

National Drought Management Authority

MERU COUNTY

DROUGHT EARLY WARNING BULLETIN FOR DECEMBER 2019



A Vision 2030 Flagship Project



DECEMBER 2019 EW PHASE



Drought Situation & EW Phase Classification

Biophysical Indicators

- During the month under review the county experienced above normal rainfall in all the livelihood zones.
- The heavy rainfall was way above the long term average for dekad one. For dekad two and three the rainfall was below LTM. The VCI for all sub counties depicted vegetation greenness above normal.

Socio Economic Indicators (Impact Indicators)

Production Indicators

- Grain filling of maize and nearing harvesting for beans in all the livelihood zones.
- Livestock body condition was fair to good for all species.
- Milk production per HH per day was 2.7 slightly the normal.

Access Indicators

- Terms of Trade were below the normal range.
- Milk consumption per HH per day was above normal range.
- 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.

Early Warning Phase Classification

Livelihood Zone	Phase	Trend
Mixed Farming	Normal	Stable
Agro - Pastoral	Normal	Stable
Rain Fed Cropping	Normal	Stable
County	Normal	Stable
Biophysical Indicators	Value	Normal Range/ Value
Rainfall (% of Normal)	186	80 - 120
VCI-3Month	74.07	35 - 50
Production indicators	Value	Normal
Maize Crop Condition	Grain filling	Tussling
Livestock Body Condition for cattle	Fair to Good	Fair
Milk Production per HH/ day	2.7	1-2Litres
Livestock Migration Pattern	Normal	Normal
Access Indicators	Value	Normal
Terms of Trade (ToT)	77.9	112
Milk Consumption per HH/ day	1.5	1.1Litres
Return HHs distance to water sources	1.4	<6 Km
Water source return distance from grazing areas	1.8	9 Km
Cost of water (20 litres)	2.50-3.00	Kshs 3.00 - 5.00
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	18.3	<20.0

<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 	<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
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Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
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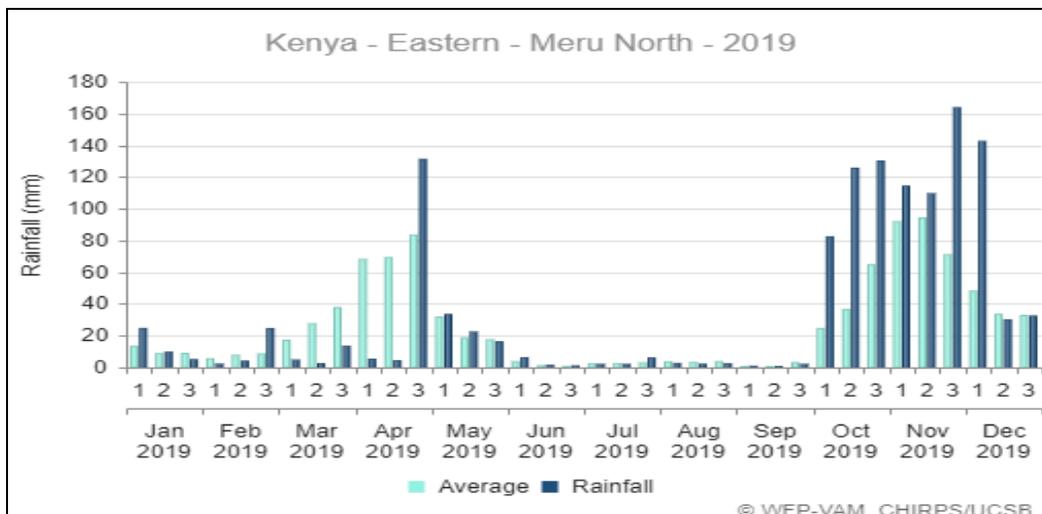
1. CLIMATIC CONDITIONS

1.1 RAINFALL PERFORMANCE

- During the month under review, the county experienced heavy rainfall in the first dekad of the month in all the livelihood zones. Second and third dekad the rainfall was below the LTM.
- The onset was on 3rd October on rain fed and Mixed farming livelihood zones while the onset was on 10th October for the agro pastoral livelihood zone.

1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

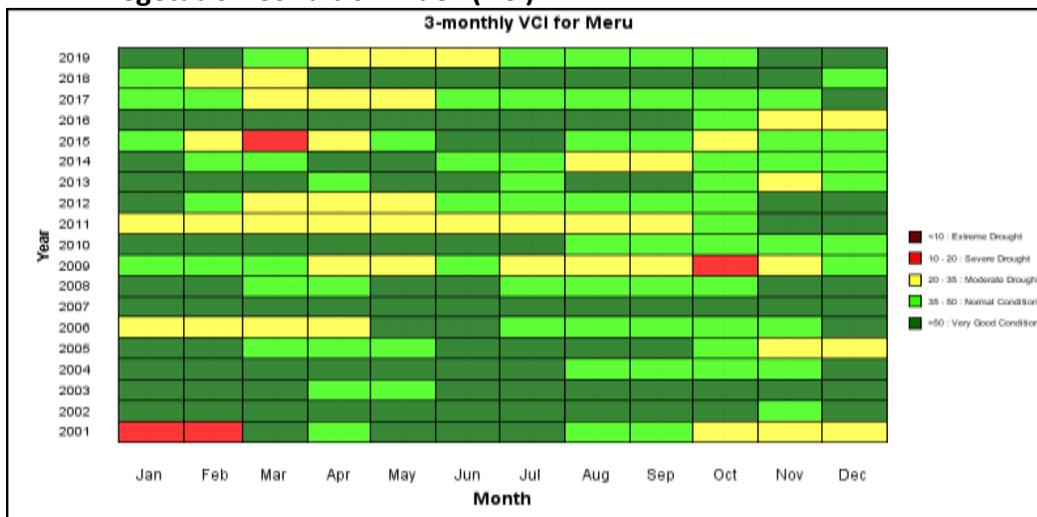
- According to WFP-VAM, Climate Hazards Group InfraRed Precipitation with Station Data (CHIRPS) three months' rainfall anomaly was within the normal at 186%.
- Dekad one, two and three recorded 142.3mm, 29.9mm and 32.2mm of rainfall amounts respectively.
- Compared to LTM dekad one was above by 197.1% while dekad two and three were below by 10.2% and 1.2% respectively



2. IMPACTS ON VEGETATION AND WATER

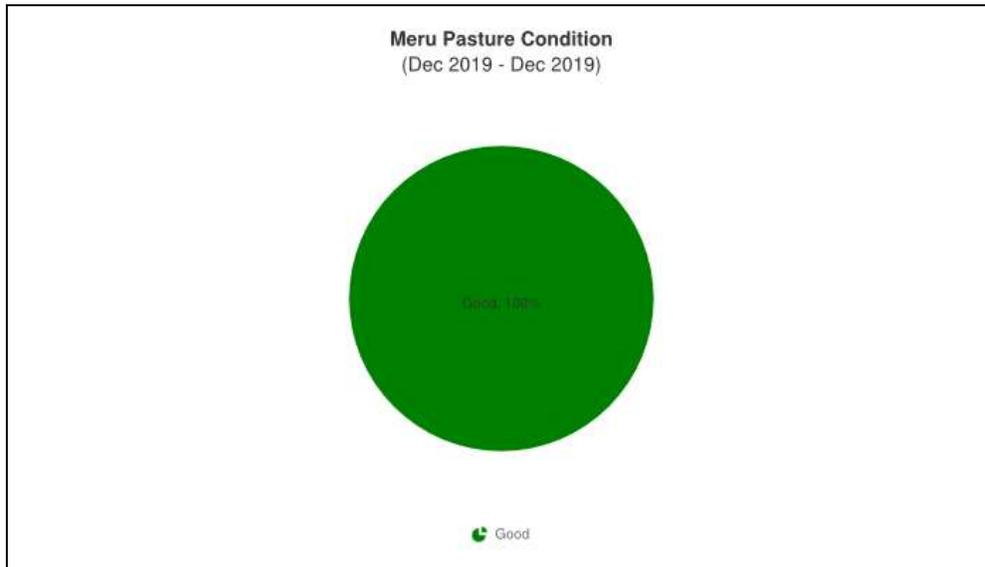
2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)



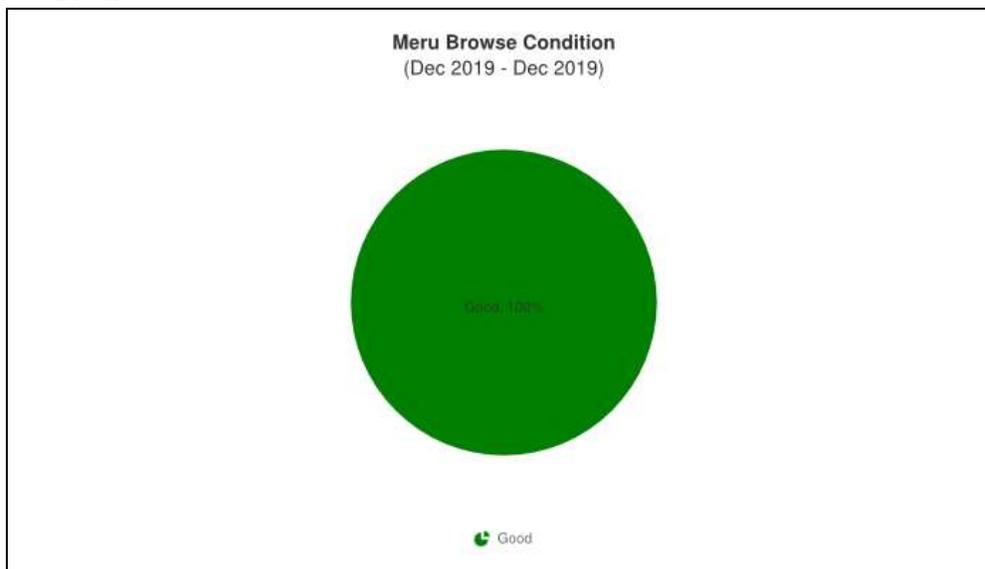
- The county vegetation greenness condition was above normal as depicted by a vegetation condition index (VCI) value of 74.07.
- All Sub Counties have VCI depicted vegetation greenness above normal.

2.1.2 Pasture



- Based on community interviews conducted 100% of respondents reported pasture condition was good. Pasture has tremendously improved as compared to last month in all the livelihood zone.

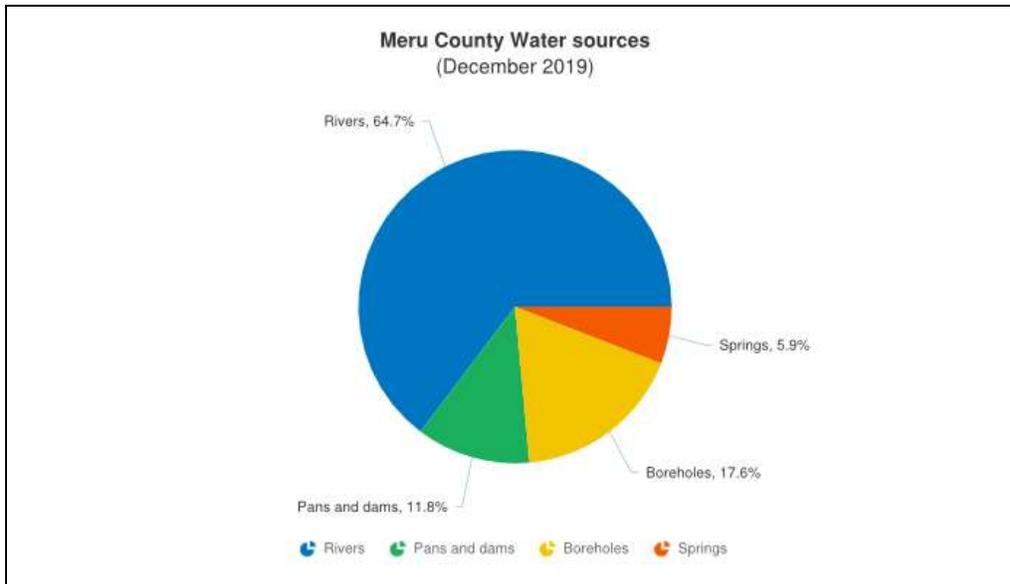
2.1.3 Browse



- Results from community interviews undertaken showed that 100% of respondents confirmed browse condition was good.
- The browse situation has improved tremendously as compared to last month in all the livelihood zone.

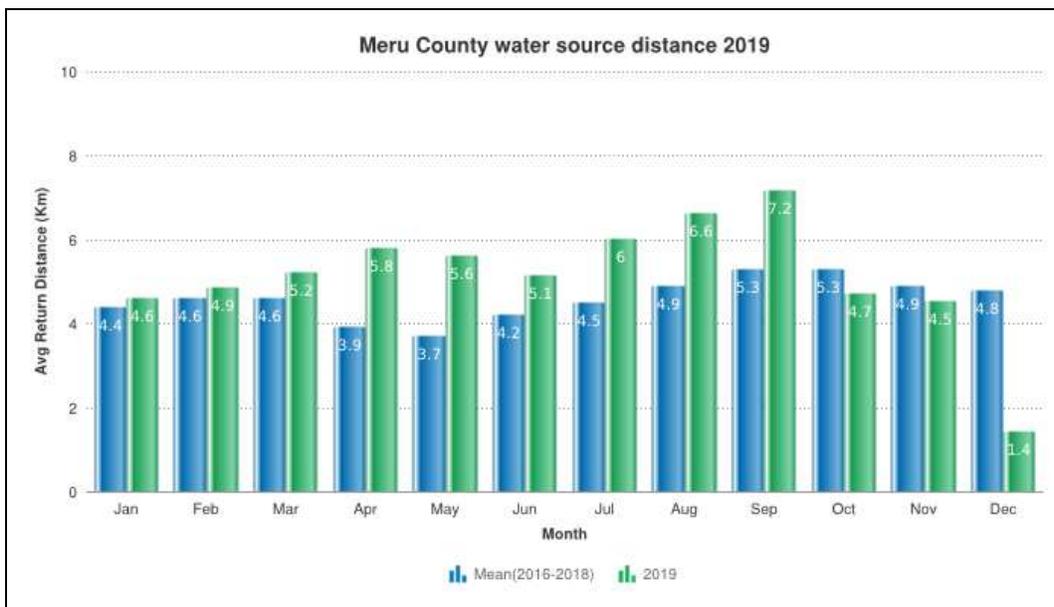
2.2 WATER RESOURCE

2.2.1 Sources



- The main sources of water from community interviews conducted were rivers, boreholes, and pans & dams by 64.7, 17.6 and 11.8 percent respectively.
- The county government drilled additional boreholes in most of the wards, this has greatly contributed to water availability.
- Most pans have water and Short distances are witnessed in areas where additional boreholes were drilled.
- Roof catchment water was also contributing as a source of water

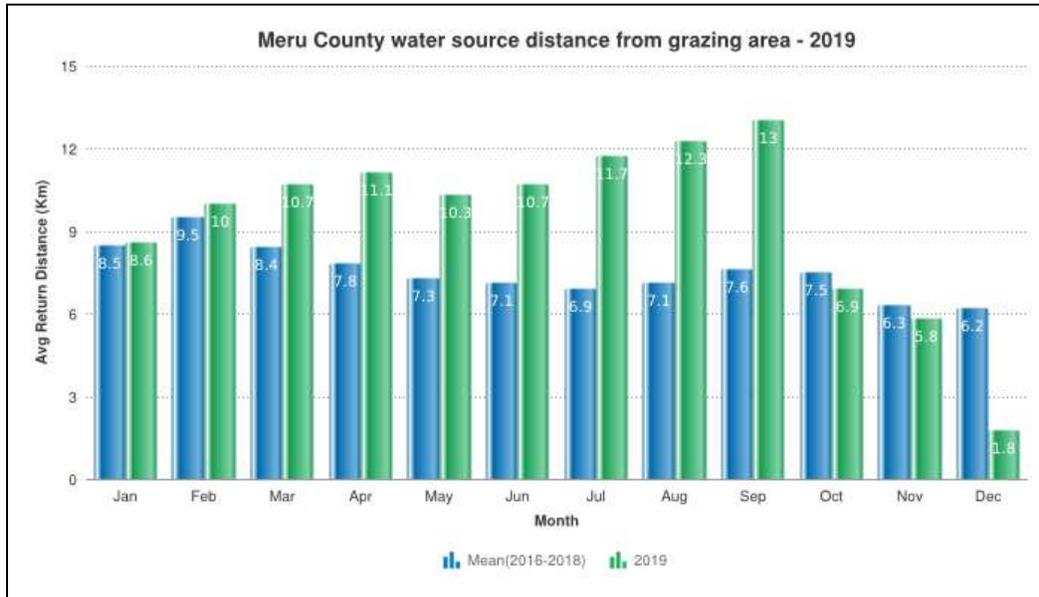
2.2.2 Household Access to Water



- Return distances to fetch water decreased to 1.4km from 4.5km recorded the previous month.

- The decrease was because heavy rains were received in all the livelihood zone.
- Compared to the long term average the current distance is shorter by 70.8%
- The average cost of 20 litre jerry can at water kiosks was ranging between Kshs 2.50 to Kshs 3.00 which is normal at this time of the year.
- Based on community interviews conducted, 24.20% of respondents treated water. Out this number 60.9% use boiled water while 39.1 filter water.

2.2.3 Livestock Trekking Distance to Water Sources from Grazing Areas



- Return distance to water source from grazing areas decreased to 1.8km from 5.8km posted in the previous month.
- This was due to browse regeneration and short distances to water points in all the livelihood zone.
- Compared to LTM the distance is shorter by 70.9%.

3. PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

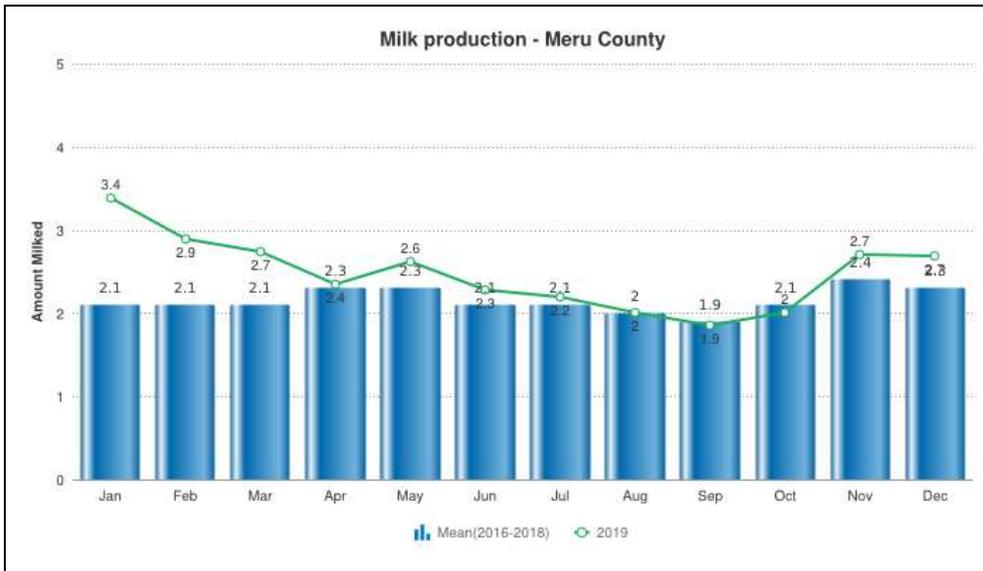
3.1.1 Livestock Body Condition

- In all livelihood zones livestock body condition was fair to good for all species.

3.1.2 Livestock Diseases

- No notifiable livestock diseases were reported across all livelihood zones although rabies and NCD was reported in dogs and chicken respectively.

3.1.3 Milk Production



- The average milk production per household per day remain the same as compared to previous month.
- Milk production was slightly above the Long Term Average.
- Milk production was high in Mikinduri Ward where cattle are of better breed and practice zero grazing. Rain fed and Mixed farming livelihood zones has more pasture and water availability as compared to Agro pastoral zone.
- Average milk price per litre at household level was Ksh 50.00

3.2 RAIN-FED CROP PRODUCTION

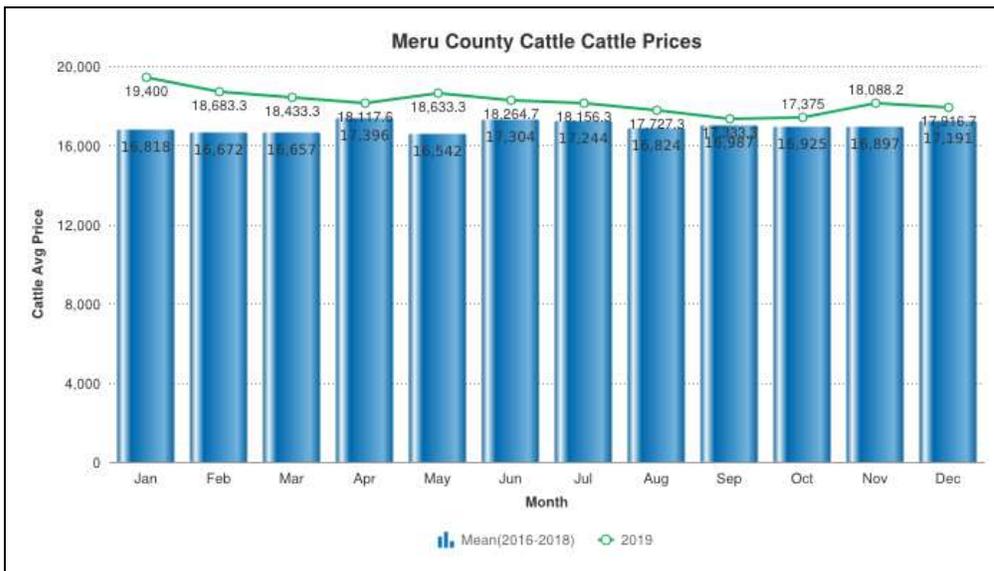
3.2.1 Stage and Condition of food Crops

- Most farmers were weeding maize and beans in their farms in all the livelihood zones.

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 17,916 compared to the previous month of Kshs 18,088.
- The trend is stable and compared to the previous year at this time.
- Pasture has improved as compared to previous month in all the livelihood zones. Body condition of cattle is expected to improve in the following months due to decreasing trekking distances to water sources and increasing pasture.
- This will increase market value of the livestock and increase the milk produced.
- Compared to the long term mean, the average price was higher by 4.2%.

4.1.2 Goat Prices



- The average market price of a two-year goat was Kshs 3,466 compared to Kshs 3,547 posted in the previous month.
- Sheep and goats body condition is likely to remain stable in all the livelihood zones during the same period due to availability of browse.
- The price is stable as compared to the previous month.
- Compared to long term mean, the average price was higher by 1.5%.

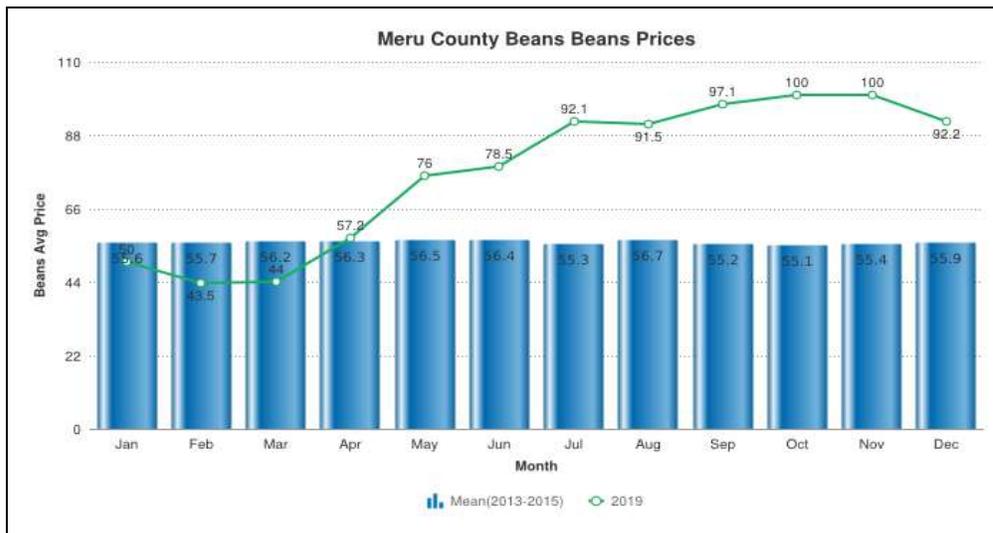
4.2 CROP PRICES

4.2.1 Maize



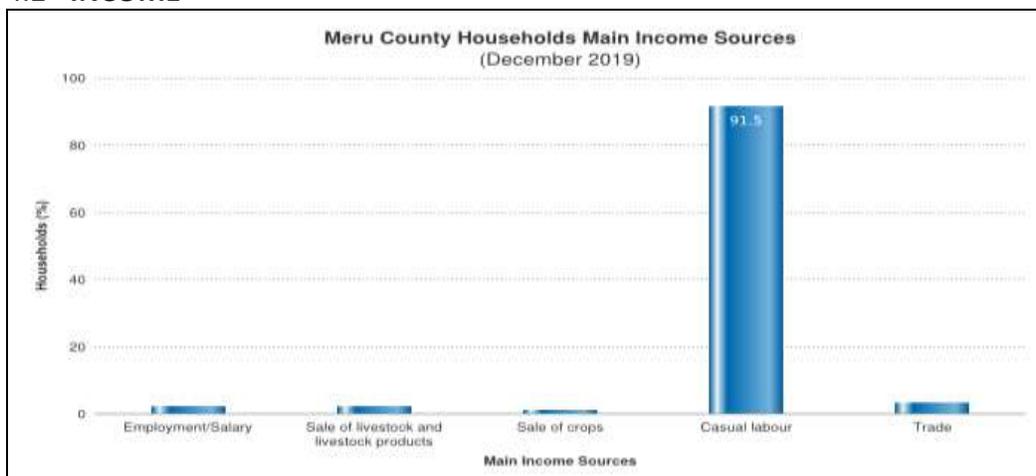
- The average market price of a kilo of maize has decreased to retail at Kshs 44.50 compared to the previous month of Kshs 46.50
- The general rise was due to crop failure last season and limited households' stocks in all the livelihood zones, the farmers who have last season stock had to sell at high price to due to demand in the market.
- The price of maize is expected to remain high until the farmers make harvest this season.
- Maize farms was invaded by caterpillars.
- The prices were Kshs 45-50 per kilo for all the livelihood zones.
- Compared to the long term average the current price was above normal.

4.2.2 Beans



- Average market price of a kilo of beans was Kshs 92.20 which was slightly below compared to the previous month. This was due to the very high demands in the market.
- Households with stocks were unwilling to release them to the market for fear of the performance of rains.
- The prices was Kshs 90-110 per kilo for all the livelihood zones.
- Compared to the long term mean the price was higher by 64.9%.

4.2 INCOME



- Household main source of income were casual labour. Others were trade, sale of livestock and livestock products and employment/salary at lower proportions.
- Trade were stable trend compared to previous months.
- Casual labour opportunities were available in the Miraa plantations, Maize and Beans plantation and town centres.

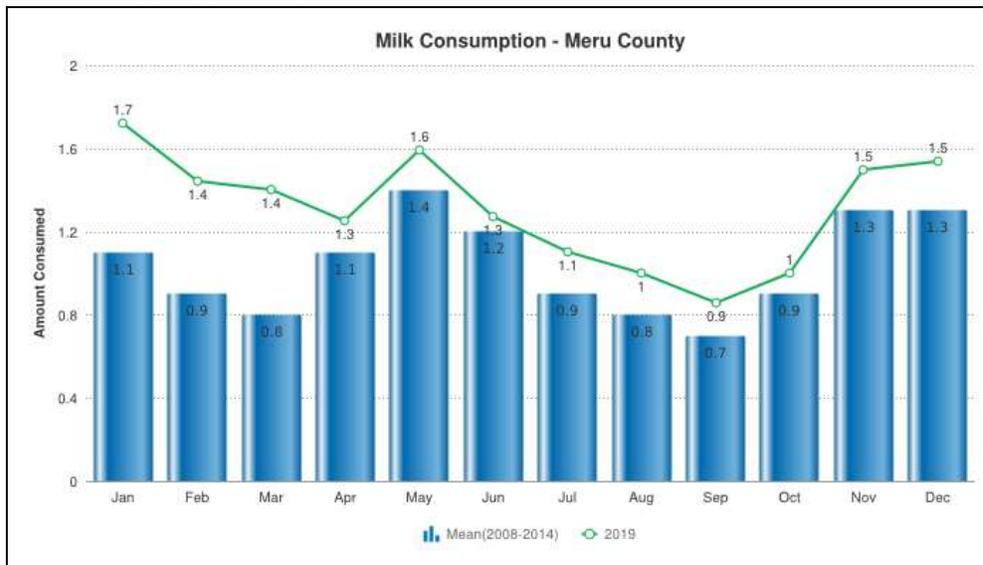
4.4 TERMS OF TRADE



- Terms of trade were below the LTA at 77.9
- Terms of Trade was below the LTA by 47.3 percent.
- The downward trend was attributed to stable price of goats and sharp increase in price of maize.
- Proceeds of sale of goat could purchase 77.9 kilograms of maize.

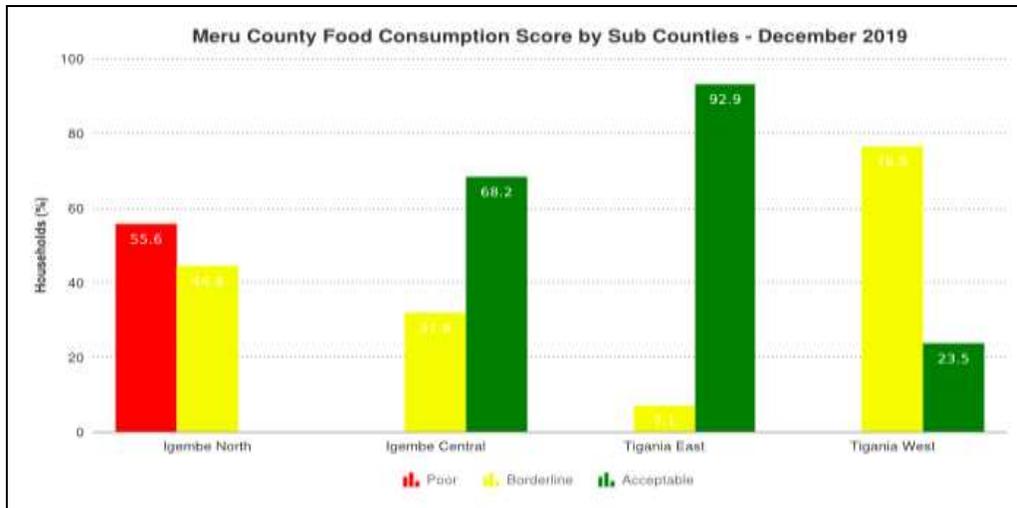
5. FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION



- Milk consumption per household per day was at 1.5 litres in the month under review.
- The quantity of milk consumed was low in Agro pastoral livelihood zone as compared to other livelihood zone.

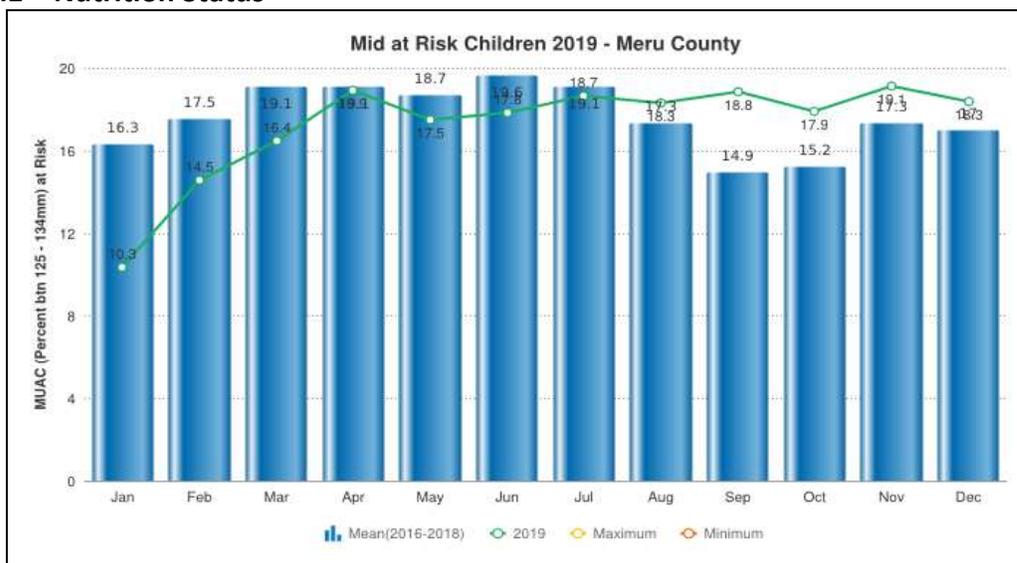
5.2 FOOD CONSUMPTION SCORE



- Households interviewed showed that 46.1 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 category was 39.8 percent. The rest 14.1 percent was poor.
- 44.2 percent households interviewed reported consumption of grains for about six days, 24.2 percent of these households consumed pulses for an average of five days in a week.
- Most households consumed more than three food groups i.e. maize, vegetables and pulses

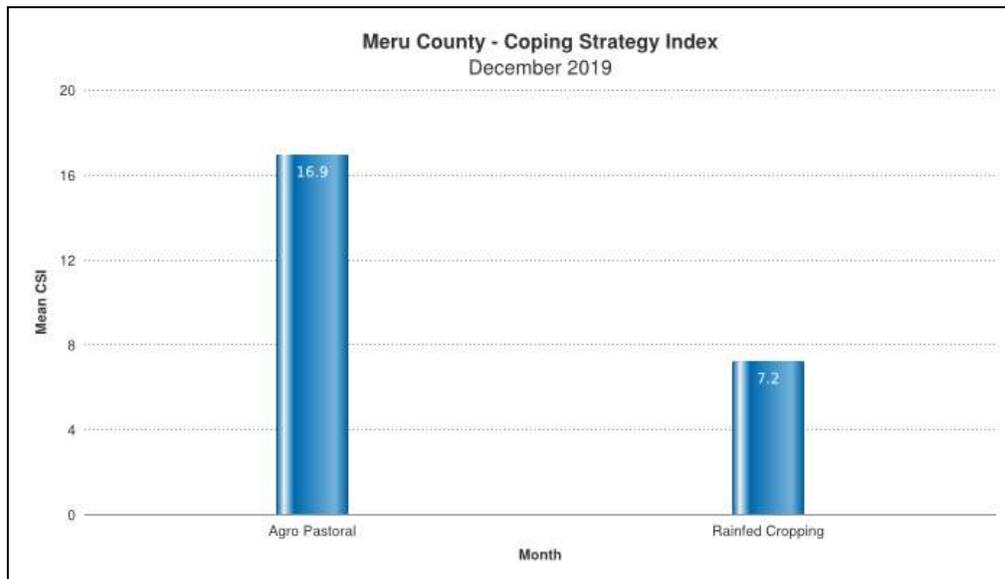
5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status



- Mid Upper Arm Circumference (MUAC) measurement for children below five years at risk of malnutrition was at 18.3percent compared to previous month of 19.1 percent.
- This was above the long term mean by 7.6 percent.

5.3.2 Coping Strategies



- The CSI for the month under review was recorded at 14.03 compared to 18.95 posted in the previous month.
- This demonstrates that households were employing the more coping strategies compared to previous month.
- Approximately 25.3 percent of sampled households engaged in reduction of meals and reduced portion of meals for about seven days in a week.

6.0 EMERGING ISSUES

6.1 Insecurity/ Conflict/ Human Displacement

- Cattle rustling were witnessed in Agro pastoral zone between Meru and Borana communities.

6.2 FOOD SECURITY PROGNOSIS

- Prices of maize and beans are extremely high.
- Quality and quantity of pasture and browse is expected to improve further.
- Livestock production and productivity is expected to increase due to availability of water at shorter distances with time.

6.3 On-going interventions

- Livestock vaccination all in Igembe South, Igembe North, Igembe Central, Tigania West, Tigania East and Tigania Central.
- The security teams were busy conducting peace meetings between communities where conflicts were witnessed.

7. RECOMMENDATIONS

Agriculture and Livestock Sector

- Farmers to be trained on crop rotation to break the cycle of pest and diseases.
- Provision of relief seed (DTS)
- Caterpillars surveillance

Water and Irrigation Sector

- Stand-by genset for Ndumuru borehole under procurement process.
- Extension of water pipes – Mariara Borehole under procurement process.
- Provision of water storage tanks to institutions – the procurement process is underway.

Public Health and Nutrition Sector

- Provision of water treatments compounds at household level.
- Provision of (adequate) vaccines in health facilities.