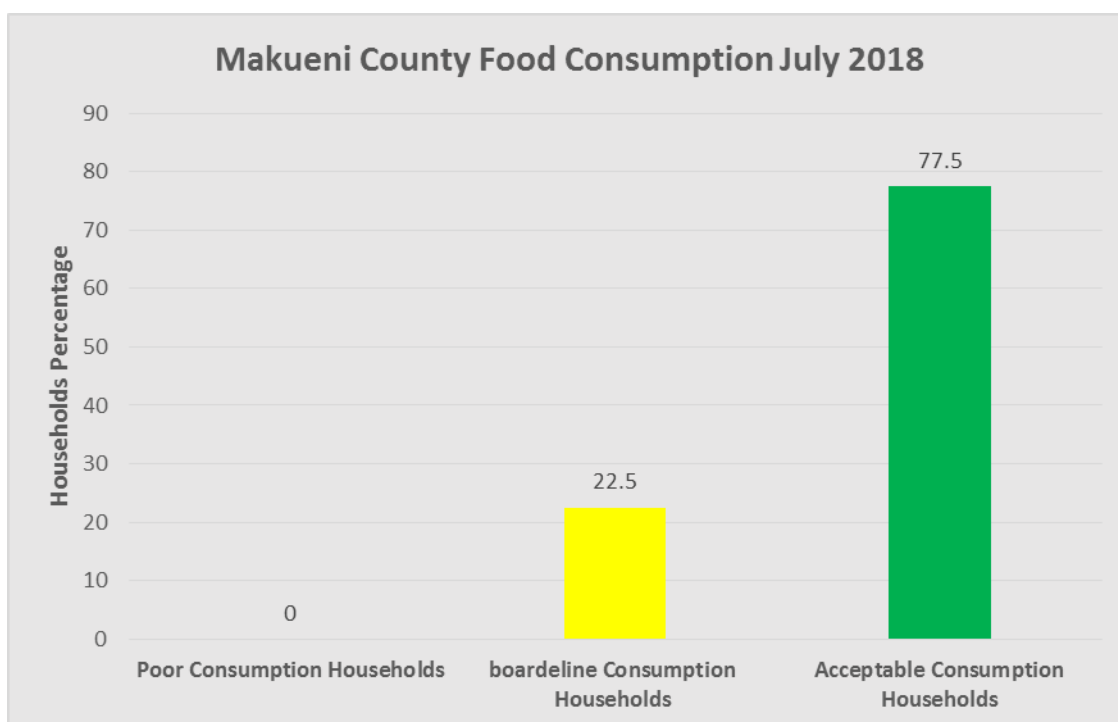
- Milk consumption per day in this zone was between 500mls to 750mls.
- The current milk price was Ksh 50 against the normal of Ksh45.

Mixed Farming Zone (Coffee/Dairy)

- Milk consumption is about 1000mls to 1500mls. The average milk price was Ksh 50 against the normal of Ksh45.

5.2 FOOD CONSUMPTION SCORE

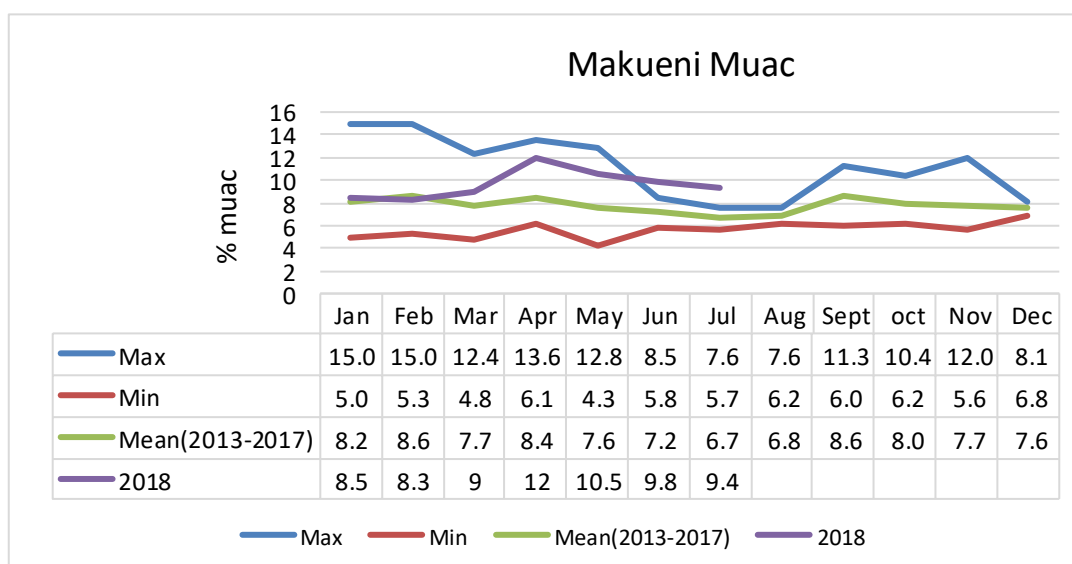
- In mixed farming zone 72.1 percent of households had an acceptable food consumption score while 27.9 percent of households were at the borderline. In the marginal mixed farming zone 78.9 percent of households had an acceptable food consumption score while 21.1 percent of households were at the borderline.
- This is attributed to the availability of food and money to buy food.
- Below is an illustration of food consumption score in different livelihood zones.



5.3 HEALTH AND NUTRITION STATUS

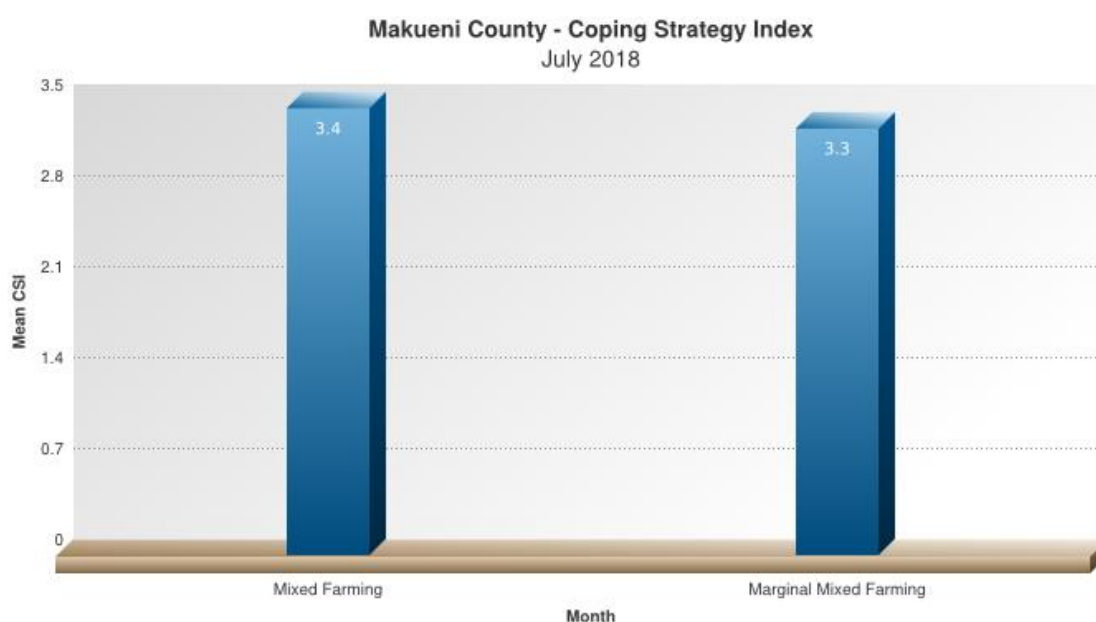
5.3.1 Nutrition Status

- The percentage of children (under-fives) at risk of malnutrition was 9.4% a decrease from 9.8% recorded the previous month. This is attributed to the availability of cereals, milk vegetables and citrus fruits mostly oranges.
- Compared to the long term average the situation was above normal.



5.4 COPING STRATEGIES

- The CSI in Mixed farming livelihood zone was 3.4, a increase from 2.7 while in the Marginal mixed farming zone it was 3.3
- The average CSI for the county was 3.4 an increase from 2.8 from the previous month.
- This implies that a majority of the households for the last two months has been food secure.



6.0 CURRENT INTERVENTION MEASURES (ACTION)

6.1 NON-FOOD INTERVENTIONS

- Asset Creation projects funded by WFP through NDMA and implemented by WVK in North Makueni and KRCS in South Makueni.
- Training of Farmers on feed preservation, utilisation and Hay bailing.
- Linkage of farmers to better markets majorly for the harvested green grams.
- Capacity building of farmers through KCEP KRAL project.
- Conducting Aflatoxin campaigns to sensitize farmers
- Post-harvest management.
- Community Managed Disaster Risk Reduction (CMDRR) trainings through Participatory Disaster Risk Assessment (PDRA) countywide in five different wards.

6.2 FOOD AID

- The Ministry of Interior and co-ordination through the County Commissioner's office received 300 bags of maize (50kg each) and 150 bags of beans (50kg each) for the month of June for each of the 9 sub-counties.

7.0 EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement/Human Wildlife conflict/Floods

- No major incidence reported.

7.2 Migration.

- No major livestock migration.

7.3 Food security prognosis-

Due to the glut in green gram and cowpea harvest, the prices have remained stable at Ksh 45-50 and Ksh 18-25 for both of the products especially in the mid and marginal parts of the county respectively. Maize prices have remained at a relatively fair price of Ksh. 35 per kg in the highlands and ranging between Ksh. 28-30 in the midlands. Livestock body condition has ranged from good to fair in the Mixed Farming livelihood zones but from fair to poor in the Marginal parts of the county especially due to poor farmer practices and weed infestation. Watering distances for both human and animals remain within the normal range and are expected to remain that way until the onset of the next rainy season. The larger part of the county remains food secure and should remain that way if the short rains season onset is timely.

8. RECOMMENDATIONS

- Pasture harvesting and silage storage trainings for farmers.
- Continuous surveillance for livestock in migration mostly in the migratory routes of konza in Malili and along Mombasa road (bordering Kajiado county).
- Weeding out of the ipomoea species for pasture before the expected rainfall onset in Mid-October.