

National Drought Management Authority

MERU COUNTY

DROUGHT EARLY WARNING BULLETIN FOR JANUARY 2019



A Vision 2030 Flagship Project



JANUARY 2019 EW PHASE



Early Warning Phase Classification

Livelihood Zone	Phase	Trend
Mixed Farming	Normal	Stable
Agro - Pastoral	Alert	Deteriorating
Rain Fed Cropping	Normal	Stable
County	Normal	Stable
Biophysical Indicators	Value	Normal Range/ Value
Rainfall (% of Normal)	91	80 - 120
VCI-3Month	49.83	35 - 50
Production indicators	Value	Normal
Maize Crop Condition	Maturity	Maturity
Livestock Body Condition for cattle	Good	Good
Milk Production per HH/ day	3.6	1-2Litres
Livestock Migration Pattern	Normal	Normal
Access Indicators	Value	Normal
Terms of Trade (ToT)	153.2	112
Milk Consumption per HH/ day	1.2	1.1Litres
Return HHs distance to water sources	4.6	<6 Km
Water source return distance from grazing areas	8.6	9 Km
Cost of water (20 litres)	2.50	Kshs 3.00 - 5.00
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	10.3	<20.0

Drought Situation & EW Phase Classification

Biophysical Indicators

- During the month the county recorded rainfall amounts that were within the normal range.
- The rains were characterised by uneven spatial and poor temporal distribution.
- The county vegetation condition index was above normal. The VCI for the 6 Sub Counties depicted vegetation greenness above normal.

Socio Economic Indicators (Impact Indicators)

Production Indicators

- Most maize crop was grain filling.
- Livestock body condition was good for all species.
- Milk production per HH per day was above normal.

Access Indicators

- Terms of Trade were favourable and above the normal range.
- Milk consumption per HH per day was above normal.
- Return distances to water sources were below the normal range.
- Distances to water sources from grazing areas were below the normal range.

Utilization Indicators

- The proportion of children at risk of malnutrition remained within the normal range.

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

1. CLIMATIC CONDITIONS

1.1 RAINFALL PERFORMANCE

- During the month the county experienced rains that were characterised by uneven spatial and poor temporal distribution.
- The rainfall was below long term average in the month under review.

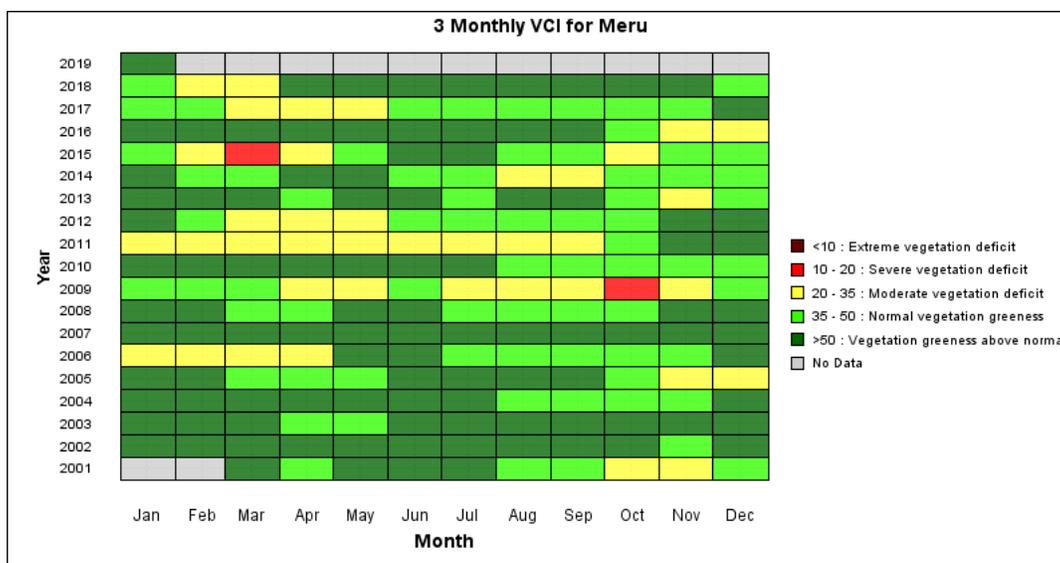
1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

- According to WFP-VAM, Climate Hazards Group InfraRed Precipitation with Station Data (CHIRPS) three months rainfall anomaly was within the normal at 91%.
- Dekad one, two and three recorded 10.6mm, 4.0mm and 1.9mm of rainfall amounts respectively.
- Compared to LTM dekad one, two and three were below by 19.1%, 52.9% and 78.2% respectively.

2. IMPACTS ON VEGETATION AND WATER

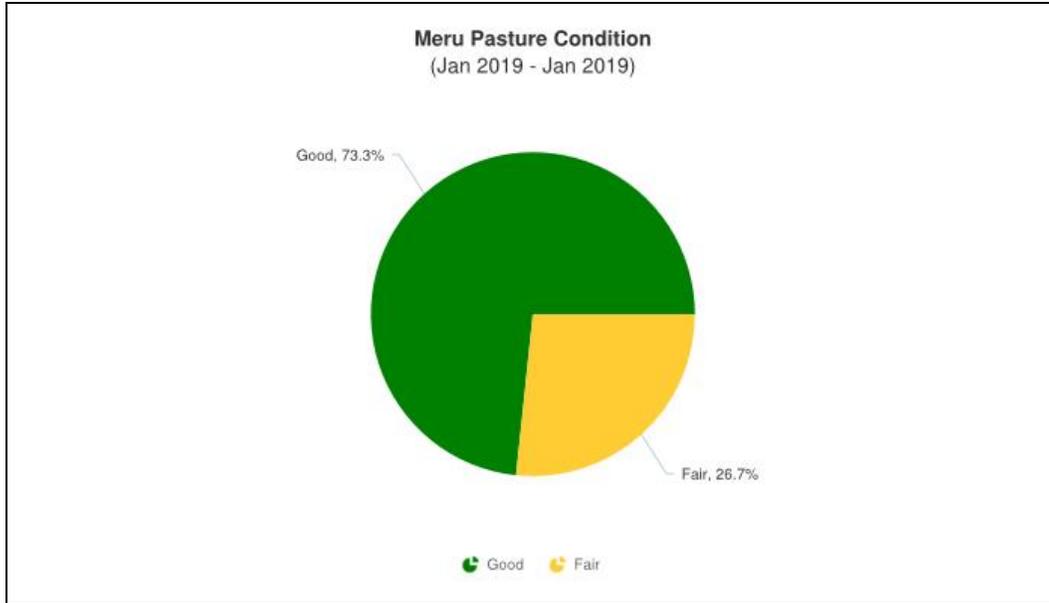
2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)



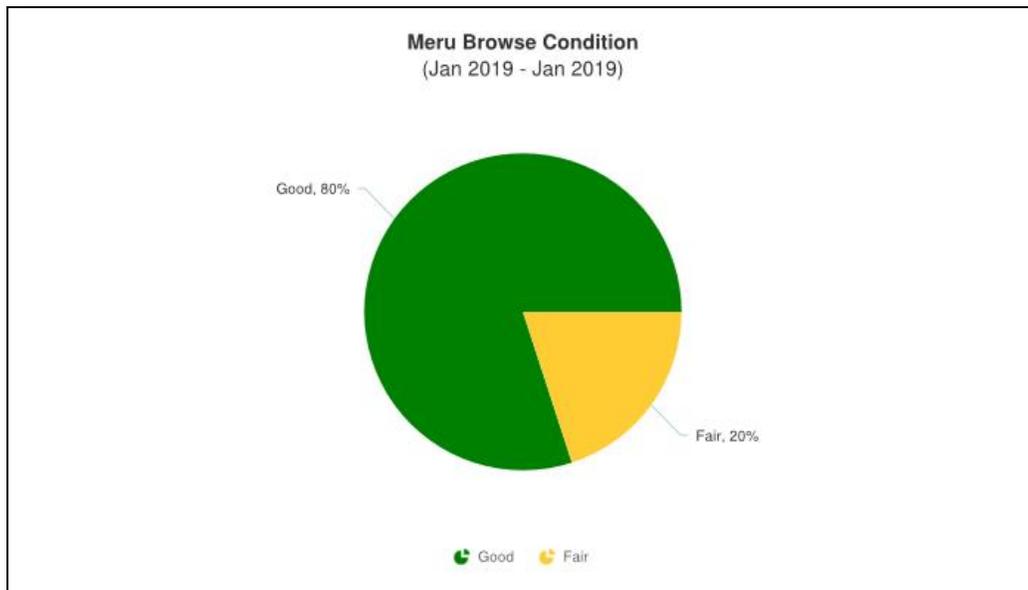
- The county vegetation greenness condition was above normal as depicted by a vegetation condition index (VCI) value of 49.83
- All the four Sub Counties VCI depicted vegetation greenness above normal.
- The current situation is attributed to regeneration of pasture and natural vegetation due to ongoing short rains.

2.1.2 Pasture



- Based on community interviews conducted 73.3% and 26.7% of respondents reported pasture condition was good and fair respectively. Pasture has regenerated due to short rains. Areas reporting fair condition were Igembe North
- The standing pasture in the grazing areas is mostly lush but few farmers have fodder harvested from previous season.
- Pasture condition is normal for this time of the year.

2.1.3 Browse

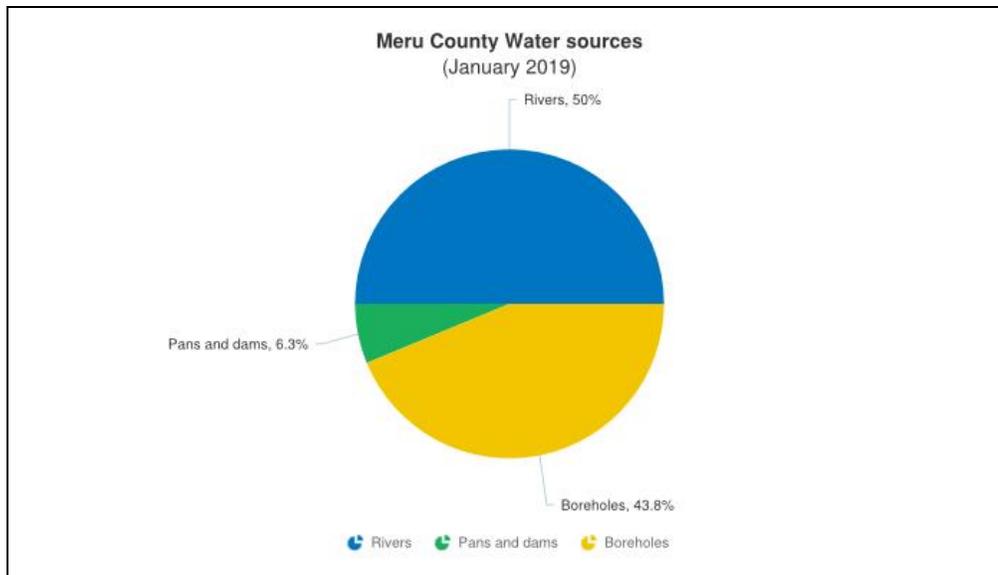


- Results from community interviews undertaken showed that 80% and 20% of respondents confirmed browse condition was in good and fair conditions respectively.

- The browse situation was good compared to same season previous year.
- The available browse has improved compared to the previous month.
- No constraints were observed in accessing browse in the month under review.

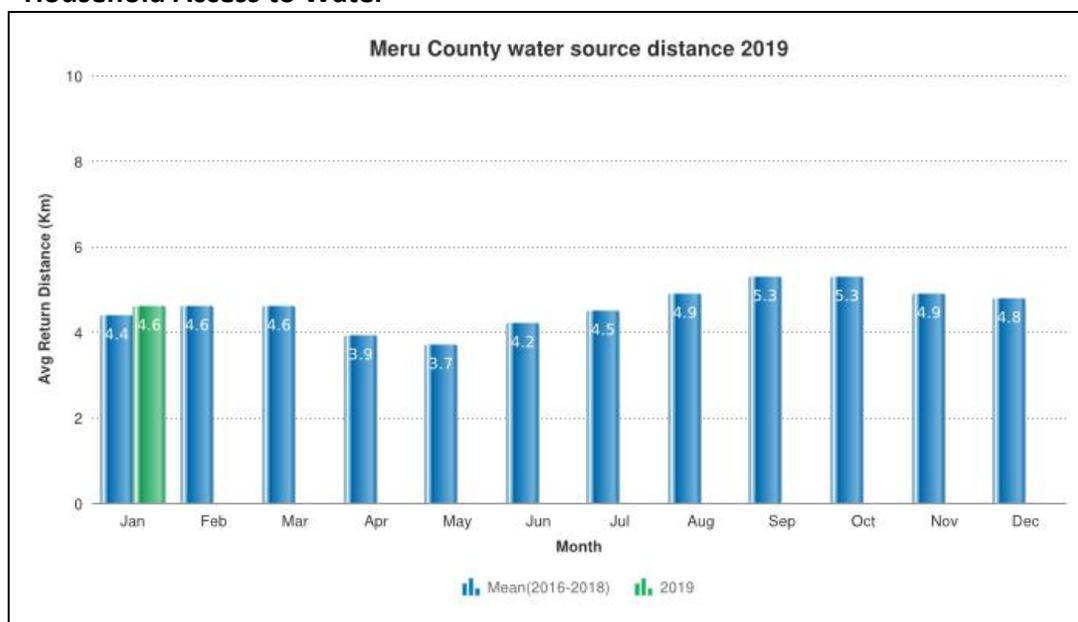
2.2 WATER RESOURCE

2.2.1 Sources



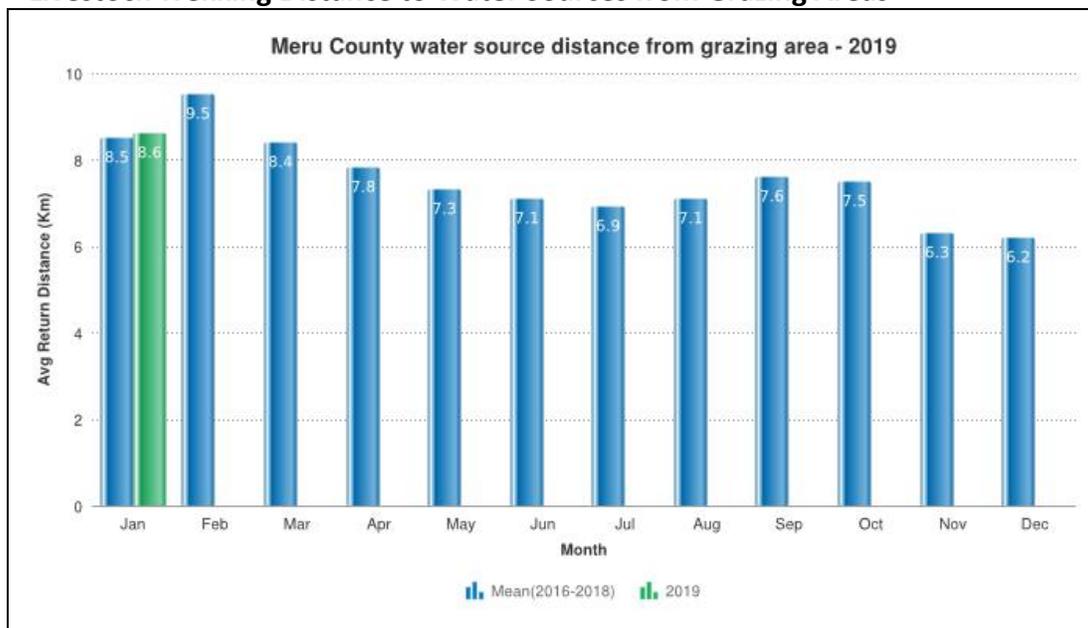
- The main sources of water from community interviews conducted were; rivers, boreholes and pans and dams and were relied upon by 50.0, 43.8 and 6.3 percent respectively.
- The rains have recharged and improved water situation in the county.
- Strategic water sources were almost full to capacity.

2.2.2 Household Access to Water



- Return distances to fetch water was 4.6 km.
- The decrease was due to availability of water at household level through roof catchment and recharge of open water sources.
- Compared to the long term average the current distance is shorter by 4.5%
- The average cost of 20 litre jerry can at water kiosks was at Kshs 2.50 which is normal at this time of the year.
- Based on community interviews conducted, 23.9% of respondents treated water. Out this number 21.4% use boil water while 2.5% filter water.

2.2.3 Livestock Trekking Distance to Water Sources from Grazing Areas



- Return distance to water source from grazing areas decreased to 8.6 km from 9.6km posted in the previous month.
- This was due to availability of pasture and browse at shorter distances and closer to watering points.
- Compared to LTM the distance is slightly longer.

3. PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

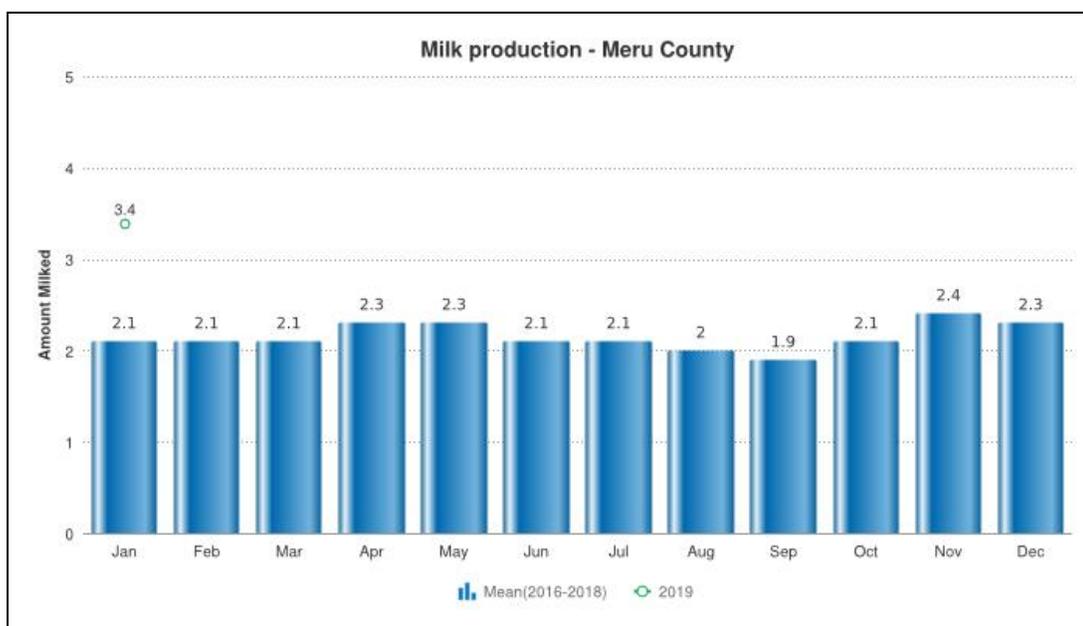
3.1.1 Livestock Body Condition

- In all livelihood zones livestock body condition was good for all species.
- Poultry production has improved during the two seasons.

3.1.2 Livestock Diseases

- No livestock disease outbreaks were reported.

3.1.3 Milk Production



- The average milk production per household per day slightly decreased to 3.4 litres compared to 3.5 litres posted in the previous month.
- Milk production was above long term average by 61.9%.
- Milk production was high in Kangetha Ward and Mikinduri Ward at 28.4% and 25.7% respectively where cattle are of better breed and practice zero grazing.
- Average milk price per litre at household level was Ksh 60.00

3.2 RAIN-FED CROP PRODUCTION

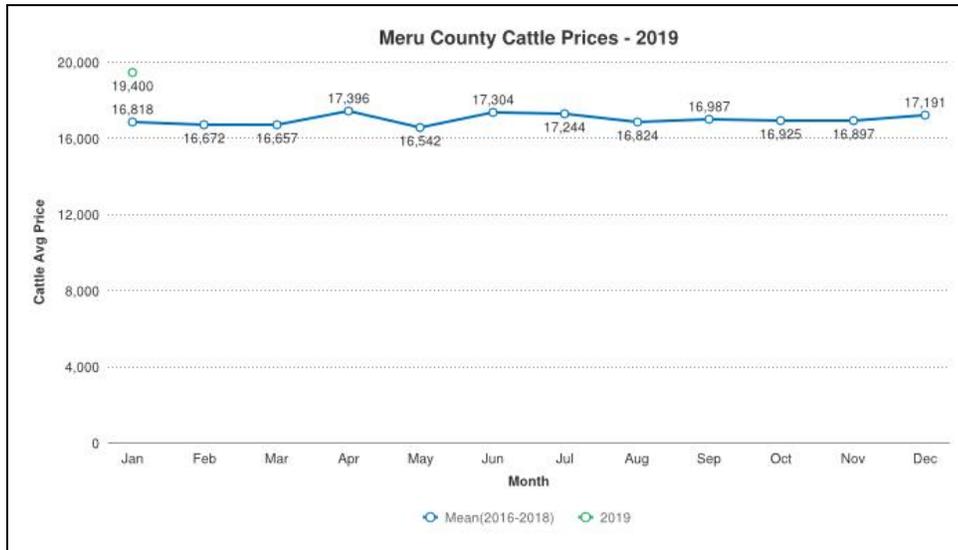
3.2.1 Stage and Condition of food Crops

- In the mixed farming livelihood zone most maize crop was maturity stage and for those farmers who dry planted they were harvesting green maize.
- In the agro pastoral livelihood zone maize crop is at maturity stage. Bean crop is at the podfill and maturity stage.
- In the rain fed cropping livelihood zone farmers are harvesting maize.

4.0 MARKET PERFORMANCE

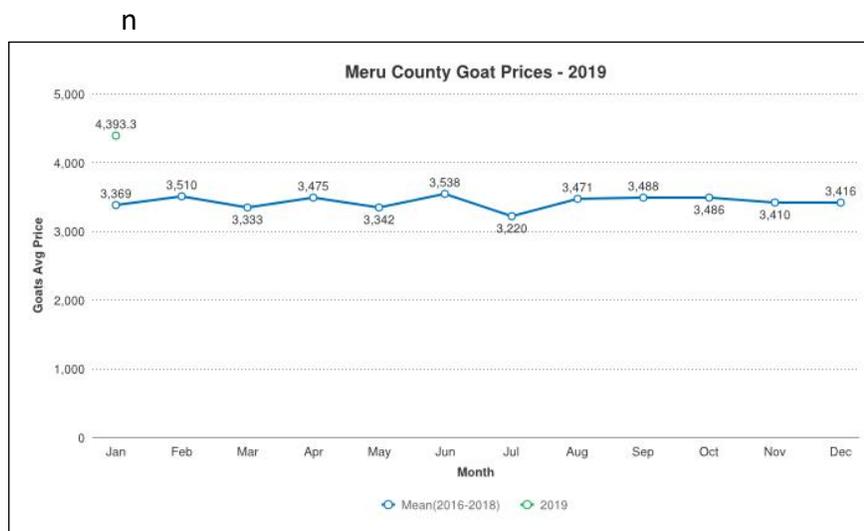
4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices



- The average market price of a three year old bull was at Kshs 19,400 compared to the previous month of Kshs 18,333.
- The trend is stable and compared to the previous year at this time, the price is higher by 5.5%.
- This could be attributed to opening up of schools (school fees) and the prevailing good body condition of cattle.
- Compared to the long term mean, the average price was higher by 15.4%.

4.1.2 Goat Prices

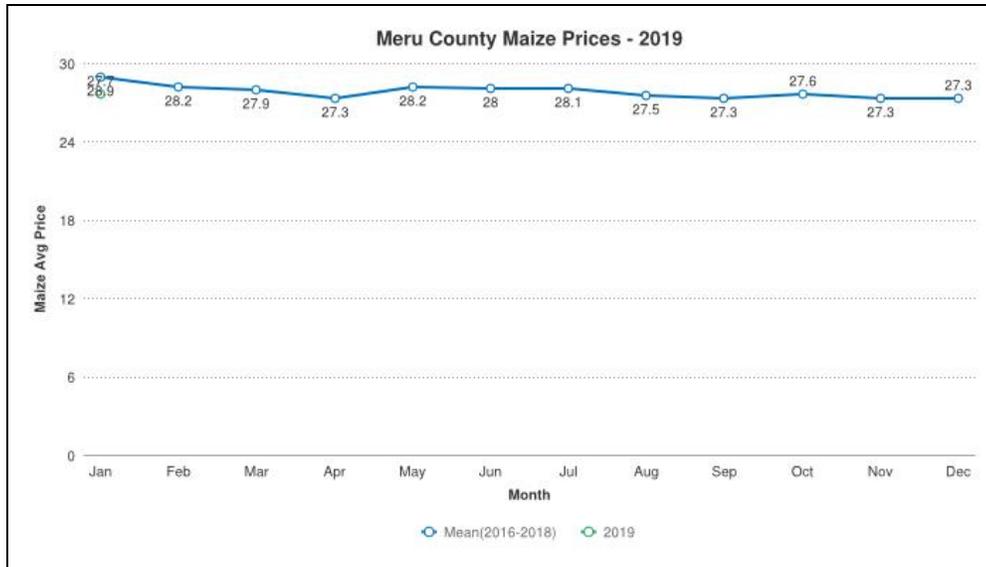


- The average market price of a two year goat was Kshs 4,393 compared to Kshs 4,691 posted in the previous month.

- The prevailing high price could be attributed to good body condition in the month under review.
- Compared to long term mean, the average price was lower by 6.4%.

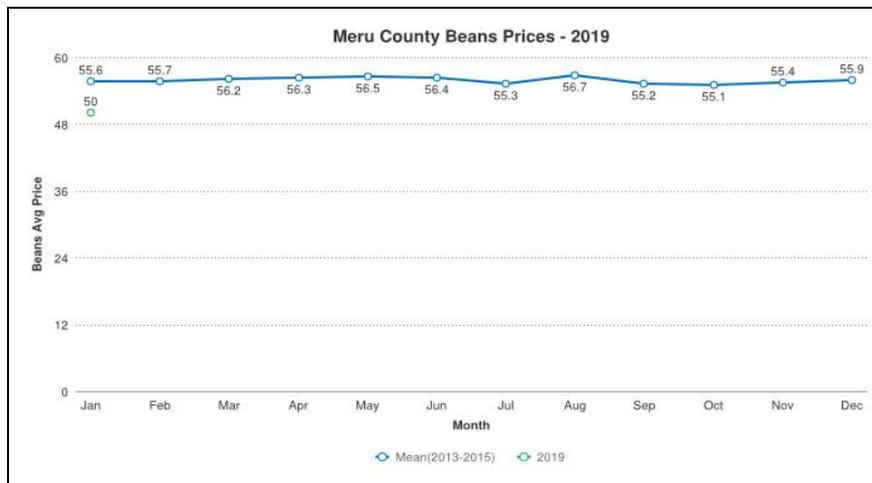
4.2 CROP PRICES

4.2.1 Maize



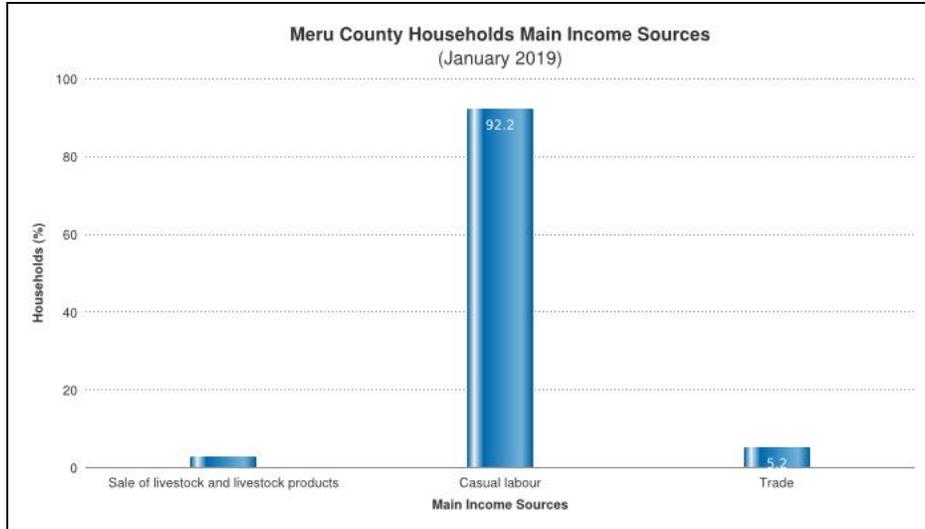
- The average market price of a kilo of maize slightly dropped by 0.7 % to retail at Kshs 27.7 compared to the previous month.
- The decrement was attributed to a few number of household selling green maize to traders.
- Across all the livelihood zones the prices was Kshs 25-30 per kilo.
- Compared to the long term average the current price was below normal

4.2.2 Beans



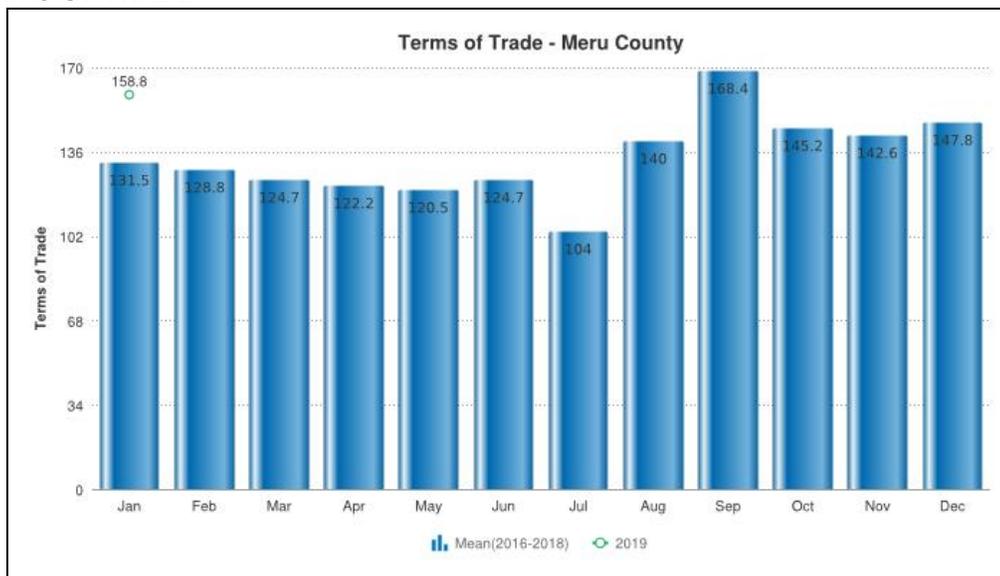
- Average market price of a kilo of beans was Kshs 50.00 indicative of 3.1% decrease compared to the previous month. This was due harvest in the rain fed cropping livelihood zone.
- Compared to the long term mean the price was lower by 11.3%.

4.2 INCOME



- Household main source of income were casual labour. Others were trade, sale of livestock and livestock products at lower proportions.
- Sale of livestock products and crops were on an upward trend compared to previous months.
- Casual labour opportunities were available in the Miraa plantations and town centres.

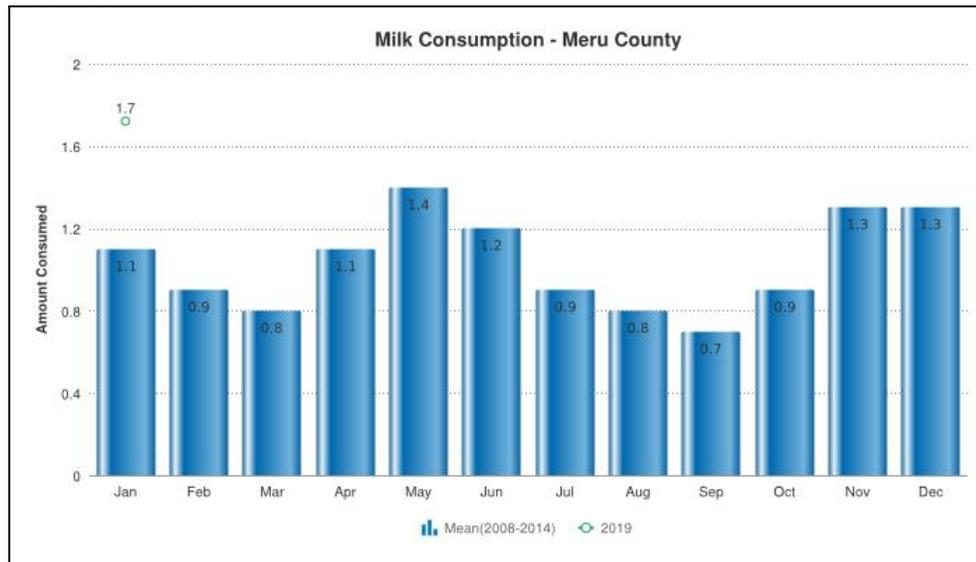
4.4 TERMS OF TRADE



- Terms of trade were favourable and consistently above the LTA.
- Terms of Trade was above the LTM by 20.8percent.
- The upward trend was attributed to high price of goats above LTM against prevailing low prices of maize.
- Proceeds of sale of goat could purchase 158.8kilograms of maize.

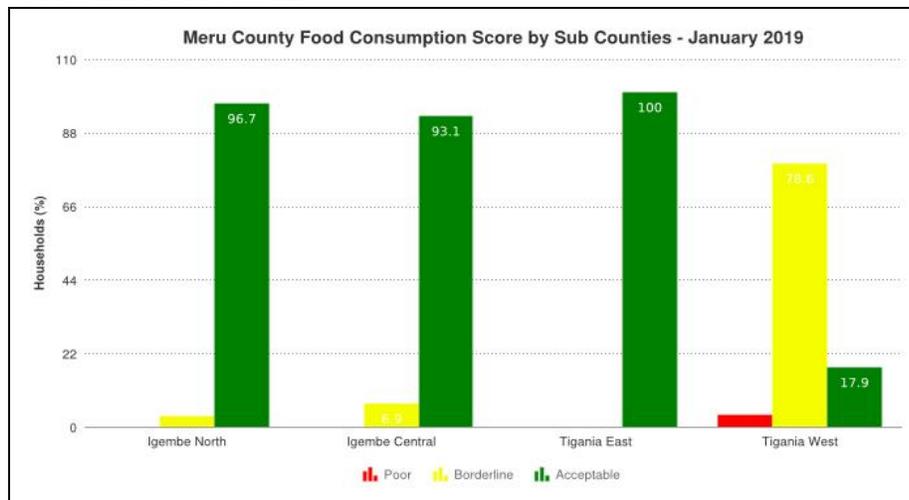
5. FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION



- Milk consumption per household per day was at 1.7 litres in the month under review.
- The quantity of milk consumed was low in Amwathi Ward.

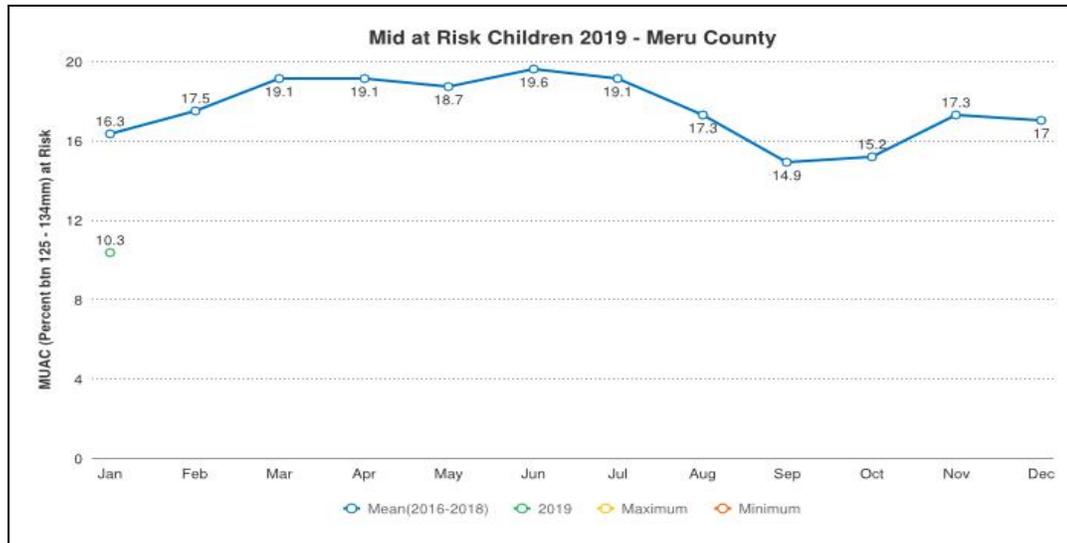
5.2 FOOD CONSUMPTION SCORE



- Households interviewed showed that 76.9 percent were in the acceptable food consumption score category indicating that they were consuming an acceptable diet in terms of meal frequency, dietary diversity, nutritional value and amount. The proportions of households under borderline and poor food consumption categories were 22.2 percent and 0.9 percent respectively.
- 74.4 percent households interviewed reported consumption of grains for six days, 70.1 percent of these households consumed pulses for an average of six days in a week while 60.7 percent consumed vegetables for an average of six days in a week.
- Most households consumed three food groups i.e. maize, pulses and vegetables.

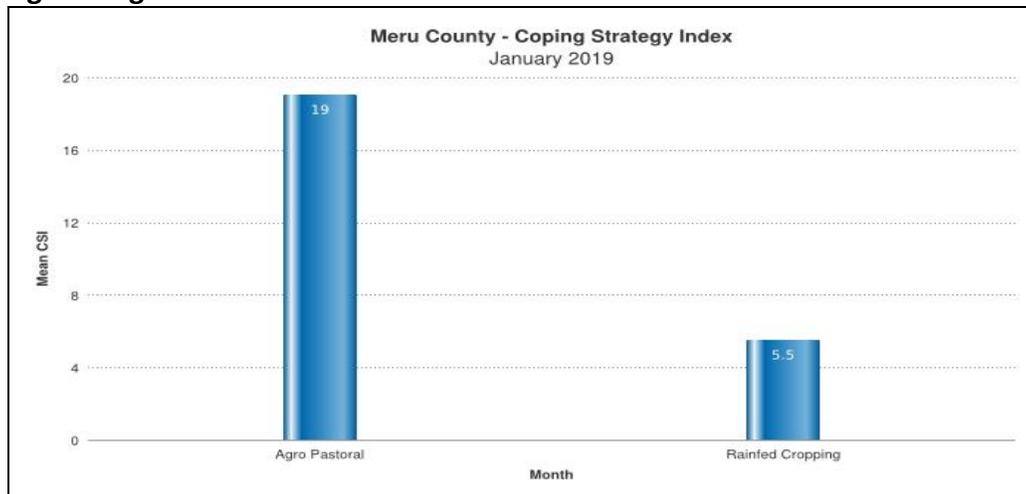
5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status



- Mid Upper Arm Circumference (MUAC) measurement for children below five years at risk of malnutrition was at 10.3 percent compared to previous month of 15.1 percent.
- This was below the long term mean by 36.8 percent.
- MUAC levels were low and consistently below the long term mean.

5.3.2 Coping Strategies



- The CSI for the month under review was recorded at 15.65 compared to 13.76 posted in the previous month.
- This slight decrease demonstrates households were employing less coping strategies compared to previous month.
- Approximately 19.8 percent of sampled households engaged in reduction of meals for about six days in a week while 21.6 percent reduced portion of meals for about six days in a week.

6.0 EMERGING ISSUES

6.1 Insecurity/ Conflict/ Human Displacement

- Presence of herds of camels observed near community settlement areas of Igembe North

6.2 FOOD SECURITY PROGNOSIS

- The rains experienced towards the end of the month have boosted crop development especially maize crop. Farmers are expecting to harvest beans in the month of January.
- Also availability of short term green leafy vegetables has greatly reduced household food stuff expenditure.
- Prices of beans are expected to fall due to expected harvests. Also prices of maize are projected to drop due to harvest being experienced in the rain fed livelihood zone.
- Quality and quantity of pasture and browse is expected to improve. Availability of feeds is expected to maintain the good body condition of all livestock species.
- Livestock production and productivity is expected to improve due to availability of water, pasture and browse at shorter distances.

7. RECOMMENDATIONS

Agriculture and Livestock Sector

- Post harvest management.
- Fodder improvement and conservation.
- Management of crop pests in the farms.
- Promote poultry production.
- Livestock disease surveillance due to influx of camels in the county.

Water and Irrigation Sector

- Provision of water treatment tabs mainly in Kangetha ward.

Public Health and Nutrition Sector

- Household level water treatment.