

National Drought Management Authority

MERU COUNTY

DROUGHT EARLY WARNING BULLETIN FOR JUNE 2020



A Vision 2030 Flagship Project



JUNE 2020 EW PHASE

Drought Status: **NORMAL**



Shughuli za kawaida

Drought Situation & EW Phase Classification

Biophysical Indicators

Rainfall: The month of June was characterized by cloudy, cold days/nights weather condition with light showers of rainfall being received in the Sub counties.

Vegetation condition: Above normal greenness condition was recorded across all livelihood zones. Pasture and browse condition was good across all the livelihood zones with exception of Agro- pastoral livelihood zone where condition was good to fair.

Socio Economic Indicators (Impact Indicators)

Production Indicators: Rain- fed crops are at harvesting stage. Livestock body condition was good for all species. Cases of LSD, FMD and Newcastle were reported in Tigania East. Milk production per HH per day remained stable.

Access Indicators: Average return distance to water sources for both households and livestock slightly increased. Terms of Trade remained favorable. Milk consumption per HH per day remained stable.

Utilization Indicators: Nutritional status of children below the age of five years was stable and within the normal ranges. Food consumption score fell within acceptable score while majority of households applied reduced consumption based coping strategies across the livelihood zones.

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)	72	80 - 120
VCI-3Month	73.15	35 - 50
Production indicators	Value	Normal
Maize Crop Condition	Fair	Good
Livestock Body Condition for cattle	Good	Good
Milk Production per HH/ day	1.8	1-2Litres
Livestock Migration Pattern	Normal	Normal
Access Indicators	Value	Normal
Terms of Trade (ToT)	128.4	69.7
Milk Consumption per HH/ day	1	1.5 Litres
Return HHs distance to water sources	7.7	6.3 Km
Water source return distance from grazing areas	10.4	11.7 Km
Cost of water (20 litres)	2.50	Kshs 3.00 - 5.00
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	0	<20.0
Copying strategy Index(CSI)	7.19	<15

- Short rains harvests
- Increased HH Food Stocks
- Short dry spell
- Reduced milk yields
- Land preparation

- Planting/Weeding
- Long rains
- High Calving Rate
- Milk Yields Increase

- Long rains harvests
- Increased HH Food Stocks
- A long dry spell
- Land preparation
- Kidding (Sept)

- Short rains
- Planting/weeding

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

1.1 RAINFALL PERFORMANCE

- Slight rainfall was recorded in the month under review.
- According to WFP-VAM, below normal rainfall was received in the region in the month of June across all the livelihood zones.

1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

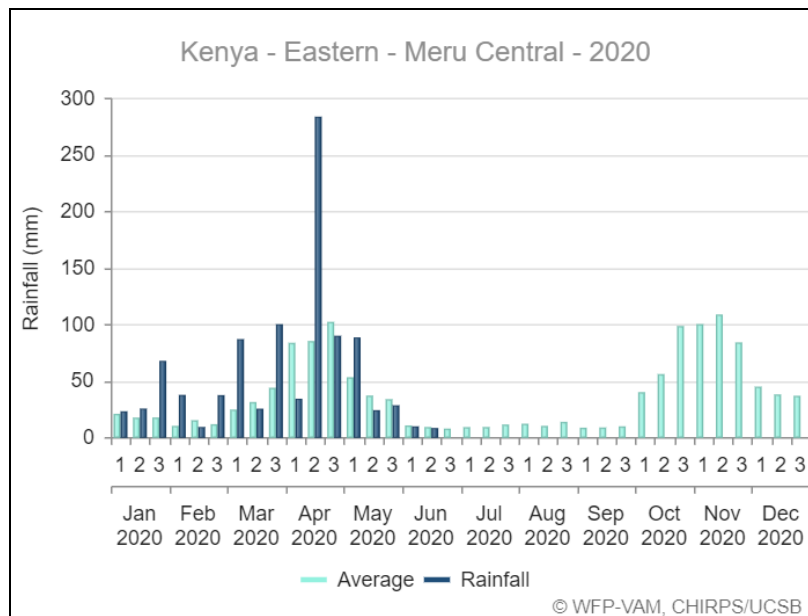


Figure 1: Rainfall estimates in Meru North

- From the figure showed above, the County received an average of 1.6 mm of rainfall in the Month of June compared to normal average amount of 2.2 mm for the same period.
- The rains received were erratic with poor temporal and spacial distribution across the livelihood zones.

2. IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

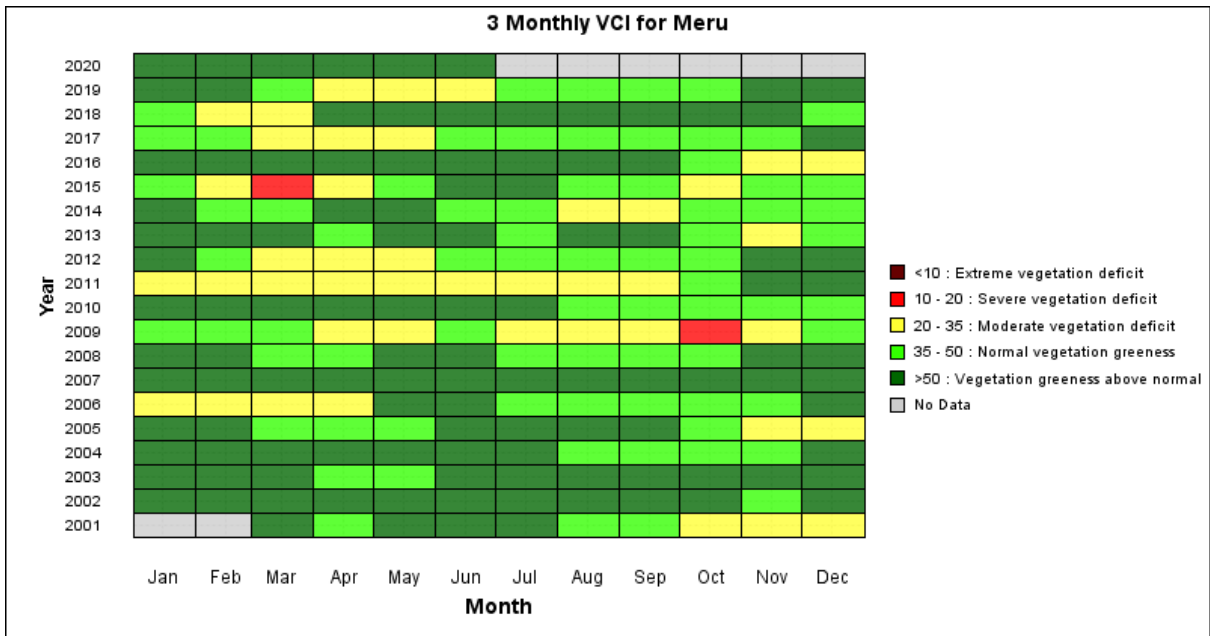


Figure 2: Three-monthly VCI for Meru County [Source: MODIS Data]

- From the figure {2} shown above, the County vegetation condition in the month under review is within vegetation greenness above normal as depicted by a vegetation condition index (VCI).
- All Sub Counties depicted vegetation greenness above normal.
- The combined 3-month Vegetation Condition Index (VCI) decreased from 79.05 recorded in the month of April to 73.15.
- The 3-monthly vegetation condition index for Meru Igembe Central was at 80.73 Igembe North at 71.51, Tingania East at 66.97 while that of Tingania West was at 73.99.

2.1.2 Pasture Condition

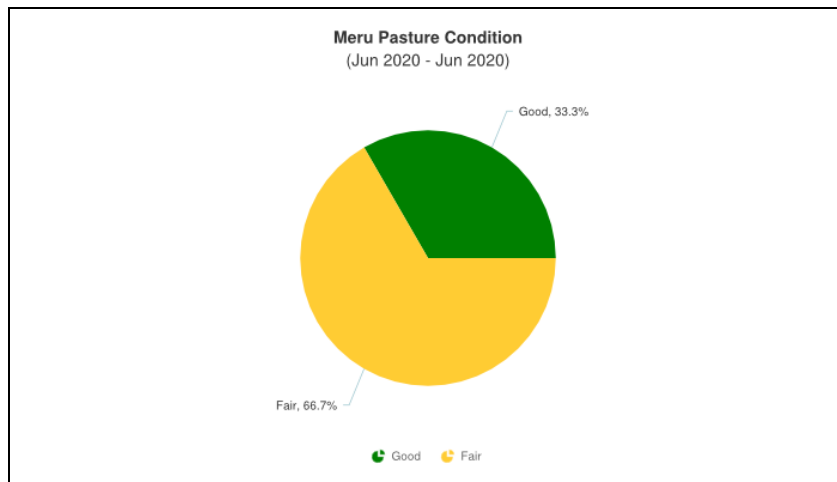


Figure 3: Pasture condition in Meru County

- The pasture condition is good to fair across all the livelihood zones. This is attributed to fast depletion without regeneration and the poor performance of the long rains.
- The pasture condition is normal at this time of the year.

2.1.3 Browse

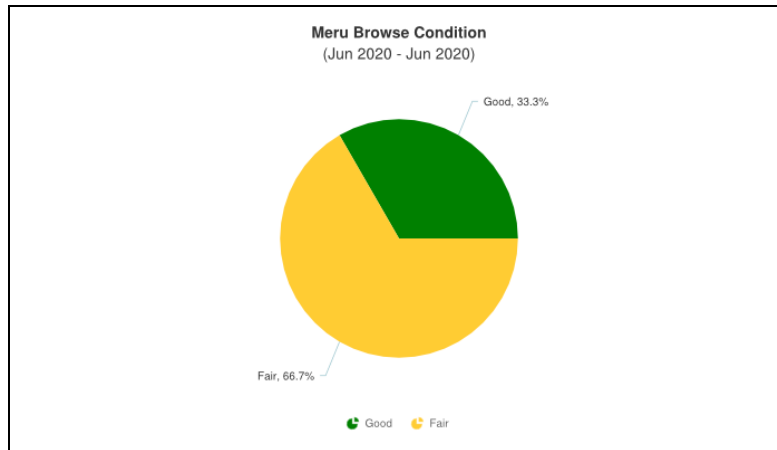


Figure 4: Browse condition in Meru County

- The browse condition was good to fair across all the livelihood zones compared to good condition recorded previous month. This is attributed to fast depletion without regeneration and the poor performance of the long rains.
- The browse condition is normal at this time of the year.

2.2 WATER RESOURCE

2.2.1 Sources

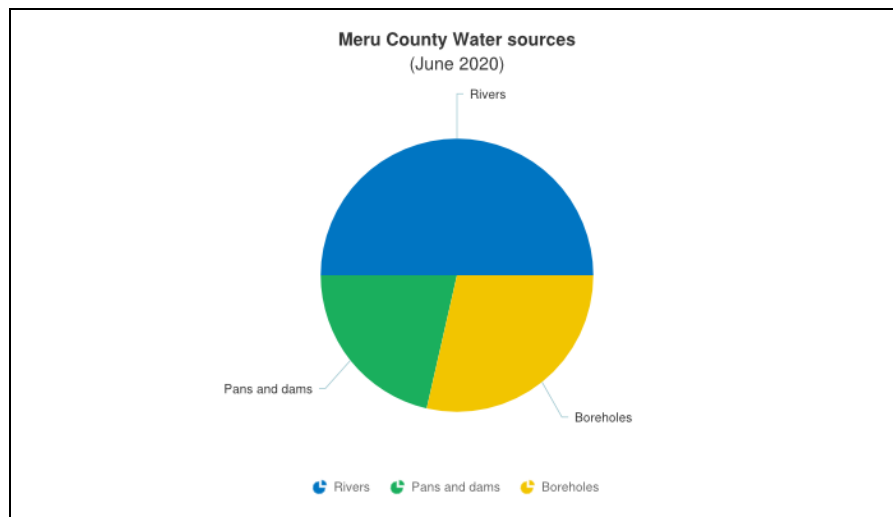


Figure 5: Water sources for Meru County

- The three main sources of water within the period under review were; rivers, boreholes and pans & dams. Other sources included; springs and shallow wells which was also relied upon as a major water source during the review period.
- The quality of water in boreholes was good while that of rivers and other surface sources was poor due to ground rain water run-off.

2.2.2 Household Access to Water

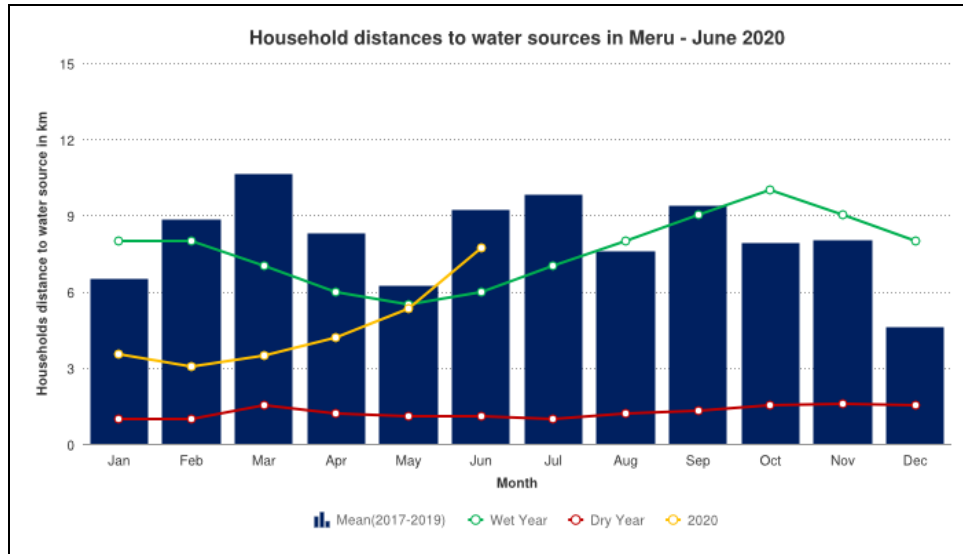


Figure 6: Household average distances to water sources

- From the figure {6} shown above, the average return distances to household water sources increased from 5.3 kms recorded previous month to 7.7kms.
- The increase is attributed to decreased recharge levels and drying up of some water sources.
- 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.
- When compared to similar periods, the current household water distance of 7.7 km is 16 percent shorter than the long term average.
- The current average water consumption in all the livelihood zone is 15-20 litres per person per day which is normal.
- Based on key informant and households interviews, 42 percent of households treat water.

2.2.3 Livestock Trekking Distance to Water Sources from Grazing Areas

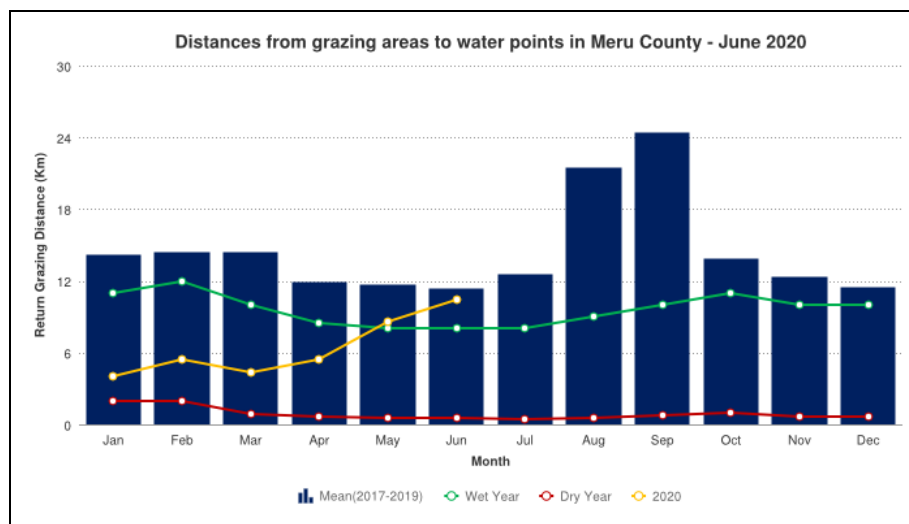


Figure 7: Livestock average return distances to water sources

- The average return distance to water source from grazing areas increased from 8.5 kms recorded previous month of May to 10.4 kms.
- The increase was due to increased distances to grazing areas, reduced recharge levels and drying up of some water sources.
- The watering frequency for livestock in both livelihood zones was on daily basis.
- The current average return distance to water sources was 8 percent shorter compared to long term average at this time of the year.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- The body condition of cattle and small stock was good across the livelihood zones which is normal when compared to similar periods attributed to above normal vegetation greenness.
- The body condition for all the livestock species is expected to remain in good for the next three months across the livelihood zones.

3.1.2 Livestock Diseases

- There were reported cases of Lumpy skin diseases, Foot and Mouth and Newcastle in Tigania East and West.
- Routine surveillance measures by the County government continued in the month under review, however no vaccines have been given out to manage the situation hence the situation is alarming for the livestock keepers.

3.1.3 Milk Production

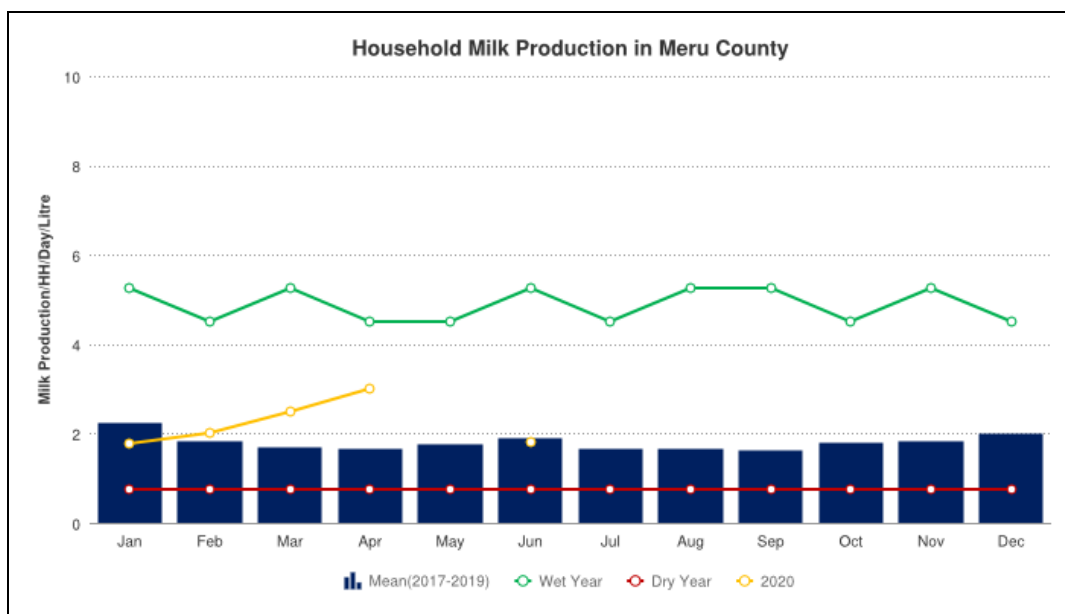


Figure 8: Household milk production in Meru North

- From the figure {8} shown above, the average daily milk production per household per day remained stable at 1.8 litres compared to the last two previous months. In the month of May, no data was collected at household level however, from the key informant interviews the production was at 2 litres per household per day. The stability was attributed to availability of water and pasture.
- Milk production was high in Mikinduri Ward where cattle practice zero grazing and are of good breed.
- Current milk production of 1.8 litres is normal when compared to the long term average milk production of 1.9 litres
- Average milk price per litre at household level was at Ksh 60.00

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

- Rain fed crops was at harvesting stage of development across all the livelihood zones.
- The rainfed crops that are in the farms are of fair condition and no much harvest is expected from such crops. This is attributed to poor performance of the long rains and infestation of fall army worms.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices

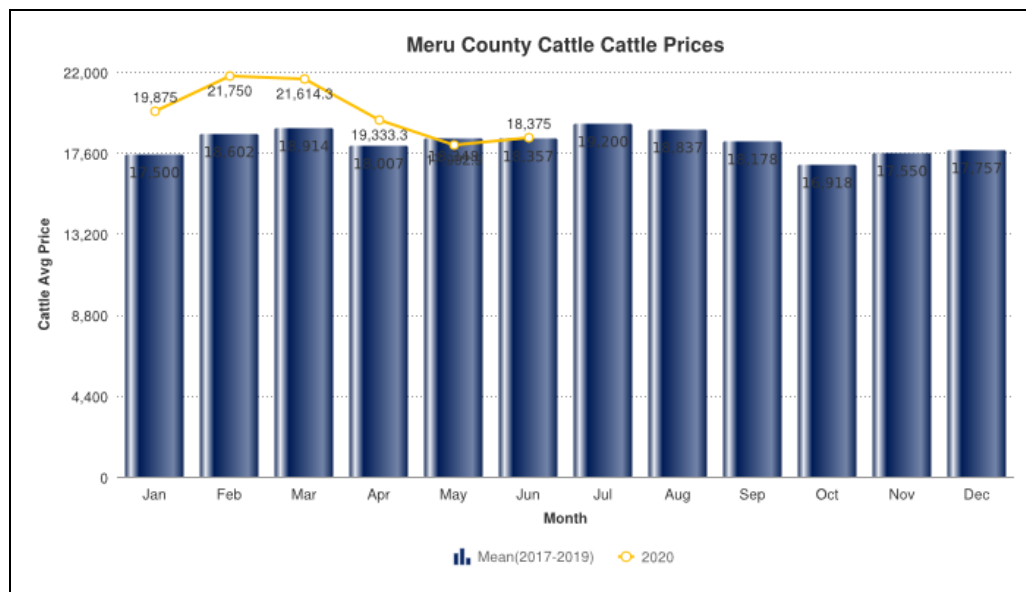


Figure 9: Average Market prices for cattle in Meru County

- From the figure (9) shown above, the average market price of three-year-old cattle price for the month under review was Kshs. 18,375 thus remained stable when compared to the preceding month of May price of Kshs. 18,000.
- Major livestock markets remained not operational and sale of livestock occurred at the farm gate due to the current COVID-19 pandemic.
- When compared to similar periods, current cattle price of Kshs. 18,375 is normal compared to the long term price of Kshs. 18,375.

4.1.2 Goat Prices

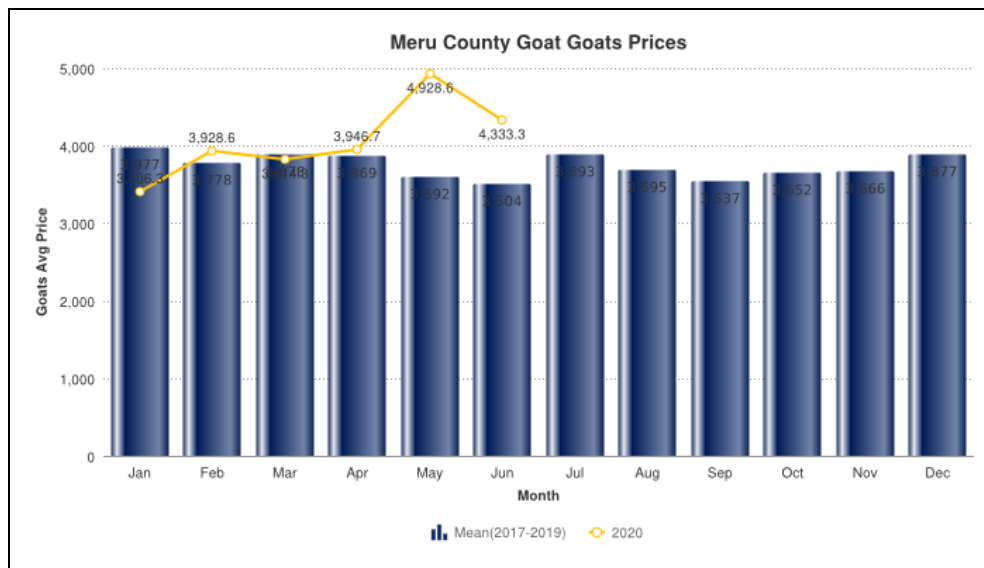


Figure 10: Average market prices for goats in Meru County

- The average market price of a two-year goat slightly decreased to Ksh 4,300 compared to Ksh. 4,900 recorded previous month as illustrated in the above figure (10).
- When compared to the long term average price of Ksh. 3,504, current goat price is above normal by 24 percent. Above normal goat price was attributed to good body condition across the livelihood zones.

4.2 CROP PRICES

4.2.1 Maize

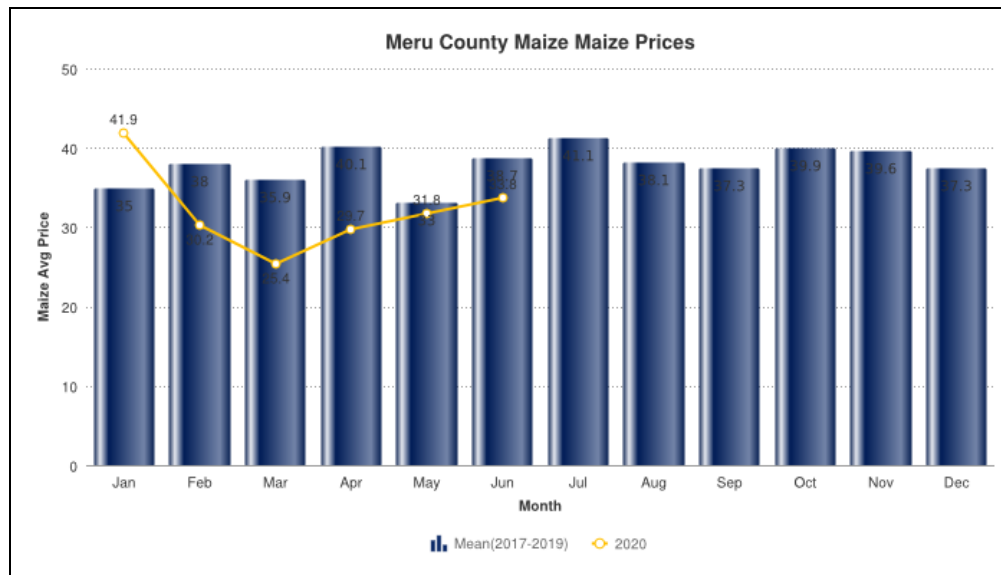


Figure 11: Average market prices for maize in Meru County

- The average market price of a kilo of maize remained stable at Kshs. 34 compared to previous month price of Ksh 32.

- The stability is attributed to held households' stocks from the short rains harvests and new harvests from the long rains.
- The average market price was 13 percent lower compared to the long term average at this time of the year.

4.2.2 Beans Prices

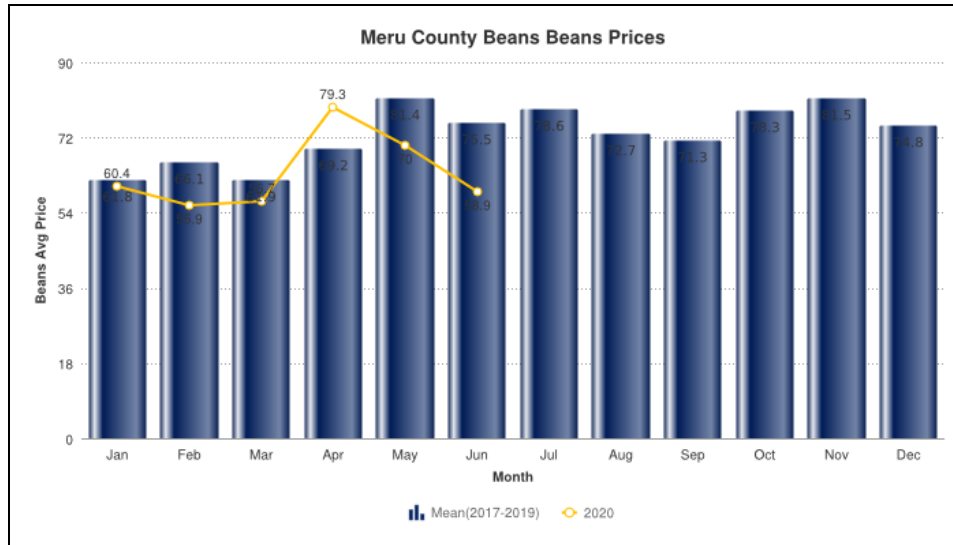


Figure 12: Average market prices for beans in Meru County

- Average market price of a kilo of beans decreased from Kshs 70. Recorded previous month to Kshs 59.
- The decrease is attributed to harvests of the beans being realised from the long rains and high supply of the commodity at the market.
- The average market price for beans was 22 percent lower compared to long term average at this time of the year.

4.2 INCOME

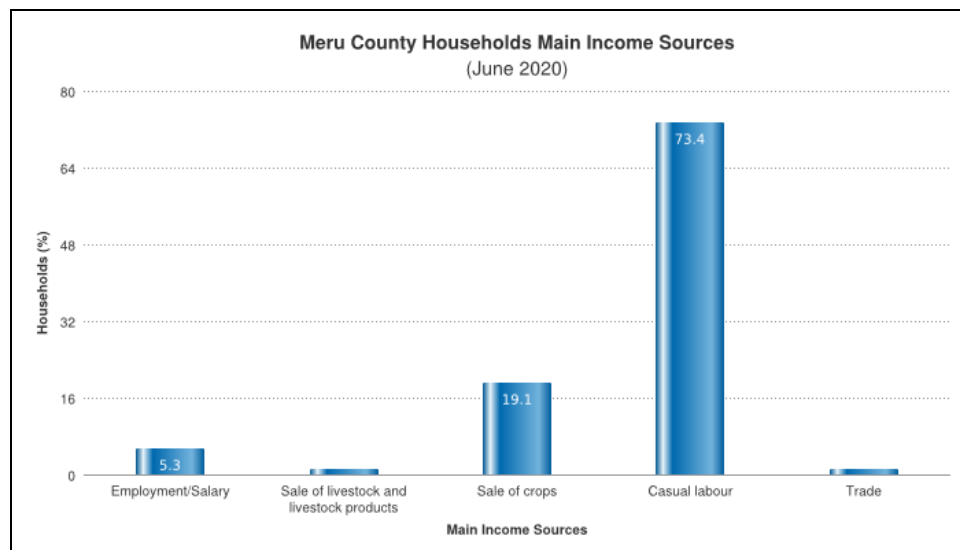


Figure 13: Sources of household income in Meru North

- Households main source of income were; casual labour, sale of crops, sale of livestock and livestock products, employment/salary and trade.
- Households also depend on sale of ‘Mira’ which is considered as a major cash crop. however, the business has been affected by the quarantine imposed as a result of outbreak of the Corona Virus (COVID-19).

4.4 TERMS OF TRADE

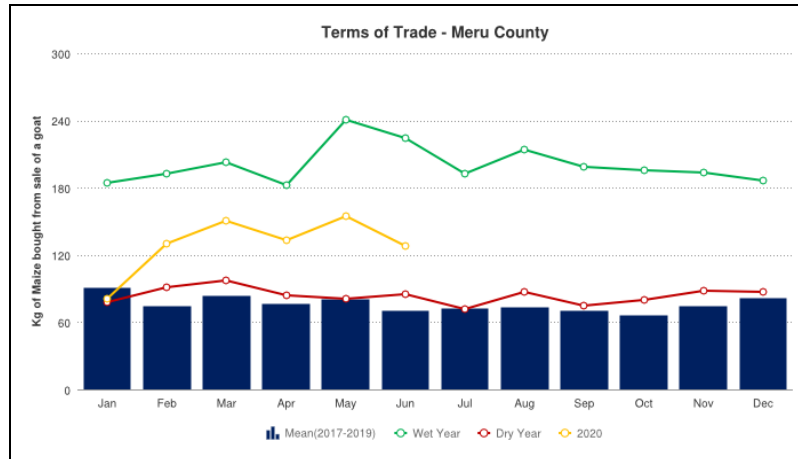


Figure 14: Terms of trade in Meru North

- The Terms of trade decreased to 128.4 kilograms of maize realised from a sale of goat compared to 155 kilograms recorded previous month.
- The Terms of Trade was 78 percent higher than the long term average.
- Even though terms of trade are above normal, it declined when compared to the previous month terms of trade of 155 and it's expected to decline further in the next one month due to COVID-19 pandemic which has led to closure of major livestock markets.

5. FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

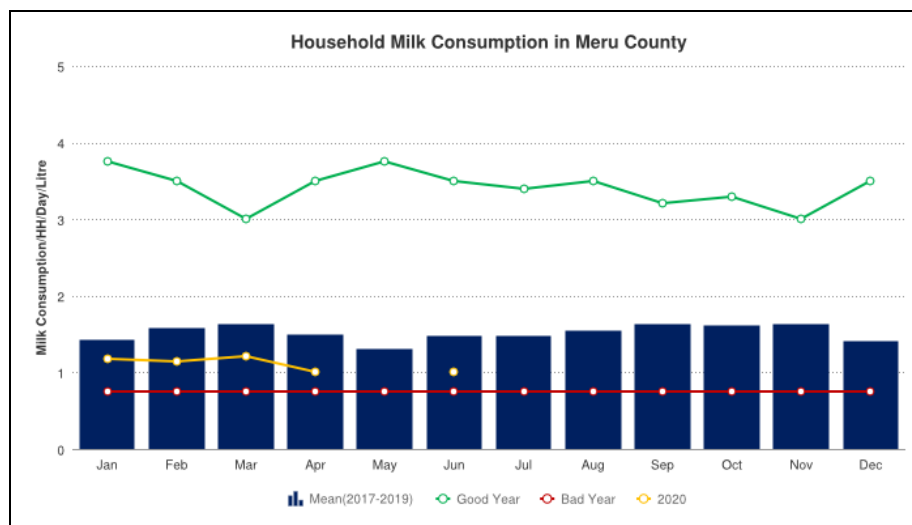


Figure 15: Average household milk consumption (l/hh/day)

- Milk consumption per household per day remained stable at 1 litre compared to previous two months. In the month of May, no data was collected at household level however, from the key informant interviews the consumption was at 1 litre per household per day.
- The stability is attributed to good body condition occasioned by availability of pasture and browse.
- The quantity of milk consumed was low in Agro pastoral livelihood zone as compared to other livelihood zone.
- The milk consumption is normal at this time of the year.

5.2 FOOD CONSUMPTION SCORE

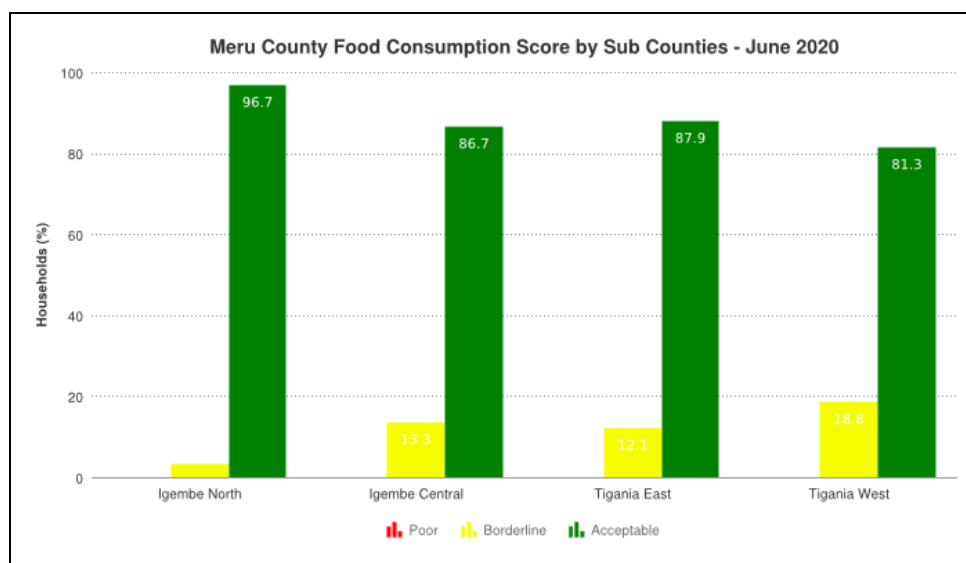


Figure 16: Household food consumption score

- Out of 120 households sampled from the sub counties, majority of the households averagely 84 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 rest of the households, 16 percent, were under borderline consumption score category. There were no household reported to be in poor food consumption score.
- The households on average consumed; grains and pulses for six to seven days, vegetables for an average of five days and fruits for four days. The households consumed milk for an average of four days while meat consumption was minimal.

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status of Children

- No MUAC data was collected in the month under review at household level, this was due to the MOH guidelines imposed due to outbreak of Corona Virus (COVID-19). However, based on the key informant interviews, the number of children below five years at risk of malnutrition remained stable and the trend was decreasing.
- The decrease is attributed to held households' stocks and increased milk consumption at household level.

5.4 Coping Strategy Index

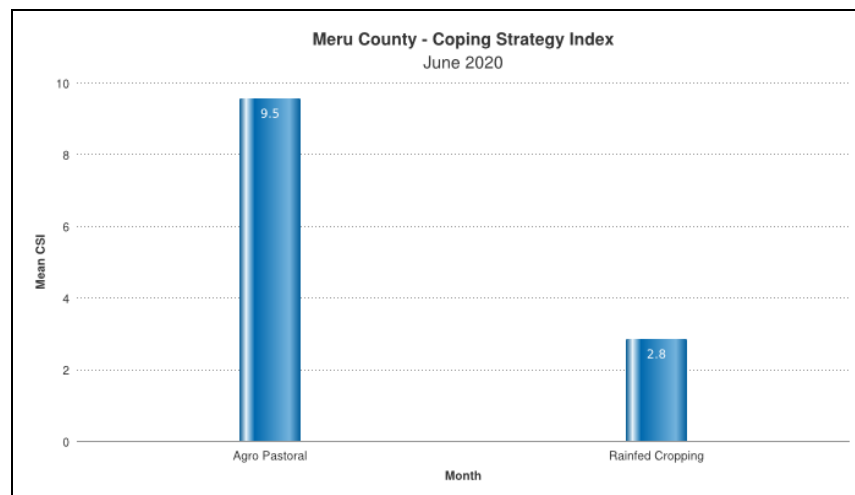


Figure 16: Household coping in Meru North

- The mean coping strategy index was 7.19 in the month under review.
- Agro pastoral livelihood zone recorded a higher coping strategy index of 9.5 while Rainfed livelihood zone recorded a coping strategy index 2.8.
- The coping strategy index was normal at this time of the year.

6.0 Emerging issues

- Outbreak of Corona Virus (COVID-19) remains a National disaster. No cases have been reported in Meru North in the month under review, however, precaution has been put in place to curb any infections as directed by the government and the WHO.
- The outbreak of Corona Virus (COVID-19) remains a threat to livelihoods. This is because it has negatively affected majority of the business people who relied on these businesses as source of income. For example, closure of markets, bars and restaurants and sale of “miraa”.
- There was infestation of tree locust in Igembe North areas of Gachuru, there were minimal destruction reported. The situation was contained and surveillance is ongoing.

6.1 Insecurity/ Conflict/ Human Displacement

- There were no insecurity and conflicts reported under the review month.

6.2 FOOD SECURITY PROGNOSIS

- Household food security is expected to remain stable due to ongoing long rains harvests and the held household food stocks is expected to sustain the households for the next 3 months.
- Pasture and browse condition is expected to deteriorate in the next three months occasioned by the dry season
- Livestock production and productivity is expected to decline in the next three months due to deteriorating pasture conditions and increased distances to water sources.
- Food commodity prices are expected to remain stable occasioned by held household food stocks and the harvests of the long rains in the next three months.

- The terms of trade are also expected to remain favourable.
- The proportion of children at risk of malnutrition is likely to remain stable due to held households' stocks and favourable terms of trade.

6.3 On-going interventions

Intervention	Implementer	Beneficiaries
<ul style="list-style-type: none"> Routine livestock diseases surveillance 	<ul style="list-style-type: none"> County Department of Livestock Production and Veterinary Services 	Livestock farmers from both sub counties
<ul style="list-style-type: none"> Routine Disease Surveillance Routine disease surveillance on outbreak of Corona virus (COVID- 19). Routine screening management of malnutrition at health facility level Routine Vitamin A and Zinc Supplementation and deworming at health facility level 	<ul style="list-style-type: none"> County Department of Health Services 	<p>Mothers and children who visited health facilities in both sub counties</p> <p>Households and health facilities in targeted community areas</p>
<ul style="list-style-type: none"> Surveillance of the locusts 	<ul style="list-style-type: none"> County department of Agriculture department 	Farmers

7. SECTOR RECOMMENDATIONS

Sector	Recommended Activities	Proposed Implementers	Expected Outcome/Impact
AGRICULTURE	<ul style="list-style-type: none"> Sensitization on improved farming methods Capacity building on pest and diseases (Fall army worm and Locust) Development of irrigation schemes 	<p>County government</p> <p>Other Stakeholders</p>	Reduced post-harvest losses due to poor storage

LIVESTOCK	<ul style="list-style-type: none"> • Disease surveillance and promotion of good and husbandry practices and silage making • Strategic vaccination of animals 	<p>County government</p> <p>Other Stakeholders</p>	<p>Increased productivity</p> <p>Diversification of income</p> <p>Reduced outbreak of diseases</p>
WATER AND SANITATION	<ul style="list-style-type: none"> • Drilling and equipping of more boreholes • Construction of new big dams and pans. 	<p>County government,</p> <p>Other Stakeholders</p>	<p>Improved potable water accessibility and consumption</p>
HEALTH AND NUTRITION	<ul style="list-style-type: none"> • Provision of Personal Protective Equipment (PPE) at the hospital and at community level to curb spread of corona virus • Provision of commodities for management of various types of malnutrition at health facilities. • Sensitization on use and provision of water treatment chemicals to households. 	<p>County department of health</p> <p>NDMA</p> <p>Development partners</p>	<p>Management of malnutrition amongst under five children</p> <p>Reduced cases of water borne diseases</p>